

**Recovering Rural Non-Elites: Commoner Landscapes and Rural Infill in the Roman Middle
Republic**

by

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To my parents, for letting me chase my dreams

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Abstract

In this dissertation, I examine the process of rural infill in central Italy— a pattern of regional change that saw an increase in dispersed material culture in rural areas across the Mediterranean between 500 and 200 BCE. In particular, I examine the role of rural commoners in this landscape transformation – commoners made up the majority of the central Italian population, but this group has seldom been considered in the various processes of change that occurred during this period. Legacy data from archaeological field surveys carried out over the last forty years furnishes a large corpus of data that has not been used to discuss Republican-period commoners. I develop a methodology for comparing diachronic trends in commoner activity drawn from field survey, informed by recent excavations. Throughout, I argue for a dynamic commoner presence in the middle Republican countryside and suggest that rural infill, while a pattern of change visible outside of central Italy, is best understood at a regional level as a series of shifting dynamics in material visibility, changes in networks of exchange, fluctuations in commoner surplus production, more visible commoner-commoner interactions, and evolving commoner-elite relationships. Old models, linking rural infill to the Roman conquest do not hold up to increased scrutiny.

The first chapter provides context for this inquiry by reviewing previous studies of non-elites in the Roman world and suggesting that commoners and commoner studies provide a useful heuristic category for the focused examination of non-elites from the Republican period. Chapter 2 addresses rural infill at a “global scale” and synthesizes evidence from survey archaeology and rescue excavations across the Mediterranean region that show increased rural

activity between 500 and 200. These explanatory models offered for this regional trend provide possible explanations for the central Italian case. While larger-scale transformations likely played a role in changes in rural material in central Italy, a focus only on the supraregional level elides the people and material that underlie the pattern of change. Chapter 3 discusses the comparison of data from survey archaeology and the various issues with this technique. This chapter focuses especially on issues of site classification in light of recent excavations that have called into question the relationships between surface and subsurface archaeological remains. This chapter also acts as a catalog of excavated commoner sites from central Italy, a small but informative corpus. Chapter 4 outlines my methodology for approaching survey comparison, suggesting a reanalysis of legacy data from the sherd up in order to reclassify rural evidence based on consumption categories structured around the commoner-elite heuristic divide discussed in Chapter 1. On a survey-by-survey basis, trends in commoner activity can be drawn out, and then these trends can be compared to examine regional patterns. Chapter 5 operationalizes this methodology, examining nineteen intensive field surveys from central Italy, elucidating trends in commoner activity, and reading these trends against the surveyors' own interpretations. Chapter 6 compares trends and teases out conclusions, while also suggesting the importance of more focused new work to nuance our understanding of commoners in the Roman world. This project takes a bottom-up approach to rural change in the middle Republic, demonstrating the ubiquity of rural infill and seeking to shed light on the role of an oft-silent majority during this period of transition.

Introduction

This dissertation examines two interrelated topics: rural non-elites and rural infill. My decision to focus on non-elites – or commoners as I will soon argue they should be called – was brought about by the strong elite bias in studies of Roman history and archaeology. Despite a push to consider a more representative sample of the Roman world in recent years, no dedicated syntheses of the historical sources or archeological fieldwork exist that focus on Republican-period commoners, the overwhelming majority of the ancient population. Dominic Rathbone stated ten years ago that Republican non-elites “remarkably have never received a monographic study and are typically imagined under the influence of old ‘peasant studies,’ as a static and undifferentiated mass.”¹ This dictum remains true today.

Rural infill in central Italy has often been anecdotally mentioned,² but has also not yet received a dedicated study. Since the first systematic examinations of the central Italian countryside, region-by-region, and survey-by-survey, a pattern of dispersed material was identified in each study area, moving further away from nucleated settlements between the fifth and second centuries. These small scatters have been identified overwhelmingly with lower class farms.³ The term “rural infill” was first used to describe an increase in rural site numbers by Dutch scholars working in central and southern Italy between the end of the twentieth and

¹ Rathbone 2008.

² Lloyd 1995; Ciancio 2002; Qulici 2002, 140; Yntema 2006; Terrenato 2007, 142-143; Marchi 2009, 328-333; Mollo 2009, 198; Attema et al. 2010, 147-170; Goffredo 2010, 18, 23; Pelgrom and Stek 2010, 48-51; Fracchia 2013 191-192.

³ Terrenato 2012, 148.

beginning of the twenty first centuries.⁴ Rural infill, as presented by these Dutch scholars, possesses an ecological character and is intrinsically linked to the rise of urban centers in various Italian regions over the first millennium BCE.⁵ Demand for rural products in emergent cities created new opportunities and “niches” that rural producers could and did fill. This demand necessitated the expansion of rural activities into new areas of the countryside; marginal land, in particular, was increasingly exploited in order to fulfill the consumptive demands of their growing urban neighbors.⁶ The increase in scatters of material recovered by field survey, according to this model, represented the habitations of these new people and an overall shift in population size within the countryside. Rural infill of this type centers around the movement of people: new people arrived in increasing numbers in new areas of the landscape due to new demands for increased rural exploitation. Scatters were linked to these new people and interpreted as both productive spaces and habitations. This dissertation will question such an ecological model of rural infill extensively, shifting the explanations of this pattern of landscape change away from demographic change and giving more consideration to the actual archaeological material that provides evidence for rural change. Comparative evidence suggests that ancient populations cannot grow at rapid enough rates to explain such a sudden change in identified site numbers over the period between 500 and 200 if sites represent population directly.⁷ A population-centric approach also fails to take into account alterations in the use and movements of material culture that can cause archaeological sites to turn “on and off,” as it were, across and within periods. People of different social statuses will produce and consume archaeologically visible material at variable rates depending on numerous exogenous and

⁴ See Attema *et al.* 2010, 147-171.

⁵ Attema *et al.* 2010, 160-164.

⁶ Attema *et al.* 2010, 152-155.

⁷ Frier 1999.

endogamous factors such as household surplus production, regional material circulation, and modern ceramic chronologies. These factors vary at both a regional, micro-regional, and site-specific levels as well as across chronological periods. This dissertation will not offer a single solution to this issue of diachronic site visibility, but will discuss the critical importance that such material factors play in patterns such as rural infill. Rather than a demographic explanation that equates new pots to new people, a more nuanced model is required that takes into account the agency of rural material and people.

While many of the underlying assumptions that have previously been associated with the phrase will be questioned, I will still use the term rural infill throughout this project to describe the process of change that sees new sites become visible in field surveys during the period between 500 and 200. While not numerous, the studies that have examined the countryside of Italy during the later first millennium BCE have used this phrase. Therefore, I will also use it for the sake of consistency. Unlike the ecological model that underlies the Dutch use of the term, however, I use the term in a neutral manner, stripping away that the demographic, environmental, and urban connotations associated with the phrase be stripped away and, instead, it simply represent that rural spaces are filled in with new material. The neutral use of the term is evocative of the actual process that is taking place. While visible material infill might be a more appropriate phrase for the phenomenon as explicated in the following pages, this phrase is wordy and a touch opaque, rural infill is an effective placeholder for this project – it does, after all, describe exactly what diachronic survey maps present – that will be replaced with a new term in the future.

There is, of course, a certain teleological implication in the use of a phrase such as rural infill – an expectation that rural areas should be filled in between 500 and 200. In testing the existence

of rural shifts in different survey regions, I am not suggesting an implicit universal existence or homogeneity of this type of landscape transformation across central Italy. The assertion that a rural infill took place in the various areas of central Italy that have been surveyed is grounded in the data itself, collected and reinterpreted from nineteen survey projects. The data reveal a heterogeneity across regions – variations on a theme of increased site numbers – that require regional contextualization but also point towards global processes of change. This tension – between global change and heterogeneity both between and within regions – points towards different trajectories that require future consideration. Due to the coarse nature of the available data – survey archaeology produces variable data depending on the different methodologies employed, this project only begins to scratch the proverbial surface when it comes to modeling the experiences of those people who produced the material markers of rural infill. As will be made clear over the course of this dissertation, only a few field surveys in central Italy produce and publish high enough quality data that can be subjected to statistical analysis in a meaningful manner, and these surveys do not offer a large enough sample to extrapolate broader patterns applicable beyond a single study area. This is, therefore, the first step in a broader project aimed at reconstructing the lives and agencies of commoners in central Italy during the period of transition between 500 and 200.

Despite its frequent recurrence in studies of the period, no systematic study has collated the evidence for rural infill for central Italy or deconstructed the regional variations of this global trend. The Regional Pathways to Complexity Project did compare evidence for rural infill across three regions in Italy – the Pontine Plain, the Sibaritide, and the Salento Peninsula – but their analysis was focused on identifying global processes for this proliferation of small sites.⁸ Global-

⁸ Attema *et al.* 2010.

scale explanations were offered, but a consideration of the regional and sub-regional changes that must have also occurred was notably absent. While rural infill has been discussed as a landscape transformation that involved non-elites, the full implications of this change are often fit within global changes in agricultural practice and environmental change or textually driven narratives based on the Roman laws, changes in land-ownership patterns, or the Roman conquest. The people are left out of the pattern as is, for the most part, the actual material culture. Rural infill presents an ideal topic through which to explore non-elites during the middle Republic. Instead of building down from elite narratives, the archaeological nature of the pattern allows an account of rural infill to be built from the sherd up. Archaeological evidence, and especially the evidence from field survey that I make use of here, has its own biases. However, it is broadly effective at reconstructing the long-term history of what has been termed the ‘silent majority.’⁹ These biases can also be addressed and corrected for in a manner that brings commoners to the center of the stage.

This dissertation will use field survey evidence to test two hypotheses related to rural infill and rural non-elites:

1. Rural infill took place between the fifth and second centuries.
2. The close reading of the material and nature of this change can be used to examine commoner histories in the middle Republic and reveals commoner driven changes that present their own history of central Italy

⁹ Shipley 2002, 180.

In testing these hypotheses, I move between different scales of analysis.¹⁰ Problems of resolution in archaeological studies are well documented. While there is much that can be gleaned from data that focuses on single excavations or collections of single sites, central Italy has not produced enough excavation data from rural areas or belonging to non-elites to reconstruct either non-elite histories or understand rural infill. The types of excavations and studies required to reach a critical mass of this type of data have yet to take place. Single surveys, while potentially representative of their own smaller regions, cannot be applied without comparison beyond the bounds of their study areas. Biases, which affect survey data to a significant degree, can create artificial patterns in data that only comparison to other regions can detect. At the same time, this is not a grand, pan-Mediterranean synthesis in line with Horden and Purcell or Rostovtzeff. The amount of work required to produce synthesis on that scale is constrained by a dissertation timeline and the modern world's easier access to an increasing amount of data.¹¹ While that may be the eventual trajectory of this project, this project acts as a case study and proof of concept preceding a larger project drawing on a more significant sample. Furthermore, studies of rural infill have tended to jump immediately to this grand narrative scale – looking for global process in regionally diverse data sets without considering the underlying objects or people that created the material record. I have opted for a compromise, Central Italy, defined here as Etruria and Latium, affords the opportunity to discuss commoners and rural infill within a broader framework than a collection of sites or small group of surveys allow, but not so broad that the amount of data overwhelms the objects and people who created this material pattern.

¹⁰ Stewart 2013, 74-5,

¹¹ Palinkas and Herbst 2011, 34-5.

Chronology, Geography, and Terminology

A brief discussion of geography and chronology for the period is essential for my study, as much of the terminology I use has been adopted in different ways by different scholars. In what follows, I use “central Italy” to refer to the area from which I drew my survey data: namely ancient Latium and Etruria, the modern regions of Tuscany and Lazio (Figure 1.1). Chapter 2 will discuss other areas of Italy as well as the wider Mediterranean. Maps with the locations of the sites I discuss will be provided. Moving to chronology, “the Republican period,” “the middle Republic,” “the Hellenistic period,” have all been used to refer to the period during which field survey has identified more small scatters of material in rural areas, roughly the fourth and third centuries BCE.¹² When possible, I will use numerical chronology for the dates of various sites, material, or events. If I refer to chronological periods, I will use middle Republic. I am using a long middle Republic that covers the period between 500 and 200. I wanted to find the chronological terminology with the least baggage – Hellenistic implies a series of interactions between the Italian peninsula and the Greek world, Republican attaches the Roman political system to a host of communities who were not yet incorporated into the Roman Imperial project. I opted for middle Republic in part because it was the phrase most frequently used by survey publications as a dating criteria for sites that fell into my chronological window, 500 to 200.

Structure of This Dissertation

This dissertation is broken into six discrete, but interrelated components. Each chapter works to build a framework for studying rural infill from the perspective of commoners. The first

¹² From this point all dates will be BCE unless otherwise noted.

two chapters present the broader intellectual and theoretical work that inform this study.

Chapter 1 reviews the study of non-elites in the Roman world, including contributions from both historians and archaeologists. Although non-elites and rural infill have been included in histories of the middle Republic, they are inexorably subsumed within broader narratives of change driven from an elite, textual perspective. I argue that a new category, commoner, creates an effective heuristic tool for examining non-elites free of much of this historical baggage.

Chapter 2 Expands the scale and looks at rural infill across the Mediterranean, an extensive survey of the areas of the Mediterranean outside of Italy is followed by a more in-depth discussion of cases of rural infill in Southern Italy. I examine the different supraregional narratives for rural infill, and suggest that an intermediate scale approach, repopulating the process through a focus on a single region, can reintroduce the people behind this pattern and test some of the supraregional hypotheses.

The third and fourth chapter cover methodological issues. Recovering rural commoners through field survey at a regional level involves an appreciation for the challenges of comparative survey. **Chapter 3** discusses the obstacles for survey comparison. This chapter also details the excavations of commoner sites related to field survey. I argue that recent fieldwork has highlighted the ability of field survey to recover evidence for rural commoners, but interpretations of this material needs to be reframed to focus on activities, not site numbers of population estimates. A consideration of elite sites, especially as it pertains to the middle Republic, is important for modeling commoner-elite relationships and understanding landscape change during this period.

Chapter 4 presents my methodology for comparing various survey projects. I explain the methods I used to select survey projects, to reclassify sites, and to divide the survey evidence

into categories that allowed me to track commoner and elite activities over the period of rural infill. I use consumption to differentiate between sites that might have been loci of commoner activity and sites that might have been used by elites. While schematic and lacking in nuance, this approach creates an aggregate picture of changes at the two poles of the social hierarchy, a picture that can then be nuanced using excavation or more intensive investigation of the survey materials. While some specificity is lost, this approach allows broad patterns of change to be studied and creates a base line against which future research can be tested. Once the various sites have been reclassified, the data can be compared and a regional narrative for central Italy reconstructed. Rather than comparing site counts or scatters between survey projects, I look at the general trends that each survey presents. These trends, represented by changes in evidence for rural, commoner, and elite activity as well as changes in the number of more permanent, possible farm sites, can be compared between surveys. At the same time, the material that comprises these trends is important – by looking at the different material in different regions it is possible to tease out variation amongst the different instances of rural infill. To this end, I have created a database (reproduced in the Appendices) that includes information on the material present in each region.

In **Chapter 5**, I operationalize this methodology and present my analysis, moving from survey to survey, producing both evidence for rural infill as well as new, heterogenous narratives of changes in commoner and elite material between 500 and 200. I demonstrate that rural infill took place across Italy in every region that was included in my database. From northern Tuscany to southern Latium, between the fourth and third centuries, there is overwhelming evidence that more durable material culture moved further from nucleated sites and was being used with greater frequency spaces that can be attributed to commoners and their activities. This marks a

significant change in both access to material and markers of permanence in the landscapes of central Italy. This survey of the evidence demonstrates the ubiquity of rural infill, but it also points towards a high level of regional variation among the different areas studied by this project. While the third century is the most frequent period for notable rural change, in certain regions the increase in rural material and its dispersion occurs a century earlier, and the material that forms this pattern does not look identical between any survey regions. A combination of endogenous and exogenous processes: local responses to changes in supply networks, surplus production, and changing relationships between elites and non-elites all play a role in causing rural infill to occur as well as determining its particular regional forms. In **Chapter 6**, I compare these narratives and discuss regional trends visible in the data, expanding outwards to reengage with the supraregional explanations offered in Chapter 2. I argue that this approach to deconstructing rural infill and reconstituting narratives of change from the sherd up, with a focus on commoners offers a productive method to reframe narratives of central Italy in a manner that allows for new, histories from below.

Chapter 1 : Recovering Rural Commoners

1.1 A Survey of Non-Elite Studies in the Roman World

The study of non-elites in the Roman world is characterized by a general lack of interest, false starts, and “slips,” either upwards to focus on the nobility and aristocrats or sideways to questions of tenancy, slavery, demography, and economic development that pay lip service to non-elite concerns but focus the proverbial lion’s share of attention elsewhere.¹³ Studies of central Italian non-elites have remained text-driven and ‘processual.’ This particular lacuna is, in many ways, a unique development of Roman history and archaeology in Italy as other Mediterranean regions and periods developed distinctly different research trajectories.¹⁴ The historiographical roots of this lack of attention are deep and varied. On the one hand, there has been a tendency beginning with Weber and Rostovtzeff to fit non-elites into broad historical frameworks that simultaneously include them as characters but denude any sense of agency. Thus, Weber narrates a Republican Rome that sees Roman smallholders with “an American character” taken over gradually by capitalist entrepreneurs and the slave mode of production, with the result that their political agency was eliminated by the end of the Social War in 88.¹⁵ In Rostovtzeff’s *Social and Economic History of the Roman Empire*, the author frames post-

¹³ Grey 2011, 16.

¹⁴ See for example, just from the Greek world, Pettegrew 2001; Foxhall 2004; Gallego 2007; McHugh 2017 where a more critical and interdisciplinary perspective has been applied to reconstructing commoners (I suspect due to the importance of a yeoman farmer type in models of early Athenian democracy and hoplite warfare). See also Smith *et al.* 2016; Allen *et al.* 2017 for rural approaches to Roman Britain.

¹⁵ Weber 1976, 309-231. Ironically, Weber here is drawing on American founding fathers who were, in turn, drawing on Roman Republican authors such as Cato, Varro, and Columella to create a circular argument of the yeoman farmer as Republican citizen *du jour*.

monarchic Rome as a “peasant state” that was undone by overseas expansion, capitalist agriculture, and the influx of Eastern slave labor.¹⁶ In both cases, the early Republic is idealized as a period belonging to the non-elites, only to be undermined by Rome’s imperialist and capitalist ambitions. This tendency to narrate a decline and fall of the Roman commoners joined to the rise of the Roman empire is not a phenomenon only of pre-Second World War Scholarship, Toynbee’s hugely influential argument for the “deracination of the Italian peasantry” as a result of the Second Punic War, that saw a “ruined and uprooted peasantry” that no longer had the strength to “protect and preserve its ancestral way of life,” follows the same general model as does Brunt’s later arguments for similar processes of decline amongst the free rural poor built on demographic grounds.¹⁷ The Gracchan land crises of the later second century loom over all of these discussions, drawn from classical authors such as Appian and Sallust.¹⁸ This model of a late Republican countryside denuded of its free inhabitants has come under criticism in recent years. However, even those arguing against the destruction of a free peasantry, such as Rosenstein, Launaro, and de Ligt focus on demographic patterns that treat non-elites as numbers and formulae, eliding their lived experiences.¹⁹ Demography, a subfield of Roman studies that has seen a flourish in the aughts and 2010s, has tended to privilege the forest of counting and recounting Romans – based it must be said on numbers we have little reason to believe are accurate – over the trees, reconsidering life at the lower end of the social hierarchy. The chronological windows for these demographic studies, beginning, outside of Rosenstein, with Polybius’ detailed list of the Roman military in 225 and ending with the Augustan census

¹⁶ Rostovtzeff 1926, 11-16.

¹⁷ Toynbee 1965, 105; Brunt 1971.

¹⁸ App. *B. Civ* I.7 and 27 speak of the decline in a rural peasantry that the Gracchi were trying to address; Sall *Iug.* 41.8 speaks of the removal of soldier’s wives and children by their powerful neighbors.

¹⁹ Rosenstein 2004; Launaro 2011, de Ligt 2012.

figure in the *Res Gestae Divi Augusti*, ignore centuries of essential developments that saw fundamental changes in non-elite life.²⁰ Teleology, driving inevitably towards the various crises and non-crises of the later Republic, is not far from the surface. My chronological window was chosen to consciously avoid these crises and present a narrative unburdened by a need to explain these literary events, yet, at the same time, a crucial prologue to later commoner developments. Whether a crisis occurred amongst the rural population of Italy or not in the second century, the material evidence that has been used to support these patterns of change need to be contextualized through a study of the preceding three centuries. Furthermore, I argue that rather than fitting non-elites into these narratives, as has also been done in the case of rural infill and the Roman conquest, commoner histories need to begin with the material associated with people at the lower end of the social spectrum, rather than the texts that often ignore them. Field survey offers a wealth of such material.

Over the second half the twentieth century, as new historical methods were developed that addressed lower class populations outside of the ancient Mediterranean, namely Marxist histories from below, the *Annales* school of multi-scalar history, and socio-anthropological Peasant Studies, these new methods were not quickly adopted or adapted for examining the Roman world.²¹ There are, of course, some exceptions. Paul Veyne, working in France and a Foucaultian tradition, examined Roman imperial social structures with particular interest in non-elites. He was primarily interested in later Roman urban non-elites with a strict adherence to legal and social categories.²² The application of these strict legal categories limits the utility of this type of approach for understanding the messier world of the pre-Augustan period, a period

²⁰ Polyb. II 23-24; *RG* 8.

²¹ For examples history from below see Thompson 1963; Hilton 1975; for the *Annales* school see Duby 1962; 1973 and Bloch 1931; 1939-40; for Peasant Studies see early issues of *The Journal of Peasant Studies*.

²² Veyne 1976.

when legal definitions were only beginning to crystallize. Peter Garnsey, in a series of articles beginning in 1971, was one of the first Roman historians to ask questions that foregrounded non-elites in a sustained and focused manner.²³ Garnsey was particularly interested in peasants and was influenced by the growing field of Peasant Studies, even publishing on Roman peasants in the *Journal of Peasants studies* – the discipline’s premier journal.²⁴ Garnsey began his inquiries by examining peasants’ legal status but moved to more nuanced and complex questions such as where they lived and what they ate.²⁵ While never explicit, a reading of his published works makes it clear that Garnsey’s framework for understanding rural non-elites was drawn from the socio-anthropological literature of Wolf and Shanin, as well as the Russian agrarian economist Chayanov.²⁶ This scholarship presented an essentialist view of the Roman peasant. The peasantry was a class that was not affected by changes in time or socio-political transformations. Comparative ethnography between ancient and modern Italian peasants was not just used by Garnsey, it was central to his model of a peasantry set apart.²⁷ Since the Italian peasantry was not engaged with market forces or urban populations, the Roman peasant must have likewise been separate from these domains in antiquity. While this static view of the peasantry does not hold up to the scrutiny placed on it by recent research either in either the modern or ancient world,²⁸ many of Garnsey’s other suggestions, namely his model of regional diversity in peasant

²³ Many of these essays were collected together in Garnsey 2004. See also Garnsey 1988; 1999.

²⁴ Garnsey 1976. To date this is the only article published by the journal focused on Roman period non-elites in the forty-six years of the publication’s history.

²⁵ Garnsey 1976; Garnsey 1979.

²⁶ E.g., Wolf 1966; Chayanov 1966; Shanin 1980. Chayanov, working in Russia the early twentieth century, was a victim of the Stalinist purges of 1937 which delayed the translation and broader circulation of his data-rich study of Russian peasants until 1966. He argued for a distinct peasant economy, separate from market forces and unchanging because they stood apart from the changing winds of history. The unchanging peasant suggested by Chayanov has had a massive impact (even if not explicitly cited) on Roman studies.

²⁷ See Garnsey 1979. The Mediterranean climate and stable, conservative agricultural practices conspired to limit the peasantry’s ability to produce enough surplus to interact with urban or external markets.

²⁸ See, for example, Bernstein and Byers 2011; Borrás 2009.

settlement practices, offered a productive dose of heterogeneity in a too-often monolithic discussion.²⁹ Amongst Garnsey's work, perhaps his most lasting contribution was his argument concerning where Roman peasants lived. In his 1979 article, "Where did Italian peasants live?" he argued that central Italian peasants lived in dispersed farmhouses – as opposed to peasants in southern Italy who lived in nucleated village communities. Many – indeed most – Italian survey projects used this model of the autonomous, dispersed peasant to interpret their data. The synthesis of the first survey that documented rural infill, the South Etruria Survey, was published the same year as Garnsey's article and, as will be discussed in Chapter 3, presented a complementary picture of rural activity also ascribing "Farm" status to isolated rural material culture. These models, supported it must be said by ancient literary sources, have been almost universally applied when interpreting survey and excavation data. Garnsey's work has been cited with relative frequency by other scholars, it did not lead to a swell in similar studies and remains, in many ways, a singular body of work for Roman Italy.

Italian language scholars of the later twentieth century cannot be said to have ignored non-elites to the same degree as their anglophone peers, but that is because Italian scholarship – coming mostly from a Marxist trajectory – latched onto one particular group of non-elites, slaves, around which much of their output was focused. There are clear echoes of the "decline of the peasants" model of Appian, Sallust, Toynbee, and Brunt, and an adherence to the literary record, which suggests the replacement of small rural producers by slave-run villas, in much of this work. This type of scholarship is typified by the excavations and interpretations of the villa at Settefinestre by Andrea Carandini as well as the associated field surveys.³⁰ Studies of the

²⁹ Garnsey 1979, 115-122. Garnsey argued that in the Roman world, northern Italian peasants lived in dispersed farmsteads while southern Italian peasants commuted from agro-towns.

³⁰ See Carandini 1985; Carandini *et al.* 2002.

Roman economy, especially the New Institutional Economic methodology popularized over the last two decades, have likewise not led to an increase in studies of non-elites. While there has been interest in quantifying inequality, this has (once more) subsumed the individual non-elite within quantification schemes aimed to determine, for example, Gini coefficients and the search for quantifiable economic growth.³¹

While this picture of relative stagnation in studies of non-elites characterizes the field of Roman studies broadly, the last decade has seen several positive developments in the study of non-elites in Italy – coming, it must be said, primarily from the archaeological side of the field. Geoffrey Kron has produced a diverse body of scholarship arguing for a more dynamic picture of peasant production in Republican Italy based on comparison with early-modern Western Europe (namely the Netherlands).³² Cam Grey’s 2011 monograph produces a synthesis for the later Roman countryside that should be a new paradigm for historical studies of Roman non-elites, especially in the later period where the variety of different evidentiary threads require a deft hand to untangle.³³ Outside of peninsular Italy, the changes in cultural heritage practices have led to an increase in the quality and publication of rescue excavations, including artifact and environmental studies, and provided a wealth of new data for provincial rural non-elites.³⁴ The results of some of these syntheses can be seen in Chapter 2, for example in France evidence for rural infill is drawn extensively from these rescue excavations. New excavations in Italy have attempted to reconstruct the day-to-day realities of urban non-elites of various periods.³⁵ The

³¹ See Flohr 2017; Scheidel 2017; 2018.

³² See Kron 2000; 2005; 2008; 2012.

³³ Grey 2011.

³⁴ See, for example, the Roman Rural Settlement Project (Smith et al. 2006; the Field of Britannia Project (Rippon, Smart, and Pears 2015; the Rurland project (Reddé 2015); and the AGER project (Leveau *et al.* 2009).

³⁵ See for example the Pompeii Archaeological Research Project: Porta Stabia (interim report Ellis and Devore, 2007) and the American Excavations at Morgantina: Contrada Agnese Project. AEM: CAP just finished their final seasons of excavation and is beginning the publication process, while PARPS has been in final publication for the last half-decade.

CoPower project, directed by Elisa Perego, is applying bioarcheological approaches to investigate the rise in social inequality in the first half of the first millennium BCE.³⁶ The Roman Peasant Project is particularly notable as it combined survey and excavation to examine rural non-elites in a micro-region within Tuscany.³⁷ This project collected a wide range of data about non-elite life including botanical, zooarchaeological, and geological samples that will significantly enrich the picture of peasant lifeways in the later Roman countryside of Tuscany. The Roman Peasant Project's combination of data from excavation and survey represents best practice for new projects examining rural commoners in Italy moving forward.

Where does this study fit in? I will, admittedly, be dealing mostly with data from field survey, less detailed than excavation data, as this represents the evidence for rural infill. I will discuss excavated non-elite sites when possible, especially the ways these excavations inform and problematize survey evidence, but there is less of this excavated evidence than one might desire. I am aiming to interrogate regional patterns; therefore, I am more interested in aggregate datasets than micro-histories. There is much value in micro-histories and micro-regional approaches to non-elites, and hopefully, an increase in evidence in line with the British and French cases would allow for a broader range of perspectives and the diverse landscapes of Italy could receive more attention.

There is a lot of variation at the lower end of the social hierarchy, but a study of regional patterns without an extensive sample of excavated data cannot fully explore the nuanced differences in status encompassed by the category non-elite. Instead of splitting the category up, what is needed is a way to group a wide range of data that can be attributed to non-elites in order

³⁶ For early outputs of this project see Perego and Scopacasa, 2018.

³⁷ Their final report is in preparation and will have a significant impact, one must imagine, on the non-elite studies, for interim reports see Ghisleni *et al.* 2011; Vacarro *et al.* 2013; Vacarro and MacKinnon 2014; Bowes *et al.* 2015; Bowes *et al.* 2017.

to create an initial, base line study that later research can nuance and reinterpret. This type of study has not been carried out for Republican period non-elites. Roman archaeology, and the archaeology of the Roman Republic in particular needs to walk before it can run when it comes to studying the lower classes. A more versatile heuristic tool, one that moves away from specificity to take advantage of the general can be a positive step in this direction. I suggest commoner as new label that can effectively encompass a wide range of the lower population.

1.2 Why Commoners?

I use the term commoner throughout this work to encompass the flexible category of non-elite people who are not part of the uppermost echelons of the Roman or Italian polities – the elite group who have, to date, received the lion’s share of attention in scholarly studies.³⁸ This is not a uniquely Italian or Roman distinction. The division of early states and empires into two social classes, hereditary elite on the one hand and commoners on the other, has been suggested to be an almost universal characteristic of these emergent political formations.³⁹ The Twelve Tables, Rome’s earliest formal legal code, suggests that Republican Rome was initially divided in a similar manner.⁴⁰ All commoners were undoubtedly not of the lowest classes, and some could be quite well off. There would likely be a blurring of the lines between the material signatures and lived experiences of the wealthiest commoners and the poorer nobility, especially

³⁸ The intention here is not to contrast commoner and royalty as might be seen in a monarchic system, but rather commoners and a nobility that possesses inherited rank.

³⁹ See Trigger 2003, 145-152 (in his sample this distinction did not hold only in the case of the Yoruba and Mesopotamia).

⁴⁰ The division between Patrician and Plebeian would be a traditional direction to point for this division, but, as Crooks has recently discussed, despite the volumes spent debating the nature of these two groups, they are still poorly understood (Crooks 2019, 119-120). Instead, I would point towards the division between *adsidui* and the *proletarii*. In the later Republic, these terms acted as a means of distinguishing wealth. In the Twelve Tables, as preserved in Aulus Gellius (Aulus Gellius 16.10.5), the law states that *adsiduo vindex adsiduus esto. Proletario ? cui? Quis volet vindex esto*. This clause covers the requirements of the *vindex* a guarantor of some kind. The requirement that a *vindex* be an *adsiduus* suggests their elevated wealth (hence their ability to act as a guarantor). This clause also codifies a hierarchical division between these two groups, with *proletarii* denied the power to act as *vindex*.

in the later first millennium.⁴¹ However, as a general rule, in first millennium central Italy, commoners operated at a different level of the social and economic hierarchy than the political elite with minimal room for political advancement. While other terms (poor, peasant, middle-class) were considered, they were either too restrictive (peasant), so general to be rendered utterly meaningless (poor), or carried far too much modern baggage (middle-class).⁴²

Commoner is, in many ways, an ideal term for precisely this reason. It encompasses a broad segment of the population and can be further divided to account for a diversity of non-elite

⁴¹ See Olson and Smith 2016 for a discussion of the separation between social inequality and wealth variation.

⁴² Slaves, a lower-class population of importance in the Roman world, will not be treated extensively in this dissertation. I am choosing to sidestep the issue of slavery for a few reasons. First, archeological field survey is mostly incapable of determining if the people who lived or used sites in antiquity were free or slaves. Second, the line between slave and free in the middle Republic would have been quite blurry. At Rome, a conception of slavery is implied by provisions in the Twelve Tables, but the fragments that survive of this law code do not clearly define what constitutes a slave or how one achieves this status (See, for instance, XII.2). Cornell has argued that this lack of a clear legal definition stems from a general understanding amongst the Roman community about the rules governing enslavement; rules that were not open for debate (Cornell 1995, 280). This might place too much trust in the ability of later Latin authors such as Livy, Varro, and Cicero to parse the nuances of fifth to second-century relations between *dominus* and *servus* on the one hand, elites and their dependents on the other, relationships that were undoubtedly in flux.

The debate surrounding the Etruscan dependent class can provide a useful counterpoint to Cornell's case for a widely understood set of communal standards regarding slavery. While linguistic barriers between Etruscan, Latin, and Greek could explain some of the variability, it is clear that no consensus on the line between dependents and slaves in Etruria existed in antiquity. Ancient historians working in Latin write of Etruscan slaves, however, there is often slippage in terminology as the lower classes of Etruria are described as both *servi* and *plebs*, one *servile*, the other free and in variable states of dependence. Ancient historians writing in Greek are even less consistent.⁴² In one instance, Dionysius of Halicarnassus uses the term *penéstai* to describe Etruscan soldiers fighting against the Romans at Veii in 480, the same word used to describe a semi-free Thessalian class (See Amann 2017b, 1106. *Doûlos*, slave in Attic Greek, is rarely used. Instead, *oikétai* and *therápontes* (domestic servant and servant) predominate). The single appearance of this word in relation to Etruscan non-elites has been used by some to argue for a separate, semi-free, legal class in Etruria (See Amann 2017b, 1106 n.22 for examples of arguments for *penéstai* as a discreet legal class.). Benelli is likely correct in stating that Dionysius is using the term here to designate a group dependent on a member of the nobility, not a separate legal category (Benelli 1996, 340) It should be added that, rather than a single individual, the *penéstai* might be dependents linked to an elite lineage group. The Latin and Greek authors cannot make up their minds about the status of the Etruscan lower classes. To this murky picture should be added the Posidonius' observation (preserved in Diodorus Siculus) that that *doulikóï* in Etruria live in all manner of houses and do not dress like slaves, wearing clothing more costly than befits someone of a *servile* nature (See Diod. Sic. 5.40). It seems likely that many of these references to Etruscan "slaves" are anachronistic and represent commoner dependents (In a Roman example of this anachronism, we might consider Appius Herdonius' "slave revolt" of the fifth century, where he took over the Capitoline with a force of 4,000 clients and "slaves" (*servi* in Livy, *therápontes* in Dionysius). Liv. 3.14-18; Dion. Hal. Ant.Rom 10.14-17). The sites I discuss as loci for commoner activity could be used by slaves, but I would suggest that the uncertainty seen in the ancient historians suggests a category that was not clearly defined during the middle Republic.

experiences. Commoner was chosen as an inclusive and mostly neutral term incorporating a significant subset of the population of the Italian peninsula and as a means of consciously contrasting this large and important group with the “elites” (i.e., the kings, senators, the nobility, and aristocrats) who figure prominently in the historical narratives of pre-Roman and Roman Italy. Because a term such as commoner is essentializing it allows the population of Roman Italy to be divided into two broad groups, groups that can be assigned material consumption patterns that can be tracked through archaeological survey. At the same time, this term is flexible enough to allow nuance to be added to individual cases without the need for a complete redefinition.

In *Ancient Maya Commoners*, Marcus states, “One of the biggest stereotypes is that all commoners were alike; it parallels another stereotype, that all elites were alike. Each group, in fact, has been stereotyped to facilitate making contrasts.” My choice of commoners in this dissertation is no exception. A number of stereotypes are used to define commoners in opposition to elites. Commoners are low-class, rural, peripheral, they live in smaller structures, with more utilitarian goods, they possess few artifacts.⁴³ They consume less expensive material culture. Archaeologists have used these material criteria to assign status to commoners for generations. My approach is to do the same, but intentionally, and then to focus on the evidence from the sites that are given commoner designations. Rather than just calling commoner sites commoner sites and moving on, a focus on how commoner sites change across time can act as a foundational piece in a project aimed at rewriting the hidden narratives of these commoners in central Italy. Commoners were poor in a material sense, but they also were capable of dynamic change as will be evidenced through the examination of rural infill.

⁴³ See Lohse and Gonlin 2007, xxv.

Discussions of those people who fall under my definition for a commoner in pre-Roman and Roman Italy have tended to use a Peasant Studies framework. Using commoners as the unit of inquiry allows this work to distinguish itself from Peasant Studies. There are three main cases to be made for beginning, at least, with a term that encompasses a broader segment of the population than peasant. From a negative perspective, many peasant-based studies of the Roman world use later, teleological Roman or Medieval models to explain Republican behaviors.⁴⁴ As noted by Horden and Purcell, four fundamental beliefs drawn from Peasant Studies have tended to dominate the discussion of Mediterranean non-elites: the overwhelmingly agricultural nature of Roman non-elites, peasant self-sufficiency, peasant self-determination, and the immemorial stability of peasant lifeways.⁴⁵ While, by the 1960s, anthropological approaches to peasants had questioned these assumptions, especially those of timelessness and apartness, this realization came late to studies of the classical world.⁴⁶ Recent work has presented a far more nuanced vision of rural production – Grey 2011 and the work of the Roman Peasant Project are prime examples, to be applauded – but a static view of non-elite communities in the Republican period persists and with it the suggestion that any changes in non-elite activity are simply a “superficial veneer” leaving the majority of the Roman commoners occupying landscapes little changed from their Iron Age predecessors.⁴⁷ Peasants figure prominently in this dissertation, but these peasants

⁴⁴ The old peasant model for non-elites is based, primarily, on models presented in studies of Eastern European and Russian serfs, most notably Kula (1976) and Chayanov (1966). Scholars such as Toynbee (1965) and Brunt (1971) incorporated this paradigm into their studies of Republican Italy where it persisted in the work of scholars such as Frayn (1979), and De Neeve (1984). While numerous scholars have moved away from this portrayal (for example Kolendo 1980; Kolendo 1993; Rosenstein 2004; Kron 2008), the effects of an alternative model on broader historical narratives have not been explored from an archeological perspective.

⁴⁵ Horden and Purcell 2000, 270-78; For Roman Italy see Witcher 2006b. The team behind the Roman Peasant Project has done heroic work deconstructing these assumptions for the later Roman period.

⁴⁶ Wolf 1966; Wolf 1982. See the discussion of Garnsey above.

⁴⁷ See Witcher 2006b.

are but one category of commoner.⁴⁸ As recent work on peasants has highlighted, a peasantry is not a universal absolute, but rather a negotiated social construction.⁴⁹ Especially from an archaeological perspective, the case can be made that one of the processes that marked the three centuries under study here was the creation of a more discrete peasantry: a group of non-elite rural dwellers, marked by shared material culture, a more autonomous social reproduction, new subsistence patterns, and, if not identifiable land ownership, a more permanent presence across the landscapes of central Italy.

A positive argument for using commoner is that it draws on more than just the rural evidence and also can highlight the people who live in rural areas but are not primarily agricultural producers; in using commoner as a category, we might also include the emerging urban lower classes in a discussion of a period that, after all, saw the proliferation of cities across central Italy.⁵⁰ Urbanization and state formation, along with social stratification, were the most significant transformations that reshaped central Italy in the first millennium. While social stratification is difficult to date and certainly predates the fifth century, urbanization and state formation play out as prologues and contemporary processes to the changes in rural habitation this dissertation investigates. This study is enriched by the possibility of reading urban and rural perspectives against one another in future. Also, the evidence is fragmentary enough that the wider we cast our nets, the more likely that the material and literary patterns identified are representative of past behaviors, rather than mirages of small sample sizes. True, as my title states, most of my focus will be on rural commoners, but urban perspectives are also valuable

⁴⁸ Following the Roman Peasant Project, I do not use land ownership to define peasants since this is all but impossible to determine archaeologically. I do focus attention on permanence in the landscape as an important factor in rural commoner life.

⁴⁹ Narotsky 2016, 305; for a modern comparison see Martins 2003.

⁵⁰ See Sewell 2016.

and will see attention in future iterations of this project. The trajectories of rural and urban commoners across this period are difficult to reconstruct and require more focused excavation, but likely represent divergent processes of identity and community formation that deserve more detailed attention. Roman elite presentations of the Italian lower classes encompass both urban and rural types depending on their ideological goals: much credence is given to Livy's presentation of Roman non-elites, autochthonous farmers, daily traversing to their *iugera* of land to work for their subsistence at the outskirts of the community.⁵¹ As Elaine Fantham has demonstrated, there are also competing narratives that treat the lower classes as “newcomers to Rome, once captive Greek and Levantines or their children, shopkeepers, craftsmen, and parasitic con-men, city slickers unsuitable for military service.”⁵² This emerging urban lower class tells a different side of commoner experiences but can be equally important for reframing our understanding of first millennium Italy. New data will be key to unlocking this urban perspective.

Finally, research on commoners as a distinct subset of a population has gained significant traction in anthropological studies of other premodern societies, namely those based the Central and South America.⁵³ The existence of these other commoner studies allows the Roman data to be placed in dialogue with comparable evidence from other premodern states, to trace similar patterns of interaction and contrast points of divergence. Commoner provides a broad heuristic category that we can nuance and divide in order to create holistic, balanced narratives of various urban and rural trajectories.

⁵¹ As Isayev notes, this use of rurality to define a quintessential feature of identity is similar to processes seen in other expanding imperial states, namely British characterization of rurality as quintessentially English in the nineteenth century. Isayev 2017, 236; see also Cannadine 2002.

⁵² Fantham 2005, 210. See also Isayev 2017, 224-227.

⁵³ See for example (amongst many) Pauketat 2000; Lohse and Valdez, jr. 2004; Marcus 2004; Lucero 2010; Robin 2013; Olson and Smith 2016; Smith and Hicks 2016; Hirth, Smtih, Berden, and Nichols 2017.

A brief note is needed on the other side of the commoner-elite dichotomy. Commoners are often defined in opposition to the elite and the specific relationships that bind together these groups and the manner in which they distinguish themselves are historically contingent. Because more work has been carried out examining elites in middle Republican Italy, there is a more robust picture of what a middle Republican elite entails.

The elite is a class that is hereditary and could be legally defined.⁵⁴ This definition fits the Roman case, for which we have the most textual evidence, and can be extrapolated, I believe, to the rest of the region under study in this dissertation. The separation between elite and commoners was a distinction based on both birth and access to resources:⁵⁵ an elite was one who had been born or was purported to be born into an elite lineage, whereas a commoner was someone who lacked or opted not to make a claim to elite parentage. This claim to lineage could be materialized in a number of ways: through burial, onomastics, maintenance of an elite residences, or historical recording.⁵⁶ Although each of these social classes encompassed considerable variation in wealth, power, freedom, and lifestyle, as a general rule commoners were materially poor and elites were not. Recent scholarship has persuasively argued for the fluidity of Italian nobility/aristocracy, and it is fair to assume that at no period was elite status

⁵⁴ Bloch 1961, 283. Legal definitions, it must be said, does get a little fuzzy in the early first millennium BCE. I am using a weak definition of the term that takes into account custom as well as codified law. Gelzer held a rigid definition of the *nobiles*, where you had to have held the consulship to be considered part of the nobility (Gelzer, 1912). Brunt, building on Mommsen, suggested a broader assignation of *nobilitas* connected to holding any curule office (Brunt 1982). Millar equates it with a fluid category that was never firmly defined (Millar 2002, 126). I follow Millar's looser definition.

⁵⁵ This definition combines a Weberian approach where status is, "a claim to positive or negative privilege with respect to social prestige so far as it rests on more of the following bases (a) mode of living, (b) a formal process of education which may consist in empirical or rational training and the acquisition of the corresponding modes of life, or (c) on the prestige of birth, or of an occupation (Weber 1947, 428) and a Marxist approach where fundamental classes are expressed through social labor, and a relationship between producer and labor appropriators is fundamental (Resnick and Wolff 1987).

⁵⁶ Naglak and Terrenato have suggested the model of a House Society, drawn from Lévi-Strauss, as a useful heuristic for understanding one way in which these elite lineages can be studied through material culture. See Naglak and Terrenato 2018.

completely closed off.⁵⁷ However, the structural makeup of first-millennium central Italian society, namely the power vested in elite lineage groups, meant that horizontal mobility between elites of various regions was significantly more common than true vertical mobility.⁵⁸ While there are few contemporaneous sources detailing Roman social structure, the fragmentary evidence that survives suggests that the social categories approximating elite and commoner were emically perceived and ascribed, making their recovery through archaeology possible. While the various dichotomies in the Twelve Tables are complex, poorly understood, and are likely not mutually exclusive, the fact that the first Roman legal code divided the early city into groups based on material wealth (*adsidui and proletarii*) and social power (*patroni and clientes*) lends credence to my divisions.⁵⁹

Studies of commoners have stressed the need for historical specificity, and the Italian case is no exception. There is evidence that the elites in central Italy possessed their own unique social structure and this would have affected commoners in a number of ways. Many central Italian elites were organized into elite lineage groups. Elite lineage groups and their importance in first-millennium Italy have seen a notable increase in scholarly attention over the

⁵⁷ See Hölkeskamp 2010; Bradley 2015.

⁵⁸ To date, I know of no compelling examples of non-elites who reached high political office throughout the Republican period. So-called *Novi homines* (the first in a family to reach the consulship) during the period I am studying all come from families that had a significant history of holding high, but non-consular offices. 14 *novi homines* are attested for the period between 500 and 200, Lucius Sextius Lateranus (366), Gaius Licinius Stolo (361), Marcus Popillius Laenas (359, 356, 350, 348), Gaius Plautius Proculus (358), Gaius Marcius Rutilus (357, 352, 344, 342), Publius Decius Mus (340), Lucius Volumnius Flamma Violens (307, 296), Spurius Carvilius Maximus (293, 272), Manius Otacilius Crassus (263), Gius Duilius (260), Gaius Aurelius Cotta (252, 248), Gaius Fundanius Fundulus (243), Gaius Lutatius Catulus (242), and Gaius Flaminius (223, 217). There is good evidence that all of these men either came from families who had a long history of holding high, non-consular office (such as the *gens* Sextia and Licina) or elites from other locales (the Ogulnii from Etruria, the Plautii from Privernum, the Duilii from Campania). See also Terrenato 2019, 51-56.

⁵⁹ And whatever *plebeians* and *patricians*, in the Twelve Tables also suggests that material wealth could act as a division in Roman society For *Adsidui and proletarii*, for patrons and clients see Watson 1975.

last two decades.⁶⁰ While much of the research on lineage groups initially focused on the role in urbanization,⁶¹ their importance has been highlighted not just in the formative stages of central Italian urban and state formation, but as a long-lasting feature of Italian and Roman society. Terrenato goes so far as to say that the presence of lineage groups larger than the nuclear family was, “the most salient feature of elite social organization in central Italy during the first half of the first millennium BCE.”⁶² The precise nature of these groups is likely too variable across central Italy to define them precisely, but Terrenato provides a series of general traits that were shared in common between groups of this nature.⁶³

1. Lineage groups included multiple generations of the same elite, descent line as well as cadet branches formed through agnatic and marriage relationships.
2. Certain features (namely cults) were particular to individual lineage groups.
3. These groups were not only urban. Rural lineage groups also existed and exerted direct control over portions of the countryside.⁶⁴
4. These groups likely had biologically unrelated social dependents attached through social obligations (e.g. debt, bondage, capture).
5. These groups played a role in managing resources, especially land-based resources (agriculture where arable land was present, but also woodland, mineral, and animal resources in areas with less cultivated land).

⁶⁰ See Smith 2006 for a discussion of the *gens* from a (primarily) historical perspective. For the most recent synthesis on lineage groups in central Italy see Terrenato 2019, 43-72. Due to the inconsistencies in the use of the Latin *gens* and *gentes*, I will use the more neutral term lineage group following Terrenato.

⁶¹ See Bietti-Sestieri 1992.

⁶² Terrenato 2019, 44.

⁶³ Terrenato 2019, 45-49 for relevant citations.

⁶⁴ Terrenato 2007, 19.

The relationships between elites and their social dependents, many of whom would have been commoners, requires further comment. Not all commoners were connected to these lineage groups and, especially with the rise of cities in the later first millennium, an increasingly visible segment of the urban commoner population was likely independent from these social constructs. However, many rural commoners must have been linked to these elite lineages, since control over agricultural production was one of the central elements in the maintenance of a lineage group's power base.⁶⁵

Rather than a top-down model of domination by elites, a more nuanced, negotiated picture of commoner-elite relationships within these lineage groups can be suggested. It is possible to envision a dialectic relationship between commoners and the elites in these lineage groups. The commoners were subordinated by a developing system of social *mores* – of which we can see one particular Roman flavor in the system of *fides* from the later Republic – that also acted to constrain all but the slimmest hopes of vertical mobility.⁶⁶ In return, however, the commoners received material benefits, advocacy, and social protections.

A high degree of exploitation should be expected in these types of vertical relationships, and it is not my intention to suggest that commoner-elite relationships were mutually beneficial at all times. However, commoners were not without recourse if this exploitation reached an unsustainable level. While this type of inter-group conflict and response is difficult to detect archaeologically, we might be able to draw comparisons with evidence from Aztec Mexico. A system of elites with dependent, mostly rural, commoners is attested in both the archaeological

⁶⁵ Terrenato 2007.

⁶⁶ Hölkenamp 2010, 33-36; Terrenato 2019, 49. It is telling that the prime example from the literary record of vertical mobility in early Rome, the story of Servius Tullius who (in some version of the story) goes from a slave to the king of Rome, includes the detail that Servius was the son of nobility captured in battle. He does not have commoner roots, perhaps suggesting it is difficult for late Latin writers to envision this type of vertical mobility. Cornell 1995, 131.

and documentary record from the period pre-dating and directly post-dating the Spanish conquest.⁶⁷ Exploitation was a reality, but there were many documented cases of passive commoner resistance, primarily through mobility.⁶⁸ The majority of Aztec commoners were not strictly bound to the land of the elites, they could move if a lord became too repressive or another community appeared more prosperous.⁶⁹

Less dramatic forms of resistance were also undoubtedly possible. While socially subordinated, commoners were not without agency. The majority of commoners in central Italy might have possessed the freedom to move between groups and across the landscape. Migration, of course, was not a safe or straightforward choice as many commoners likely lived on the precipice of subsistence and any risk could push them over the edge, moving was undoubtedly a risk. However, it was a possibility and one avenue for commoners to actively shape their participation – or lack thereof – in developing social structures. Mobility as an act of resistance is important to keep in mind when we consider rural infill. It might be possible to see increased commoner presence in new parts of the landscape as just this type of resistance through avoidance or Aztec-style voting with their feet.⁷⁰

Economic opportunity was likely not the only impetus for commoners to forge and maintain connections with elite kinship groups. The increased presence of weapons, shield, and panoply as well as chariots and equine military equipment in the burials of the emergent central Italian nobility beginning in the tenth century suggest that martial activities formed not only a core aspect of elite identity, but also that conflict was the lived reality of many early Iron Age

⁶⁷ For a general discussion, see Smith and Hicks 2016.

⁶⁸ For non-elite resistance see also Scott 1985.

⁶⁹ Smith and Hicks 2016, 427. See also Terrenato 2019, 49; Güreç, Irlenbusch, and Rocenbach 2009. Isayev 2017 also discusses mobility at length.

⁷⁰ See Joyce *et al.* 2001 for a discussion of resistance through avoidance.

communities.⁷¹ This conflict did not disappear, and continued through 200 and beyond.⁷² While these conflicts likely resembled raids and counter-raids for much of the first millennium, the creation of fortification walls at several proto-urban centers in the seventh century belies a significant increase in conflict over this period.⁷³ Commoners could use these kinship groups as a protective strategy against increased raiding, but the increase in martial activities also might present one of the few opportunities for vertical mobility. Kinship groups did disappear and likely died out.⁷⁴ Migration by extra-local elite groups, as is attested in the later literary record in figures such as the Etruscan kings of Rome and the *gens* Claudia, likely played a significant role in filling the niches left behind by these disappearances, but even if there is no direct evidence for we should not completely rule out social advancement. The loot and prestige drawn from raids and conflict might allow commoners to achieve increased rank both within kinship groups and, one can imagine in exceptional cases, form their own *ex novo* elite lineages. Changes in these practices of raiding warfare might also have freed commoners to colonize new parts of the landscape.

As the Aztec case presents, commoners had different mechanisms for dealing with overbearing elites. Many of these negotiations likely played out in the countryside of central Italy during the period between 500 and 200. Rural infill can be considered through the lens of these negotiations. Other scholars have hinted in this direction. Colonna has interpreted shifting Etruscan settlement patterns as evidence for changing relationships between elites and rural

⁷¹ Martinelli 2004.

⁷² Armstrong 2016.

⁷³ See Fontaine and Helas 2016.

⁷⁴ This might be the case with a group from Osteria dell'Osa, whose burials peter out in the seventh century. For the temporary nature of kinship groups, see Smith 2006, 147-156. While new archaeological data calls into question some of Smith's arguments (namely the egalitarian nature of the *gens*), he is correct to point out that it should be expected that only a few (if any) exceptional kinship groups managed to survive from the 10th century into the historical period.

commoners, and Terrenato has hinted at a complex system of peasant-clan (another name for lineage groups) relationships encoded in rural infill in the middle Republic.⁷⁵ It is possible that *nexum*, a poorly understood early Roman legal term related to debt bondage, as well as the social transformations in Etruria that have been read as the emancipation of a serf class, are also related to the rural transformations of the fourth and third centuries.⁷⁶ Rather than disappearing with the creation of the various cities and states in the middle first millennium, Terrenato's recent argument has suggested the survival of these lineage groups and their continued importance through the first two centuries of the Roman conquest.⁷⁷ Rural infill must have taken place against the backdrop of continued power amongst elite lineage groups. It is important that we not only examine the relationship between commoners, their environments, city states, or individual elites, but also keep in mind the central importance of the relationship between lineage groups and commoners through the middle Republic. A dichotomy between commoners and elites creates a useful heuristic frame for examining changes in the countrysides of central Italy.

1.3 Sources for Commoners in the Middle Republic

How do we access commoner histories? Field survey data provides the majority of my evidence, and I will discuss the methods I use to recover rural commoners at length below, but a more general overview can help elucidate some of the challenges faced by a bottom-up approach to central Italian histories. Information on commoners in first millennium Italy is scattered across

⁷⁵ Colonna 1990; Terrenato 2007.

⁷⁶ For dependents in Etruria see Colonna 1990, Terrenato 2007; Torelli 1987; Torelli 2014, Amann 2017a; 2017b; 2017c. For the most recent bibliography on *nexum* see Bernard 2016. While still viewed primarily from an economic perspective, it is time that *nexum* be reassessed in light of new evidence for the survival and continued importance of lineage groups in central Italy.

⁷⁷ See Terrenato 2007 and, especially, Terrenato 2019. It is tempting to see the persistence of not only these groups, but also their relationships with commoners still present in Tacitus' opening of his *Histories* "The respectable part of the common people and those attached to the great houses, the clients and freedmen of those who had been condemned and driven into exile, were all roused to hope. The lowest classes, addicted to the circus and theatre, and with them the basest slaves, as well as those men who had wasted their property and, to their shame, were wont to depend on Nero's bounty, were cast down and grasped at every rumor (Tac. *Hist.* 1.4.)".

many different sources and types of data. It should be evident that the best approach combines as much data as possible to create a synthetic picture that takes into account the strengths and weaknesses of various research traditions, unfortunately evidence related to rural commoners in the middle Republic is almost completely absent. The literary record contains much information about inequality and class. This record, however, must be treated carefully if we are to break outside of the echo chamber of elite-driven histories. Latin and Greek literary accounts are biased temporally and in relation to the social statuses they represent. Most of the information on Roman commoners, especially the information preserved by the annalistic tradition, was first recorded by or for members of the nobility and then translated through multiple elite interlocutors before it reached its ultimate Livian or Dionysian form.⁷⁸ The literary evidence for Etruscan commoners traveled an even more fraught path, coming as it does from sources such as Athenaeus of Naucratis, pseudo-Aristotle, Posidonius as preserved by Diodorus Siculus, and the Byzantine chronicler Zonaras.⁷⁹ Emic perspectives are absent as are all but a few contemporaneous etic points of view. As a general rule, elite life and concerns are described at length; commoners, rarely discussed below the aggregate level of the amorphous *plebs*, to begin with, are presented as idealized types or following the conventions of literary tropes. One example that illustrates this broader pattern can be seen in the events that led up to what has often been read as a seminal moment of non-elite/commoner activity in Republican Roman history: the first secession of the *plebs*. While the nature of plebeians will be discussed later, many scholars would suggest that plebeians and commoners (at least before the First Secession) are two names for the same social group.⁸⁰ Livy's narrative of the events that precipitated the

⁷⁸ For an overview of the development of Roman historical writing, see Feeney 2016. For Livy, in particular, see Oakley 1997-2005, I.13-108.

⁷⁹ See Chapter 2.

⁸⁰ E.g., Cornell 1995, 256-258.

first secession center around a single plebeian individual, an elderly former centurion, forced due to his debts to live in squalid conditions (Livy 2.23).⁸¹ He is emaciated, wasted, and pale with wild hair and beard.⁸² His destitute social status is reflected in his haggard physical appearance. As evocative as this description of physical and social squalor might be, Ogilvie is certainly right to suggest that this image is drawn not from authentic reporting or an actual record of this centurion but, rather, is a classic stage type that appears elsewhere in Livy as well as other Latin authors.⁸³ Livy presents a commoner in language that underscores their status to an elite audience but is not intended to represent the actual state of their non-elite neighbors accurately. This episode illustrates a general pattern of characterization bordering on caricature as commoners, when not presented as an undifferentiated mass, were presented so that their physical state echoed their lower status. The Roman nobility (the group for whom we have the most abundant evidence) were ideologically separated from their commoner peers, and encoded this separation in their literary presentation of their social inferiors. It is the nobility's literature that dominates in any historical inquiry.

It can be challenging to glean even a kernel of real commoner histories, especially for the period before Fabius Pictor (writing ca. 210-200), from written sources. Thus, while scholars drawing on the literary record to discuss pre-Fabian central Italian history tend to define themselves on the Cornell-Forsythe spectrum (with Cornell representing the 'conservative' while

⁸¹ I am eliding for the rhetorical effect the fact that, in the early Roman army, it is entirely likely that the centurion position was filled by elite personages.

⁸²*obsita erat squalore vestis, foedior corporis habitus pallore ac macie perempti; ad hoc promissa barba et capilli efferaverant speciem oris. noscitabatur tamen in tanta deformitate, et ordines duxisse aiebant aliaque militia decora volgo miserantes eum iactabant;*

"An old man, bearing visible proofs of all the evils he had suffered, suddenly appeared in the Forum. His clothing was covered with filth, his personal appearance was made still more loathsome by a corpse-like pallor and emaciation, his unkempt beard and hair made him look like a savage (Liv., 2 23)." All translations taken from the most recent Loeb editions of the various texts.

⁸³ Ogilvie 1965, 298. Cf. Liv. 3.58.8, 4.58.13; Cicero *Tusc. Disp.* 3.26; *Aeneid* 3.590.

Forsythe represents the ‘skeptical’),⁸⁴ even if we hew towards the Cornell side of the line and believe that the ancient literary tradition preserves a significant core of fact, with kernels of truth that can form a narrative framework, there is little reason to assume that more quotidian aspects of commoner lives are preserved in these sources with any accuracy. Unfortunately, it is these quotidian aspects that are most useful for writing histories from below.⁸⁵ In general, it is my position that we need to look at other sources of data first if we want to reconstruct commoner histories.

Looking beyond the literary sources, studies of commoners in other premodern cities and states have found different sources of data to be less biased than the written texts. Administrative documents describing households, landholdings, and taxes have proven to be highly informative about actual on-the-ground conditions in those places where available.⁸⁶ However, these types of documents rarely survive for the period under study here, and it would be irresponsible to extrapolate the evidence from, for example, Imperial Roman Egypt, where we do have some of these documents on papyri, to model the situation in first millennium Italy.⁸⁷ Social and economic structures were not spatially or temporally static, and more nuance is needed than a direct extrapolation from later evidence. Scholars have too often looked back from the more

⁸⁴ Borrowed from Fronda 2010. Cornell 1995 and Forsythe 2005 and the monographs by each author that set the benchmark for this comparison.

⁸⁵ This historical method has proved popular amongst historians of the early modern world yet largely failed to appeal to those working on the Roman world (and especially first-millennium Italy). For a discussion see Hobsbawm 1997, 201-217.

⁸⁶ E.g., Grey 2011 for the later Roman period; Smith and Hick 2016 for the Aztec case.

⁸⁷ One possible exception is the *Tabula Cortonensis*, an Etruscan language document that dates to the tail end of my period under study (ca. 200 BCE) and might reveal information about land tenure relationships in Hellenistic Etruria. The fact that it is written in Etruscan, a language we cannot fully read, makes its utility less than we might hope for but, it will be discussed in the next chapter. See Agostiniani and Nicosia 2000; Amann 2006.

abundant late Republican or Imperial evidence when looking at the early and middle Republic. I will try to avoid that teleological quagmire.⁸⁸

If we cannot rely heavily on an unbiased literary record or documentary evidence (not that this ever exists), archaeological evidence represents a more promising starting point. Archaeological evidence, if treated correctly, can provide different types of data that can elucidate commoner histories. While fragmentary and often biased in its own way, the archaeological evidence offers an array of different techniques for studying non-elite life. Materials recovered from houses and domestic contexts can provide information that can help define the material signatures of different commoners. Bioarcheological studies can answer important questions of subsistence and diet. Funerary evidence, while not a direct mirror of lived experiences, can produce a picture of how commoners were represented in death by the nobility and, in some cases, how they represented themselves. Artistic depictions of commoners and artifactual evidence can help understand what commoners were doing in the past. Epigraphic evidence, while not bountiful for these periods, bridges the gap between text and object and has played a significant role (mostly through linguistic and onomastic approaches) in changing our understanding of Etruscan commoners.⁸⁹ Unfortunately, excavation has only accessed middle Republican levels sporadically, and commoner houses are few and far between. Chapter Three presents a representative sample of this fragmentary evidence. I will deploy these archaeological data when possible, but the picture from these sources alone would be fragmentary and elide much of the rich diversity that must have characterized commoner experiences. The lack of excavated sites is especially glaring in the countryside, where outside of a few small farmsteads

⁸⁸ The risk of anachronism and teleology are additional problems presented by the literary sources, based on observations and assumptions from the author's time.

⁸⁹ Amman 2017a; 2017b; 2017c.

and the work of the Roman Peasant Project, little excavation exists that can be compared to the survey record. I hope that in future projects, I will take inspiration from Roman Peasant Project's work and excavate scatters identified as middle Republican commoner sites. Unfortunately, there is not a representative sample of this type of excavated data – or combined excavation and survey data – available at this moment and dated between 500 and 200. As the catalogue in Chapter 3 demonstrates, excavation of middle Republican commoner sites has been both limited and sporadic. Most of the commoner sites excavated fall outside of the period under study in this dissertation, forcing extrapolation from later periods and perpetuating the “myth of the static peasant.” Much of this excavation also took place prior to the implementation of more scientific excavation and recording techniques. Rather than attempting to reach conclusions based on this partial and fragmentary sample, I will turn to a different form of evidence that is more numerous, although fragmentary and unrepresentative in its own way. Survey archaeology has long been considered the lesser cousin of excavation.⁹⁰ In this case, however, it offers an untapped body of data that falls within the right chronological period for studying rural infill. Commoners are the oft-silent majority of the ancient world, by examining their material culture from the sherd up as it were, using field survey evidence to create a regional narrative of heterogeneous commoner histories, we can get a better sense of this understudied group's place in evolving middle Republican countryside.

1.4 Conclusion

This chapter serves as a foundation for studying commoners in central Italy that also begins to illustrate the significant length studies of the Roman world still need to go to recover non-elite perspectives, especially from the first millennium. My philosophy for reconstituting

⁹⁰ As the saying goes, “those who can dig, dig, those who can't, survey” (Stewart 2013, 7).

commoner histories is deceptively simple: before we can recover complexity, we need to deconstruct the many categories we tend to ascribe to non-elites and return to a terminology that allows for general patterns of activity to be detected. A basic dichotomy between the haves and the have-nots, the commoners and the elites, allows for general trends in material consumption to be connected to these status groups. The assertion of a two-status system in middle Republican central Italy is not made without support, there is evidence from the comparative studies of other premodern states, as well as emic evidence from sources such as the Twelve Tables, that most of the central Italian population between 500 and 200 could be grouped into these two broad categories. This would especially hold true for rural areas. There is, of course, a multiplicity of identities and groups subsumed within this broader categorization. However, before the full nuance commoner experience can be appreciated, initial studies of commoners need to be carried out.

Our data for the middle Republic generally is fragmentary and full of lacunae; this is exacerbated when a study targets the lower end of the social spectrum, often linked with less durable material and a peripheral (at best) treatment by the literary source. While many different bodies of evidence can contribute to the study of commoners, for the period under study in this dissertation the choice in material is dictated by what is available. Excavation data and literary sources do not offer a robust corpus of material on rural commoners. Feld survey, on the other hand, can provide a large body of data. The analysis of this data involves various methodological hurdles, discussed in Chapters 3 and 4, but it remains an untapped and abundant source of evidence that has not been used to ask questions of commoners to date.

Commoner studies stand to contribute much to our understanding of first millennium Italy. It has the potential to do far more than simply cataloguing the material remains of the

lower classes. If research outside of the Mediterranean is a guide, commoner studies can help recognize the diversity of responses to inequality in the past. Commoner-elite relationships should be viewed as a dialogue that involved push and pull in both directions, commoner studies can balance the dominant perspective in classical studies that focuses on the elite side of these negotiations. My analysis of rural infill can act as an initial test case for the utility of this commoner studies framework. The assumption has been almost universally made that rural infill involves commoners, so I will investigate this material pattern with a methodology designed to explicitly locate commoner actions in this supraregional pattern. Commoner studies offer a means to achieve a more integrated and comprehensive perspective on the Roman past, this dissertation provides a starting point for discussing the interactions between commoners, elites, and the world around them.

Chapter 2 : Rural Infill: a Supraregional Pattern

2.1 Introduction

Andrew Sherratt expressed the view that local and regional patterns can only be understood at the macro-regional level.⁹¹ Yet, at the same time, every step one takes up the interpretative ladder divorces the interpretations from the primary data. The wider the chronological and geographic unit of analysis chosen, the more the individual character of regions, micro-regions, sites, and individuals is obfuscated. The general replaces the particular. Ideally, studies will take multiple scales of analysis that allow regional patterns to be compared to broader macroregional processes. At the same time, the excavated site maintains a central place in archaeological inquiry. The tight chronologies and patterns of material distribution, as well as contextual data from ceramics, architecture, botanical studies, and zooarchaeology, that excavation offer are invaluable when trying to contextualize not only the local conditions of a particular site, but also a regional pattern such as rural infill. Neither small-scale nor large-scale approaches are inherently better, both are suited to particular questions and particular types of data.

Rural infill is a particularly interesting case with which to test these scales of analysis. On the one hand, as this chapter will demonstrate, rural infill occurs across the Mediterranean in various regions. This is as close to a “global” landscape transformation as the Mediterranean can offer. Studies of rural infill as a global phenomenon have pulled out a series of narratives for

⁹¹ Sherratt 1996.

why this change occurred: climate change, erosion, sedimentation, urbanization, changes in agricultural practices.⁹² At the same time, a focus on these supraregional explanations elides the individuals behind this landscape transformation. Attempting to reconstruct the place of commoners in rural infill from these trends leaves non-elites as undifferentiated and ignored as they have tended to be in studies based on texts or monuments. These global patterns provide a framework, general trends against which the smaller data sets can be tested. I suggest moving the frame not to the site level – there is not the quantity or quality of data for that type of jump in analytical scale – but instead to a smaller region, central Italy, where data can be collected at a higher level of resolution, in this case the individual survey project. The “global” framework, however, is still important. This chapter presents a survey of evidence for rural infill outside of central Italy. I begin with the wider Mediterranean, and move to southern Italy. I look at a number of theories for the cause of rural infill, arguing that some (such as the Roman conquest) are unlikely due to the chronology of events, while others (such as intensive agricultural production) need further contextualization. General trends can help explain rural infill as a “global” phenomenon, and in turn, inform more regionally specific models for this landscape change.

2.2 The Mediterranean

Field survey and rural excavation have recovered an increase in rural activity in the period between 500 and 200 in several regions of the Mediterranean (Figure 2.1). Field surveys in the regions of Segesta, Entella, Monreale Himera, and Heraclea Minoa on Sicily noted patterns of rural settlement intensification that saw a system of nucleated settlements replaced with a system of dispersed small sites between the fifth and third centuries. In at least some of these surveys,

⁹² Attema *et al.* 62, 82-6.

for example around Segesta, a number of these new sites were interpreted as small farms based on the material and size of the scatters.⁹³ On Sardinia, similar processes have been identified around Nora, Mount Sirai, and Riu Mannu.⁹⁴ The exact chronologies do not align between these two islands, Sardinia sees increased dispersed settlements settlement beginning in the fifth century, while the different areas of Sicily see it a little later, often only in the fourth. On the islands of Malta and Gozo, surveys have noted that the number of tombs increases over the fourth century, suggesting some form of rural change. These surveys, however noted no analogous rise in rural sites.⁹⁵ Recent evidence may emend this picture, as surveys of Northwest Malta, while not fully published, have recorded a preliminary increase in rural activity during the fourth and third centuries.⁹⁶

Across the Mediterranean in northern Africa, the hinterlands of Carthage and Thugga see a marked increase in dispersed rural material, as does the island of Jerba. Shifts in settlement patterns on Jerba are dated slightly earlier, the fourth century, than around Carthage which sees increased rural settlement beginning in the third (Figure 2.2). Thugga's period of rural transformation comes the latest of these sites, in the second century with the increase in black gloss ceramic at dispersed settlements.⁹⁷ The Spanish region of Andalusia and the island of Ibiza also see evidence for the increased dispersion of small sites between the fifth and second centuries. Initial evidence for an increase in rural settlement on Ibiza can be seen in the fifth century, but the density of recovered sites increases markedly in the fourth.⁹⁸ Andalusia also sees

⁹³ Bernardini *et al.* 2000, 98-104; Corretti and Vaggioli 2001, 190; Vaggioli 2001, 61-63; Johns 1990; Belvedere 2002; Van Dommelen 2006; Wilson 1981; Van Dommelen *et al.* 2008, 134-47.

⁹⁴ Rendeli 2003, 16-19; Botto *et al.* 2003, 177-80; Van Dommelen and Finocchi 2008, 171-76.

⁹⁵ Spanò Giammellaro *et al.* 2008, 149-53.

⁹⁶ Docter *et al.* 2012, 110.

⁹⁷ Greene 1983; De Vos 2000; 2002; Fentress and Docter 2008, 108-115.

⁹⁸ Gómez Bellard 2003; Lòpez Casto 2008, 95-96; Gómez Bellard 2008, 62-63; García Fernández 2005.

rural site densities increase. This increase is especially notable in the late Phoenician-Punic period at the end of the third and beginning of the second centuries.

This general pattern is not only present in the western Mediterranean. A recent effort to synthesize site data from the Levant has identified an apex in rural settlement during the early Hellenistic period, the fourth and third centuries.⁹⁹ Studies of Hellenistic settlement patterns in Greece have primarily focused on the decline in settlement numbers detected by field survey in the later centuries of this chronological period, following the Roman conquest.¹⁰⁰ If we shift focus to the beginning of this period, the fifth, fourth, and beginning of the third centuries are generally characterized by highly dispersed settlement with an increase in the number of small sites, traditionally interpreted as small farmsteads and seasonal agricultural structures.¹⁰¹ Surveys in the southern Argolid, Nemea Valley, southern Euboea, southern Boeotia, northern Keos, Messenia, Melos, and Panakton have identified this general pattern of Classical and early Hellenistic site increase,¹⁰² while in Aetolia, this increase in site numbers and the appearance of a dispersed settlement pattern appears to occur in the later Hellenistic period, around the third century.¹⁰³ Surveys of the Western Argolid point to a similar pattern of early Hellenistic growth.¹⁰⁴ A recent synthesis of survey data from northern Greece and the Peloponnese demonstrate an apex in “human activity” – their terms for sites – during the Classical/Hellenistic periods (480 to 31) (Figure 2.3).¹⁰⁵

⁹⁹ Palmisano *et al.* 2019, 720.

¹⁰⁰ For a recent study of this period using comparative survey and discussing the decline in site numbers see Stewart 2013.

¹⁰¹ Alcock 1994, 177.

¹⁰² See Alcock 1994.

¹⁰³ Bommeljé and Doorn, 1987.

¹⁰⁴ Gallimore *et al.* 2017, 429.

¹⁰⁵ Weiberg *et al.* 2018.

This rise in settlement numbers has also been noted in areas that do not directly border the Mediterranean. Research on the Sénart Plateau in the environs of modern Paris, has identified a “new agrarian system” during the “Gaulish period” (La Tène C2/D2), roughly 200-50, with a rise in the number of rural units identified as farms. Since this pattern was detected through rescue excavation, the nature of these sites is well known. Many of the structures consist of single or double quadrangular enclosures surrounded by postholes and can attributed to rural activity likely by commoners (Figure 2.4).¹⁰⁶ A recent synthesis of rural data from northern France by Malarin *et al.* provides a macro-regional picture of settlement growth in the area, with two apexes in rural activity. A first apex, around the fifth century, is associated with an initial rise in nucleated settlements, while a second, more dramatic peak in rural evidence between 250 and middle of the second century is characterized by an increase in dispersed rural settlement (Figure 2.5). Notably, this increase in sites is seen across landscape types, in valleys, on plateaus, and in more marginal areas.¹⁰⁷ Environmental data, mostly drawn from pollen cores, suggests that this increase in visible rural activity in northern France was also accompanied by landscape transformation: the two periods that exhibit an increased number of rural sites in correspond with moments of deforestation. Palynologists have noted that in these two periods, between roughly 480 and 350 and again in the last two centuries BCE, the frequency of alder pollen is reduced, suggesting the deforestation of valley bottoms, potentially for more intensive agriculture.¹⁰⁸ Cultivation patterns also change: botanical data from the fifth century suggests a diversity of cultivates: grains and pulses of various species were identified. The second peak sees more single-species grain cultivation, suggesting changes in agricultural practice.¹⁰⁹

¹⁰⁶ Desrayaud 2015, 2.

¹⁰⁷ Malarin and Lohro 2016, 52. See also Malrain *et al.* 2013.

¹⁰⁸ Malarin *et al.* 2013, 226.

¹⁰⁹ *Ibid.*

The chronologies of rural infill events do not align across the Mediterranean, but it is striking that this diverse sample of projects, methodologies, and regions has detected the same general trend. Whether it is through the collation of results from rescue excavation, more traditional pedestrian field survey, or regional synthesis, the period between 500 and 200 sees a marked increase in rural activity. In many cases, this rural activity involves small scatters of material becoming manifest in new, dispersed areas of the landscape. These small scatters have been interpreted as farms, in the case of northern France excavated and revealed to be farm structures, and ascribed, often tacitly, to commoners. A global pattern exists, but explanations vary from region to region as to why this change occurs. In some cases, such as in Greece, an increase in early Hellenistic sites is given less attention than Romanocentric models for later Hellenistic landscape abandonment. Scientific analyses have revealed the possibility of a reciprocal relationship between landscape and settlement change: deforestation creates more arable land that can support the activities denoted by surface finds; at the same time, the act of deforestation also involves activities that could leave material traces. This supraregional scale of analysis hints at global patterns, but for more central Italian specific information a survey of evidence for rural infill closer to this region can suggest possible interpretive frameworks grounded in the local, Italian conditions. In southern Italy rural infill has also been noted in numerous regions and various explanations – both general and regionally specific – proffered for understanding this landscape change.

2.3 Southern Italy

Numerous areas of southern Italy see an apex in rural activity during the middle of the first millennium BCE (Figure 2.6). In the foothills north of Sybaris, a nucleated settlement pattern surrounding the sites of Timpone della Motta and Timpa del Castello has been identified through

analysis of surface material and dated to the ninth and eighth centuries, but the subsequent four centuries furnished little evidence for rural activities. In the fourth and third centuries, however, a rise in rural sites was noted in the form of scatters identified as farms and hamlets – the traditional classification for commoner sites. No larger elite sites were recovered.¹¹⁰

In the coastal areas of the same region, there is minimal evidence for pre-fifth century occupation. Only with the foundation of Thurii, replacing the colony of Sybaris, destroyed in 510, does rural occupation increase.¹¹¹ There are a number of new sites identified in the fourth and third centuries.¹¹² This pattern of growth, however, does need to be contextualized by local geomorphology. The Sybaritide plain was covered by a dense layer of alluvium, at times burying the third centuries material beneath at least seven meters of sediment and material from the preceding centuries still deeper.¹¹³ Ceramic visibility also likely skewed the results of the surveys around Sybaris/Thurii towards a greater density of third century material: the ceramic forms and fabrics from the sixth to third centuries are better known and more archaeologically visible. There are more durable architectural elements used in construction during the third century, namely terracotta roof tiles. The ceramic used to date sites to the third century is also more easily visible: it is bright orange/pale yellow color rather than grayish-black. A pattern of rural change is present, but geological conditions and changes in material types make it difficult to parse the exact meaning since material is certainly missing (Figure 2.7).¹¹⁴ These twin factors: visibility and changes in material culture, affect all field survey data and constantly raise the question whether patterns of diachronic change, like rural infill, are related to the changes in the number

¹¹⁰ These fall under the class “villa.” Attema *et al* 2011, 96-97, 103, 105.

¹¹¹ Diod. Sic. 12.9.1-12.10-1; Strabo 6.1.13.

¹¹² De Rossi *et al.* 1969.

¹¹³ Attema *et al.* 2010, 101.

¹¹⁴ *Ibid.*

of people or actual activities taking place in the countryside or, instead, changes in the landscape and what types and mechanisms move ceramics through different areas that create false narratives of dramatic change. This can generally only be assessed on a survey to survey basis, although the preponderance of evidence pointing to rural infill suggests that there is real change that needs to be contextualized.

To the north, in the area around the later settlement of Metapontum, the countryside sees multiple infill events between the seventh and third centuries (Figure 2.8). Rural occupation at a noticeable scale is first visible in the seventh century, but mostly remained nucleated or near the walls of the city. Dispersed settlement is only evident in the material record beginning in the sixth century.¹¹⁵ The first half of the sixth century sees an apex in dispersed rural occupation, followed by a decline in the later parts of the century.¹¹⁶ This decline is reversed in the subsequent centuries, with more sites identified by the surveyors as new foundations beginning in the fifth century. Many of these sites were identified as farms and a number have been excavated.¹¹⁷ Between the fourth and third centuries, the number of sites continued to increase and the settlement pattern changed; while in the fourth century most of the sites identified as farms were located close to the city walls, new foundations in the subsequent century moved increasingly to more marginal areas. The surveyors suggest that landless citizens or newly enfranchised citizens may have been given land in order to increase the defensive potential of Metapontum. This suggestion is likely related to the frequent references to Metapontum's involvement in various regional conflicts between Greeks, Italians, and Greco-Italian colonies

¹¹⁵ Carter 2006, 63-4.

¹¹⁶ The number of sites identified as farms drops from 64 to 14. Carter suggests that localized environmental changes, namely the significant increase in the water table led to the dramatic abandonment of rural sites. Carter *et al.* 2011, 727.

¹¹⁷ Roughly half of the 76 sites recovered in this period were identified as new foundations. Carter *et al.* 2011, 756.

during this period.¹¹⁸ New technology — more wells for irrigation or new crops such as alfalfa — and growing market demands in Metapontum were also suggested as explanations for the increase in site numbers.¹¹⁹ The connections between emancipation, conflict, technological change and rural infill is a standard connection drawn in regions where this material pattern is evident.

Survey work in the Brinidisi plain noted a significant rise in isolated rural sites during the third century, although the sample size was relatively small. Field survey around the site of Oria located one isolated site with potential occupation during the period between the sixth and fourth centuries (Figure 2.9).¹²⁰ The same situation, a single isolated “farmstead,” was identified, based on the presence of Archaic/Classical ceramics at a later Hellenistic site, in the surveys around the Contrada ‘Li Castelli.’¹²¹ In Burgers’ synthesis of survey data for the Brindisi plain, these are the only two rural sites with material from between the sixth and fourth centuries. Burgers suggests that this dearth of settlement is not caused by archaeological biases, since “even ephemeral sites are likely to leave some traces unless they are entirely built of perishable materials.”¹²² His hypothesis is, instead, that Brindisi communities mainly clustered in larger settlements attested archaeologically during this period.¹²³ This view of the distorting effects on archaeological biases is perhaps overly optimistic, but the preference for a nucleated settlement patterns matches other areas of southern and central Italy during this period.

Between 350 and 250, there is a rise in small artifact scatters, measuring on average about half a hectare, in the Brindisi plain. Eleven new sites of this type were identified, three in the

¹¹⁸ For example, Alexander the king of Epirus’ expedition in 332 involved Metapontum (Liv. 24.8), as did Cleomynus of Sparta’s in 326 (Diod. Sic. 20.104).

¹¹⁹ Carter et al. 2011, 837.

¹²⁰ Yntema 1993.

¹²¹ Burgers 1998.

¹²² Burgers 1998, 200.

¹²³ This is, needless to say, a very optimistic reading of the surface record. See Burgers 1998, 201.

survey areas around Muro Tenente and four around the Contrada Li Castelli and Masseria Mea. Based on the material within these artifacts scatters – tiles, Apulian black gloss, kitchen wares, loomweights, dolia fragments, amphorae sherds – and the similarities between the material assemblages at these scatters and at more substantial, nucleated sites, the surveyors hypothesized that these rural scatters represent isolated, rural homesteads.¹²⁴ Rural loci of commoner activity. In several cases, concentrations of Apulian Red Figure, Gnathian, and Banded Wares were found near the rural scatters. Burgers suggested that, since these are traditional funerary wares for the region and other small, necropoleis had been found in the Brindisi plain, the farms were linked to small burial areas.¹²⁵ The presence of both productive spaces – farms – and burial areas might point toward an increase in permanent habitation in the countryside. Evidence for at least one site interpreted as a dispersed hamlet – an area of six hectares with variable concentrations of dolia, loomweights, millstones, black gloss, coarse cooking wares, amphorae, and a preponderance of tile — was also recovered and dated to roughly 350.¹²⁶

Burgers argued that this increase in rural habitation suggests changes in agricultural production. He suggests agricultural intensification can be seen in four important areas: 1. new land was brought under cultivation, 2. agricultural workers moved their primary residences from larger settlements to farms closer to their land, thus removing transit time and allowing more intensive cultivation, 3. marginal land became more commonly used for agriculture and settlement activities, and 4. the typical Mediterranean polyculture system focused on cereals, olives, and grape was introduced.¹²⁷ Burgers notes that significant socio-political changes are also taking place at nucleated, proto-urban sites over the same time period that the increase in

¹²⁴ Burgers 1998, 232.

¹²⁵ Quilici and Quilici Gigli 1975, 232.

¹²⁶ Burgers 1998, 232.

¹²⁷ Burgers 1998, 254- 259.

rural material takes place.¹²⁸ Sites are getting larger and more architecturally articulated. He suggests that urban changes, namely the growth of the urban site at Taras, are the driving force behind the increase in agricultural intensification. The increase in settlement and activity in the countryside is a logical rural result of exogenous urban processes, but certainly not the cause.¹²⁹

Field survey in the interior of Southern Italy, outside the areas directly influenced by Greek settlement, has also noted patterns of rural expansion. Surveys between 1985 and 1991 around the nucleated *oppidum* site of Roccagloriosa suggest agricultural intensification and a concurrent increase in rural material throughout the fourth century, building into the third.¹³⁰ These surveys are fragmentary and limited in their chronological utility since they only regularly document rural habitation post-dating the fifth century, making it difficult to track patterns of change, but the results demonstrate a similar process of landscape change to that seen in the coastal regions. The core area around the *oppidum* (approximately 80 km²) was characterized by an increase in dispersed sites interpreted by the surveyors as farms over the course of the fourth century. This intensification is, like the data from the Brindisi plain, linked by the surveyors to the rise in polyculture and vine cultivation. Archaeobotanical material from the excavated *oppidum* and an increase in Graeco-Italic amphorae at the *oppidum* site support this conclusion.¹³¹

Multidisciplinary field survey at Torre di Satriano carried out by the University of Basilicata notes settlement change in the area conventionally referred to as Northern Lucania. The initial changes in regional settlement patterns can be seen in the fifth and early fourth centuries. The fifth-century landscape was characterized by nucleated settlement clusters, with

¹²⁸ Such as the expansion of major habitation centers, the construction of new fortifications, changes in burial customs (namely the increase in access to burial for a segment of the population), and rural reorganization were occurring at the same time as rural infill.

¹²⁹ Burgers 1998, 259-263.

¹³⁰ Fracchia and Gualtieri 2001, 168.

¹³¹ Fracchia and Gualtieri 2011, 15.

“lower order” sites located around “first-order” hilltop settlements (Figure 2.10). The countryside around these primary sites was mostly devoid of archaeologically recognizable occupations. Between the end of the fifth century and beginning of the second, these field surveys identified numerous new minor settlements spatially separated from the primary hilltop sites.¹³² The surveyors identified these new settlements as scattered, isolated farmsteads based on their material signatures: tile, common ware, tableware, and loom weights.¹³³

In the same region, within the territory of Grottole, survey again noted an increase in rural activity during the fourth century. Much like the area around Torre di Satriano multiple “*piccoli insedimenti sparsi*,” rural scatters of material interpreted as isolated farmsteads, were recovered and dated to the fourth and third centuries.¹³⁴ More elite residences and nucleated, urban spaces were also identified in this area of Northern Lucania, leading Osanna to suggest that the transition from the fifth to third centuries sees a significant redefinition in the structures of land ownership, produced by the deconstruction of the Archaic political and economic systems.¹³⁵ Intrinsically linked with this political change was the beginning of specialized crop cultivation and the intensification of agricultural practices. The local and regional demand these crops allowed commoners access to markets denied by an agricultural regime based on grain production and dependency relationships. According to Osanna, the elite kinship groups that had dominated the area were replaced by a group analogous to Torelli’s “*ceti intermedi*” – an intermediate class of rural consumer-producers that Osanna connects to not just local changes, but changes in settlement patterns seen elsewhere in southern Italy.¹³⁶ It is further suggested that

¹³² 22 new sites were identified. Di Leto, M. 2011, 47.

¹³³ Osanna, 2010, 138-140.

¹³⁴ Osanna 2010, 11.

¹³⁵ Osanna is referring to the model first suggested by Capogrossi Colognesi that posits a shift at Rome in the fifth and fourth centuries from *ager gentilius* to privately held land. Capogrossi Colognesi 1981; Osanna 2010, 12-13.

¹³⁶ See Torelli 1990.

this shift in settlement practices marks a change from a communal world to one of autarchic control over small plots — to a peasant landscape where the ownership of land is a central aspect of community membership.¹³⁷ Osanna is interpreting a change in settlement patterns similar to that seen near Torre di Satriano – a move from nucleated sites with a clear hierarchy to a more heterarchical countryside dominated by smaller scatters of material – as a process that mirrors contemporaneous socio-political developments. While the model he reads onto the landscape is suggestive and fits nicely within a general narrative of emancipation for the lower classes over the later first millennium popular, as will be discussed below, in other regions such as Etruria, Osanna’s model does not take into account the subsequent decline in settlement numbers in the next century or changes in material use that might create an archaeological pattern that does not match socio-political changes – new materials are not always the same as new political systems although the two can be intertwined.

The Università di Bologna and the Seconda Università degli Studi di Napoli jointly surveyed the upper and middle Sinni Valley along the border between Calabria and Lucania, between 1997 and 2000. While this exploration adheres to the topographical tradition of the *Forma Italiae* series, modern methodologies, including intensive line walking techniques for a more complete coverage, were used to map all archaeological evidence from the Bronze Age to the Middle Ages.¹³⁸ In the sixth and fifth centuries, settlement patterns identified by the survey show a preference towards centralized sites with little expansion into the countryside.¹³⁹ Evidence from the fourth and third centuries is characterized by a significant increase in rural habitation, namely sites interpreted by the surveyors as small farmsteads and village hamlets

¹³⁷ Osanna 2010.

¹³⁸ Quillici and Quillici Gigli, 2001. The survey reports are presented in a multi-volume set in a mosaic fashion, covering the twenty-four different surveyed *comuni* and a total area of approximately 1130 km².

¹³⁹ Quillici, and Quillici Gigli, 2001, 800.

appear in a capillary and diffuse manner.¹⁴⁰ Of particular note, there is evidence for sites as high as 800 meters above sea level in marginal areas. This suggests a more intensive regime of agricultural activity. Evidence for kiln sites, cult places, and necropoleis were used to suggest a more intensive rural economy during these two centuries, an economy that was not only focused on agricultural production. The surveyors connected these changes to urban expansion at sites such as Monte Coppola, Cersosimo, Chiaromonte, and Seluci.¹⁴¹

Moving north into Campania, the Seconda Università degli Studi di Napoli has been leading a campaign of field research in northern Campania since 1999. This project is modeled on the investigations of the Sinni Valley, providing data for the territories of numerous ancient urban centers (*e.g.* Alifae, Capua, Cubulteria, Caiaitia, Trebula Balieniensis) as well as other regions.¹⁴² Unfortunately, the methodologies used by this project are not clearly elucidated in their publications, so the quality of the data is difficult to assess. Nevertheless, in the territories of Cubulteria, Caiaitia, Capua, Trebula Balliensis and Alifae, as well as the *comuni* of Faiacchio, Casapesanna, and Savignano Irpino, there is an increase in dispersed rural material between the fourth and third centuries.¹⁴³ Of particular note is a rise in the number of rural necropoleis dated between the fourth and third centuries, suggesting either changes in burial practices, or potential shifts in rural wealth as either elites moved into the countryside or more surplus was available, allowing for more visible burial practices amongst commoners. These various field surveys in southern Italy, like the evidence from the Mediterranean more broadly, produce numerous examples of rural infill between 500 and 200. A series of explanations have been put forward for this landscape change. A shift in agricultural practices – either related to technological changes

¹⁴⁰ Quilici, and Quilici Gigli, 2001, 801-803.

¹⁴¹ Quilici and Quilici Gigli, 2001, 803.

¹⁴² Cera 2004; Renda 2004; Guandalini 2004; Calastri 2006; Carfora 2006.

¹⁴³ See Appendix 1 for my database of rural sites from these surveys.

in the hinterland of Metapontum, more intensive exploitation of marginal land in the Sinni valley, or a shift towards olive and win cultivation as suggested for Northern Lucania – has been suggested to explain the locations of these new sites, further from nucleated urban centers. This same spatial separation is also linked to socio-political changes, namely the loosening of dependence relationships between centralized elites and agricultural commoners. Regional variety in chronology and explanatory frameworks exists, but it is clear that this process of increased rural material in small scatters is not isolated to one region or one type of settlement. At both Greek colonial and indigenous material evidence from rural spaces increases dramatically between 500 and 200.

2.4 Supraregional Models

Central Italy also sees an increase in rural site numbers compatible with the above examples during the period between 500 and 200. Chapter five will present the data for this region. Why is there suddenly significantly more evidence for dispersed rural material at this time across the Mediterranean? This increase in site numbers, along with the nature of these rural sites, is a fundamental question that my dissertation aims to address. Numerous explanatory frameworks have been used to justify the appearance of this global pattern, although Attema *et al.* are certainly correct in stressing the regional diversity underlying this pattern of change.¹⁴⁴ The next section will engage with some of the proposed explanations for rural infill: the Roman conquest, demographic expansion, and changes in agricultural practice. Chapter six will return to some of these supraregional model, as well as suggesting some local factors that played a role in rural infill.

¹⁴⁴ Attema *et al.* 2010, 152.

2.4.1 The Roman Conquest

Scholars first connected the capillary diffusion of settlement in the period between 500 and 200 with the Roman conquest. This explanation initially took root because the first regions in Italy to be intensively surveyed, the territories of Veii and Sabina north of Rome, were also areas into which Rome expanded at an early period (Figure 2.11).¹⁴⁵ Based on ceramic chronologies, it appeared to these early surveyors that the Roman conquest of this region occurred at roughly the same time as these new rural sites began to appear, the beginning of the fourth century.¹⁴⁶ It is also important to remember that surveys such as the South Etruria survey were reacting against the intellectual climate of their times. Without rural evidence from survey or much excavation outside of monumental sites, a textually-based model of an abandoned countryside, drawn from accounts of the Gracchan land crisis in the literary record was generally accepted.¹⁴⁷ In place of an abandoned landscape, the surveyors instead found what appeared to be a booming peasant population. With this new evidence in hand a new model could be proposed, rather than a destructive event, the conquest would have had a “positive” impact on rural life in the area. Rome was still given a central role; Roman colonists were sent out by the state to newly conquered regions, the local populations were driven off, and colonists created *ex novo* settlements on distributed plots of land.¹⁴⁸ Recent studies of Roman colonization have problematized this model of colonial replacement; not all colonists originated in Rome, not all locals were replaced, and the presence of non-Romans amongst the colonial elite suggests the persistence of local elites in colonial contexts.¹⁴⁹ Surveys of colonial hinterlands also suggest that

¹⁴⁵ Potter 1979.

¹⁴⁶ See Terrenato 2012, 147.

¹⁴⁷ See, for example, Plut. *Vit. Ti. Gracch.* 8.7.

¹⁴⁸ See Salmon 1970; Gargola 1995, esp. ch. 3-4.

¹⁴⁹ Bradley 2006; Pelgrom 2012.

rather than a direct relationship between capillary settlement patterns and colonial foundations, early colonies tend to have more nucleated patterns of initial settlement.¹⁵⁰ A Romanocentric model that places colonial systems as a primary driver of this landscape change does not hold up to scrutiny of the evidence. The increase in surveyed areas across the Mediterranean, as presented above, has also been damaging to the causal link between the Roman conquest and rural infill. As more regions are surveyed and the trends in rural settlement compared, it becomes clear that this pattern of dispersed rural sites took place at a rate that did not match with the chronology of Roman expansion. While some parts of southern Italy appear to have seen the dispersion of settlement during the same period that Roman hegemony expanded into the area, other areas begin to see rural site numbers rise in the fourth century, prior to major Roman incursions. Much of the Punic and Greek world was not formally incorporated into the Roman imperial project until between one and four centuries after this dispersed settlement system appears. Regions of France saw rural settlement change after the regions that directly bordered the Mediterranean, but a century before Caesar's conquests in Gaul. In chapter five, I will demonstrate that rural infill in central Italy also occurred at a different rate than the Roman conquest. The evidence from a wide range of survey projects suggests that the Roman conquest did not occur in chronological lockstep with the infilling of the countryside; Rome the conquering metropole cannot take sole credit for this landscape change.¹⁵¹

2.4.2 Demographic Increase

¹⁵⁰ Casarotta *et al.* 2016; Pelgrom 2008; 2014; Stek 2008, 166-215; 2009, 133-170; 2014.

¹⁵¹ This has already been suggested by Terrenato. See Terrenato 2007, 19; 2012, 147.

If the Roman conquest is no longer a historical explanation for rural infill, what other global patterns could lead to this increase in rural material culture? A rural demographic “explosion” has been posited as one potential model for explaining the rise in site numbers during the middle Republic.¹⁵² This explanation is particularly popular amongst Italian scholars working in southern Italy.¹⁵³ There are several reasons for skepticism over such claims. As will be discussed in Chapter 3, counting the rural population based on archaeological surface materials involves a number of assumptions about the relationship between the horizontal and vertical archaeological records. Excavation has demonstrated that the sites traditionally characterized as peasant farms likely represent a wide range of rural activities.¹⁵⁴ If these are not habitation sites, and without a serious effort to differentiate between different types of small scatters in new ways, site numbers hold less value as proxy data for the rural population than previously assumed.¹⁵⁵ There are also multiple concurrent processes that complicate an argument based on strictly rural demographic growth; over the same three centuries that rural site numbers increase, the nucleated sites that had predominated in many regions are abandoned. Rather than a gross increase in the number of people, the abandonment of these nucleated settlements for a more dispersed settlement system might provide a model that does not require the input of numerous new people. Migration is difficult to quantify archaeologically, but must have been a common occurrence.¹⁵⁶ During the same few centuries, as Jamie Sewell has illustrated through his Romuribital project, the number of urban settlements in both central Italy and the rest of the Italian peninsula was expanding dramatically (Figure 2.12).¹⁵⁷ Even if the excavations of these

¹⁵² Lanza Catti 2010, 100.

¹⁵³ See Ciancio 2002; Quilici 2002, 140; Fabbri 2009, 230; Lanza Catti 2010, 100.

¹⁵⁴ See Ghisleni *et al.* 2011; Vaccaro *et al.* 2013.

¹⁵⁵ See Chapter 4.

¹⁵⁶ Isayev 2017, 20-29.

¹⁵⁷ Sewell and Witcher 2015; Sewell 2016.

new urban spaces have found them less full of archaeological material than expected,¹⁵⁸ it is hard to imagine that this directly reflects a lack of people. While a net growth in population between 500 and 200 is possible and even likely, it takes multiple interpretive leaps, as well as faith that the results from field survey are diachronically representative of population change, to locate this growth primarily in rural areas.

2.4.3 Urbanization and Changes in Farming Practices

The expansion and intensification of agriculture is another potential explanatory framework for this supraregional pattern. Arguments in favor of this explanation are linked to the growth of demand for rural products in new urban spaces. A dispersed settlement pattern is often connected with agricultural intensification since dispersed settlement systems cut down on the cost of movement.¹⁵⁹ Especially amongst agricultural communities, the less energy spent moving to and from land – or collecting other resources needed for a rural lifestyle – the more energy is available for productive purposes.¹⁶⁰ Already in the 1990s, Halstead and Garnsey suggested that the dispersed settlement patterns of rural infill were linked with agricultural intensification.¹⁶¹ As more scientific analyses are brought to bear on first millennium datasets, however, various data push this moment of intensification earlier than the fourth and third centuries, when the apex in rural site numbers occur in most regions. The increased frequency of cattle bones is taken as a possible proxy for agricultural intensification since these animals provide both traction and manure for fertilizer, but recent archeozoological studies point towards an increase in cattle

¹⁵⁸ See, for instance, Becker 2007, 211.

¹⁵⁹ Halstead 1987.

¹⁶⁰ Stone 1991, 343-353.

¹⁶¹ Halstead 1987, 83.

numbers already in the early first millennium.¹⁶² The spread of iron implements has been suggested as another proxy for intensification,¹⁶³ but I know of no systematic study of iron tool frequency that covers the period between 1000 and 200. The examination of lead pollution in ice cores from Greenland and Cul du Dome in the French Alps, used as proxy data for the scale of European mining and smelting, does suggest an increase in metal production that rises to a peak in the third or second century BCE.¹⁶⁴ Metal production does rise, but more artifactual evidence is required associated with dispersed scatters to confirm iron tools as a root cause of intensification.

The adoption of manuring in agriculture has also been suggested as possible evidence for agricultural intensification and a supraregional explanation for rural infill by the Regional Pathways to Complexity project.¹⁶⁵ Bintliff and Snodgrass' manuring hypothesis connected low densities of ceramic material forming halos patterns around sites found in field survey with the adoption of manuring. This might be a testable proxy for agricultural intensification.¹⁶⁶ The Regional Pathways to Complexity project suggests that the increase in rural "off-site" material during the fourth and third centuries in Italy is related to manuring and agricultural intensification.¹⁶⁷ Kron used the adoption of manuring as one of the pillars in his argument, based on textual figures, for a Roman agricultural system that surpassed all other periods of Italian history in its productive power until the twentieth century.¹⁶⁸ Tymon de Haas's study of off-site material in the Pontine plain did reveal material the author believed to be related to

¹⁶² Trentacoste *et al.* 2018. A brief peak in pastoral indicators from central Italy was dated to 2500 cal. yr BP, but this is difficult to interpret. See Stoddart *et al.* 2019, 9.

¹⁶³ Van Dommelen and Gomez Bellard 2008, 236.

¹⁶⁴ McConnel *et al.* 2018; Preunkert *et al.* 2019.

¹⁶⁵ Attrema *et al.* 2011, 164.

¹⁶⁶ First suggested in Bintliff and Snodgrass 1988.

¹⁶⁷ Attrema and Burgers, 2012, 113.

¹⁶⁸ Kron 2008, 76. The levels suggested by Kron would only be matched by industrial revolution England and the Netherlands.

manuring, in an area that saw one new site, interpreted as a farm, appear in the period between 500 and 200.¹⁶⁹ Other projects, however, have not made the same connection. Also, off-site material is not well enough understood or recorded to attribute its presence universally to manuring. More study of off-site material in Italy is needed to test this pattern, as survey in Italy lags behind other regions in its consideration of scatters that are not interpreted as sites. It should be said, however, that in other regions of the Mediterranean there has been a call for more scrutiny regarding the manuring hypothesis, and a close examination of the material itself.¹⁷⁰

Deforestation could also point towards more intense agricultural production as has already been argued for the north of France, and recent environmental studies have suggested a peak in deforestation around the third century based on palynological data. Pollen cores from a series of lakes in central Italy, namely lakes Albano and Nemi, suggest peaks in deforestation during the early Roman period, while cores from Lake Vico in Southern Etruria suggest appreciable woodland clearance and cereal cultivation around 600.¹⁷¹ Woodland clearance in these areas, however, could also be associated with incipient urbanism, a process that must have required a significant amount of wood, as well as the increase in the use of wood for fuel for activities such as ceramic production. It is true that the clearance of this land, even for the purposes of construction, would have still opened up more land to cultivation but again, more data is needed to link these two processes. Furthermore, the evidence from Lake Vico suggests that not all regions were synchronized in their major deforestation events.

The pollen record calls into question the assertions made by multiple surveys above that linked rural infill to more intensive cultivation of olive trees and grapevines. Van Dommelen and

¹⁶⁹ De Haas 2012, 68-9.

¹⁷⁰ Davis 2004; Fentress 2000.

¹⁷¹ Value give at 2600 BP (Magri and Sadori 1999); see also Stoddart *et al.* 2019.

Gómez Bellard identify the expansion of olive groves and vineyards as one of the essential elements for understanding the process of settlement dispersion in the areas of the Punic world.¹⁷² For Italy, however, despite the numerous Southern Italian surveys that connected olive and wine production with rural infill, the correlation is less clear. Stoddart *et al.* argue in their recent study of environmental data from prehistoric Italy that the significant increase in olive oil and wine production in peninsular Italy can be dated to around 800; a study of the pollen suggested that it came from cultivated trees.¹⁷³ This research suggests that oleo and viticulture had already seen a significant increase prior to the period of rural infill. As will be discussed in Chapter 6, my database recorded little evidence of transport vessels traditionally associated with an intensification of wine and olive oil production. While an increase in dispersed scatters could be related to agricultural intensification, aside from arguments based on dispersed nature of the settlements themselves, more data is needed especially from excavated small scatters to connect understand the forces bringing about these changes in agricultural practices.

Agricultural intensification, as Erickson amongst others has noted, is in and of itself an elusive term that is often linked with several assumptions regarding its nature and constituent elements.¹⁷⁴ Not all large-scale, patterned farming systems are evidence for agricultural intensification, and the line between labor intensive (high-production yield with diminishing returns for labor invested) and intensive agriculture (continuously farming units of land with short or no fallow periods) is often blurry.¹⁷⁵ A system of agriculture based more on crop rotation than long periods of fallow is challenging to model across the entire Mediterranean; it is better studied at a region by region level. In pre-Roman Etruria, archaeobotanical and osteological data,

¹⁷² Van Dommelen and Gómez Bellard 2008, 324.

¹⁷³ Stoddart *et al.* 2019, 9.

¹⁷⁴ Erickson 2006.

¹⁷⁵ Erickson 1993; 2006.

namely dental caries, have been used to suggest a rotation between cereals and legumes.¹⁷⁶ This data, again, pushes a shift in agricultural practices to the period before the numbers of sites recovered in archaeological survey dramatically increase.

2.5 From Why to Who and What?

This regional sample suggests that rural infill needs to be contextualized within a global pattern of change. Changes are occurring across a broad geographical scale that look, on the surface, very similar. More material is present in the rural spaces in a more dispersed pattern. This suggests general changes in rural commoner activity that is not, necessarily, regionally or culturally specific. At the same time, no single explanation for rural infill can be applied universally; chronologies of proxy data do not match the survey evidence and regions saw this pattern play out in a heterogenous nature. Since no regional synthesis of this pattern has taken place, the closest being Attema *et al.*'s examination of three survey areas across the breadth of Italy, local factors have been notably absent from explanations of this pattern that stretch beyond single regions. There are likely multiple explanations for this change, and the search for a one-size fits all model only acts to separate debates about this "landscape revolution" from individual landscapes in which it took place and the individuals in these landscapes whom it affected and who affected these changes. I suggest that questions of rural infill be reframed: instead of building inwards from the macro-regional perspective or suggesting models based on specific, local data, I will examine rural infill across single region and focus not on global processes and abstract models, but the actual people involved in the process: rural commoners. The act of reframing the narrative of rural infill to focus on people, not process, and commoners in

¹⁷⁶ Barker and Rasmussen 1998, 193-4.

particular, allows for a new type of narrative for middle Republican Italy and rural infill, one that is built from the bottom-up. This method also brings questions of the data underlying rural infill back to the fore. Rural infill is primarily detected in survey archaeology, a notoriously fickle discipline. Instead of an agricultural or economic pattern, rural infill first needs to be explored as a material phenomenon. Sites and scatters appearing in dispersed locations means that ceramic material is being found in different locations. This, in turn, suggests that commoners are consuming, producing, and trading in different ways or with different materials. These changes have important ramifications for understanding the connections between rural commoners, the rural economy, elites, and newly urban spaces. Ideally, this inquiry would take the form of new survey, the analysis of legacy data, and excavation that would allow new information – a better grasp on what lies beneath the surface of these Hellenistic scatters, evidence for exchange networks related to ceramic fabrics, more detailed site chronologies, botanical information showing the agricultural regimen of these dispersed sites – to be added to the aggregate picture provided by large bodies of survey evidence and the superregional picture presented above. Unfortunately, there is not a large enough body of excavated middle Republican sites to provide this higher resolution at this time and new surveys and excavations will have to come with a future iteration of this project. This being the case, in what follows I instead extract as much evidence as possible from the survey data. While there are problems with the resolution that this data provides and it only allows for an aggregate picture of the region under study, this is a step towards nuancing the global focus on rural infill and reinserting people and material into this pattern of change. I propose a model of increased commoner production that point towards dynamic and reinvigorated local networks as a driving force behind this global landscape transformation. There is evidence for socio-political transformations as well, but these are not

only related to the “emancipation” of commoner dependents. There is evidence for a continued, renegotiated, but significant relationship between elites and commoners. The casual link between rural infill and the Roman conquest can be rejected, but the processes of interconnection that facilitated Roman expansion are a significant factor in this landscape change. I will return to these global explanations in Chapter Six and compare the results from my intensive study of central Italy to these extensive explanations for this pattern of Mediterranean change.

Chapter 3 : Survey Comparison and Site Classification

3.1 Introduction:

In this chapter, I introduce survey archaeology and provide a brief history of the discipline in central Italy. Following this introduction, I discuss the practical issues with survey comparison, focusing on the potential biases that affect survey data. Survey comparison should not be undertaken uncritically, and various biases need to be taken into account. This discussion is followed by an overview of issues with site classification. Two debates regarding site classification are particularly relevant for this study. Excavations of small rural sites associated with scatters of artifacts found through field survey, especially the recent work of the Roman Peasant Project, have demonstrated that archaeological surveys can recover evidence for commoner activity, but this evidence does not fall nicely under the hut-farm-villa classification scheme first introduced by the South Etruria project and adopted by many Italian field surveys. Instead, these small scatters represent a significant range of commoner activities. This requires a new classification that is focused on commoner activities rather than identifying discrete commoner structures. This section also provides an overview of excavated commoner sites from central Italy. While most of the sites fall outside of my chronological range, they do provide a glimpse at the current state of the evidence and as well as the problems associated with making generalizations about commoner life based on excavated remains.

Farm and hut sites are not the only parts of the traditional South Etruria classification scheme that need to be revised in light of recent excavation work. “Villas,” typically identified as elite sites, also need contextualization when they are attributed to the period before the first

century. Excavations at the Auditorium site outside of Rome have revised traditional views on “villa” structures, suggesting that before the second century, buildings traditionally interpreted as villas are likely to have been elite residences, rather than the “Catonian” villas presented in the literary sources. These residences can tentatively be connected with the elite lineage groups discussed in Chapter 1, and their presence in rural areas suggests different social and economic relationships than structures described as “villas.” This does not mean that productive activities did not take place in these spaces, as the excavations of the Auditorium site have shown that it was a loci for productive activities as well as an elite residence. It is also important, however, to consider the social ramifications of sites of this nature as well; they acted as a nexus for elite and commoner interrelations in a rural areas and persisted well into the Republican period. The connections between these elite activity areas and commoner activity spaces requires attention when present in the survey data, especially in light of the frequent models of dependent emancipation suggested for the period of rural in fill and outlined in the previous chapter. This chapter provides the background for the methodology I propose in the next chapter. I suggest that these new data from excavation can be applied to the analysis of survey material to create a methodology that combines an understanding of the surface and subsurface archaeological record. I argue that consumption along the commoner-elite divide, a division that the excavation of survey material and other sites outlined in this chapter suggests is based patterns visible in the material evidence, provides a useful heuristic for examining commoner and elite activities, rather than rural habitation, and tracking trends in the developments in these different groups between 500 and 200.

3.2 Survey Archaeology in Italy, a Brief History:

Until the mid-twentieth century, a study of the non-monumental rural landscapes of central Italy would have been based almost exclusively on the ancient literary tradition, with all the inherent issues previously discussed. Archaeological field survey in Italy can trace its roots back to the topographical studies popularized by George Dennis, Rodolfo Lanciani, and Thomas Ashby in the period spanning the end of the nineteenth and beginning of the twentieth century.¹⁷⁷ This longstanding tradition, preoccupied with documenting the considerable number of standing structures visible in the Italian countryside, reached its zenith in the period spanning the beginning of the First World War through the decades following the Second.¹⁷⁸ In the same period, although established in the 1880s, the first volume of the *Forma Italia* series was published. Also preoccupied with recording standing archaeological remains, the goal of the *Forma Italia* was to map the archaeology of the entire Italian peninsula, I.G.M. grid square by 100 square kilometer I.G.M. grid square.¹⁷⁹

Beginning in the post-Second World War period, systematic field survey in Italy began in earnest with the introduction of the deep mechanical plow, pulling much archaeological material to the surface.¹⁸⁰ Since these initial surveys, beginning with Ward-Perkins South Etruria survey, data from archaeological surface survey has provided an alternate source of rural information. It was first believed that this new archaeological practice would provide data independent from the traditional literary-based frameworks that had dominated the Classical fields. More broadly, it was envisioned as truly scientific archaeology. Controlled, systematic, and capable of contextualizing regional case studies by detecting truly global patterns.¹⁸¹ Field survey also

¹⁷⁷ See Lanciani 1909; Ashby 1902; 1906 Ashby, in particular, was influenced by George Dennis' (Dennis 1883) documentation of the landscapes of Etruria.

¹⁷⁸ See Terrenato 1996; Quilici and Quilici Gigli 2004.

¹⁷⁹ Patterson 2006, 11-12.

¹⁸⁰ Witcher 2006a, 39-40.

¹⁸¹ Terrenato 2004, 36.

presents a certain immediacy for answering questions about rural populations, since some (if not most) of the material recovered through field survey was produced by actual rural commoners, not the mirages and pastiches drawn from literary sources. There was also, in these early days of field survey, a dream of impartiality, free from the tyranny of the text.¹⁸² These projects not only added a wealth of new information in a field that, outside of excavation, had been operating with a mostly finite supply, this information appeared qualitatively superior for answering questions of an agrarian and non-elite nature.

It soon became apparent, however, that survey data is not objective and, on its own, offers many of the same issues found when writing history using the literary record. There are problems of transmission, material is lost and missing, and just as particular Latin and Greek authors require a specific grammar, vocabulary, and historical scaffolding, the choices made by different survey projects to address different methodological issues require their own specialist language and contextualization. In much the same way, then, that the most nuanced histories of the Roman world use a combination of literary sources, the best history written using survey will also combine data from several projects, thus increasing both the scale of analysis and the amount of data. This comparison is not straightforward, and numerous issues arise that must be addressed before a workable methodology can be produced. This chapter will discuss the practical issues of survey comparison with particular emphasis on issues that concern commoners, the middle Republic, and rural infill in particular.

3.3 Comparative Survey Analyses

The comparison of survey data, in many ways, returns the discipline to its roots, attempting to provide a methodological means by which to establish the character of large

¹⁸² See Van Dommelen 1993, 168.

geographical areas. The last three decades have witnessed a wide-ranging series of debates about the issues inherent in survey archaeology that make its comparison methodologically fraught. It was only in the last three decades that survey comparison has been critically addressed and new debates on more pragmatic methods of survey comparison have emerged.¹⁸³ The major stumbling block in survey comparison is the significant number of biases that affect individual survey projects, and the diversity of methodologies that different survey projects employ, both explicitly and implicitly, to try to overcome these same biases. Fieldwalker distance, collection strategy, sampling strategy, classification scheme(s), pottery chronologies. Surveyors must make choices on these and many other factors on an individual, case by case basis. There is no single set of best practices for an intensive survey, no universally accepted framework, and no how-to guide. Surveyors must deal with a variety of landscapes and come into their projects with disparate research questions; the *Carta Archeologica della Provincia di Siena*, designed with a particular focus on the medieval landscapes of north-central Tuscany is different in its methods than the Pontine surveys, examining a coastal region in Latium with particular interests in Roman colonization, and both only resemble Quilici's one-man investigation of the territory surrounding Collatia in the broadest sense.

The question fundamental question is what to compare. Smith and Peregrine call for the comparison of raw data – sherds of pottery, site counts – rather than interpretations (although raw data is also, in its own way the result of interpretation).¹⁸⁴ Methodological diversity stands in the way of this type of comparison: site definitions, fieldwork protocols, factors related to visibility or ceramic supply, chronological definitions. Data from field surveys is not produced uniformly, so the comparison of these data on their own, without correction, risks the proverbial

¹⁸³ See Alcock 1993, Launaro 2011, Attema and Schörner 2012; Stewart 2013.

¹⁸⁴ Smith and Peregrine 2012.

apples to oranges comparison. In the end, however, the quantity of data is too great to be ignored. If we become comfortable with the inherent gaps and interpretive leaps in survey data, and correct for those things that we can, it represents a heretofore untapped wealth of data for exploring commoners. As Rob Witcher has recently argued, “We can no longer use diverse methodologies as an excuse for the failure to compare.” The challenge is what to compare – not whether.¹⁸⁵

A number of attempts have been made to propose practical solutions to the problems of survey comparison. Alcock called for “archaeological source criticism.” Cunningham and Driessen advocated a “holistic approach” that used both survey and excavation, producing a more holistic picture of the archaeological landscape. Terrenato proposed that once we accept that no survey is a complete record of the settlement history of an area, we can move towards using it again to answer the large-scale questions of the sort that led archaeologists to start looking at regional patterns in the first place.¹⁸⁶ Ikeguchi and Launaro argued for using relative trends, rather than absolute quantification.¹⁸⁷ My project draws from all of the proposals, using a combination of these various methods. A close reading of the survey reports is crucial for understanding their methods, but the raw data is also important and needs to be reclassified and reanalyzed so it can be used to answer new questions. Excavation, while not feasible as part of this project, is irreplaceable for understanding the relationships between surface and subsurface deposits. The second half of this chapter acts as a proxy for the excavation that I could not undertake, examining the different structures that might underlie the surface archaeological record of the middle Republic and using this data to devise my reclassification scheme. Relative

¹⁸⁵ Witcher 2006a, 60.

¹⁸⁶ Alcock 1993, 49-52; Terrenato 2004; Cunningham and Driessen 2004.

¹⁸⁷ Ikeguchi 2006; Launaro 2011.

trends offer an effective means of moving forward, as they are not reliant on absolute figures and the more areas that produce similar trends, the more likely that a pattern is real and not the result of survey biases. This project operates on the assumption that survey comparison is a valid exercise that can lead to certain testable conclusions.

With this background in mind, a brief overview of methodological issues that affect survey is in order. Let us start with a big one. Surface finds are an unrepresentative and possibly displaced sample of the subsurface record.¹⁸⁸ In Italy, the vertical and lateral movements of artifacts are mostly caused by the action of deep plowing; this process brings artifacts to the surface, but it can also rebury them, causing sites to appear and disappear (sometimes over the course of a single season). If surveyors take post-depositional factors into account, their presence alone does not prevent survey comparison. Every area is subject to the same risk of misinterpretation, as long as probable and possible post-depositional factors that may have affected a site are noted, and there is no expectation of a complete distribution of sites, survey data can still be productively compared. In my survey source critiques in the following chapters, I note when there is a good chance that surface conditions affected survey results.

Visibility – including vegetation and geomorphology – likewise plays a substantial role in site recovery. Terrenato and Ammerman showed in their study of the Cecina Valley that the better the visibility the higher the site recovery.¹⁸⁹ As will be discussed below, this can cause issues with surveys that rely on artifact density but, as with surface displacement, other than recording visibility and adjusting the resulting site counts (choices often implicitly included in survey publications) the onus for dealing with visibility conditions falls on the surveyor more than the survey analyst. Terrenato and Ammerman, as well as Terrenato on his own, have both

¹⁸⁸ Terrenato 2004.

¹⁸⁹ Terrenato and Ammerman 1994.

suggested corrections for visibility that gave more weight to data from good visibility areas since these areas were more likely to be indicative of subsurface settlement patterns.¹⁹⁰ Unfortunately, with much legacy survey data failing to record visibility consistently, it is difficult to operationalize this method across a diverse body of data.

Survey intensity, which covers a range of issues from fieldwalker spacing to area covered and the size of the work team, has been shown to significantly affect the number of sites recovered by a survey project. Plog, Plog, and Wait showed that there is a positive correlation between survey intensity and site density, with no sign of diminishing returns.¹⁹¹ While a more significant investment of person-hours per m² undoubtedly leads to an increase in the number of sites recovered per unit surveyed, it also leads to a general decrease in the amount of land that can be surveyed. Practical concerns of money and time, often the field archaeologist's enemy, usually necessitate a gradual shrinking of survey areas as intensity increases. Many scholars have been critical of this progressive loss in coverage, suggesting that these smaller surveys could no longer produce representative data for entire regions.¹⁹² More extensive approaches have a lower recovery rate but do cover broader areas. A few surveys in my sample combine both methodologies, determining when each technique is used based on the underlying geology and the surface visibility.

Almost as soon as the first studies pointed out the relationship between intensity and site recovery rates, it was clear that recovering more sites was given priority by survey practitioners over geographical coverage. From the late 1970s, surveys in the Mediterranean have moved towards ever-more intensive surveys in continually smaller areas. Pushback has been frequent,

¹⁹⁰ Terrenato and Ammerman 1994; Terrenato 2004.

¹⁹¹ Plog *et al.* 1978, 393.

¹⁹² Blanton 2001, 629; Fentress 2000, 44; Terrenato 2004, 47.

namely in the form of critiques stating that these smaller areas are no longer representative of regional patterns.¹⁹³ This question of representativeness is connected to debates around sampling strategy. Since more intensive surveys can cover less ground, it is necessary for researchers to determine whether they will survey continuous areas, divide it up into specific zones, select at random, through stratified sampling, or a combination thereof. The method chosen has a direct effect on the results obtained. If, for example, a field survey chooses specific fields or transects because they seem most likely to contain sites (for example a fertile river valley), the settlement pattern observed from those samples cannot be transferred to areas that are less likely to be densely settled (like a swamp). A variety of sampling strategies have been employed in Italy. The Albegna Valley used transects, while the *Carta Archeologica della Provincia di Siena* projects used a combination of targeted and random sampling. Early survey tended to be more extensive, with sizable gaps between fieldwalkers, or as some suspect for the survey of Collatia, carried out by only one fieldwalker.¹⁹⁴ When choosing the surveys for my sample, preference was given to more intensive surveys with explicit methodologies. More intensive surveys were more likely to recover smaller scatters, the material often associated with commoner sites.

The above issues, while sources of bias in any survey, primarily fall upon the surveyor to take into account. It was important for my selection of surveys to know the intensity and whether surveys took into account visibility, but many of these choices were consistent throughout those individual survey projects. While all survey data has value, data from some surveys are better suited to answering the questions I am asking of rural infill and commoners than others. For that reason, I have only selected intensive field surveys and those surveys – with a few exceptions

¹⁹³ See Alcock and Cherry 2004, 3; Blanton 2001; Fentress 2000; Terrenato 2004.

¹⁹⁴ Paul Arthur's survey of the Massico and Gargliano basin was carried out by only the author. See Arthur 1991.

like the Corese and Pontine Plain surveys both of which were resurveying areas covered by older, extensive projects – that covered a significant sample of their respective regions.

There is one other major issue for a project such as mine, aiming to compare archaeological surveys: site classification. The data collected during survey is interpreted through a series of categories, determined by the surveyor. These categories act as a dictionary, translating specific material patterns into categories relevant for particular historical or archaeological debates. Any classification scheme will focus on specific interpretive issues, and the act of classification is not objective or impartial, because when sites are classified, they are often done so based on the *a priori* questions of the researcher. As Witcher notes, “classifying involves a deliberate narrowing of the field of vision to prioritize aspects of reality which relate to research questions: it is a process of selection for meaning.”¹⁹⁵ If we hope to compare and reinterpret data from field survey, it is crucial to understand the underlying classification systems used – and the manner that excavation has challenged basic assumptions of these same systems. This discussion will shift focus back to rural infill and the middle Republic, as specific issues associated with site classification – namely the deconstruction and reinterpretation of the villa-farm-hut scheme first used by the South Etruria survey -- challenge what used to be the prevailing view of the countryside between 500 and 200.

3.4 Site Classification

Let us take for our starting point the basic dichotomy between commoners and elites, it might appear straightforward to locate rural commoners and the rural elites through survey archaeology. Survey publications usually contain maps with a series of dots or other symbols that (at least in Italy) are presented as specific types of structures (See, for instance, Figure 2.9):

¹⁹⁵ Witcher 2012, 12.

e.g., villages, farms, villas, huts. Villas are elite sites, so farms and huts must belong to commoners. Right? If we want to know about changes in commoners across time, we just count these sites. What on the surface looks straightforward, any survey practitioner will tell you is, in reality, far more complex.¹⁹⁶ The relationship between surface material, subsurface material, and the interpretation of one based on the other is neither straightforward nor easy. This section will discuss the issues that underlie these classification systems in Italian surveys with particular reference to commoner sites. These concerns directly affect the types of questions that can be asked of survey data.

Archaeological field survey is the practice of mapping areas of archaeological value and recording their various attributes. In modern, pedestrian field surveys, this research primarily takes the form of one or more archaeologists walking through fields at regular intervals and mapping and picking up material. The most abundant material is ceramic. The various features of this material (the amount of material, the types of material, the dates the material is thought to be produced) is used to infer information about the part of the landscape from whence it came.¹⁹⁷ In Italian landscape archaeology (as well as in survey archaeology more generally) locations “where significant traces of human activity are identified” are defined as sites.¹⁹⁸ Human activity, again, primarily takes the form of ceramic objects that have reached the surface through post-depositional actions (often ploughing). These sites are the basic unit of interpretation for any given survey project.¹⁹⁹

Sites tend to be interpreted through classification systems. These classification systems are not objective and impartial, but instead, they are usually related to the questions that each

¹⁹⁶ See Rajala 2006; Witcher 2012.

¹⁹⁷ For a discussion Witcher 2006a, 9-11.

¹⁹⁸ Renfrew and Bahn 1994, 42.

¹⁹⁹ For a more detailed discussion see Rajala 2006 and Witcher 2012.

survey project is asking.²⁰⁰ Often, these classification systems assign functional categories based on surface finds to the archaeology that is assumed to be beneath the surface. Unfortunately, it is a simple, if, at times unpleasant, reality that surface scatters do not always (or for that matter usually) present material that can lead to direct understanding of the subsurface archaeological record. The exact relationship between the surface and subsurface traces of the past has been debated for the last half-century. While we must, under the weight of previous research and responsible data usage, accept that surface finds are an unrepresentative, possibly displaced, sample of the subsurface record,²⁰¹ this fact does not mean that this reality has always been accepted or that it should discourage the use of survey data as evidence for past activity.

Various studies have attempted to determine the relationship between subsurface and surface remains with mixed (but mostly pessimistic) results. Small's recent work on kiln sites in southern Italy compared the results of magnetometry surveys with surface material from a pedestrian survey and test pits. While kilns could often be identified based on particular surface materials (namely kiln wasters), this was not a foolproof method for identifying kiln sites. Occasionally, wasters were not present in the area of kilns and visa-versa.²⁰² Even with a specialized site type, such as kilns, with a particularly visible material class used for its identification, the surface record is not wholly reliable.

In another recent study, Schörner examined the surface, ploughsoil, and subsoil assemblages in deeply plowed fields at Il Monte in Tuscany. Surface finds represented between 1.96% and 3.57% of all finds recovered in this study.²⁰³ These recovery rates are both low and variable. Furthermore, as with Small's example of kiln wasters, the artifacts on the surface did

²⁰⁰ See Witcher 2012, 12; Stewart 2013, 11-12.

²⁰¹ Terrenato 2004.

²⁰² Small 2011, 58.

²⁰³ Schörner 2012, 35.

not necessarily produce a representative fraction when compared to subsurface remains. A critical eye is crucial when attempting to reconstruct subsurface remains, and again when attempting to moving from subsurface remains to past activities, using material recovered from surface deposits. As Schörner notes, “the correlation between material found on the surface and artifacts recovered from structural features or buried deposits... must be studied, not presupposed.”²⁰⁴

What does this have to do with site classification? Many Italian surveys have failed to test the relationship between surface and subsurface remains, leading to the uncritical application of site classification systems that presuppose not only identifications but also build historical narratives associated with sites and specific settlement patterns based on unreliable, surface, proxy data. Projects working in central Italy have mostly followed variations of one particular scheme, first laid out by Timothy Potter in his synthesis of the South Etruria survey. The model of the middle Republican world and the commoner’s places in it encoded in this scheme must be deconstructed if we wish to locate rural commoners through survey and interpret rural infill.

3.5 Villa, Casa, and Tugurium

In Potter’s synthesis, rural sites were classified into three categories: villas, farms, and huts (we might also add village into this scheme, although this addition has been less dogmatically attributed to Potter).²⁰⁵ Potter justifies this distinction by referencing the literary record, citing the difference between *villa*, *casa*, and *tugurium*.²⁰⁶ Potter’s villas were the vestiges of large buildings, linked to estates belonging to the ruling nobility. The intermediate category were smaller buildings, often straightforwardly interpreted as the residences of peasants

²⁰⁴ *Ibid.*

²⁰⁵ See Witcher 2012.

²⁰⁶ Potter 1979, 122.

that served as both households and loci for production. The last category, huts, were rudimentary buildings that served as ancillary structures to other buildings or were only occupied seasonally.²⁰⁷ Size and material determined which category a site fell under; combining quantification and qualificative evaluation. Sites with large fragments of marble, *tesserae*, and other luxury items were interpreted as villas. Small areas with “household” and common ware ceramics as well as an absence of “luxury” items were characterized as farms. Small areas with no household ceramics and few common wares were huts.²⁰⁸

Potter himself did not explicitly discuss the connections between his classification system and the socio-political standings of the people he imagined inhabiting his villas, farms, and huts. However, three concurrent developments in Roman studies conspired to codify a model that linked textual assumptions to site classification. Garnsey’s study of where Roman peasants lived suggested that Roman smallholders lived in autonomous farmhouses. Contemporary historians of the Roman world, notably such influential figures as Brunt and Toynbee, were quick to recognize the impact the integration of landscape studies could have on their models of Roman history. Brunt, for example, stated that he was “convinced that it is from archaeology that we can best hope to extend and deepen our understanding of social and economic conditions in ancient Italy.”²⁰⁹ Unfortunately, while this did lead to a slightly greater appreciation for the types of data archaeological survey could produce, the results of the South Etruria surveys and many subsequent landscape projects tended to be fit into pre-existing historical narratives (namely the decline and fall of the free Roman peasantry and a rise in slave run villas unsurprisingly, championed by both Toynbee and Brunt).

²⁰⁷ Potter cites Columella and Varro’s texts as specific justifications for this classificatory scheme (Potter 1979, 122).

²⁰⁸ Potter 1979, 122.

²⁰⁹ Toynbee 1965: II.564, 564-7; Brunt 1971, viii, 352-3.

At the same time, Italian survey projects (for example the *Ager Cosanus* survey) adapted the South Etruria classification scheme and used it to answer their survey's evolving questions related to the rise of slavery and villa production.²¹⁰ This approach to classification reified the idea that spatial relationships and surface scatters could act as useable proxy data for the social hierarchies that dominated Republican Italy. As more surveys adopted this classification scheme, the same questions continued to be asked of the data, and a limited number of analytical frameworks were repeated. It should come as little surprise, considering this classificatory straitjacket, that recent studies that engage with survey data from the Republican period are still debating the same fundamental questions Brunt and Toynbee were asking.²¹¹ Survey evidence either confirmed Toynbee and Brunt's hypothesis of a peasantry in decline, or it did not. As recently as 2011, Launaro's monograph on *Peasants and Slaves: the rural population of Roman Italy (200 BC to AD 100)* used survey evidence to create a model for counting rural populations to continue this debate.²¹² Up until the last two decades, Potter's site classification system had not been extensively questioned, which might explain why studies of non-elites in the Republic have remained stagnant. The assumption that surface scatters could be easily correlated with rural commoners generally, and rural commoner houses, in particular, removed much of the impetus for modeling a more complex picture of non-elite experience in the past. Archaeological narratives need to be built from the sherd up, not based on outdated modes of classification. New methods and a reconsideration of the assumptions inherent in this system are needed if we want to ask new questions about the rural landscapes of Roman Italy.

²¹⁰ See Celuzza and Regoli 1982, 57.

²¹¹ E.g., Launaro 2011, de Ligt 2012, Hin 2013.

²¹² Launaro 2011.

There were some efforts (especially amongst British practitioners of field survey in the 1980s and 1990s) to break away from the villa-farm system of identification and adopt methods of site identification based on quantification.²¹³ These projects recorded artifact density for all areas of the fields they surveyed; sites were quantified as areas of “abnormal density above background scatter.”²¹⁴ At the same time, however, other survey archaeologists working in Italy highlighted the distorting effects that various post-depositional processes discussed above had on precisely this type of quantification.²¹⁵ Resurvey in different regions pointed towards the stochastic nature of artifact movement in the plough zone and the destructive effect of repeated deep ploughing on the surface record.²¹⁶ Visibility conditions due to the underlying geology as well as vegetation were shown to have a significant effect on survey results; good visibility increased the density of sites recovered, while areas of poor visibility were often empty.²¹⁷ Finally, at the interpretive phase, surveys using density measures often subjected their density-located sites to the old hut-farm-villa classification scheme for interpretation.

The next two sections deconstruct two of the major categories of Potter’s classification scheme: farm and villa. The purpose of this extended discussion is two-fold. First, it serves to explain the new classification scheme I develop in my methodology for the next chapter that uses consumption categories and the basic division between commoners and the elite discussed in Chapter 1 to create new, general patterns of activities. Second, it offers a catalogue of the limited commoner sites from Republican Italy – although many fall outside of the chronological period

²¹³ See Terrenato 1996, 220. See also work at Gubbio (Malone and Stoddart 1994) and Rieti (Coccia and Mattingly 1992, 1995).

²¹⁴ ADABS for short, actually drawn from Millet 1991, 23.

²¹⁵ Namely Ammerman, Fentress, and Terrenato.

²¹⁶ Ammerman 1995; Terrenato 1996, 222.

²¹⁷ Terrenato and Ammerman 1996.

of greatest interest here – as well as the excavated examples of elite residences that belong to this period.

3.6 What is a Farm?

Excavation finally dug away at the domination of the South Etruria classification system. The excavation of survey scatters has been used to test the validity of survey interpretations since the South Etruria survey, which excavated some of their smaller scatters to test the reliability of their identification system with a limited sample. For example, excavations as at Monte Forco, in the territory of Capena,²¹⁸ explored one of an agglomeration of six sites (site 154, out of sites 151-156) identified on a hill and classified as one part of a village belonging to peasants of a similar status based on the surface assemblage (Figure 3.1).²¹⁹ The goal was to excavate a type-site for the structures associated with these agglomerations of small ceramic scatters.²²⁰ The site, dated to the first century, was a small structure (10.95 m x 5.1 m) built in *opus reticulatum* of a “high standard” (Figure 3.2).²²¹ Various materials potentially related to agricultural activities, such as nails, and ceramic sherds, were found in at the exterior of the building which, although lacking internal differentiation, did contain a beaten earth floor. The excavation team suggested that this was a typical peasant house, belonging to a small peasant family. A tomb, thirty-five meters away, constructed in simple materials reinforced the excavator’s idea of permanent occupation and the lower status nature of the inhabitants.²²² The later phases, the excavators noted, provided evidence for a more utilitarian structure, possibly a stable, but this site certainly looks, at least superficially, like a commoner rural dwelling.

²¹⁸ A settlement 26.2 km north of Rome.

²¹⁹ Jones 1962, 172-173.

²²⁰ Jones 1963, 147-149.

²²¹ Jones 1963, 150.

²²² Jones 1963, 151-157.

The excavations at Monte Forco were not the only example of this type of ground-truthing by a survey team. A project working in the territory of Luni (a Roman colony in northern Etruria) excavated a scatter (site 9) that revealed a structure first occupied between the second and first centuries and typologically similar to the “peasant house” found at Capena (Figure 3.3).²²³ At least six rooms outlined by wall foundations of unsquared blocks of local stone and an open courtyard were identified with a partially buried *dolium*. No cooking spaces, floors, or concentration of ceramics were discernable in the structure, but the excavators still identified it as a peasant house, suggesting that a lost second floor held the residential parts of the house while the first floor was used for productive activities.²²⁴

The survey of the territory of Gubbio excavated their “concentration 326” in 1987, revealing a building dated between the late Republican and Imperial periods, with a wall footing of unmortared stone and reused tiles, as well as post holes to support a superstructure built of what they assume to be *pisé*.²²⁵ The excavators were surprised by the high volume of “competently manufactured” pottery and fine wares, suggesting the inhabitants lived above subsistence level with some amount of material surplus.²²⁶ This surprise emerges as a general theme of many of the more recent rural excavations. The poverty assumed by the excavators based on the size and rural nature of the structures is confronted with material that point toward access to external markets and limited, but present, luxury goods.

The Podere San Mario site, excavated as part of the Val di Cecina survey, represents another example of an excavated small survey scatter sites. Typologically similar to the sites at Capena, Luni, and Gubbio, the San Mario site had masonry foundations, traces of clay and wood

²²³ Delano-Smith 1986, 117.

²²⁴ Delano-Smith 1986, 115-117.

²²⁵ Mallone and Stoddart 1994, 192-3.

²²⁶ Mallone and Stoddart 1994, 194.

that suggest *pisé* superstructures, a tile roof, both external and internal beaten earth floors, and evidence for cooking activities, and a possible cistern (Figure 3.4).²²⁷ Much like at Gubbio, excavators found the site more materially rich than expected. Notably, the San Mario site provided evidence for occupation from the fourth century BCE through the fifth century CE. This suggests a remarkable stability for the rural commoners at the site.²²⁸ Archaeobotanical data from the site suggested the cultivation of cereals, legumes, and vines as well as the gathering of local wild fruits. Sheep and cattle were bred for food, wool, and traction, while deer, hares, dormice were also consumed.²²⁹ The inhabitants of the site practiced a balanced economic system aimed at self-sufficiency but could engage with external markets when possible, or needed. The Podere Cosciano site, identified by the surveyors based on surface material as a small *fattoria*, was excavated ten years later in the Cecina valley.²³⁰ This site and the San Mario site had similar physical characteristics, although the site at Podere Cosciano had a tub possibly used for grape fermentation (Figure 3.5).²³¹ The recovery of luxury items in these excavations, namely a bronze figurine of a paternal deity, a carnelian cameo gem, a scarab, and numerous coins suggest that at certain times the inhabitants of these sites possessed enough surplus to engage with external markets.²³² This was probably not the constant state of these commoner sites, but rather a punctuated system dependent on the orientation of exchange networks, yearly or seasonal variation in agricultural production, the amount of labor available, and other exogenous and endogenous factors. If these commoners were linked to elites through ties of dependency, no point does it appear the inhabitants were in a servile state, although these

²²⁷ See Motta 1997.

²²⁸ Motta *et al.* 1993, 110.

²²⁹ Camin and McCall 2002, 22.

²³⁰ The surface investigations identified a 400 m² scatter of mostly tile, but also black gloss, African Red Slip, Arretine Ware, *dolia*, and amphorae.

²³¹ See Camin and McCall 2002.

²³² Camin and McCall 2002, 23. Nabatean coins were not found, but had they been, see Harvey 2015.

relationships would have shifted over the various centuries of occupation. In all of these cases, small survey scatters were excavated and revealed evidence for rural commoners, and in many cases rural commoners with more material wealth than anticipated by the excavators.

Taken as exempla, these limited excavations suggest that it is possible to identify some sites that were used by rural commoners through field survey. The identification of these spaces as habitations, however, with all the assumptions about their domestic nature and function needs to be further nuanced. While some of these structures, especially San Mario and concentration 326 at Gubbio that were subjected to both faunal and botanical analysis, appear to have domestic functions, or at least evidence for food consumption, the excavations at Capena and Luni are less clear. Cambi has cast doubt on the identification of the site 154 as a peasant farm, suggesting that the identification of a stove, the only clearly domestic feature of the structure is questionable on archaeological grounds and that the building is more likely to have been a stable.²³³ The absence in most studies of Roman houses of considerations for what constitutes a commoner “house,” whether it be defined by architecture, relationships, or activity, makes the attribution of these spaces as commoner households difficult. There was loci repeated actions, but whether these actions were “domestic” is difficult to determine.

The recent work by the Roman Peasant Project has underscored the difficulty of determining subsurface function based on surface finds, especially when dealing with non-elite materials. Following a survey in the *comune* of Cinigiano by Mariaelena Ghisleni, the Roman Peasant Project selected several sites identified by Ghisleni that suggested peasant occupation. Ghisleni’s survey, following the methodologies of the *Carta Archeologica della Provincia di Siena* project, used a series of functional categories drawn from the South Etruria research

²³³ Cambi 2004, 87.

tradition.²³⁴ Over the course of multiple seasons, the Roman Peasant Project team excavated sites associated with Ghisleni's functional categories that were smaller than the "villa" and "large settlement," as well as some "villages." It was assumed that these sites, on the smaller side of the settlement hierarchy, would provide the best evidence for peasant activities.²³⁵ While not the primary goal of the project, the excavation of small scatters by the Roman Peasant Project team provides much-needed information that complicates the picture of subsurface characterization based on surface results as well as the South Etruria classification scheme.

At Pievina, a scatter of seven agglomerations of ceramic and building material covering approximately two hectares, was targeted for excavation. Based on her survey, Ghisleni characterized the site as a village that shrank in size during the Late Antique period.²³⁶ Excavations revealed a more complex picture than that which was implied by the surface data.²³⁷ Two phases were identified, one associated with the Late Republican material, one with the Late Antique scatters. Beneath the Late Republican scatter, no "houses" were found. Instead, the debris corresponded to structures identified as a possible cistern, a possible granary, an exterior hearth, and a kiln site. The Late Antique scatters revealed a small structure with associated beaten earth surfaces, but no spaces used for cooking or sleeping.²³⁸ None of these structures

²³⁴ Functional categories matched size categories, thus Villages were 1-2-hectare distinct concentrations of ceramics and construction material with the presence of artisanal installations such as kilns; Villas were 1-3 ha, with abundant ceramics and luxury architecture; Large settlements 1-3 hectares, with unclear spatial and wealth characteristics; Farms 0.05-0.15 ha sites, with ceramic and construction material as well as storage/transport ceramics; Houses were 0.01-0.05 ha, ceramic and construction material with storage/transport ceramics (a smaller farm); Kilns were identified by the presence of overfired or waster ceramics as well as darkened soil; Off-sites were defined as scatters measuring 1.0 m or less or diffuse scatters producing one-two sherds. See Ghisleni *et al.* 2011, 98 n. 2.

²³⁵ Ghisleni *et al.* 2011, 98.

²³⁶ Ghisleni *et al.* 2011, 101.

²³⁷ Ghisleni *et al.* 2011, 100-101.

²³⁸ Ghisleni *et al.* 2011, 133.

were clearly domestic, and the site was tentatively interpreted as a shared workspace used by peasants who lived in its environs.²³⁹

The Roman Peasant Project excavated another small scatter at Case Nuove, identified by Ghisleni's survey as a possible small habitation.²⁴⁰ Rather than a residential structure, the excavations revealed a late Republican pressing installation.²⁴¹ The interpretation of the pressing installation is complicated by the presence of a nearby villa site, Santa Marta, one of the few in the area. The growth of this villa appears to affect the abandonment layers of the pressing installation; imports and fine wares are more numerous in the period after the villa's appearance and the faunal remains suggest a diet of young animals. This change in material consumption may represent a general increase in the wealth of the people frequenting this area. During the press's use life, however, the picture is less clear.²⁴² The excavators put forth two possible scenarios: the press could be used collectively by surrounding farmers and a nexus of rural community formation. Alternatively, due to the proximity of the villa to the pressing installation, it could hint at efforts to control the local commoners.²⁴³

While they have yet to be fully published, four other scatters were excavated by the Roman Peasant Project at Poggio dell'Amore, San Martino, Colle Massari, and Podere Terrato. They confirm a diversity of activities hidden by the simplified classifications systems used by most field surveys. San Martino was characterized as a small farm based on the surface finds, but excavations revealed a single phase, temporary or seasonal site possibly used for storage at

²³⁹ Ghisleni *et al.* 2011, 134.

²⁴⁰ Vaccaro *et al.* 2013, 130.

²⁴¹ The original surface scatter was comprised of three discrete clusters of material that measured 28 x 13 m, 13 x 12 m., and 10 x 10 m. River cobbles, roof tiles and ceramic including *terra sigillata italica* as well as late Roman cooking pots and colour coated ware made up the material at a density of c. 1-3 per meter (Vaccaro *et al.* 2013, 131-132).

²⁴² Vaccaro *et al.* 2013, 172-173.

²⁴³ *Ibid.*

harvest time or the temporary shelter of animals. Botanical studies that revealed both evidence for fodder and pollen belonging to cereals led to these interpretations.²⁴⁴ Ghisleni classified Poggio dell'Amore as a habitation site, but excavations again revealed a temporary site linked to season or pastoral activities.²⁴⁵ Colle Massari was labeled as an off-site scatter and was revealed to be a thirteen meter long field drain used to remove stagnant groundwater.²⁴⁶ Finally, Podere Terrato is perhaps the most interesting of the sites from a rural infill perspective as it was identified as a *fattoria* (farm) site by Ghisleni.²⁴⁷ A more stable habitation site with two rooms, a porch, and possibly a garden was found by the excavation.²⁴⁸

The excavations of the Roman Peasant Project reveal a diversity of possible commoner structures obscured by a classification scheme based on the South Etruria model. As the excavators suggest, this should be used to question the site typologies traditionally used by survey archaeologists.²⁴⁹ Taken with the earlier excavated structures that resemble more closely a rural commoner occupation, the Roman Peasant Project data suggests a number of possible interpretations for surface scatters traditionally associated with commoners. Each point on a survey distribution map, especially those sites smaller than farms, would not necessarily represent a living space or an individual commoner family, but rather a host of potential spaces used by commoners on a daily, seasonal, or temporary basis.²⁵⁰ We need to introduce an element of uncertainty into our classification system for rural commoner sites. While domestic structures

²⁴⁴ 20 x 25 m. scatter of tiles with some fine wares (black gloss, Italic sigilata, dolia) See Bowes *et al.* 2015 for the site description, see Rattighieri *et al.* 2013 for the botanical data.

²⁴⁵ Scatter was 30 x 20 m. See Rattighieri *et al.* 2013 See Rattighieri *et al.* 2013 for the site description, and the botanical data.

²⁴⁶ Bowes *et al.* 2015.

²⁴⁷ 50 x 40 m. scatter rich in tiles, Bowes *et al.* 2015.

²⁴⁸ Bowes *et al.* 2015.

²⁴⁹ Ghisleni *et al.* 2011, 134.

²⁵⁰ The Roman Peasant Project findings force a reconsideration of how peasants are counted based on survey evidence and call into question many demographic estimates that use these archaeological proxy data.

are possible, the Casa Nuove site especially highlights how fine ware and tile scatters, often used as the surface correlates for a “habitations,” can represent different types of permanent commoner activity. Furthermore, as de Haas has recently argued and the Roman Peasant Project excavations at Colle Massari demonstrate, off-site scatters can encode rich information regarding a wide range of commoner activities.²⁵¹ While, as de Haas notes, the microenvironment of particular off-site material is crucial to a richer categorization, these smaller, more ephemeral traces of activities suggest a wide range of actions in past landscapes.

It would be easy to look at both the Roman Peasant Project and Schörner’s findings and despair about the utility of survey data for reconstructing past landscapes. If we were interested in, for example, arguing that rural infill represents population change and, thus, tried to count rural commoners, the higher degree of variation at the lower end of the settlement hierarchy and the presence of numerous non-domestic sites in a category that would previously have been defined as habitations would complicate this project significantly

There are also positives both in the data itself and in the deconstruction of the dogmatic application of the South Etruria categories brought about by the Roman Peasant Project’s work and other recent attempts to question this classifications system.²⁵² The Roman Peasant Project has demonstrated that an intensive survey can identify rural commoner sites. While the function of rural scatters is now more open to interpretation, the ability of field survey to locate commoner presence provides some verification that a project, like this dissertation, can actually come to grips with non-elites in the past. There has been a wide body of literature questioning field survey’s ability to locate those at the lower end of the social hierarchy.²⁵³ To cite one recent

²⁵¹ See De Haas 2012.

²⁵² Rajala 2006; Witcher 2012.

²⁵³ See, for example, Francovich, Patterson, and Barker 2001, Pettegrew 2000; Bintliff *et al.* 2002.

example, Rathbone has cast doubt on field survey's ability to find the rural poor. His argument is based on his reading of Roman agronomists and a sample of excavated farm sites he views as qualitatively too nice to belong to peasants.²⁵⁴ He suggests that the majority of the poor rural population must have lived in buildings too small and rudimentary for a surface survey to recognize.²⁵⁵ Thanks to the work of the Roman Peasant Project, we have good evidence that certain aspects of this argument are spurious. When we look at small rural sites recovered by intensive field surveys, we can assign these spaces to commoners and likely poor commoners. What we cannot do is designate these spaces as commoner habitations. Instead, they are activity spaces – habitation is just one amongst a litany of possibilities. In a sense, this should be freeing for those inclined to look at the surface record. Rather than dots on a map representing autonomous peasants living in isolation, they represent the materialization of complex networks of production and consumption opportunities. Rather than a static picture, interaction – as seen especially at the Case Nuove and Pievina sites – is materialized in the landscape. While in the Roman Peasant Project case, this interaction is structured around agricultural activities, in different landscapes, these interactions should be imagined in multiple different ways. At Podere San Mario, the interaction could be seen in patterns of material exchange: fine ware ceramics, bronze objects, and coins demonstrate a reasonable level of interaction between the users of this space (occupants being, perhaps, too loaded a word) and a more extensive network of sites and people. While the Roman Peasant Project's data comes primarily from sites that post-date the period I am studying, it is hard to imagine the basic tenants of rural life shifting so dramatically

²⁵⁴ Rathbone is, however, missing a number of important recent sites.

²⁵⁵ Rathbone 2008, 307. There are many issues with Rathbone's suggestions, perhaps principally his suggestion that Roman peasants lived in huts similar to Latial hut-urns. The closest archaeological correlates to these structures, such as those excavated at Gabii, appear to have been elite residents. It is often forgotten that huts made of perishable material involved considerable investment in resources to maintain against the constant forces of water and erosion.

between the third and second centuries that the model of a more dynamic commoner landscapes needs major revision. While the countrysides of Roman Italy were not static, they also were not so mutable that we cannot retroject this important model of heterogeneity.

Additionally, the older excavations, especially at San Mario in the Cecina Valley, in conjunction with the Roman Peasant Project's excavation of Podere Terrato suggest that while a healthy dose of skepticism is needed when looking at site identifications in survey legacy data, *fattoria*/farm sites, generally characterized by high concentrations of roof tiles and domestic ceramic, are somewhat more securely identifiable through field survey than smaller habitations.²⁵⁶ Suggesting that these farm sites represent domestic spaces is perhaps overly positivist, but their presence shows at least a more permanent presence in the landscape as well as productive practices. Especially, when these sites appear in a capillary distribution and are located far from urban sites, the presence of farms points to increased investment by rural commoners in a permanent presence in rural spaces as well as an intensification of various forms of rural production. The farther these sites are located from nucleated settlements, and the more resources are used in their construction, it seems logical that these sites (or sites nearby) take on a domestic function, but this will have to be tested through excavation.

Gone are the days where Garnsey's model of the autonomous peasant household could be mapped onto survey archaeology. Instead, the countrysides of Republican Italy need to be imagined as dynamic spaces where ceramic scatters encode a series of landscape activities. Dots on the map do not mean more commoners were necessarily present; it means more activities left behind durable material traces. The methodology I outline in the next chapter uses the data gathered by these excavations to reclassify survey data. I will argue for a model that does away

²⁵⁶ There is, admittedly, a small sample size and hopefully, more excavation will either confirm this hypothesis or force it to be reworked.

with the specificity of South Etruria's system in favor of a more general classification scheme that allows for a range of interpretations, while still focusing the attention on commoner activities. This is especially important at the lower end of the social spectrum, where commoner activities are variable and functional attributions require excavation. Some suggestions about these activities can be made based on the landscape under study, but in general a generic attribution as "activity spaces" provides the flexibility required for material that is difficult to specify without further investigation.

In the next section, I will consider the other end of the social spectrum – villas. As I outlined in Chapter 1, relationships between elites and commoners are important for understanding rural infill. This means we need to critically consider what constitutes an elite site during the middle Republic. In the South Etruria scheme, "Villas" were elite sites. As Witcher notes, the "villa" is the most debated class of rural site.²⁵⁷ It is important to have a very specific definition for this type of elite structure, contextualized by new excavations that have deconstructed the traditional view of the "Catonian" villa and point towards a different function for "villa" spaces in the middle Republic.

3.7 What is a Villa?

If the term "farm" in traditional Italian survey classification systems is problematic because it hides a litany of possibilities beneath a generic term, the term villa, creates interpretive problems because it is both overly specific and not temporally specific enough. The villa is all but synonymous with the Roman countryside: from Hadrian's Villa at Tivoli to the Villa of the Mysteries, Pliny's villa letters to Tiberius' Villa Iovis on Capri, you would be hard pressed to make it through an introductory course on the Roman world without running into a plethora of

²⁵⁷ Witcher 2012, 14.

villas. Numerous examples are known from Roman Italy, and the export of the villa abroad is often seen as a signature part of a Roman cultural package. The disappearance of rural villas is evoked as part of the transition from the Roman to Late Antique periods.²⁵⁸ What does it mean when a villa is identified during an archaeological field survey? Depending on the period, the reader, and the particular interpretive frameworks, the presence of “villas” can mean a number of things: the presence of a particular form of social structure, diffusion of an architectural style, the materialization of an economic system, or evidence for “Roman” cultural dominance.

In particular, it has been difficult to disentangle the idea of a villa as a high-status residence from the idea of the villa as emblematic of agricultural intensification through the slave mode of production. The equation of slavery and villas has a long tradition in Roman studies and can trace its roots in anglophone thought at least to the self-image constructed by the slaveholding aristocrats of the American south.²⁵⁹ This led to an explicit comparison between the American slave plantations and villas: wine and olive oil were the Roman versions of cotton, wine and oil presses were the cotton gin, the cotton-hungry European countries that drove the slave economy were analogous with the city of Rome and other emerging cities, and chattel slavery is evident in Columella’s advice to divide slaves into groups of ten with an overseer.²⁶⁰ It is beyond the scope of this dissertation to engage with the various issues surrounding this debate as it pertains to the later Roman world, but a wealth of evidence suggests that this type of villa cannot be retrojected into the middle Republic.

²⁵⁸ For an overview, see Marzano 2007; see also Dyson 2003, Chapter 1; Francovich and Hodges 2003.

²⁵⁹ See Dal Lago and Katsari 2008. Since Finley and Hopkins, Rome has been listed as one of five “genuine slave societies” (along with Athens, pre-Civil War Southern United States, Brazil, and the Caribbean). Hopkins 1978, 99-100; Finley 1980, 82.

²⁶⁰ Columella 1.9.7-8.

The traditional model for villa development, which for a long time was fit directly into historical narratives of the rise of slave-estates and the decline of the peasantry, was based on a “backward-facing archaeology” tied to literal readings of historical sources. The story goes, as Rome expanded and conquered central Italy, local commoners were dispossessed in favor of Roman colonists. These colonists build small farms on their colonial allotments. Some of these small farms, finding their way into the hands of the Roman elite,²⁶¹ would, over time, buy up their neighbor’s land and, with an eye towards the capitalist opportunities presented by a rise in confiscated *ager publicus* and an increased supply of slave labor, transform these small farms into slave-run landed estates. The Catonian villa became the Varronian villa, which became the Columellan villa and so forth.²⁶² An evolutionary scheme was developed where smaller rural buildings, evolved over the third and second century into the lavish villas of the first century and later. The small buildings were the Catonian villas, while their larger first-century descendants were Varronian.

Excavations of the Auditorium site at Rome called into question this model of villa evolution. First discovered in 1996 due to excavation work for the construction of a new concert hall in Rome, the so-called Auditorium site is located about one and a half kilometers outside of the Aurelian walls of Rome.²⁶³ Over two seasons, a sequence of buildings was excavated dating from the middle of the sixth century BCE through the second century CE. This site represents one of the most significant pieces of elite architecture recovered from the early and middle Republic.

²⁶¹ Who after all, lived on small farms following the model of Cincinnatus.

²⁶² According to this model, the Palladian villa follows the Plinian villa. Carandini 1994.

²⁶³ See Terrenato 2001; Carandini *et al.* 2006.

Following an initial phase dated to the middle of the sixth century,²⁶⁴ a second phase building belongs firmly to the chronological period under study here. Phase 2, dated to the beginning of the fifth century, possessed an orthogonal and regular layout and was sizable – about twice the size of the Phase 1 building (Figure 3.6). The Phase 2 building is still oriented around a courtyard space, complete with a drainage system, evidence for partial roofing, and perhaps wooden flooring. Of particular note is a single large slab of tuff, belonging to an oil press, as Terrenato notes one of the largest and earliest known from central Italy.²⁶⁵ These rural residences were still loci of productive activities, but it is unlikely that large slave labor forces provided this labor. The walls are built from ashlar masonry in a local cappellaccio tuff, similar to the contemporary houses identified on the northern slopes of the Palatine.²⁶⁶ The excavators suggest that the rooms surrounding the central courtyard belong to a “*pars urbana*,” drawing on the language of later Imperial villas, while the suite of rooms to the south (rooms that include a hearth and a paved potential work surface) belong to a “*pars rustica*.” It should be noted that the differentiation between the productive and residential spaces is not as marked in this phase as in later construction.²⁶⁷

For the next two centuries, the building was maintained with only minor alterations. The external character of the building did not change dramatically, although there were significant internal renovations and reworkings (especially towards the end of the fourth/beginning of the third century). The overall floor level was raised, a new courtyard replaced the well and cooking area, the large oil press fell out of use, and evidence from architectural terracottas, high quality

²⁶⁴ This phase consists of a courtyard space surrounded by rooms on three sides; one room contained an oven or kiln while another contains a hearth. The walls are built without foundation trenches out of irregular fragments of a local ‘tufo lionato’ bound together with local clay. See Terrenato 2001, 7 and Carandini *et al.* 1997, 123.

²⁶⁵ Terrenato 2001, 8.

²⁶⁶ Carafa, Munzi, and Brocato 1995; although the identification of these spaces as houses, and the proposed plan is controversial, see Moorman 2001.

²⁶⁷ Terrenato 2001, 8.

and reflecting Hellenistic styles, and roof tile forms suggests that a compluviate roofing system was constructed (Figure 3.7).²⁶⁸ Finally, in the middle of the third century, the building was again renovated, many of the walls and floors were replaced, and a building was constructed that fits well with the picture of a canonical late Republican atrium-style villa.

The Auditorium site maintained an elite character and, as far as we can tell from the evidence, continuous occupation from the middle of the sixth century through the entirety of the Republican and into the Imperial period as well. While it is not possible to determine if a single family or family group held this building across that entire period, the degree of continuity in habitation suggests stability; there were no violent disruptions in the occupation of the space.²⁶⁹ The continuity of elite families (at least certain elite families) is well attested in the consular *fasti* so it should not, necessarily, be surprising to find archaeological evidence for similar continuity of space near Rome. The presence of such a long-lived elite structure would have affected surrounding commoner communities. It is hard to envision the Auditorium site as anything other than the top site in the local settlement hierarchy, with a number of smaller settlements economically and socially dependent on the facilities, power, and advocacy of the elites who inhabited it.

Since its discovery, an increasing number of sites have been offered as comparanda for the Auditorium. The so-called villa site at Grottarossa, north of the Auditorium on the Via Flaminia, shares characteristics with the Auditorium site, especially in its Phase 2 (Figure 3.8).²⁷⁰ A massive residential building centered on an atrium-like space, the architecture at Grottarossa is

²⁶⁸ Terrenato 2001, 10.

²⁶⁹ For a counterexample where there is evident disruption in elite habitation, we might look at the so-called Regia at Gabii (intentionally abandoned in the transitional period between the 6th and 5th centuries BCE) or, indeed, Gabii Area D (where inhumation burials are placed within the urban space suggesting some disruption in the cultural *mores* at the site).

²⁷⁰ See Becker 2006.

built of ashlar tuff masonry without mortar, generally, a style belonging to the early or middle Republic.²⁷¹ Stratigraphic details for the excavations at Grottarossa are not preserved, but architectural terracottas support a fifth-century date. Volpe argues that two villas in the Centocelle park, south of Rome, which had a monumental phase at the end of the first century CE, also possessed a middle Republican phase, once more characterized by ashlar, tuff masonry.²⁷² Outside of Rome's direct suburbium, the Villa of Selvasecca in Southern Etruria has also been suggested as a palatial site similar to the Auditorium site, especially since the restudy of the architecture suggested a pre-second century phase.²⁷³ A recent study of the polygonal masonry platform sites in the Pontine region, posited at one point by Torelli as central Italy's first villa sites,²⁷⁴ suggests that some of these middle Republican structures may also have been elite sites based on surface finds.²⁷⁵ While these sites have only been located through sporadic excavations, the presence of ashlar masonry in tuff has been suggested as a means of identifying unexcavated sites of this nature, especially at the sites of villas with later Imperial phases.²⁷⁶ Di Giuseppe suggested a methodology for finding palatial sites similar to the Auditorium "hidden" in survey data. Within the sample of sites recovered through field survey, Di Giuseppe suggests that palatial sites would be unlikely at either small scatters, due to their expected large size, or at sites with no evidence for occupation between the fifth and third centuries. She suggests that at "high-status settlements," i.e., large scatters and sites interpreted as villas, with occupation in the middle Republic, one might posit the existence of palatial site similar to the Auditorium.²⁷⁷ The methodology likely overrepresents palatial sites, but as a hypothesis for locating elite structures

²⁷¹ Terrenato 2001, 23; Stefani 1946.

²⁷² Volpe 2012, 98-99.

²⁷³ See Terrenato 2001, 23; Terrenato 2012, 75; Becker 2003, 819.

²⁷⁴ Torelli 1990, 123-32.

²⁷⁵ De Haas *et al.* 2015.

²⁷⁶ Volpe 2012.

²⁷⁷ See Di Giuseppe 2005.

through surface data, it is easy to operationalize and might lead to the recovery of more palatial sites when coupled with excavation. Even if we cannot confirm the presence of these elite sites, it enriches our models if we suggest places where they might have been present.

What was the function of these palatial sites? There are two different interpretations. Terrenato argues that this type of building was the rural seat of the elite lineage groups discussed in Chapter 1.²⁷⁸ Rather than villas, he suggests the term “Palace” might be more appropriate as it makes the differentiation between this type of structure, and later, canonical, villas that arise only in the first century.²⁷⁹ Unlike the evolutionary model of villa development discussed above where small farms evolve into opulent villas, a new model can be put forward where later villas drew their architectural inspiration from these palaces. Terrenato argues further that the few buildings identified as “Catonian villas” belong to another form of habitation, called *Hellenistic farmsteads*, and are associated not with villa evolution but perhaps are a result of rural infill and the creation of an elevated commoner class. The palaces were architecturally related to, and functional in a similar manner, to Etruscan palaces like Poggio Civitate.²⁸⁰

Carandini criticizes Terrenato’s arguments, stating that the context of growing urbanization and the creation of the Republican political system makes the association between the Auditorium site and Etruscan princely palaces, far from urban centers and symbolic of a different political reality, untenable.²⁸¹ Terrenato’s recent arguments about the importance of lineage groups well after the expulsion of the monarchy from Rome, however, acts as a compelling counter-argument, and the palace model, where these types of buildings are the base

²⁷⁸ Terrenato 2007, 19.

²⁷⁹ Terrenato 2011, 73-88.

²⁸⁰ Terrenato 2011, 11-21.

²⁸¹ Carandini *et al.* 2011, 587-92.

for elite lineage groups has been accepted by numerous scholars working on early Republican Italy.²⁸²

If these are the seats of elite lineage groups, the relationships we can hypothesize when potential palatial sites are located through field survey change significantly than what we might assume if we identify these “high-status settlements” as villas on a Carandinian or Catonian model. The appearance of these types of sites suggests the presence of elites, and potentially elite lineage groups, in the rural landscapes of central Italy. As the Roman Peasant Project noted at Casa Nuove, the presence and appearance of elite sites in commoner-dominated rural landscapes could suggest various forms of elite control over their commoner neighbors. There would also be a whole set of negotiations between commoners and elites regarding labor, produce, and land. These palatial sites were evidently deriving some of their prosperity from their rural dependents, but the rural dependents were also likely benefitting from centralized exchange nodes that brought a different category of material culture into rural spaces. If there were a diffusion of elite sites in conjunction with rural infill, this would suggest a very different process of landscape change than only the recovery of sites associated with commoners. Alternatively, if there was evidence for increased spatial separation between commoner activity areas and palatial sites, this might suggest active attempts by non-elites to separate themselves from their social superiors. The location, or if not location, the suggestion of possible locations testable through excavation, of palatial sites through field survey can be crucial for modeling social relations between commoners and elites in the middle Republic. As with any categorization through survey, the identification of these elite spaces should not be expected. Rather, the potential presence of

²⁸² See, for example, Smith 2006, 153-4; Fulminante 2014, 144-5; Armstrong 2016, 162-3. See also Terrenato 2014; 2019.

palatial sites can perhaps be suggested, on the model of Di Giuseppe, on a scatter to scatter basis and using the recovered material and interpretations of the original surveyors as guides.

Not every elite residence in the middle Republic was necessarily as large as the Auditorium and its peer sites, however. There are two other classes of buildings identified primarily through excavation rather than field survey, that needs to be considered: the so-called “Archaic Farms” and “Hellenistic Farms” that have been excavated across Italy and date to the Archaic period and the middle to late Republic respectively (Figure 3.9, Figure 3.10).²⁸³ These figures have been used almost as frequently as the distribution maps from South Etruria to represent rural infill. A more in-depth examination of one of these Archaic sites, excavated at, Podere Taruchino suggests that rather than the original interpretation, that this site was a rural commoner’s farm, this could be a different type of elite structure. Size and building technique are not the best methods for determining what constitutes elite architecture in the middle Republic. The excavated material must also be considered.

Identified during the Albegna Valley survey, a scatter of 300 m² with tiles and building stones was excavated, revealing a two-phase structure. The first phase, dated to the sixth century, was a relatively simple building (12.2 m x 5.8 m) oriented E-W, with stone wall foundations. A row of post-holes to the south of the building may have supported an extended porch (Figure 3.11). A hearth and *pithos* were found that might belong to the Phase 1 building, but the excavators were far from certain.²⁸⁴ The Phase 2 building, dated to the first half of the fifth century, had more than double the area of the Phase 1 building, with double walls in at least one of the rooms suggesting a more robust superstructure. The roof was tiled, the hearth that might have belonged to the Phase 1 building was certainly in use during Phase 2, as was the *pithos*,

²⁸³ See Volpe 1990; Terrenato 2007, 18-19.

²⁸⁴ Perkins and Attolini 1992, 76-77.

likely for wine production (Figure 3.12).²⁸⁵ The excavators characterized the finds as indicative of an austere lifestyle, but a closer examination of the material might suggest otherwise. The Phase 1 building, while not very large or architecturally elaborate, produced a noticeable amount of bucchero (6.8% of a total of 1382 sherds) and fine creamware (15.56% of 1382). Amphora sherds suggest a broad network of interactions. While bucchero was found in much lower frequencies in the Phase 2 structure, the size of the building is notable and fine wares are not absent.²⁸⁶ The wine production facilities also imply access to grapes, requiring some degree of control over productive land.

The excavators interpreted the Phase 1 building as a home occupied by a small, peasant nuclear family that shared the space with their animals.²⁸⁷ The growth in Phase 2 is linked to the growth in family size, housing now an extended family with more than one generation of adults.²⁸⁸ Garnsey's autonomous farmer is clearly an influence on this model of the self-sufficient, growing peasant family. Since this site was excavated, we have a more robust corpus of architecture from the sixth and fifth centuries which might help us question the non-elite attribution of Podere Taruchino.²⁸⁹

For example, recent excavations at Gabii have focused on a hut complex occupied at least by the eighth century and abandoned in the fifth century. This complex, transitioning from a single large hut in the eighth century to a two-room building with stone foundations by the fifth, has been interpreted as a residential complex based on its ceramic assemblage. The presence of numerous infant burials with rich grave goods suggests it was occupied by a local elite group,

²⁸⁵ Perkins and Attolini 1992, 110-113.

²⁸⁶ A fragment of *aes rude* was also found in the ploughzone associated with the site, but its exact relationship with the site is purely conjectural. Perkins and Attolini 1992, 129.

²⁸⁷ Perkins and Attolini 1992, 113, 125.

²⁸⁸ Perkins and Attolini 1992, 125.

²⁸⁹ It should also be noted that many so-called Archaic farms with their three-room plans look formally quite similar to elite structures from the same period such as the Regia in Rome and the Regia at Gabii.

and these rich grave goods persist through the abandonment of the complex (Figure 3.13).²⁹⁰ The buildings within the habitation, however, did not take an architecturally elaborate form, consisting of a stone foundation and superstructure constructed of either *pisé* or wattle and daub. In the 2010s, an Italian team excavated another building on the so-called arx at Gabii that is likely also an elite residence. Built using polygonal masonry, the so-called Regia di Gabii was far more architecturally ostentatious than the Area D complex, with three rooms and a courtyard, as well as architectural terracottas.²⁹¹ Ceramic evidence suggests that this Sabine Regia was occupied contemporaneously to the architecturally unpretentious structure in Area D. Both structures belonged to elite groups, but one group materialized this status in burials while the other did so in monumental architecture.

Other so-called Archaic farms also produce a material signature that suggests a commoner attribution might be premature. House B at Luni sul Mignone, similar in plan and construction technique to the first stone phase of the Area D house at Gabii, produced sherds of Attic Red-Figure and Black-Figure ceramic, as well as other fine wares (Figure 3.14).²⁹² The Lago de Aversa complex is associated with a nearby, rich necropolis.²⁹³ We should not examine Archaic or middle Republican buildings with preconceived notions of what constitutes elite architecture. Excavated material is crucial for detecting if these sites were used by elites or commoners, and in all three cases the material looks similar to Gabii, where the presence of an elite lineage group has been hypothesized. Rich burials are missing, but these sites have a very different material signature than the contemporary small farms and peasant activity areas discussed above. While the sites in the Cecina valley were materially richer than one might

²⁹⁰ Mogetta and Becker 2011, 177.

²⁹¹ See Fabbri 2017.

²⁹² Ostenberg 1969, 92.

²⁹³ Giuntoli 2018.

expect from a commoner site, the structures notably did not change in size and the It is entirely possible that in the sixth and fifth centuries, and especially in rural areas without easy access to workable stone such as cappellaccio, many elite residences were built out of more quotidian materials. It should not be surprising that many of the palatial sites compared to the Auditorium were found near Rome, an easy source for ashlar construction material as well as a nexus for the movement of material and workers. When we are looking at field survey data, sites like Podere Taruchino will not produce many of the signs for elite status Di Giuseppe suggested at palatial sites. Contextual information such as the presence of necropoleis can help determine if one of these sites was present but has been missed. Addition attention must be paid to sites with large scatter sizes or notably rich material. In the end, some of these sites will be missed and attributed to commoners rather than elites. Just as the complexity of different commoner statuses are being elided in order to create a general narrative, elites suffer a similar fate. Not every Archaic or middle Republican elite lived in an Auditorium site. This also means that, at later villa sites with evidence for earlier occupation, ashlar masonry might not be the only sign of an earlier elite presence.

The same arguments questioning non-elite attribution can be applied to the “Hellenistic farmsteads” recovered through excavations, and mostly dated to the second century (Figure 3.10). A quick examination of these sites suggests that there is a significant gulf in materials between these sites and the farms discussed above. The Posta Crusta site, from northern Apulia, was a building of moderate dimension (400 m²) but had *opus signinum*, mosaics, and *opus sectile* floors in various rooms.²⁹⁴ Site C19 near Giardino Vecchio in the territory of Cosa was slightly larger (600 m²), with *cocciopesto* flooring, plastered walls, and evidence for agricultural

²⁹⁴ Excavated between 1972 and 1973. De Boe 1975, 520-528.

production.²⁹⁵ These sites are not as sumptuous as the Auditorium site, the site at Grottarossa, or the villas of the late Republican and Imperial periods, but they are also noticeably more ornate and more substantial than the smaller farm sites discussed above. These are not Catonian villas that would evolve into later villa structures, the excavation of the Auditorium site makes this type of evolutionary scheme untenable. But I find it unlikely that these are commoner sites. Their limited numbers and the fact that we cannot associate any of these sites with surface scatters that characterize rural infill makes it difficult to draw a direct line between these intermediate-level structures and rural infill. Instead, I would suggest that these structures are elite residences; their relationship to the Auditorium-class sites is the rural equivalent of the Area D building at Gabii's relation to the Regia; different material manifestations of nobility that did not yet have access to a full range of architectural markers of elite status.

The argument that these are not commoner sites does not mean their appearance and proliferation during the period of rural infill is not worthy of note. The recovery of this type of site might suggest the same processes of elite-commoner interaction as the presence of palatial sites. It is also possible that, with more excavation of scatters associated with rural infill, the rural evidence will suggest that instead of a dichotomy between commoners and peasants, an intermediate class of rural inhabitants appears in the later first millennium. At urban sites, an intermediate class of consumer-producers appears to develop during the Archaic period focused on production and trade.²⁹⁶ More survey and the excavation of the surface materials associated with these types of sites would go a long way towards elucidating the nature of peculiar class of settlement. It would also be worth examining the continuities of so-called Hellenistic farms, do they continue into the Imperial period? Elite presence in the landscape is important for

²⁹⁵ Attolini *et al.* 1982/3.

²⁹⁶ Amman 2017b.

understanding rural infill; it is not just Auditorium sites but also more modest dwellings with different material signatures that could suggest the presence of a rural elite. Site by site reanalysis can reveal some possible areas of elite activity, but it cannot provide certain attributions. It is important that the limitations of survey data be noted, as well as its strengths. Survey can cover a broad area and it provides a wealth of potential evidence, but even with the excavation data provided in this chapter, many of the site attributions – even with a simplified classification scheme– remain hypothetical and require further research to contextualize and nuance.

3.8 Towards a Comparison of Commoners

This chapter has summarized the concerns about using data from multiple survey projects to study broad regions, and discussed the manners in which those concerns can be addressed. First and foremost, data of similar quality must be used in order to formulate valid conclusions. Regardless of data quality, however, a certain amount of data reformatting and reinterpretation is needed in order to compare like with like. In the next chapter, I will argue for my approach using consumption patterns to create categories within surveys that can then be reinterpreted to produce trends that can be compared at a narrative level.

At the same time, excavation is an essential tool for testing the relationship between the surface and subsurface archaeological records. Recent work has deconstructed the survey category of “farm” demonstrating that this class of site actually represents a wide range of possible activity spaces. When reinserting commoners into the data from field survey, it is no longer enough to count dots and suggest that each represents an autonomous peasant house. A more nuanced understanding of landscape use can move studies of commoners away from counting, to considering activities and the manner in which changes in the visibility in activities

across the landscape –how these activities are materialized over time and what changes lead to these new patterns of visibility – encode different relationships between commoners, rural spaces, and elites. Regarding elites, the relationship between commoners and elites is central to understanding social structures in the middle Republican countryside. This chapter considered the villa, and examined how recent work has changed our understanding of these in the period before the first century. No longer indicative of a slave-mode of production, middle Republican villas are elite residences whose presence can be used to model commoner-elite relationships in the past.

Chapter 4 : Methodology

4.1 Introduction

There are many ways of combining and comparing survey data, but some will make for more plausible conclusions than others.²⁹⁷ In this chapter, I will outline my methods of analysis and comparison; how I selected surveys, reclassified sites, recalibrated chronologies, and the framework of survey source criticism that informs a scatter by scatter reinterpretation and quantification that allows trends in individual survey projects to be compared to one another. In the last chapter, I discussed how problems of space (survey intensity, visibility biases) and interpretation (site classification) complicate the comparability of disparate data sets. While each of these concerns is valid, archaeology is an intext and interpretive science, therefore error is a reality and is often based on factors outside of the archaeologist's control. Thus, we collect the best data we can and make the best conclusions possible, working from a testable hypothesis that can, and should, then be tested. Comparative archaeological survey uses the available data, which were carefully collected, recorded, and published, to tease out trends and develop models for regional trajectories. These hypotheses may be further refined as areas are resurveyed or, ideally, excavation tests the survey hypotheses.

The actual compilation of a survey dataset is but one of many roadblocks in the path of comparing surveys. Terminology varies widely and is intrinsically linked with the questions an

²⁹⁷ Terrenato 2004, 47.

individual survey project is asking.²⁹⁸ The only solution to such variation is to work from the sherd up and establish new classifications both based upon the material itself and also designed to meet the needs of the particular study. It is essential, then, to be explicit about what that study is. This study is testing two hypotheses:

1. Rural infill took place between 500 and 200
2. A significant role in this process can be assigned to commoners

Testing the hypothesis that rural infill took place between 500 and 200 involves building a framework that allows for diachronic comparison in site trends. This is not a new approach and has been undertaken by numerous previous comparative projects, although mostly for the purpose of answering demographic questions.²⁹⁹ Moving from site numbers to status, however, is more complicated. In this chapter, I argue for the comparison of trends in consumption patterns as a tool for both differentiating between elite and non-elite rural material, and for contextualizing the changes that occur in these datasets. I contend that rural infill represents an increase in consumption of ceramic and durable material culture by commoners; a close, diachronic, reading of the materials that underlie this pattern can help reintroduce commoner narratives into middle Republican history. At the same time, this dissertation endeavors to invert traditional narrative hierarchies and write new, commoner histories for central Italy. To do this, I engage with the original interpretations of this survey material, to reframe published survey narratives using my own interpretations of the data that focus explicitly on commoners. In the next chapter, I will present both the results of the site by site reclassification and these new narratives of the middle Republic across multiple central Italian survey regions. I contend that by

²⁹⁸ See Witcher 2012.

²⁹⁹ *E.g.*, Ikeguchi 2000; Ikeguchi 2004; Witcher 2008; Launaro 2011.

comparing both interpretations and trends in the raw data (which is in and of itself an interpretation) we can create new hypotheses that track regional changes in commoner activities.

4.2 Survey Selection

Nineteen survey projects were identified for inclusion in the present study and collated using a database built in Microsoft Excel.³⁰⁰ An emended version is included in the Appendices. Additional surveys were initially included in the database, primarily comprising a number from the region of Campania, but these were later removed because of refinements in my regional focus and a lack of either formal or contextual metadata in the publications.³⁰¹ Given the number of archeological surveys that have been conducted in central Italy, it was necessary to develop constraints in my survey selection to keep the data as consistent as possible in its reliability and its content. Of course, total consistency and reliability are unrealistic since survey methods continue to develop, and any two survey projects are seldom in agreement when it comes to recording and publication methods. The time it takes many surveys to reach publication also creates a significant lag between field and publication methods. Even within one overarching project, like the *Carta Archaeologica della Provincia di Siena*, different regional surveys developed their methodologies over time and style of publication was not uniform. Although consistency varies between surveys, I assume that, within each survey, methods were carried out as consistently as possible. Starting from this assumption, three requirements led to survey selection.

³⁰⁰ The database was initially built in FileMaker Pro 12, but issues of cost and access led to its migration to Excel, which was more readily available.

³⁰¹ For a discussion of contextual metadata see Witcher 2008 Contextual metadata is “forms of ‘data about data’ which defy measurement – even categorization – but which can assist understanding (Witcher 2008, 7).”

The first requirement was that the survey be published. Publication allows an interested party to return to the data and scrutinize my interpretations. Repeatability is important for a study of this nature. Also, if I have copied something incorrectly in my database, this can be double-checked and reinterpreted against the original dataset. Unfortunately, this requirement ruled out several projects that are particularly spatially relevant for central Italy. I hope that a number of unpublished datasets, namely the Suburbium Project and the South Etruria Survey/Tiber Valley Project, will be published in the next few years and allow the next iteration of this project increase its breadth of coverage.³⁰² All surveys were published in either Italian or English.

The second requirement was spatial; I was interested in surveys that were carried out in central Italy, specifically in the regions of Latium and Etruria. I limited the geography of this study to those areas with the most robust historical narratives for the middle Republic in order to “read” my reinterpretation of the survey evidence against various meta-narratives that are often encoded in survey publications and accounts of this transitional period. In the final chapter, I will examine how the data from this regional study fits within some of these discussion as well as a more comprehensive, Mediterranean framework.

Third, I selected surveys that provided at least some information on the material recorded at the various sites. Surveys that were published without at least cursory mention of the material could not be reinterpreted and reclassified, making it challenging to model commoner presence or absence. Many surveys were inconsistent in their finds recording, so reclassification had to take place on a survey by survey basis.

³⁰² For the Suburbium see Carafa 2017; For the Tiber Valley Project see Patterson 2004. This also ruled out the Cecina Valley and Tuscania Projects. Cecina valley data was analyzed as part of this dissertation, and as a first step towards its systematic publication, but the data requires further contextualization and interpretation before it could be included.

There was a significant degree of variation within my sample of surveys in both the quality and specificity of publication regarding various categories such as material, methods, and biases. When the choices made by these individual surveys could be reconstructed, this is included in my dossier of surveys in the next chapter. Information like survey intensity, geological conditions, collection strategy, and site classifications scheme form a crucial metadata – data about data – for understanding the original interpretations made by the surveyors.³⁰³ This metadata is of central importance for reconstructing the biases that affected the survey's output; survey source criticism is predicated in being able to reconstruct and interrogate some of these choices.³⁰⁴ There has not been enough discussion about the form that archaeological metadata should take.³⁰⁵ Often, tables have been used that list various relevant pieces of information. I chose a different approach, narrating this metadata on a survey by survey basis. This choice was pragmatic, this information is of central importance when contextualizing survey results, but when placed in a table, I have found it is often skipped over. In narrative form, metadata is rhetorically placed as a central part of the account of the survey's findings. As a result of theoretical, methodological, and publication diversity between surveys, not all of the information will be included for each survey; what is presented outlines the main frameworks used to construct and interpret the data recovered in each particular region.

4.3 Site Selection

Once the survey projects were chosen for inclusion, individual sites were extracted from the publications and included in my database according to two criteria: their chronology based on the survey author(s) periodization and if they were rural sites. Rural, in this case, excluded urban

³⁰³ For discussions of survey metadata see Witcher 2008; Stewart 2013, 33-25.

³⁰⁴ See Alcock 1993, 49-53.

³⁰⁵ See Stewart 2013, 33.

sites such as towns, *oppida*, and cities. The present study, as previously stated, covers the period between 500 and 200. However, no study can adequately hope to address change or continuity without examining the preceding period. Thus, I also included in my database sites dated to the periods between 700 and 500. I made a choice not to include these subsequent periods, since recent publications have covered these periods extensively, and I wanted to avoid the textually derived narratives that dominate late Republican history and archaeology. Since the middle Republic remains lacunose, there was more space to examine an understudied group like commoners. I did allow for some leeway, sites that were given generic classifications such as “Republican” were often included to account for a chance of misinterpretation based on generic artifact classes.

Since this project aims to examine a significant body of disparate survey data using a single interpretive lens aimed at locating commoners in rural infill, it was important to standardize site terminology and dating in such a way that would allow for diachronic comparison. Some data (visibility, finds, location) could not be reinterpreted to smooth differences between survey projects, but the diversity of site types and chronologies could be normalized. Witcher hypothesizes that when survey classification systems are reduced to a limited number of hierarchically determined categories, local distinctions between these categories should be relatively robust.³⁰⁶ Thus, I determined a set of four categories: commoner activity, elite activity, “farm” sites, and rural activity. Sites were reclassified into one of these groups.

Across survey projects, the same scatter of artifacts might be described as several different things: *e.g.*, a farm, *villa rustica*, *villa*, or a settlement. Rather than merely reinserting

³⁰⁶ Witcher 2012.

each survey's designations into my database, a combination of different data— site size, artifact density, artifact class, the presence of tile, the presence of fine wares – were used to regularize site classifications in a manner directed at locating commoners and tracking changes in commoner activity. As Witcher notes, one of the significant issues with survey classification is that it often uses productive categories such as farm and villa to classify materials that tell us about the consumption of particular material culture, not, *a priori*, the existence or non-existence of certain types of settlement and certainly not the number of people inhabiting the ancient landscape.³⁰⁷ I reclassified sites based on consumption categories, consumption categories that use the dichotomy between commoners and elite discussed in chapter 1. While schematic, this distinction allows me to draw out narratives of commoner change from aggregate field survey data and nuance the overall picture of rural infill.

4.4 Locating Commoner Through Consumption in Field Survey

Rural infill consists of two inter-related observations:

1. An increase in small scatters identified through field survey
2. The association of these scatters with farms belonging to rural non-elites, the rural commoners whom this dissertation aims to recover.

As the last chapter demonstrated, the identification of these scatters as farms is likely an oversimplification of a far more complex picture. However, excavations have shown that these small scatters can still generally be associated with rural commoner activity.

If we hypothesize a fundamental dichotomy between commoner on the one hand and elites on the other, how do we locate each of these categories in the survey record? I suggest the most effective approach is to make the assumption that wealth and status are linked in the middle

³⁰⁷ Witcher 2012, 28.

Republic – that there is a significant difference in wealth, power, and status between commoners and the nobility that leads to differing patterns of consumption and, thus, different material traces in the surface archaeological record.

Comparative anthropological and economic analyses suggest that in premodern, unequal, state systems, there was a social and material gulf between commoners and the elite.³⁰⁸ While the reality would have been complicated, because we are dealing with aggregate data that has a thin resolution, in my mind it is better to sacrifice a little complexity, while still tipping our hats to its likely existence, and slightly over-represent commoners. Once commoners are reintroduced as active participants in the ancient world, more nuanced studies, through a combination of survey and excavation, can expand upon this schematic picture. Furthermore, as I discussed above, there is a positive correlation between survey scatters interpreted as belonging to rural commoners and, after excavation, the identification of these scatters as spaces that were used by commoners.³⁰⁹

There has been some dissent if this broadly two-tiered system works in other early states that traditionally have been assigned distinct classes of commoners and nobility. Discussing Mesoamerica, Brumfiel and Robin suggest that, “when archaeologists examine the material record, the variation [in material wealth] seems to be distributed along a continuum of quantity and quality, suggesting the existence of a continuum of social differentiation in ancient Mesoamerica rather than segmentation into discrete classes.”³¹⁰ In Brumfiel and Robin’s model, class and wealth are not intrinsically linked. It is certainly true that one can have poor aristocrats and wealthy commoners with a blurred line between the two. If we had higher data resolution,

³⁰⁸ Bottomore 1965; Brown 1988; Milanovic *et al.* 2011; Williamson 2010.

³⁰⁹ The exact nature of the sites (are they domestic units) has been problematized, but the excavated data support their attribution to the rural lower classes.

³¹⁰ Brumfield and Robin 2012, 674-75.

we would probably be able to track patterns of differentiation amongst the rural commoners and blurred material signatures of certain commoners and members of the nobility. The wealth gap between poor branches of a lineage group and their dependent commoners was likely not always so significant as to be evident from material alone. Unfortunately, without sustained excavation, it is unlikely that we can reconstruct this degree of nuance only through the examination of surface scatters.

It has been suggested that a two-class model can also be tested archaeologically.³¹¹ Steere and Kowalewski argue that, based on surface data from the site of Inguiteria in Oaxaca, the distribution of more expensive objects like fine ware, and obsidian shows that wealth was distributed on a continuum at this site, rather than a strict, two-class system.³¹² If wealth (however one quantifies it) appears to be distributed on a continuum, then social class may be less important, social class may not be related to wealth, the method used to determine wealth is not adequate. If, on the other hand, the wealth measure denotes a bimodal distribution than class and wealth are more likely to correlate with one another.³¹³

Measuring wealth through surface survey data is complicated by the stochastic nature of the ploughsoil assemblage. If we could assume that we were locating domestic spaces through survey, consumption theory could be used to argue that wealthier and more powerful households will invest more significant resources (labor and material) in their houses and thus leave more substantial, more durable scatters of material.³¹⁴ This domestic consumption approach might work for the nobility since most of the rural structures identified through field survey are either identified as “villa” – as I argued in the last chapter likely domestic rather than purely productive

³¹¹ Olson and Smith 2016, 134.

³¹² Steere and Kowalewski 2012.

³¹³ Olson and Smith 2016.

³¹⁴ See, for example, Bodley 2003. 97.

structures – or are burial sites.³¹⁵ For commoners, surface survey can recover evidence for a range of commoner actions, not just the farms and huts of traditional site classifications systems with their clear domestic function. A qualitative assessment of my database does point to a division into two types of scatters: smaller scatters with limited material wealth such as a few pieces of fine ware (the traditional farms and huts) and larger, more materially wealthy scatters (the traditional villas). Without excavation, it is difficult to truly quantify the wealth disparity between commoners and the nobility in the middle Republic or prove a bimodal distribution. For this study, I will assume that this basic structure of premodern states holds in the aggregate and hope to use excavation to test this hypothesis in the future. Small scatters (less than one hectare) and nucleated areas of small scatters without clear traces of material wealth in the form of particularly rich fine ware or metal objects are assumed to have been used by rural commoners, while more significant sites or sites with clear indicators of distinctly elite consumption practices are assigned to the nobility. These are not habitation sites, but signs of commoner activity. There are far more commoner sites than those of the nobility, supporting the basic model of a large, rural commoner population, even if they are not living in these spaces. It is likely that elite sites are underrepresented; because the original number of elite sites was likely lower than sites of commoner activity, the incomplete distributions recovered through survey are more likely affect the smaller sample sizes.

4.5 Site Reclassification

In order to reclassify my sites, the site functions attributed by the original surveyors were stripped away. Depending on the individual survey project and the level detail in its publication,

³¹⁵ Consumption in burials has often been read as a proxy for status in life and used to calculate status differentiations. See Fochesato *et al.* 2019.

different patterns of material consumption were used to assign scatters to one of three classes: possible commoner sites, possible elite sites, “farm” sites. “Farm” sites are sites with evidence for an increased permanence in the landscape. These are moderately sized sites with evidence of high densities of tile as well as other building materials, namely stone. “Farm” sites resemble the scatters from San Mario and Podere Terrato that, when excavated, revealed something close to the isolated peasant farms that Garnsey envisioned dotting northern Italy. The classification “farm” is not meant to imply any particular scale of production or degree of participation in exchange networks. Instead, it is merely used to identify rural sites that are more likely to have been both involved in productive activities and provide evidence for construction intended to tie these sites to the landscape more permanently.

The label “elite sites” was assigned to large scatters with evidence for the consumption of luxury goods or evidence for Archaic or middle Republican material at later sites that produce evidence for luxury consumption, following di Giuseppe’s suggestion outlined in the previous chapter. I included rural necropoleis, especially if they had evidence for imported ceramic or a high density of fine wares, in the elite category.

“Commoner sites” is a catch-all category that includes sites from survey publications that did not have evidence for patterns of significant consumption. This category includes the “farm” sites, as well as small scatters traditionally assigned to the South Etruria hut and farm class, sites interpreted as burials without fine wares or imported ceramics, and village sites. Sites that have a clear productive function, such as kiln sites, are more difficult to assign to a particular class and therefore were only included in the calculations of overall rural activity.³¹⁶

³¹⁶ While some ceramic classes were likely produced by commoners, the associated of black gloss production with rural sanctuaries as well as urban spaces suggests some degree of elite control. See Di Giuseppe 2012.

I assigned these categories on a survey by survey basis and there was a significant degree of subjectivity in this assignation due to the differences between survey methods and publications. The variability in the amount of data provided by individual surveys has undoubtedly skewed the data set. In particular, survey publications do not consistently include scatter size, and the quantity/density of artifacts. When the size of a scatter was not available, qualitative interpretations made by the surveyors or other pieces of evidence were used to categorize the site.

4.6 Interpreting Diachronic Patterns in Commoner Consumption

This approach, using consumption to differentiate between commoner and elite sites can help classify sites within single periods, but it also raises the question of what we are comparing between the periods under study here. Certain types of ceramic are more visible in surface surveys than other types. Visibility depends on geological conditions, topography, vegetation, and even lighting in the survey region. The characteristics of specific ceramics also play a role: black gloss is shiny, while impasto is very much not.³¹⁷ It is possible for a site that was occupied or used during a specific period to be missed, even if the people who used the site consumed archaeologically detectable materials. Numerous scenarios can lead to sites “turning off” for a chronological period: the people using a site might opt for non-diagnostic bowls or cups, the plough could fail to turn up a particular diagnostic sherd, or the surveyors might simply miss the bucchero that would re-date the occupation. This does not even take into account a general assumption amongst archaeologists about the ubiquity of ceramic; especially at commoner sites that were not primarily used for occupation, one might imagine wood or wicker being used in lieu of ceramic for several tasks.

³¹⁷ Patterson 2004, 14.

The diagnostic material used to date sites across the periods at issue in my study are not comparable in terms of their visibility or past supply patterns.³¹⁸ If we assume this lack of comparability in ceramic visibility and supply, we need to critically reassess what the presence or absence of sites with diagnostic ceramic actually means. The appearance of new sites does not always mean new people, rather it can often mean that people and activities that were previously archaeologically invisible experience a change in material conditions that makes it easier to detect traces of their activities.³¹⁹ Within a given region, there can be a number of both endogenous and exogenous factors that explain a change in this type of archaeological visibility, especially amongst commoners. A particularly good spell of weather could lead to an increase in surplus that, in turn, could lead a commoner to suddenly have access to a class of fine ware ceramics that were outside his or her means during the previous generation. The small number of luxury goods recovered from the farm sites in the Cecina Valley suggest this type of punctuated market access. Changes in supply networks and ceramic production could also allow commoners who always had a surplus, to finally get their hands on something that will pass through enough post-depositional filters to be preserved in the archaeological record. New areas, with more favorable archaeological visibility, could be settled for various reasons: changes in demand for rural products, social tensions necessitating a movement away from nucleated areas, larger landscape changes such as drainage. One of the advantages of survey data comes from its size, potential patterns in these newly activity areas can be traced across regions, somewhat negating the possible effects of small sample sizes. It is crucial that we consider how much changes in site

³¹⁸ Launaro makes this assumption in his demographic study of the late Republic, but while a case can be made that Black Gloss and Terra Sigilata have similar distribution patterns, the same cannot be said for bucchero, black gloss, and the poorly understood fine ware ceramics of the fifth and fourth centuries. See Launaro 2011, 89-90.

³¹⁹ See Terrenato 2001, 2-3; Roth 2007, 30.

numbers are due to a real increase or decrease in the number of people and how much is due to an increase or decrease in production, circulation, and consumption of material culture.³²⁰

I suggest two approaches for dealing with these changes in ceramic supply. First, we must remain skeptical of the notion that the survey record is an effective means of demonstrating demographic changes. Hin has recently highlighted the problems that assumptions about visibility, site recovery rates, and site size present when formulating population estimates for Roman Italy. As she states, “alterations in these ultimately arbitrary starting assumptions have a considerable impact on results.”³²¹ In his classic study of the increase in burials in late Geometric Greece, Ian Morris argued that any interpretation of the increase in terms of demographic growth can be criticized because it makes the unwarranted assumption that all stratum within a society throughout the period under study would have had access to burials in ways that leave archaeological traces.³²² While the practices of burial and household consumption are very

³²⁰ An example of the interpretive hurdles faced when examining changes in production, circulation, site numbers, and population can be seen in Helga di Giuseppe’s work on Italian black gloss ceramic, the most common dateable fine ware for the middle Republic. Based on the detailed study of this type of ceramic, Di Giuseppe argues that by tracing the distribution of black gloss in South Etruria, using the South Etruria survey’s dataset, one can see evidence for population decline and a crisis in the second century (Di Giuseppe 2012, 142-55) Proportionally more sites disappear during this chronological window than black gloss; the mean number of sites with black gloss present increases, the opposite, Di Giuseppe argues, of what one might expect from a reduction in consumption. Thus, Di Giuseppe believes the culprit for this overarching pattern must be population change. But decline or increase in ceramic consumption is not always related to changing population, especially amongst rural commoners who would possess variable access to ceramic exchange networks. In Di Giuseppe’s aforementioned study of black gloss production sites, she suggested that temples and shrines were a central locus for black gloss production in the middle Republic (Di Giuseppe 2012, 33-78) Black gloss production was significantly higher, according to di Giuseppe, in the fourth and third centuries than in the subsequent century, especially in South Etruria where several of these black gloss production centers disappear between 250 and 150. Changes in production might lead to a smaller circulation of ceramics, and make it more difficult or costly for commoners to access a high-demand commodity. Even with healthy surplus production, if supply was limited enough and demand from other parts of the social hierarchy increased, commoners could be cut out of the ceramic exchange network. This change in consumption patterns could also represent a shift in intra-commoner hierarchies, as some groups achieved greater material prominence than others, as discussed above. Pots do not equal people, missing pots do not equal an absence of people, nor do more pots mean more people.

³²⁰ Millet has noted, also for southern Etruria, a similar pattern of site number changes based on ceramic supply. He attributes the higher number of first-century sites compared to third to first century sites in southern Etruria to the broader distribution and increase in consumption of *terra sigillata* (Millet 1991, 20).

³²¹ Hin 2013, 301-2.

³²² Morris 1987.

different, in both cases one cannot make the uncritical assumption that all social groups within a given region – or even any social groups depending on regional networks – had the same access to material that will make it through the various post-depositional filters and be recovered by field surveyors. It is very possible that at various times, only specific social groups of people located in specific areas of the landscape would have access to material that leaves an archaeological trace. What look like demographic changes, if the new sites are assumed to hold new people, are instead changes in material with sites turning on and off depending on local and regional exchange networks, ceramic chronologies, and consumption activities. Rural infill, in this case, is a material phenomenon not a demographic change.

Second, a focus on consumption patterns in field survey data offers a new avenue for examining commoner activities. Variations in rural consumption have most often been discussed as a means of getting at methodological issues in archaeological survey.³²³ Variability in consumption patterns, more so even than methodologies, has been suggested as a primary reason for the variable recovery of rural sites.³²⁴

Consumers at all levels of society make choices about what they will use in their daily lives. It has been argued, however, that the aggregate choices in consumption seen in the archaeological record reflect dominant processes within a given society.³²⁵ Differential access to certain goods confers economic power and reifies social hierarchies, and can reflect emerging elite hegemony. At the same time, increased consumption by commoners can mean surplus production for a number of reasons: *e.g.*, increased consumption needs, stockpiling against shortages, greater market opportunity, external demands. Our ongoing task is to understand

³²³ See Mullins 2011 for a discussion of consumption in archaeology.

³²⁴ Witcher 2006a, 122.

³²⁵ Costin 1989, 691.

whether the appearance of a scatter in field survey is due to increased consumption, new people, or changing ceramic networks. Furthermore, is this increase in consumption driven by top-down pressures or the result of local, bottom-up choice.

Through the examination of consumption patterns, it is also possible to examine questions of access and interconnectivity. Shared material culture can suggest the formation of social connections. Ideally, I would quantify consumption of certain classes of fine ware and building material in order to track variations in consumption over time. Unfortunately, many of the survey publications do not provide the quantitative data for the number of sherds recovered, rather listing only the presence of these materials. Due to this lack of data, I have chosen a more qualitative approach, using presence or absence of tile and fine ware to track variations in consumption. While this produces an impressionistic picture that is surely affected by the stochastic movement of material to the surface, it does present general patterns that can be compared. It should also be noted that the absence of fine wares and tile does not signal that sites were isolated socially or economically. It simply suggests that they were either part of smaller, more local, exchange networks, opted for a different series of building techniques, or had less surplus to use – or chose to use less surplus – on certain classes of material.³²⁶

Contextual metadata can help elucidate specific consumption patterns, for example, the increase in roads in a survey area might explain increases in consumption as might the growth of urban centers. More sites in areas of marginal land can point towards agricultural intensification or occupational pluralism – the use of multiple seasonal activities to meet subsistence needs and ensure familial well-being. Data for spatial patterns of this nature was extracted through the close reading of survey publications and compared to the trends illustrated in my data. Spatial

³²⁶ De Ligt 1993, 6; McCallum 2004, 125ff.

information here is of particular interest, and the movement of specific material across the landscape will be explored on a survey by survey basis, namely fine ware and tile since they provide contextual evidence for surplus and permanence. I did not use GIS as a tool for this study, but I hope that future iterations of this project will include the migration of my data into a GIS database so that more systematic spatial analyses can be included.

4.7 Chronology

Once sites were reclassified, it was possible to diachronically compare the level of commoner, elite, and rural activity in various survey areas across the period between 700 and 200. However, before this comparison was possible the chronologies between the various projects needed to be synchronized. Two primary issues affect chronologies in my study. The first is that the various surveys recorded site chronologies in a disparate manner. Survey reports can be grouped into two general categories: *period-based* and *chronology-based*.³²⁷ My sample included both types of surveys, so I had to choose one of the two options and then translate all of the site data into that system. I opted for a chronology-based approach. On a project to project basis the vocabulary used to describe the time period between the seventh to second centuries varies widely. Early Republican, post-Archaic, Hellenistic, and middle Republican and various Italian language correlates are all used by different survey projects, as are different ethnolinguistic attributions such as Etruscan, Samnite, and Campanian. Since there is not a consistent terminology with which to start, the different surveys were consulted in order to translate the chronological periods into absolute dates.³²⁸

³²⁷ Launaro 2011, 94.

³²⁸ When possible, I checked my re-periodization against Launaro's chronologies (The Appendices of Launaro 2011) and Palmisano's database of central Italian sites (Palmisano 2018).

Since this study is interested in changes in site numbers – redefined as activity areas – over time, there is also the issue of contemporaneity/coeval occupation.³²⁹ Within any given chronological period, it is unlikely that the occupation of sites falls cleanly in the chronological periods provided. After all, the chronological periods used between 700 and 200 are often based on political events in Rome that may have had little to no impact on rural communities and those parts of Tyrrhenian central Italy not under direct Roman hegemony; few rural sites, it should be expected, were first occupied at the beginning of my middle Republican period in 500 and abandoned precisely in the year 200. Instead, if material dating between 500 and 200 is found at a site, there is a certain probability that the occupation fell within each year of that broader span.

In order to correct for the temporal uncertainty inherent in the survey data as much as possible, while making use of the maximum amount of chronological data available, I adopted a probabilistic, “aoristic” approach.³³⁰ If we assume that a site is used during a timespan (here the production life of its total ceramic assemblage as recorded by the surveyors and their ceramicists) a value of 1 can be assigned to the probability that the site was in use during this period. If this value is divided by the length of time that the site produces visible material, the probability that the site was in use during each temporal block is given a uniform value. While this approach can be weighted to take into account anomalies in the data (for example a preponderance of a certain well dated ceramic at a site) in the case of my data, I opted for default assumption of uniform probability since at a survey by survey level there was not enough information to always detect such anomalies. I used time steps of 100 years, so a ceramic suggesting an occupation from 700 BCE to 700 CE would have an aoristic weight of 0.0714

³²⁹ See Foxhall 2000; Wandsnider 2004; See also Dewar 1991 for a broader discussion and simulation approach to issues of contemporaneity in survey data.

³³⁰ Previous applications of this approach can be seen in Crema et al. 2010; Crema 2012; Orton et al. 2017; Palmisano et al. 2017.

while a site with ceramic dated from 500 BCE to 200 BCE would have an aoristic value of 0.33. A weight was assigned to each site that fell within the chronological period under study here, and the sums were calculated for each temporal block belonging to each survey, site type, and for the entire data set. This aoristic data can be then compared to information about individual scatters and the interpretations provided by the original surveyors. It should be remembered that, like many of the figures in this project, these numbers and charts are illustrations of general patterns, they are not intended to be absolute representations. The figures themselves, and the numbers that underlie them are metaphors meant to support a specific reading of the survey record.

This approach will favor short-lived sites over long-lived sites. A site used for only a century will have a much higher value than an equally well-attested site that produces material for continued use over five centuries. The presence of long-lived versus short-lived sites is tracked on a survey by survey basis. Notes are made in the next chapter when patterns in brief occupation appear to have skewed the data or when continuity implies a resilient local settlement pattern. A sudden and short-lived shift in consumption at either commoner or elite sites, mainly if it occurs at several sites in the same period, is a pattern worth further examination.

4.8 Conclusion

Once the data was recalibrated and reclassified, it was possible to produce trends in rural activity by commoners and elites between 700 and 200. The next chapter presents these trends by working through each survey individually, discussing evidence for changes in patterns of activity, consumption,

This chapter discussed my methodology for organizing the data for rural infill in central Italy in order to enable the analysis of this pattern as a social and economic process. I highlighted the importance of consumption practices as a tool for locating rural non-elites based on studies of

other premodern states. The methodology of data recording for the present study was detailed as was how I reinterpreted site data to assign it to different consumption-based categories. Finally, I discussed issues of chronology and how I assigned chronologies to sites and addressed issues of coeval occupation. This recategorization has produced maps that are significantly different than those originally published by the various survey projects. My methodology renders the data from various survey projects comparable – smoothing over differences in chronology and site classification. The lack of publication, small survey areas, and low survey intensity – despite my efforts to correct for such issues in my selection of projects – have forced the simplification of survey categories and masked some of the possible heterogeneity especially at the lower end of the social spectrum. The binary system I suggest elides what must have been a dynamic and shifting population of commoners that included many subgroups depending on time and location. Future research must take into account this heterogeneity and devise methods to enrich and nuance this binary classification used here. Despite its somewhat schematic nature, however, this binary system has still created maps that look different from the original survey projects – sites defined as villas have been reassigned based on material signatures and a more nuanced diachronic picture is produced using my classification system. The addition of maps in future iterations of this project will provide a visual representation of the new picture produced by this classification scheme.

There are issues of the small sample sizes in a number of surveys presented in the next chapter.³³¹ Quantification, outside of general trends, is a visual metaphor for an overall pattern of change. My methods allow for a graphic representations of trends in rural consumption patterns

³³¹ As noted by Terrenato, “what we are seeking are ways to evaluate narratives based on field surveys, combined with a moderate use of heuristic quantitative and graphic tools that do not require exceedingly strong assumptions about the quality of the data (Terrenato 2004, 38).” My methodology is creating visual heuristics to measure commoner activity across these periods.

associated with commoners, elites, and across the entire landscape. These trends can be read against the surveyor's own interpretations, as well as a consideration of spatial, historical, and archaeological data, to reconstruct narratives of rural infill across central Italy from the bottom up. These trends can also be read against one another to demonstrate that rural infill certainly took place between 500 and 200, and commoners played a significant role in the creation of this material pattern.

Chapter 5 : Evidence for Rural Infill

5.1 Introduction

Legacy survey data is the best and most abundant type of evidence for understanding rural infill. At its most basic level, this study aims to prove that rural infill took place in central Italy. At the same time, I make the argument that this landscape transformation is connected with rural commoners. In the previous chapter I put forward a methodology that foregrounds rural commoners by reclassifying legacy survey data using differing patterns of consumption. Sites were classified in three categories: potential commoner sites, potential elite sites, and potential “farm” sites, a classification for more permanent landscape occupation. By looking at diachronic changes in these categories, it is possible to trace trends in in commoner activity in the central Italian countryside. These trends can be compared across surveys to gain a regional picture.

This chapter aims at precisely this: to present the evidence for a sample of nineteen systematic surveys from Latium and Etruria. While the methods are not entirely new,³³² the questions are, shifting the focus of survey synthesis from the late Republic and questions of the Gracchan land crises or demography to an earlier period and an explicit non-elite focus. I am not engaged in a demographic exercise, the trends that I recover for different surveys are not meant as metrics for reconstructing population patterns. Instead, they show visible activity at four different scales: at sites attributed to commoners, at sites attributed to the nobility, at sites associated with a more permanent presence in the landscape, and across the entire landscape. The

³³² *E.g.* Ikeguchi 1999; Witcher 2006a; Launaro 2011.

operational methodology for the reclassification of sites into these new categories, devised for my specific questions and region of my focus, was outlined in the last chapter. The changes in these patterns encode changing relationships between commoners and elites, between commoners and the land, and amongst commoners.³³³

Before we get to the data, a brief *apologia* is in order. The analysis I have performed was carried out on a set of data that is only a sample.³³⁴ Despite the rise in survey intensity over the last four decades, survey will only be able to recover an incomplete distribution of past activities.³³⁵ Only a fraction of central Italy has been surveyed, and this selection is biased by the fact that an overwhelming number of surveys have taken place in those areas that have the best visibility. Due to the lacunose nature of the data, I have tried to examine evidence from a significant number of projects, and I hope to have achieved a reasonable level of geographical and environmental diversity (Figure 5.1). In order to be included in this project, a survey was required to be published, provide some kind of dossier of sites that could be broken down and reinterpreted in line with my methodology from the previous chapter and have a chronological framework that was more detailed than just assigning sites to the “Roman” period. The raw site data is available in the Appendix.

In addition to the results of my reclassification and diachronic comparison, provided in as figures with each survey, each survey is provided with a synthetic entry. This entry provides, in narrative form, both the practical metadata and contextual metadata for the individual, as well as a commentary, when appropriate, on potential biases in both the original surveyors methods and

³³³ A sample of my data as included in Terrenato 2019, 99 Fig. 3.5. This only included “farm” category sites. Upon a further analysis of my data the general pattern presented holds true, but actually underestimates the scale of rural infill.

³³⁴ This is the same *apologia* provided by Launaro (see Launaro 2011, 103).

³³⁵ Terrenato 2000; Terrenato 2004.

interpretations of the archaeological record from the period between 700 and 200.³³⁶ This discussion aims to elucidate the survey's methodology, but also the intellectual climate that influenced the research methods and the interpretation.³³⁷ This is less a summary of the published reports of these individual survey projects than a reexamination and reinterpretation of their data in light of both comparative data from other surveys and a broader consideration of the archaeology of middle Republican central Italy.³³⁸ While survey by survey certain interpretations will be provided, no general conclusions will be drawn here. Most of the discussion is drawn from published survey records, although new discoveries in the various regions since the surveys were carried out, as well as resurvey and restudy of the original material were included when relevant. This dossier proceeds from north to south. When possible, the historical context will also be included, in order to test the relationship between rural infill and the Roman conquest, one traditional explanation for this landscape change that I already questioned in the second chapter. Once this overview has been completed for each survey region, one can begin to compare region with region, moving up the interpretive ladder and examining the entirety of central Italy.

5.2 Carta Archeologica della Provincia di Siena

The *Carta Archeologica della Provincia di Siena* (from here CAPS) represents a collaborative endeavor between the Provincia di Siena and the Università degli Studi di Siena. This major survey project has explored the modern *provincia* of Siena for the last thirty years, working from *comune* to *comune*.³³⁹ As each of the various *comuni* was explored, they were

³³⁶ For the importance of this type of source criticism see Witcher 2006a, 8; Alcock 1993, 49-53.

³³⁷ Terrenato 2004, 47.

³³⁸ For a similar approach see Stewart 2013.

³³⁹ A *comune* (plural *comuni*) is a basic administrative division in Italy, roughly equivalent to a township or municipality.

published individually, beginning with the Chianti Senese in 1995.³⁴⁰ While each different survey publication will be treated independently below, in this section, I will provide a general overview of the project, and some of its shared methodologies, since many methodologies are shared across projects and publications. No global synthesis of the data from these surveys is available to date, so each *comuni* will be treated independently in order to highlight different geological, environmental, settlement, and historical trajectories (Figure 5.2).³⁴¹

The CAPS project was particularly interested in identifying late antique and medieval landscapes, having arisen initially out of and been inspired by the Monterrenti Project directed by Graeme Barker.³⁴² The publication volumes have many, if not more, medieval sites than sites dated to the prehistoric, Etruscan, and Roman periods. The CAPS employed multiple techniques including intensive and extensive survey, the analysis of aerial photographs, remote sensing, and limited excavations; the project was also one of the first in Italy to fully commit to GIS and computer use in survey recording and analysis.³⁴³ The medieval/late antique focus of the project does create some oddities in the data when it is approached with a focus on the Etruscan and Roman periods. The choice of *comuni* as the units of division for the different survey areas means that many of the individual projects cover territories that are not conterminous with the territories of either Etruscan or Roman cities.³⁴⁴ For example, only the western part of the territory of ancient Clusium (modern Chiusi) was included in any of the CAPS surveys, making reconstructions centered on the urban-hinterland relations of Clusium difficult, based on an

³⁴⁰ Valenti 1995.

³⁴¹ The most recent publication, covering the *comune* of Monteroni d'Arbia was published in 2018, too late to be included in this dissertation. I am confident that I will be able to include the data from this *comune* in the monograph.

³⁴² Salzotti 2012, 11.

³⁴³ For a full discussion of the CAPS methods, see Salzotti 2012.

³⁴⁴ Not that we really have a sense of what an ancient administrative unit might look like in these early periods.

incomplete and biased sample.³⁴⁵ This lack of connections between survey areas and ancient territories be a touch frustrating when trying to fit the results of the surveys into historical narratives. Furthermore, aside from Volterra and the Cecina Valley Survey,³⁴⁶ the territories of most of the significant inland urban centers of northern Etruria have not been investigated through systematic survey.³⁴⁷

Many of the landscapes that CAPS explored would have been located between the territories of major urban centers. While this lack of a direct connection with urban sites affects some of the questions that can be asked of these data and makes them more difficult to insert in narratives like the Roman conquest of the region, from the perspective of commoner studies, the data from more liminal regions offers an opportunity to examine rural communities free of direct urban biases. The CAPS data sets provide a chance to focus on rural infill in regions spatially distant from centralized, city-state administration. The relationship between agricultural intensification, one potential explanation for rural infill, and the presence or absence of state authority have been theorized in numerous different ways. It is often assumed that states provide cost-effective strategies for managing large-scale intensive agriculture or that these types of systems require the presence of elites.³⁴⁸ Recent scholarship has highlighted alternative systems, where commoners manage intensive agriculture without these external forces, especially in marginal areas.³⁴⁹ The relationship, then, between changing evidence for commoner and elite sites might suggest varying relationships between these two groups. The data from the areas

³⁴⁵ Bottarelli 2004; Felici 2004; Nardini 2001; Cambi 1996 cover parts of the Chiusine territory.

³⁴⁶ As yet unpublished, although I will be taking on the publication of that data as a project in the near future

³⁴⁷ Arezzo, Fiesole, Cortona, and Perugia, for example, have received no systematic landscape studies to date.

³⁴⁸ Stanish 2004; Scarborough 2003.

³⁴⁹ Erickson 2006; Thurston 2015.

surveyed by CAPS can potentially point towards changes in rural economies absent direct urban control.

The CAPS methodology incorporated both intensive and extensive survey. Intensive surveys were carried out in only a sample of the landscape. The choice of sample was made based on an evaluation of the geomorphology of the *comune*, the modern land use, and the presence of sites known from other publications.³⁵⁰ More extensive fieldwalking allowed for a larger sample of the territory to be explored. The more extensive research is less likely to detect the smallest sites, but this is a problem shared by many survey projects. The CAPS project interpreted the various scatters they recovered according to size/functional categories, although each volume did not follow the same categorizations.

For example, the volume looking at the Chianti Senese used *Casa di Terra* (house made of earth), *Casa di Pietra* (house made of stone), *Grande Fattoria o Villa* (large farm or villa), *Villaggio* (village), *Oppidum* (town), *Piccolo Complesso Difensivo* (small defensive complex), *Fornace* (kiln), and various classes of *Tombe* (tombs) while the Monte Amiata volume uses *Capanna* (hut), *Casa* (house), *Villaggio* (village), *Chiesa* (church), *Monastero o Convento* (monastery or convent), *Torchio Vinario* (wine press), *Fornace* (kiln), *Tomba* (tomb), *Sepolcreto* (burial site), *Frequentazione* (area of frequent activity), and *Strada* (street).³⁵¹ As noted in Chapter 3, these categories are drawn from the South Etruria tradition and come with a host of historiographic assumptions. However, perhaps due to the medieval focus of the project, more multidisciplinary ink has been spilled by CAPS interrogating the relationship between the formation processes of surface scatters and subsurface materials. CAPS paid significant attention

³⁵⁰ For discussion of the CAPS methodology see Valenti 1995, 21-3; Cambi 1996, 12-22; Valenti 1999, 15-18; Nardini 2001, 27-32; Campana 2001, 48-9; Felici 2004, 47-39; Bottarelli 2004, 53-57.

³⁵¹ Valenti 1995, 27-31; Cambi 1996, 27.

to non-elite architecture and habitations, although most of these structures were dated to the medieval period.³⁵² At the lower end of the settlement hierarchy, this led to more significant distinctions between different settlement types (see for example the distinction between *casa di pietra* and *casa di terra*).³⁵³

The historical record does not afford much certainty regarding the Roman expansion into this region of Etruria. It does not help that many of our sources list “Etruscans” as a single entity, rather than separating out different polities within Etruria. According to Livy, in 310, a number of Etruscan polities were engaged in conflict with Rome (absent, notably Arretium).³⁵⁴ Rome was victorious in this conflict, leading Perugia, Cortona, and Arretium – now apparently involved in the conflict – to sign a peace treaty lasting thirty years.³⁵⁵ In 302, Rome was active around Arretium, returning an aristocratic family friendly to Rome, the Cilnii, to power after a local revolt.³⁵⁶ Volterra was defeated by Lucius Cornelius Scipio in a conflict in 298,³⁵⁷ but surveys in the area have noted a continuity in the local settlement pattern.³⁵⁸ A reanalysis of this survey evidence currently underway suggests that there is a significant increase in dispersed rural activity during the early third century, although the sampling strategy – focused on areas with the best archaeological visibility – likely significantly underrepresents Etruscan period sites that appear to prefer forested, elevated areas. A movement of rural production, namely tile, away from the urban centers into areas that provided easier access in this hilly region could also play a role in this increase in visibility.

³⁵² See for example Valenti 1999, 53-60.

³⁵³ See, for example, the hypothetical modeling of the relationship between different types of subsurface structures and surface material (Valenti 1995, 28-38).

³⁵⁴ Liv. 9.32.

³⁵⁵ Liv. 9.37.

³⁵⁶ Liv. 10.4-5; Harris 1971, 114-24; Terrenato 2019, 143-146.

³⁵⁷ Liv. 10.12-4-8.

³⁵⁸ Terrenato 1998, 95-96.

Some Etruscan cities appear to have supported the Gallic incursion against Rome of 284/3, but according to Polybius quickly began to fight amongst themselves once they had returned to their home territories.³⁵⁹ At the same time, conflict between Rome and Roselle led to the sack of that city and another peace treaty, including tribute, between the Romans and Perugia, Arretium and Volsinii.³⁶⁰ In 281, the *fasti triumphales* record a triumph by a Quintus Marcius Philippus over the Etruscans and in 280 a triumph by Tiberius Coruncanius over Vulci. There is evidence for conflict with southern Etruscan polities, but there is little information about the relationship between Rome and northern Etruria.³⁶¹ Siena (ancient Saena) was listed as an Augustan *colonia*, but there is no narrative of conflict with Rome or stories of a Roman conquest. Terrenato has recently highlighted the heterogeneous nature of Roman expansion, stressing elite families as central actors in a series of negotiations – both violent and non-violent – that brought Italy under the hegemony of a new system.³⁶² The lack of evidence for violence, in either the historical record or the survey evidence, in the area under study by the CAPS project suggests that this might be a region that saw a negotiated, gradual, inclusion within the Roman state. It is difficult to envision a scenario where Roman intervention dramatically altered the rural trajectories of this area. While ceramic chronologies are not fine enough to date rural infill to before or after the nominal inclusion of Etruria into a Roman sphere in 260,³⁶³ in many areas under survey an increase in rural site number is already visible in the fourth century.

5.3 Chianti Senese

³⁵⁹ Polyb. 2.19-21.

³⁶⁰ Cortona apparently having lost its predominance amongst Etruscan cities. Liv. 10.37.

³⁶¹ Carandini suggests that the triumph was over Tarquinia, Carandini 1985, 38.

³⁶² Terrenato 2019; esp. 191-2.

³⁶³ Suggested by Harris 1971.

The first published volume of the CAPS surveys covers the *comuni* of Castellina in Chianti, Castelnuovo Beradenga, Gaiole in Chianti, and Radda in Chianti. In total, this survey area measured 386 km². Located directly to the north of Siena, the survey area is bounded by river valleys at its northern, southern, and eastern limits and the hills of the *Montagnola senese* to the southwest.³⁶⁴ The heterogeneous landscapes of the area fall into four broad categories: 1. alluvial and fluvial plain and low hills well suited for cultivation, 2. hills of an average height (*Media Collina*) with significant clay deposits, 3. tall hills (*Alta Collina*) covered in forests, and 4. the *Monti di Chianti*, rich in forests and stone building resources (sandstone and calcareous marls). The majority of the arable land is found in the plains, low hills, and hills of average height while viticulture and oil cultivation are present in the higher hills.³⁶⁵

The survey, in line with the CAPS methodology, selected a sample of the region combining a targeted and random approach that covered 158 km² of the 386 km² region. All landscape types were targeted, although less work was carried out in the mountainous areas which were more difficult to access. A team of up to twelve surveyors walked ploughed fields, recovering material and if there was not sufficient material for an interpretation, excavated shovel test pits.³⁶⁶ The chronology was based on thorough ceramic chronologies supported, in the Etruscan and Roman periods, by excavations at Murlo, Lago dell'Accesa, and Cetamura.³⁶⁷ The site report lists location, information on the recovery, a description of the scatter including material classes, an interpretation based on the above site classifications, chronology (by periods) and a bibliography. This was a high intensity survey that also covered a significant territorial sample.

³⁶⁴ The river associated with the valleys are the Valdarno, Valdambra, Val d'Elsa respectively.

³⁶⁵ Valenti 1995, 11-13.

³⁶⁶ Valenti 1995, 22-23. Unfortunately, the survey publication did not record interwalker distance.

³⁶⁷ Valenti 1995, 39-200.

5.3.1 The 7th and 6th Centuries

A modest sample of material dating to the seventh century was recovered by the survey, including commoner and elite sites, but no evidence of “farm” sites. Minimal fine ware or tile were recovered from this period. This was followed by an increase in evidence for rural and commoner activity in the sixth century (Table 5.1). Much of the sixth-century evidence comes from nucleated concentrations of smaller scatters (interpreted as *Casa di Pietra* by the surveyors) surrounding large scatters (interpreted as either villages or elite residences). Evidence for rural necropoleis and possible elite sites suggest some stratification in the countryside, perhaps with elites and dependent commoners operating out of clustered settlements.

5.3.2 The 5th to 3rd Centuries

The fifth century saw continuity at elite sites, with slightly less commoner activity but no signs of a change in locational preferences. The fourth century saw a decline in all site categories with little material visible in the landscape. Ceramic chronologies are partially to blame, with only Etruscan Red Figure acting as a diagnostic ware for this century.³⁶⁸ Changes in networks of exchange and patterns of material consumption can also not be ruled out, as the elite sites and necropoleis do not produce ceramics and the few “farm” sites from the fifth century are also devoid of material. This nadir in visible material culture is followed, in the third century, by a significant increase in rural material across all of my site classes. Across all landscape types, more small scatters were identified, suggesting rural commoner activity in more areas of the survey region and activities that left behind more durable material culture. Evidence for “farm” sites rose dramatically, with more scatters containing tile, brick, stone building material, and fine ware – primarily black gloss. New building techniques, using brick and tile, suggest commoners

³⁶⁸ Valenti 1995, 43-45.

had access to means of fixing themselves to the land with more durable and permanent material. Fine ware ceramic was also being moved to new parts of the landscape.

All landscape types, including the mountains, had evidence for commoner activity, perhaps indicative of an increase in the utilization of marginal land. This might suggest a diversification in resource extraction, taking advantage of more forest resources. Large village sites from the previous period – such as Cetamura del Chianti and Poggio la Croce, now categorized by the surveyors as *oppida* – were fortified and may have served as consumers of these resources. It is also possible that the increased demand for utilitarian ceramics such as tile led to an increase in demand for fuel and, therefore, the use of more forested areas.

The surveyors interpreted the changes in site numbers of the third century as inherently demographic, representing colonization of the area by new people.³⁶⁹ This new population, they suggest, was drawn from the emancipated servile populations of Volterra and Chiusi.³⁷⁰ An increase in elite sites during the third century, however, suggests that a model of a new, emancipated, commoner class ignores a continued, and materially robust, elite presence in the area. In the third century, a number of new rural necropoleis begin to be used, and there is evidence for what might be elite habitation sites.³⁷¹ Demographic change, as I have already discussed, is difficult to model using survey data. Instead, these data point to a more materially productive network of landscape use and a more diversified rural economy with different parts of the landscape used more permanently. The growing *oppida* also might have acted as nodes in new rural-urban networks of exchange that facilitated the movement of building material and

³⁶⁹ Valenti 1995, 397.

³⁷⁰ “Non crediamo plausibile proporre altra spiegazione se non quella di un proletariato libero, una nuova forza lavoro prorompente, che si distribuisce dove c'è terra disponibile ovvero va a occupare ampi spazi rurali (Valenti 1995, 397).”

³⁷¹ F.114 n. 87 and F.120 n.36.

ceramic into the countryside. Rural infill, in the form of increases in both commoner sites and the presence of material in dispersed, marginal areas, took place in the *Chianti senese* during the third century, but it was tied to increase in both urban and elite activity. Many of the commoner sites that appeared in the third century stopped producing visible material by the first century, suggesting limited use perhaps related to a flourish in surplus production during a particularly interconnected third century.

5.4 Val d'Elsa

The Val d'Elsa volume of the CAPS project contains the results from surveys in the municipal districts of Poggibonsi and Colle. These *comuni* sit at the margins of the territory of ancient Volterra, a major north Etruscan center. The two *comuni* cover a total surface area of 162.92 km². The landscape is marked by undulating low hills interspersed with small transverse valleys.³⁷² One of several intermontane basins running more or less parallel to the Apennines, it formed during the late Tertiary period corrugations (5.3-2.6 yBP) along with much of modern Tuscany.³⁷³ The Val d'Elsa can be divided into two basins (upper and lower); this survey area falls into the upper basin. Three major geomorphological areas cover the survey area: 1. plains (c. 22 km²), 2. *ripiano* (hills with flat tops and steep slopes, c. 40 km²), and 3. low to average hills (c. 110 km²). The modern landscape is largely agricultural; 102.52 km² is under cultivation, 40.26 km² is covered by forest, and 20.16 km² is urbanized in one form or another. In the agricultural areas, grain cultivation dominates (covering half the area), but grapes, olives, and corn are also

³⁷² A transverse valley cuts a right angle across a series of hills, ridges or mountains (its opposite is a longitudinal valley). #geographyfact.

³⁷³ Tertiary is used here for convenience and so I could write this footnote; the period is no longer recognized by the International Commission on Stratigraphy (a thing that exists).

grown. With a high proportion of land under mechanized cultivation, this is a promising area for field survey.³⁷⁴

The sample, chosen following the CAPS methodology, covered 37% of the total area (c. 59 km²). The *ripiano* was not surveyed due to logistical difficulties, but samples of the plain and low hills were included. Dense woodland was avoided but not completely ignored. The survey took place between 1991-1993, detecting 437 new scatters of material across all periods.³⁷⁵ Fifty-five scatters contained material dated to my period of interest. The settlement trends in the area conform to the pattern already seen above; a slight increase in material and scatters in the sixth century was followed by a slight decrease in the fifth and a further decline in the fourth. The third century saw a significant increase in both commoner and landscape activity, compatible with rural infill (Table 5.2). The majority of these new scatters fall under my category of commoner activity, originally interpreted by the surveyors as small habitations made of perishable material and stone. There was also an increase in off-site material and rural necropoleis.

5.4.1 The 7th and 6th Centuries

Survey evidence presents a picture of a countryside in the seventh and sixth centuries characterized by nucleated rural activity. These nucleated sites were often centered on water sources. There is no evidence for elite sites in the survey data, but there is possible evidence for a regional nobility, a series of chamber tombs at Le Ville and Dometaia with few grave goods but

³⁷⁴ Valenti 1999, 15-17.

³⁷⁵ Valenti 1999, 42. The archaeological visibility was generally quite high for the area: of 135 sites identified through the study of medieval documents, only 41 showed no traces of surviving masonry.

monumental architecture.³⁷⁶ Most of the material recovered and dated to these centuries came from small scatters with little evidence of more permanent building techniques or fine wares.

5.4.2 The 5th to 3rd Centuries

The fifth century saw a sharp decline in commoner activity, and rural activity in general. The fourth century saw another dip in the amount of material recovered. Both of these declines in visible material are probably related to ceramic chronologies and shifting networks of exchange. Elite necropoleis were used across this period, however, perhaps indicative of an element of continuity. The third century saw an increase in all site types as both old areas with high agricultural potential and more marginal land saw an increase in rural and commoner activity. The rural economy appears to have been more substantial in this period. There is some evidence for nucleation, especially on the low hills. These nucleated scatters, interpreted as village communities by the surveyors, are separated by necropoleis that might have been shared by these communities. This, in turn, could suggest an elite presence in the area tied with resource extraction. Fine wares and tile are significantly more present in the third century, especially at some of the larger nucleated scatters. Notably, there is evidence for a continuity amongst the regional elite at the necropoleis, still producing rich grave goods, and in the survey evidence where new scatters were categorized as possible elite sites.³⁷⁷

The surveyors used the location of the area in the territory of Volterra to interpret Val d'Elsa's historical trajectory. They argue that, already in the Archaic period, the ruling, hereditary elite at Volterra had organized their dependents to work lands at the margins of their

³⁷⁶ While it is possible that these relate to commoner stratification at the margins of the territory of Volterra, these tombs probably belong to a local, new elite still sorting out their language of self-representation. There is no evidence for the funerary stelae that dominate the contemporaneous burials at Volterra although the chamber tombs are similar in style.

³⁷⁷ Valenti 1999, 208.

territorial control, such as the Val d'Elsa. The elite burials at Le Ville and Dometia are taken to indicate elite control over resource extraction in this region. The decline in the landscape in the following centuries was connected by the surveyors to Volterra's unsuccessful forays into Roman territory during the regal period.³⁷⁸ Changes in ceramic distribution and the scale of landscape use, seen elsewhere in the region, appear more likely. The surveyors also connected the increase in third-century sites with population movements. In this case, the extension of property rights to an Etruscan servile class, in an episode reminiscent of the dissolution of *nexus* at Rome.³⁷⁹

The survey record can do little to determine definitively if the increase in commoner material belonged to commoners who now owned their land, but the material record suggests at least some persistence of the preexisting settlement pattern, despite an increase in the amount of visible rural material and a certain level of dispersion. It is notable that this region sees not only an increase in dispersed commoner material but also evidence for elite continuity and increased activity in the area between the fourth and third centuries. Older settlement patterns, namely nucleated settlements, appear to have been more resilient in this area than in other regions in my database. More material is visible in the countryside associated with commoner sites, and there is evidence for an increase in new, more permanent buildings with tile as well as more dispersed fine wares. Livy records Roman incursions into the territory of Volterra in the late fourth century, where they faced local elites with auxiliary troops possibly drawn from agricultural dependents.³⁸⁰ It is possible that ties between the elites and commoners were preserved in this

³⁷⁸ Valenti 1999, 303-304.

³⁷⁹ Valenti 1999, 309; for a discussion of the Etruscan *servitus* see Mastrocinque 1996, 250; Amman 2017a; 2017c.

³⁸⁰ See Liv. IX 12.3 and 36.12.

area through the third and second century when many of these scatters appear to have been abandoned.

5.5 Chiusdino

The *comune* of Chiusdino is located southwest of modern Siena, covering 141.85 km². The CAPS team explored this area between 1993 and 1995. The eastern and central portions of the *comune* are flat with some low hills. These areas form the basins for two rivers, the Merse and Feccia (tributaries of the Ombrone). The western, southern, and northern portions are hilly and mountainous, having a more “traditional” Tuscan topography related to the same seismic events that formed the Val d’Elsa. The geology is quite variable, but four landscape types predominate: 1. Flat, fluvial plains make up 8.8% (12.5 km²), 2. Low to moderate hills occupy 27.6% (39.2 km²), 3. Foothills, transitioning from the hills to more mountainous terrain make up 22.1% (33.3 km²), and 4. Mountainous terrain makes up the final 41.5% (58.9 km²) of the region. In terms of land use, forests predominate, especially in the hilly and mountainous areas (60.5% at the time of the survey), followed by agricultural land (34.1%), uncultivated land (3.1%) and urbanized spaces (0.73).³⁸¹ The fluvial plains and low hills are primarily used for agriculture, while the foothills are split evenly between forests and agricultural land. The mountains contain little arable and are heavily forested.

The surveyors focused their sample on the areas of the region that were not covered by forests, due to their own experiences with the costly and ineffective nature of forest survey using intensive methods. 48.3 km² of these cultivated areas were examined, about 60% of the total non-forested land. Field teams consisted of four walkers but had to contend with a lack of ploughing (only 8 km² was under active cultivation, 16.6% of the sample and 5.7% of the overall

³⁸¹ Nardini 2001, 7-11.

territory). Archaeological visibility was poor, and the surveyors hypothesize that this might be behind the high proportion of off-site scatters identified by the survey (c. 1 in 4, or 53 of the total 214). More time might have allowed for a more thorough investigation of this trend, but the project did not afford this.³⁸² The period between 700 and 200 is well represented in the recovered material, 55 total scatters identified, nine of which were interpreted as off-site material created by post-depositional events – a lower percentage than for later material.

5.5.1 The 7th and 6th centuries

There is ample evidence for both rural and commoner activity in the area in the seventh and sixth centuries, mainly in the form of nucleated scatters. “Farm” sites are also not uncommon (Table 5.3). While no survey scatters were identified as possible elite sites, there is some evidence for social stratification in the territory, namely a small necropolis containing a chamber tomb with imported ceramics, a bronze mirror, and weapons excavated in the early 20th century.³⁸³ The surveyors argued that, because the two scatters located in proximity to the necropolis were not notably rich, and the tomb appeared to have a short period of use, this was an upjumped commoner, rather than evidence for a hereditary elite group.³⁸⁴ The rise to power of this *nouveau riche* group is then connected with a power vacuum due to territorial contraction related to Volterra’s expedition to Rome in the Regal period. An undue amount of weight is placed on the negative effects of this excursion. The short-lived evidence for a regional elite could also plausibly be related to similar, if significantly larger scale, emergent elite groups at Poggio Civitate discussed in section 5.6. The Chiusdino region, like Murlo, sits along an internal frontier between the territories of Volterra to the northwest, Clusium to the east, and Roselle to

³⁸² Nardini 2001, 31.

³⁸³ Nardini 2001, 137 n. 3.

³⁸⁴ *Ibid.*

the southwest. Instability along this frontier might have led to brief elite dominions, marked by signs of a regional nobility. These elites could not maintain hegemony over more than a couple generations.³⁸⁵ The robust nature of commoner activity in the area during the seventh and sixth century suggests a rural surplus production through agricultural and other productive activities, as well as networks linking this area to the urban centers surrounding it. The presence of a rural elite group might have facilitated the formation of these networks.

5.5.2 The 5th to 3rd Centuries

The fifth century sees a steep decline in all identified material, followed by a modest increase in commoner activity, rural activity, and “farms” in the third century. Most of these new scatters are small and dispersed across the landscape. There is little evidence for fine ware at these new sites, but an uptick in the tile and brick is visible, as well as material related to iron smelting.³⁸⁶ While the recovered evidence for rural activity is not as extensive as that seen in the seventh and sixth centuries, there is evidence in more significant investment in the land – higher quality building material, diversification in activities – metalwork, and more dispersed settlement. While the scale of rural activity, and rural infill, looks modest compared to other regions and the preceding periods, the nature of activity does suggest a change. It is also worth considering the parts of the landscape not covered by the survey, namely the forest areas. Forest resources (wood, fuel, food) would have been in high demand for many urbanizing areas. It is easy to imagine an increase in the exploitation of arboreal resources leading to new commoner opportunities and networks. Until further research is carried out, this is purely conjecture but, the parts of the landscape that were not accessible could provide further evidence for commoner

³⁸⁵ Stoddart uses this model of internal frontiers when examining Murlo, Stoddart pers. com.

³⁸⁶ Nardini 2001, 141.

activity. There is no evidence for an elite presence post-dating the necropolis discussed above. It is possible that the commoners in the area integrated themselves into exchange networks autonomously or that elite sites have been missed. It is notable that the overall trends in rural activity in the area look very similar to the Chianti senese, suggesting a degree of homogeneity.

5.6 Murlo

The *comune* of Murlo sits in central Tuscany, at the frontier between the Etruscan centers of Clusium, Volterra, and Roselle. The underlying geological structure of the area suggests a complicated history due to the tectonic activity in the area but is overall not dissimilar to other areas of Tuscany. 11,466 km² in surface, around a quarter of the total area, is covered by arable land (3,043 km²), over half by forests (c. 7,033 km²), and the rest by shrublands and wine or olive production.³⁸⁷ This territory presented rather acute issues of visibility, with 71% covered by either woodland, uncultivated areas, or urban sprawl. Due to concerns of poor visibility, two months were set aside for remote sensing in order to correlate surface and subsurface evidence. The sample chosen for pedestrian survey followed the CAPS methodology, initially selecting 47 km², 41% of the areas with good archaeological visibility, but expanding to 63 km². Field seasons, using an average of six fieldwalkers, took place between 1995 and 1997. One sample covered the lower hills, the most archeologically visible area and, unsurprisingly, the area with the highest returns in terms of material, moderate hills with little anthropic material chosen for landscape variation, a series of river terraces with known prehistoric sites, and an area of dense vegetation where there were medium hills but evidence for copper deposits; the plan was to look for evidence of mining.

³⁸⁷ Campana 2001, 7-15.

5.6.1 The 7th and 6th Centuries

Significant evidence for rural and commoner activity is present in the *comune* of Murlo in the seventh century, and the evidence increases through the sixth (Table 5.4). The nature of the material underlying this evidence, however, is notable. The Poggio Civitate palace complex was occupied during this same period. Most of the scatters were small (on average c. 396 m²) and interpreted as habitations built using the *pisé* technique.³⁸⁸ Roof tiles were frequent, and there was limited evidence of wattle and daub. Fine ware was relatively rare, with coarse ware fabrics predominant, making up 74% of the total recovered material. There are some dispersed scatters in the southern part of the *comune*, in the area not in the direct hinterland of Poggio Civitate, but in the area around the monumental building, there is considerable nucleation in the recovered scatters. The region is dominated, both in the settlement hierarchy and in the literature, by the palatial structure at Poggio Civitate.³⁸⁹ While a full discussion of the complex falls outside the chronological and topical range of this research, a brief sketch of the settlement is still informative. In the seventh century, a monumental residence likely belonging to a local nobility emerged. The first structure was destroyed by a fire in the late seventh century, after which a four-winged building was constructed. There is rich terracotta decoration, and evidence for the significant production of elite textiles and metal.³⁹⁰ In the middle of the sixth century, the palatial complex was abandoned and never reoccupied. While there is still debate regarding the cause(s) of this abandonment, the subsidiary center was likely brought under the control of nearby, urban, elite groups, leading to the forced dispersal or elimination of the nobility who controlled the

³⁸⁸ Campana 2001, 275 n.11. This assumption is based on the construction technique found at the Poggio Civitate building.

³⁸⁹ For a summary of excavations at the site, see Nielsen and Tuck 2001; Tuck 2017.

³⁹⁰ Gleba 2008.

area.³⁹¹ Whatever the reason for the complex's abandonment, the material visible in the countryside of the *comune* sees a sharp decline in the following two centuries. It seems probable that elimination of the local nobility, who, after all, occupied a highly productive space, severely disrupted the local production and exchange networks.³⁹²

5.6.2 The 5th to 3rd Centuries

The fifth and fourth centuries see a sharp decline and continued downward trend in rural material. Scatters categorized as commoner activity from the seventh and sixth centuries still do produce evidence for activity through the fifth, but these scatters stop producing material by the fourth when several new sites begin producing visible material. This dramatic reduction in visible material is reversed, however, in the third century. Both commoner and overall rural activity increases. There is some limited evidence of re-settlement (or continuity with missing phases due to stochastic factors) at Archaic period sites but also some new small scatters with roof tiles, ceramic, plaster and, in six cases, evidence for metal work. The ceramic assemblage was still dominated by coarse wares (54%) but, there was an increase in fine ware across the landscape (+46%, including black gloss and other fine wares). There is evidence for both dispersed "farms" and two, new nucleated commoner activity areas.³⁹³ The average distance between recovered scatters increased between 700 and 900 meters.³⁹⁴ With the abandonment of the central production center at Poggio Civitate, there is an increase in evidence for ceramic production in the form of kilns as well. Ceramic production likely played a role in the two periods of increased commoner visibility in the area. In both the sixth and third centuries there is

³⁹¹ Torelli 1981.

³⁹² Population decline and movement are also possible.

³⁹³ Identified by nucleated scatters and necropoleis; 120 I 2.1, 3.1, 5.1; 120 I 57.1, 57.2, 71.1.

³⁹⁴ Campana 2001, 297.

significantly more evidence for this type of production. The landscape types that saw activity in this period are similar to the seventh and sixth centuries, but there appears to be a reorientation in production activities. The spaces commoners were using between the seventh and fifth centuries were abandoned in favor of a new productive system that started in the fourth, and then continued with a significant increase in the third. An increase in fine wares such as black gloss could be related to both a higher surplus production due to these new strategies and exchange networks with a more “global” reach, no longer focused on the palatial site. It is notable, however, that while nothing on the scale of Poggio Civitate has been found for the third century, three necropoleis were identified by the surveyors with relatively rich grave goods – fine wares, stone urns, and metal weapons.³⁹⁵ The surveyors interpret these as belonging to “*una classe media rurale*,”³⁹⁶ in part due to their short-lived nature.³⁹⁷ It seems just as likely, however, that another elite group moved into the area, filling the void left by the abandonment of the palatial structure.

5.7 Buonconvento

The *comune* of Buonconvento is located in the Val d’Arbia, 25 kilometers south of modern Siena. The *comune* covers 64.5 km² east of the *comune* of Murlo and north of the *comune* of Montalcino. The landscape is similar to that of those areas, and that seen to the south of Siena. Formed in the late Miocene from marine sediments, the landscapes are primarily made up of rolling hills (69% of the surface area), cut by numerous rivers and their associated river valleys belonging to the Ombrone, the Arbia, and their tributaries. The sandy soils of the region

³⁹⁵ 120.I 2.1, 3.1, and 5.1.

³⁹⁶ Campana 2001, 74.

³⁹⁷ All of the necropoleis were abandoned by the first century aside from 120 I.2.1.

are conducive to arboreal growth, namely olive and oak trees.³⁹⁸ Three main landscape types predominate: 1. flat river valleys, 2. low hills, and 3. a series of higher hills. The river valleys (40% of the total area) are almost entirely under cultivation, with sunflowers and cereals the primary crops. While this would suggest optimal archaeological visibility and this area did have the best visibility of the three landscape types, the areas near the watercourses are subject to seasonal alluviation, making their results somewhat unreliable. The low hills (43% of the total area) are suited to extensive rather than intensive survey due to the lack of ploughing and the presence of sporadic *macchie* that make systematic fieldwalking difficult. The higher hills (17% of the area) are heavily forested, making survey difficult and visibility very low.³⁹⁹ Following the CAPS methodology, a sample of 36 km² was chosen by the surveyors (55% of the total surface area) covering all three landscape types.⁴⁰⁰ Between 1998 and 2000, three intensive survey campaigns took place, followed by re-survey and limited new fieldwalking between 2001 and 2004. In cultivated fields, fieldwalkers were spaced between either four to five meters or ten meters apart. Site classification followed the CAPS methodology used by the surveyors of *Chianti senese* outlined above.⁴⁰¹

5.7.1 The 7th and 6th Centuries

Looking at the evidence for rural activity in the *comune* (Table 5.5), the period between the seventh and sixth centuries sees an initial increase in commoner and rural activity. The majority of these newly visible scatters, interpreted by the surveyors as *Case Rurali* built of perishable materials, are either isolated or found in small nuclei. The scatters are small, between

³⁹⁸ Cenni 2007, 7-13.

³⁹⁹ Cenni 2007, 19.

⁴⁰⁰ Cenni 2007, 41-42.

⁴⁰¹ Cenni 2007, 43-49.

0.0024 ha and 0.006 ha., and characterized by the presence of ceramic building materials and wattle and daub fragments. In particular, nucleated scatters were found amongst the low hills consisting of five or six associated concentrations of materials. These collections of materials were interspersed with arable land. The material recovered consists mostly of impasto ceramics, very little bucchero, and numerous sherds of *dolia* suggesting some form of agricultural activity. There is limited evidence for elite sites, but the various biases in visibility, as well as the lack of survey in the more defensible hills, might account for this absence.⁴⁰² The surveyors suggested that a tumulus burial known from previous archeological study belonged to an elites associated with the Poggio Civitate complex, which sits only five kilometers away. This tumulus was used by the inhabitants of that complex to exert control over the region.⁴⁰³ Sitting, as it does, at the boundaries of the areas controlled by Volterra, Clusium, Vetulonia, and Roselle, it is possible that this area fell under the temporary control of the community at Poggio Civitate. The evidence for nucleated activity might represent a technique for controlling local production in the more distant areas of the palace's territory. In the sixth century, there is evidence for a possible elite site with fine ware and metal production activities which produced material from the sixth through the fifth centuries, perhaps filling the void left by the abandonment of Poggio Civitate. The rural economy was clearly active during these two centuries, and it is possible that the elite presence nearby acted to stimulate this activity.⁴⁰⁴

5.7.2 The 5th to 3rd Centuries

⁴⁰² Sites 161.1 and 161.2.

⁴⁰³ Cenni 2007, 321.

⁴⁰⁴ There is further, potential evidence for an elite Etruscan presence in the form of a local toponym (Percen(n)a) that may hearken back to the gens *perkna* also found in funerary evidence from the Val d'Elsa. However, the attribution of a scatter of material to elites of this family feels a touch premature without further investigation (Cenni 2007, 323).

The fifth and fourth centuries see a significant dip in rural and commoner activity, likely related to both changes in supply networks of durable material, the poor ceramic chronologies for the period, and some movement of people out of the landscape. The third century, however, follows with a *boom* in activity; rural, commoner, and “farm” scatters increase dramatically. The settlement pattern for this period is characterized by increased activity and dispersion across the landscape. A direct increase in material “wealth,” in the form of fine ware, stone building, funerary evidence, however, does not follow. Most of the new scatters are still small and characterized by evidence for the same wattle and daub building techniques seen in the preceding period. There is some evidence for continuity, either the continued use of spaces through the five centuries or the reappearance of material, after a hiatus, at sites used in the seventh or sixth centuries. This suggests that the rural economy was not radically transformed between these periods, but rather exhibits a continuity interrupted by material conditions that limit the visibility of particular periods. The hilly areas surveyed were the only area that saw a wholly new pattern of activity. Fine wares, especially black gloss, are not as diffuse in this area as elsewhere, suggesting that this liminal zone was not as connected with broader patterns of exchange.

The surveyors interpreted the increase in the material during the third century through the lens of the broader change in Etruscan social structure and a newly liberated rural class.⁴⁰⁵ However, while the scale is different, the activity areas do not differ so significantly from those of the preceding period. Changes in the demand for some of the local resources, namely timber, might have played a role in the return of exchange networks that brought more durable material culture into the region. One possible difference is the presence of an elite group at Poggio Civitate in the preceding period, while, notably, there is minimal evidence for elite sites in the

⁴⁰⁵ Cenni 2007, 327-8.

third century. Absence of evidence is not evidence of absence, but it is possible that two different drivers of rural intensification are at play in these two periods. The seventh and sixth centuries might represent rural intensification as the result of external hierarchies,⁴⁰⁶ while the third century, without local elites, could follow a different model. Recent studies have suggested that agricultural intensification is not always elite driven, it is often related to intentional commoner production for trade.⁴⁰⁷ Increase in local economic demand and rural-rural exchange amongst commoners might have led to a reinvigoration of old productive systems, and a modest increases in material surpluses amongst commoners. Many of the commoner sites that “turn on” in the third century are used through the first century CE. This growth and then continuity in visible activity suggests a stability in the local rural economy, but not necessarily an economy that was connected to external areas as evidence for imports and fine wares remains low.

5.8 San Giovanni d’Asso

The *comune* of San Giovanni d’Asso is located in the center of modern Tuscany, covering 66.38 km². The area is characterized by numerous hills, predominately of moderate height (around 450-480 meters above sea level). At higher elevations, sandy soil predominates while, at lower elevations, clayey soil is more frequent. Modern landscape use is determined by the type of soil that is present: sandy soils are used for olive cultivation (interspersed with woodlands) while clayey soils are used to grow cereal crops. The surveyors defined three landscape types: 1. the northern part of the *comune* is dominated by sandy hills (used for olive cultivation), 2. further south clayey hills (used for pasture and cultivation), and 3. flat alluvial plains running along the course of the river Asso.⁴⁰⁸

⁴⁰⁶ Addams 1966; Parsons 199

⁴⁰⁷ Leach 1999; Morrison 1994; 1996.

⁴⁰⁸ Felici 2012, 7-19.

Survey took place beginning in 2000 and ran through 2004, following the basic CAPS methodology outlined above. An initial sample was chosen covered 65% of the total municipal area (43 km²) in order to cover all the different landscape types. Following initial extensive reconnaissance, where factors such as surface visibility, modern land use, and archaeological fragmentation were taken into account, the sample was narrowed to 17 km² that was intensively investigated. A significant amount of work was devoted to the area around a medieval church at Pava, known from medieval documentary sources. Due to the focus on this church structure, the sample of data from this area is less representative than some of the other CAPS surveys.⁴⁰⁹

5.8.1 The 7th and 6th Centuries

Evidence for rural activity from the *comune* presents a slightly different picture from that seen elsewhere in the CAPS study area (Table 5.6). The seventh and sixth centuries were characterized by little evidence for commoner activity but relatively robust evidence for the presence of a local elite. While not all recovered by the survey, several necropoleis have been identified across the territory suggestively connected with nucleated scatters of material interpreted as villages by the surveyors. Many of these necropoleis show continuity from the seventh century through the second. Epigraphic evidence from the tombs shows a number of elite lineages maintaining a presence in the landscape over these centuries.⁴¹⁰ Not all of these elite groups are local, some of these families belong to an older, regional nobility with ties to the growing urban centers of the area. The *Haprni*, for example, are attested in funerary epigraphy at Saena as well as, further abroad, at Volsinii and Perugia.⁴¹¹ While not numerous, the areas of

⁴⁰⁹ Felici 2012, 88.

⁴¹⁰ Namely the *Aveini*, *Haprni*, *Arini*, *Caini*, *Petrui*, *Prumathnei*, *Titei*, *Reitnei*, *Vete*, *Vezni*, and *Felsinei*. Felici 2012, 21 fig. 3.

⁴¹¹ Tarabella 2004, 227.

commoner activity show evidence of use from the seventh through the second century, suggesting a continuity in the rural settlement system.

5.8.2 The 5th to 3rd Centuries

The fifth century sees continued use of the elite necropoleis in the region, but a slight decline in rural and commoner activity. A flourish in activity follows during the fourth century with new commoner sites identified. A slight decline in activity occurs in the third century, although this might be related to either the non-representative sample presented by the intensive activity around the church at Pava or the stochastic nature of surface remains. There is evidence for rural infill in the *comune*, but it is chronologically earlier than seen elsewhere in the other region around Siena.

The scatters recorded were characterized by building material, especially roof tiles but also wattle and daub. While coarse fabrics predominated, there was a fair amount of fine ware, especially black gloss recovered at a number of the commoner sites. Most of these scatters were recovered as part of nucleated groups, between 2-3 and 12-15 scatters interpreted as houses within village communities by the surveyors. These sites occurred most frequently on hill slopes at higher elevations. Work near the church at Pava investigated one of the nucleated “villages” of 12-15 scatters more intensively and found evidence for ceramic production in the form of a kiln and metal slag suggesting metallurgy.⁴¹² The ceramic production, a local black gloss ware, appears to have been distributed across the region while the metallurgy might have been for local use. A hypothetical sanctuary site, with ashlar masonry and a figural antefix, in the area of the church at Pava might have served as a focal point for this community. The settlement system in the *comune* appears to be somewhat conservative with less change across the centuries under

⁴¹² Felici 2012, 221.

study that seen elsewhere. The persistent elite presence across the entire period under study is certainly notable. There does not appear to be a significant rupture amongst the ruling class in the region, unlike what has been proposed for other areas of Etruria. There is evidence for changes in building techniques, with an increase in the presence of roof tiles notable already in the fourth century. There appears to be a general increase in material wealth amongst commoners but no associated radical changes in the settlement system, notably little dispersal of settlement. It should be noted, however, that the sample chosen by the surveyors may play a role in the absence of this type of dispersed settlement pattern. The elite continuity through the period of Roman expansion in the region, as well as the rise in rural activity during the fourth century before a notable Roman presence is recorded, suggests that regional and local factors, rather than Roman intervention, played a central role in these rural changes that, in turn, did not disrupt the established local settlement hierarchy.

5.9 Montalcino

The *comune* of Montalcino, with an area of 242 km², is delimited at its northern and western limits by the Ombrone river, the Asso to the east, and by the river Orcia at its southern extent. A rich mosaic of geological formations sits beneath the low hills that characterize this region along with much of central Tuscany. The *comune* acts as a transitional space between the diverse landscapes of the Monte Amiata area and the more homogenous Chianti senese. Hills of variable altitude dominate the area, although in general, these hills have a gentler slope than other areas of central Tuscany. There are also river valleys that provide flat, arable, agricultural surfaces. The modern land is used primarily for either cereal cultivation (the lowlands and lower

hills), viticulture (moderate hills), or is forested (hills of a medium height).⁴¹³ In the medieval period, cattle breeding and transhumance routes passed through the area, a practice that we might be able to tentatively retroject further into the past. These husbandry practices, as well as the forested nature of much of the area, a situation that has changed due to increases in viticulture, but is supported by the presence of large, old trees throughout even the lower hills, suggest that the area might have been home to diverse commoner activities beyond only subsistence agriculture in the past.⁴¹⁴

The CAPS investigation of the *comune* of Montalcino began in 1998, with subsequent seasons occurring in 1999, 2000, and 2003; again, an interdisciplinary methodology was used, including pedestrian survey, aerial photography, remote sensing, geoarchaeology, and in this case bioarcheology. The selected sample covered six discreet areas for a total of 81.7 km². All landscape types were sampled, although unsurprisingly the more heavily forested sample areas furnished less archaeological material.⁴¹⁵ Survey occurred in August and September, with five meters spacing between fieldwalkers. If a site was identified, the material was recorded and diagnostics were collected along with a sample of less diagnostic material (*e.g.*, roof tiles). Off-site material was also recorded, and 15% of off-site scatters were resurveyed over the course of the project.⁴¹⁶

5.9.1 The 7th and 6th Centuries

⁴¹³ The vineyards, however, are likely a recent phenomenon related to the rising popularity of Brunello beginning in the 1970s (Brunello only received its DOC certification in 1960 and DOCG 1980). It is unlikely that the historical landscape was marked by the same levels of viticulture. Olive cultivation was likely more significant.

⁴¹⁴ For a discussion of historic and modern land use see Campana 2013, 18-33.

⁴¹⁵ Campana 2013, 60-61.

⁴¹⁶ Campana 2013, 66. This resurvey did not lead to any significant changes in the interpretation of any sites from my period.

A sparse collection of sites was dated to the seventh century, but suggests both elite and commoner presence in the area. The evidence for rural activity in the *comune* rises notably in the sixth century, with the numerous scatters identified as initially visible in this period (Table 5.7). The majority of these sixth century scatters are small, interpreted by the surveyors as houses made of perishable material and belong to my commoner site class. Many are short-lived, with thirty-five only furnishing material from this century. Spatially, the sites are grouped along the thoroughfares running through the territory, suggesting that the road network already had an active role in shaping the locations of durable material culture and commoner activities. Four nucleated clusters of material were interpreted as villages, with the surveyors further suggesting that the higher quality material in these scatters (namely *bucchero*) and their larger size might connect them to an emergent local elite. Three rural necropoleis were identified from this period and also support the presence of local elites in the area.

5.9.2 The 5th to 3rd centuries

The fifth century provides little archaeological material. A lack of datable ceramic classes from this period likely plays a role in this dip in material,⁴¹⁷ the concurrent disappearance of elite sites suggests a reorientation of exchange networks and patterns of material use. The fourth century sees a recovery in commoner, elite, and rural activities. New necropoleis begin to be used, supporting the idea that the fifth century decline is only related to material patterns not population change. The third century sees a significant peak in evidence for settlement in the area, with identified rural, commoner, and elite activity increasing and the appearance of “farm” sites. The majority of these, new, scatters were small (interpreted as “*Abitazioni*”

⁴¹⁷ This is suggested by the surveyors, Campana 2013, 278. Only one type of ceramic was diagnostic of activity in the fifth and fourth centuries Campana 2013, 233.

Monofamiliari”) and were ascribed to my commoner class. Four more substantial scatters were identified as “*case ricche*” by the surveyors, and were classified as “farms.” These four scatters are larger, produce higher percentage of fine wares, and had evidence for *dolia* and loom weights suggesting different forms of productive activities. They fall under my “farm” class.

There is little evidence for actual site continuity, perhaps influenced by the poor fifth-century ceramic chronologies. The nucleation seen in the previous periods is no longer visible; instead, the scatters are more dispersed with between one and two kilometers between sites. Despite these changes, the new scatters of commoner material occupy the same general areas, along the thoroughfares, as the sixth-century material, suggesting continuity in land use and the survival or revival of similar systems of land exploitation. There is also evidence for the continued use of the elite necropoleis discussed above as well as new necropoleis. Various elite lineage groups are attested in the area through funerary epigraphy. While some families (for example the *Afni*) are known to have been elites from Clusium, other families appear to be local (Figure 5.3). The onomastic evidence suggests a mixture of some older aristocratic groups from nearby primary centers as well as local elites. Further study could also provide evidence for the survival or disappearance of these families in the later first millennium. The surveyors use this evidence to argue for a “*ceto medio agrario*.” The question must be asked whether all of these *nobili della terra* are emergent commoners, or if some are families that trace their presence in the landscape back to the Archaic period and have shifted the locations of their burials. It is notable that, in this landscape likely characterized by a mixture of agricultural land and forests, similar processes of diffusion occur to those seen in more agricultural areas. Rather than strictly agricultural production leading a growth in visible material, in this survey area it is likely that the exploitation of arboreal resources also played a role in elevating commoner visibility.

5.10 Pienza

The *comune* of Pienza covers 122.6 km² at the southeastern edge of modern Tuscany, near the region's borders with Lazio and Umbria. It is part of the larger Val d'Orcia. The geology of the area is characterized by clastic sediments (clays, sandy clays, and sands) formed in coastal marine environments during the lower Pleistocene. The landscape is predominately made up of hills with scarce arboreal vegetation (68 km²), but there are also areas of flat valley bottoms (16 km²), medium hills (20 km²), and higher, more rugged hills (19 km²). Arable land predominates in the valley bottoms and low and medium hills, while the more rugged hills are forested.⁴¹⁸ The archaeological visibility was affected in all landscape types by different factors. The valley bottoms were subject to alluvial soils covering material and fragmentation by agricultural activity. The clayey soil in the lower hills made it difficult to identify ceramics, cutting the chances of identifying material in half according to the surveyor's calculations. The abundance of olive and vine cultivation in the medium hills meant that seasonal lifting of the sediments over the last few centuries fragmented scatters making sites more difficult to identify and site size less reliable. The abundance of forests in the higher hills negatively affected visibility, as is traditional in more heavily forested areas.⁴¹⁹

The survey of the area took place in the late summer over three years (1996, 1997, and 2001) to maximize the number of ploughed fields and visibility conditions. 223 new sites were identified over these seasons of survey. The methodology followed that outlined by the CAPS project, although more focus was placed by the authors of this volume on the consideration of off-site material. Unfortunately, most of this off-site material was dated to the Medieval period.

⁴¹⁸ Felici 2004, 10-12.

⁴¹⁹ Felici 2004, 59.

5.10.1 The 7th and 6th Centuries

The seventh century produced evidence for modest commoner and rural activity. The sixth century saw an increase in rural activity, commoner activity, and evidence for a local elite; the increase in rural and commoner activity is inflated by numerous scatters that only contain ceramics dated to this century, but there is still a significant increase in material (Table 5.8). While the site has not been found, there is secondary evidence for a significant nucleated settlement, dominating the regional road network and associated with a rich necropolis at Tolle.⁴²⁰ The rich grave goods in the necropolis and its monumental construction suggest a local nobility that controlled the area by at least the sixth century. Small scatters, associated with small to medium-sized rural houses by the surveyors and characterized as areas of commoner activity in my database, predominate although there is at least one larger scatter with evidence for roof tiles and ceramic building material.⁴²¹ Wattle and daub building material was found, suggesting at least moderate permanence in the landscape since wattle and daub requires regular maintenance.⁴²² Rather than an even distribution over the surveyed land, the sixth-century material was clustered around the areas of movement through the territory, river valleys, and later road locations. Most of the material recovered from this period (87% according to the surveyors) was rough terracotta, with fine ware making up only 8% of the total assemblage across all scatters. The nucleated site associated with the Tolle necropolis might have facilitated this rise in visible material, acting as a node in exchange networks that brought material through the landscape along these movement routes, but fine wares do not appear to have moved very freely through this landscape during these two centuries suggesting issues of access.

⁴²⁰ The settlement itself, hypothesized by Carandini to have been an *oppidum* has not been found. Felici 2004, 304-5. For the necropolis at Tolle see Paolucci 2000, 2002, and 2007.

⁴²¹ Site 136.1.

⁴²² *E.g.*, Site 108.1.

5.10.2 The 5th to 3rd Centuries

Following a decrease in activity in the fifth century to a similar level to that seen in the seventh, there is an increase in rural and commoner activity in the fourth century, followed by continued growth in evidence through the third. Rather than the dramatic peak in the third century seen elsewhere, rural infill in the area appears to be more gradual if still significant. Most of the third-century scatters were small in size relative to this survey area (0.3 ha on average) with evidence for tile roofs. There is a significant increase in fine wares (black gloss makes up 30% of the total recovered assemblage according to the surveyors) although they are dispersed amongst sites, with only one site possessing a density high enough to be considered a “farm.”⁴²³ Visibility issues, especially in clayey soils, might affect the recovery rates of other ceramics, inflating this recovery rate, although it is also possible that this quantity of black gloss represents a general rise in surplus expenditure amongst the commoners in the area. The distribution of sites is far less regular than the preceding periods, scatters appear in all landscape types. One of the possible elite sites from the sixth century produces material through the third century, while two possible elite scatters produce material beginning in the third century. The three sites are distributed across the territory (at the north, central, and southern parts of the *comune*).⁴²⁴ Two of these scatters furnished material suggesting continued occupation or use through the Roman period, suggesting a degree of rural stability. The number of rural necropoleis increases significantly between the fourth and third centuries, while the Tolle necropolis shows evidence of continued use through the second century. A number of these necropoleis produced epigraphic material. The surveyors suggested that the presence of certain epigraphic formulae represents the

⁴²³ Felici 2004, 307.

⁴²⁴ Sites 136.1, 107.1, and 83.1.

emergence of an intermediate commoner class with greater access to signs of social power.⁴²⁵

There is good evidence for this shift, if we subscribe to the *Vornamengentile* formula coined by Vetter and appropriated by Rix. Numerous tombs bear the inscription *Cae* (*Caenal-Cainei*), built from the *nomen* Caius.⁴²⁶ The argument goes that the bearer of a *Vornamengenticum* was initially part of a dependent commoner class but, when these dependency bonds loosened, they changed their name to emulate a more prestigious onomastic formula.⁴²⁷ The gentilic associated with some of these tombs might support this model of an emergent, *nouveau riche* commoner class and a breakdown of the two-class system with a new, intermediate group present for at least a century.

There appear to be two trajectories in the landscape related to commoners. There is greater evidence for commoner prosperity, seen in both the greater visibility of material culture, an increase in burials that might correspond to more socially powerful commoners, and more robust networks of exchange that distributed fine ware deeper into the rural landscape. At the same time, elite communities persist and maintain some level of social continuity in the area, as seen at the necropolis at Tolle. Roman hegemony in the area was likely established by at least 297 when Livy records a victory by the Romans over Clusium (in whose territory Pienza likely sits) and Perugia.⁴²⁸ No dramatic break in settlement activity, however, is evident as the trends in rural infill appear to be part of a longer-term process and there is evidence for elite continuity in the area. The apparent rise in social standing amongst commoners is not predicated on the disappearance of the local elite. This area might furnish evidence for the breakdown of a two-

⁴²⁵ Cristofani 1977.

⁴²⁶ Rix 1977, 65.

⁴²⁷ Rix 1963.

⁴²⁸ Liv. 10.30.2.

class system and the rise of an intermediate group of consumer-producers, but not social upheaval of the disappearance of the previous social systems.

5.11 Radicofani

The systematic investigation of the *comune* of Radicofani by the CAPS project began in 1999. The total area of the *comune* measures 118.1 km². The sedimentary basin is characterized by outcrops of Pliocene marine sediments and is located between the Amiata lava dome complex and the Monte Cetona ridge. Alluvial deposits characterize the majority of the landscape, although there is also volcanic stone and detritus (related to the eruption of Monte Amiata around a million years ago). As is the case with much of modern Tuscany, hills dominate the landscape (covering around a fifth of the *comune*). Modern, mechanized, agriculture has reshaped the landscape significantly, leveling the terrain and leading to significantly higher rates of erosion.⁴²⁹ Outside of the typical Tuscan hills, four other landscapes types were present: 1. alluvial plains currently under intensive cereal cultivation, 2. low hills along the major river valleys, 3. higher hills formed by volcanic detritus, and 4. the actual volcanic cone of Radicofani, the summit of which has evidence for occupation already in the bronze age and eventually a medieval fortress.

The survey sample was chosen based on the CAPS strategy and included portions of the alluvial plains, the river terraces, and the hills with the best visibility. Forested areas were less intensively investigated. An average of eight surveyors examined a sample of 36.6 km² over sixty days (for a total of 13.2 days/person/km²). The space between walkers was ten meters, reduced to five meters in areas of targeted survey and expanded to between 15 and 20 meters in

⁴²⁹ Botarelli 2005, 14.

areas of high erosion or steep slopes.⁴³⁰ The identified scatters were categorized following a simplified version of the CAPS system used in earlier surveys. The categories used were: off-sites, house/tomb, small house, large house, village, tomb, necropolis, and fortified site.⁴³¹

5.11.1 The 7th and 6th Centuries

The survey recovered limited material from the seventh and sixth centuries; the surveyors noted a general scarcity of material culture in this period (Table 5.9).⁴³² Of the few scatters recovered, the majority were interpreted as small habitations; no evidence for elite sites was recovered from this period. Ceramic chronologies likely play a role in this dearth of evidence, but this area, likely part of the further hinterland of ancient Clusium, also appears to have been peripheral to external exchange networks as well as local networks that would have facilitated the movement of durable material culture.

5.11.2 The 5th to 3rd Centuries

The fifth and fourth centuries were just as poorly represented in the survey material as the preceding two centuries, with no evidence of new activity recovered. The third century, in contrast, saw a significant increase in commoner and rural activity. Scatters were dispersed across the landscape, with evidence of activity increasing not just in the alluvial plains and low hills, but also further inland in more forested areas, suggesting perhaps the increased exploitation of arboreal resources. Tile is present at a higher percentage of sites, but fine ware is not as widely distributed. Instead, *dolia* fragments appear with a higher frequency, perhaps indicative of more agricultural production. This increase in evidence for activities related to production, however, did not see an increase in luxury products like black gloss in the same manner as other regions of

⁴³⁰ Botarelli 2005, 53-57.

⁴³¹ Botarelli 2005, 60.

⁴³² Botarelli 2005, 175.

central Tuscany. There is evidence for either tile or stone building material at the majority of commoner sites, suggesting an increase in permanent activity in the landscape.

In line with other CAPS projects, the surveyors interpreted this change in rural settlement patterns as a demographic increase related to the liberation of an Etruscan servile class. The lack of elite material culture might be the result of survey biases, but it is perhaps a touch presumptuous to assume a servile class in a region that does not have evidence for any dominant social players. Demographic changes are less likely than changes in the use of surplus. The data does speak to a certain ubiquity of rural infill; there are significant changes in rural activity in the third century, even in this marginal zone. The absence of elite material culture, both necropoleis and larger sites are absent, could provide evidence for local development leading to rural infill. While the rural material does not point towards a significant increase in material brought in using external networks, such as fine wares, the establishment of a sanctuary on the slopes of the Monte di Radicofani does suggest certain extra-subsistence communal expenditures. Landscape change related to modern agriculture could also have caused site visibility to decline to the point that much of the material from the middle Republic was not recovered.

5.12 Scarlino

Between 1979 and 1983, a team from the Università degli Studi di Siena carried out a survey of the area around the 10th century Lombard castle of Scarlino along the Pecora and Alma valleys, in the hinterland of the Gulf of Follonica. This survey was carried out in conjunction with excavations at the castle itself. The area is geographically diverse, with landscape forms typical of the coastal region of south-central Tuscany. There is a significant degree of morphological variation between the river valleys, the coast with its rocky outcroppings, and the

lacustrine sediments of the interior.⁴³³ Due to the presence of urban areas, reclaimed agricultural land, and overgrown vegetation in many of the higher elevations (*macchia*), the majority of the survey took place in the valley bottoms.⁴³⁴ Van Dommelen resurveyed the area, focusing only on these areas of higher visibility.⁴³⁵ It is difficult to reconstruct the methodology for the original survey since the publication does not list things like the number of fieldwalkers or the distance between said walkers. However, as Van Dommelen suggests, it is heavily implied in the publication that the survey was carried out by a single person.⁴³⁶ This means the data is of a lower quality than the above CAPS surveys, lacking both intensity and data from areas of the landscape, the hills, in particular, that might have contained past rural activities.

5.12.1 The 7th and 6th Centuries

There are ample material remains of rural activity in the area during the seventh century (Table 5.10). Much of the evidence takes the form of small scatters with coarse wares (*impasto*) and ceramic building material. Most of the scatters were on the smaller side, with even the most significant measuring only a hectare in size. There is evidence for a local elite, namely in the form of a necropolis along the southeastern edge of one of the river valleys.⁴³⁷ The economic activity in the area is different from other regions in my database. While there is some evidence for agricultural production, there is also diachronic evidence for the production of metals, although it is limited to a single smelting site in this period. This metal exploitation has been

⁴³³ Cucini 1985, 157-163.

⁴³⁴ Cucini 1985, 147-9.

⁴³⁵ Van Dommelen 1992. I follow Launaro in including both Van Dommelen's work and the survey from the late 70s/early 80s in my dossier of sites because I am also interested in evaluating general trends in landscape trends rather than absolute densities (see previous chapters). While the Scarlino project was far from perfect and certainly missed evidence for settlement, the original publication includes a far more comprehensive catalog of sites with information more useful for my project (for further discussion see Launaro 2011, 115 n.29).

⁴³⁶ Cucini 1985, 147-50; Van Dommelen 1992, 865 n.5.

⁴³⁷ Site 134.

tentatively linked to similar activities at the nearby urban centers of Populonia and Vetulonia, whose territory must have included the area around the Scarlino castle. With numerous natural anchorages, it is possible this area was a port of call for traders bringing metal resources from Elba to the nearby, growing, urban sites.⁴³⁸ The sixth century saw a decrease in visible material; the necropolis falls out of use, and commoner sites are no longer producing visible material culture. The only evidence for activity comes from a “farm” site that appears to have been a center of activity for most of the first millennium.

Change in material practice, rather than a demographic change, could be an alternate explanation. Perhaps, with the decline in the importance of Vetulonia, new exchange networks involving metal goods bypassed the area, leading to less visible material culture. Due to the survey’s methodological challenges and the need for new ceramic chronologies, it is difficult to attribute this decline to any one development.

5.12.2 The 5th to 3rd Centuries

The fifth century sees a slight increase in material, although ceramic chronology issues almost certainly have a role to play in this, buccheroid impasto being one of the primary wares used by the surveyors to date sites to this period. The survey publication connects this lack of material with the abandonment of the countryside in favor of urban sites.⁴³⁹ However, elite burials reappear, as does a possible elite site that became an imperial villa.

The third century sees a change in the visible evidence. The landscape is filled in with new sites; commoner sites, “farm” sites, and rural activity all increase. The sample size is relatively small, due to the survey’s limited sample area, but site numbers trend upwards. All of

⁴³⁸ Cucini 1985, 285.

⁴³⁹ Cucini 1985, 286.

the scatters are small, less than a hectare, with common ware the predominant ceramic class. Fine wares do make an appearance, with black gloss present at several sites dispersed across the landscape. There is tentative evidence for an increase in metal production, including a possible smelting site and iron slag present at a number of scatters, which the survey publication connects to an increase in demand from Rome after a violent conquest, in particular an episode recorded in Livy where Rome demands metal from Populonia during the Second Punic War.⁴⁴⁰ Rather than this violent conquest, for which there is no material evidence, it is possible that networks were reinvigorated by higher demand for metals and agricultural goods at Populonia, where there is evidence for urban renewal following a period of decline in the third century. These external stimuli could have increased the movements of material in the area and led to the rise in commoner visibility.

5.13 Albegna Valley

The Albegna Valley holds an intermediate position between northern and southern Etruria. The valley, with three Roman colonial foundations of note – Heba, Saturnia, and Cosa – has been a rich source of data and debate regarding the impact and nature of the Roman conquest of Etruria. In particular, the presence of Cosa (a site whose associated archaeological literature far outweighs its actual importance) and the villa excavated by Carandini and his team at Settefinestre has ensured that this region remained near the center of many Republican period debates. The majority of the geology in the Albegna Valley, unlike the more volcanic geology of southern Etruria and Latium, is marine in origin.⁴⁴¹ The geology of the valley is relatively complex, and the surveyors identified fifteen different geological classes that made up the

⁴⁴⁰ Liv. 28.47.

⁴⁴¹ Berghem *et al.* 1984; Perkins 1999.

underlying structure of the region.⁴⁴² Several valleys (the Elsa, lower Albegna), as well as the coastal plain provided relatively productive agricultural land, while the upper Albegna valley (dominated by the hill where the settlement of Saturnia sits) provides both agricultural land and forest resources. This diversity in landscape form allowed for the exploration of multiple landscape forms.

Prompted by the Italian-British excavations at the villa of Settefinestre, a significant survey project took place in the hinterlands of Cosa, Heba, and Saturnia between 1977 and 1986. The methodology used by the project, primarily devised by Lisa Fentress and based on the South Etruria Survey from the previous decade, incorporated a systematic, stratified sampling of the landscape, intended to cover only 20% of the 1000 km² study area, using one kilometer wide transects placed at regular intervals. In total, 249 km² of the whole study area was investigated (a 17.5 percent sample of the eventual 1,428 km²).⁴⁴³ The transect sampling method was chosen, primarily, because it sampled all of the various landforms in the valley in the proportion that they occurred.⁴⁴⁴ Another perceived benefit, voiced by Ammerman in support of this research design, is that the regular sampling patterns “make better sense to future generations and are a lot less difficult to work with.”⁴⁴⁵ The location of the transects was not random but rather manipulated in order to cover the territories of the Roman colonies of Cosa, Heba, and Saturnia.⁴⁴⁶ Fields were walked at intervals of either five meters, ten meters when visibility was poor, or 10-20 meters, in

⁴⁴² Perkins 1999, 3-4. (Alluvium, Detritus, Pleistocene colluvial/alluvial/fuluviolacustrine, Travertine, Lacustrine limestone, Pliocene sands and clays, Pliocene clays and marls, Miocene conglomerates, sandstones and marls, limestone and marl, shale and limestone, cretaceous marl and limestone, Jurassic limestone, Dolomitic limestone, and Clastic deposits).

⁴⁴³ Fentress 2009, 140.

⁴⁴⁴ Fentress 2009, 129.

⁴⁴⁵ Fentress, 2009, n. 7. As a member of this future generation, I can confirm that Fentress and Ammerman are not wrong.

⁴⁴⁶ Cambi 2002, 43-48; Perkins 1999, 15.

September to take advantage of the ploughing season.⁴⁴⁷ When a surface scatter was detected, the area was defined, recorded, and artifacts were collected and sorted.⁴⁴⁸

The intensity and rigorous methodologies of the survey would, under normal conditions, offer a great promise that the data would say much about rural infill and commoners in the region, but the publication of the survey data did not take place under normal circumstances. After a series of interim reports, a synthesis of the project was finally published only in 2002.⁴⁴⁹ This does mean that the Albegna Valley survey beat South Etruria to press, and underscores the complexity of large-scale survey publication. The publication itself, however, is a rather strange text. While the synthesis does provide a wealth of information, it is not the easiest to incorporate into this study. The site gazetteer provided in the synthetic volume is a set of spreadsheet printouts that provide some information – site number, location, visibility codes, modern land-use, periodization, chronology, interpretation – but are inconsistent with others – artifact density, site dimensions. No publication of the finds is present in the report and none has been produced since this publication.⁴⁵⁰ Due to this omission, the artifacts used to interpret the sites are not present. The sites themselves are interpreted roughly following the villa-farm system developed by the South Etruria survey, with a little more nuance, including options like *casa/tomba* for more ephemeral scatters. These publication choices limit interpretive possibilities.⁴⁵¹

⁴⁴⁷ Perkins said the intervals were 5-10 meters depending on visibility but Cambi (Cambi 2002, 46) says that the spacing was 10-20 m without any qualifying information (not that Perkins explains exactly how “poor” visibility was determined). This is illustrative of the problematic publication discussed in the next paragraph.

⁴⁴⁸ Perkins 1999, 16.

⁴⁴⁹ Carandini *et al.* 2002. See Attolini *et al.* 1982, Cambi and Fentress 1988, Cambi 1999, and Perkins 1999 for a sampling of these interim reports. Wilson 2004 outlines many of the issues with the 2002 publication (the fortuitous discovery of manuscripts in the attic, the absence of two of the editors from the decision to publish the text, the nature of the text itself).

⁴⁵⁰ According to the introduction, this publication is indefinitely postponed.

⁴⁵¹ See Carandini *et al.* 2002, 375-409 for the catalog.

Nevertheless, the sheer weight of data and the importance of this survey in terms of its methodology and the unique regional setting necessitated its inclusion.

5.13.1 7th and 6th centuries

The settlement history of the Albegna Valley, calibrated as outlined above, paints a picture of relatively intense rural activity already in the seventh century (Table 5.11). Rich necropoleis at Marsiliana and Magliano, as well as an elite residence at Uliveto di Banditella show the existence of a local elite.⁴⁵² The region likely fell under the territorial control of the Etruscan center of Vulci, and the foundation of the fortified, nucleated settlement at Doganella may have been related to attempts by that city-state to exercise control in the area. Doganella was a locus for amphorae production, suggesting it played an important role in the circulation of local agricultural surplus.⁴⁵³ The foundation of Doganella and several other small fortified sites in the area might be related to a first wave of settlement dispersal to more remote areas of the landscape, also marked by a slight increase in commoner activity.⁴⁵⁴

5.13.2 The 5th to 3rd Centuries

This rural and commoner settlements increase gradually over the fifth and fourth centuries, hitting its peak in the fourth century. However, the number “farm” settlements decreases, especially in the territory of Doganella. Doganella also sees a decline in amphora production, suggesting that the local economy might be reorganized and moved away from the production of wine.⁴⁵⁵ There is an increase in nucleated, commoner settlements in the area around Ghiaccio Forte, possibly related to metallurgical activity.⁴⁵⁶ The decline in “farm” sites in

⁴⁵² Atolini *et al.* 1991, 143.

⁴⁵³ Carandini *et al.* 2002, 77-79.

⁴⁵⁴ Vander Poppen 2008, 109.

⁴⁵⁵ Perkins 1999, 34-5.

⁴⁵⁶ Firmati 2002.

the fifth and fourth centuries could be related to Etruscan-Roman conflict, but Vulci only appears in the *fasti triumphales* in 280. It is unclear if either the inhabitants of the territory or Vulci were involved in the fifth and fourth-century conflicts between the Romans the generic “Etruscans” of the historical record. The interregional conflict between Etruscan polities and raiding by elite groups could be another explanation for the decline in these sites; the settlements at Doganella, Orbetello, and Talamone all received fortification walls in this period, and nucleation does take place at a higher rate, suggesting a possible period of increased conflict.⁴⁵⁷ The coastal region, however, saw the opposite trend with nucleated sites abandoned in the fourth century in favor of more isolated commoner sites.⁴⁵⁸ It seems likely that commoners in different regions were reacting to variable conditions in a locally-specific manner.

Unlike many of the other surveys discussed, however, the site numbers attributed to rural, commoner, and elite activity in the Albegna Valley drop significantly in the third century. This is the period of increased conflict with Rome marked by Tiberius Coruncanius’ triumph in 280 and the foundation of Cosa in 273.⁴⁵⁹ This decline is often assumed to represent a point of significant rupture in the local settlement pattern.⁴⁶⁰

While my data does attest to a decline in commoner, elite, and rural activity, “farm” sites increase through the third century. It is possible that a high number of scatters in the *casa/tomba* category in Carandini *et al.*’s publication, grouped under commoner sites and dated to exactly the fourth century could inflate the pre-third century data and make this decline in activity look more precipitous than it was. One might imagine that these restrictive dates are based on very limited ceramic evidence; unfortunately the publication does not allow for a close reading of the material

⁴⁵⁷ Vander Poppen 2008, 134-5.

⁴⁵⁸ Carandini *et al.* 2002, 79.

⁴⁵⁹ Vell. Pat 1.14.7; Liv. Per. 14; Strabo 5.2.8.

⁴⁶⁰ Attolini *et al.* 1991, 144.

record. There is regional variation in the pattern of decline as well, in the region around Talamone, a number of fourth century sites are still used through the third century and new sites also appear.⁴⁶¹ In the environs of Talamone, at least, rural infill follows a more predictable pattern.

Perkins presents another possible issue with the underlying data in his publication related to the survey. In his chronological breakdown, Perkins separates sites into certainty occupied and possible occupied categories.⁴⁶² While the number of "certainly occupied" sites dips in the third century (falling from 60 to 37 in the sample transects and from 35 -20 outside of the sample transects) and there is less evidence of continuity (60 sites in the sample transects are occupied between the fifth and fourth centuries, compared to only seventeen between the fourth and third), if the possibly occupied sites are included, the third century actually sees an increase in aggregate rural scatters (239 in the third century compared to 208 in the fourth) (Figure 5.4). The value certain/uncertain was, according to Perkins, ascribed based on the reliability of the complete ceramic assemblage from the scatter but is absent from the 2002 publication. It is unclear how these sites were treated. For the categorization of certain/uncertain, the date range for each piece of pottery was assessed, given a rating of "good," "bad," or "uncertain."⁴⁶³ All the dated material was then combined to provide an assessment.⁴⁶⁴ While the fine-grained analysis of these patterns will have to await the publication of the finds from the survey (so the wait may be a very long time), some general observations are possible. Sites with a higher proportion of fine wares, ceramic classes that tend to be better dated, will be better represented in the certainly

⁴⁶¹ Carandini *et al.* 2002, 109-110.

⁴⁶² Perkins 1999, 28. His division is actually slightly more nuanced: he splits his sites up 8 ways, two broad categories (In sample transects, out of sample transects) And then four categories within these two groupings (Number of sites certainly occupied, Number of sites also occupied in previous period, Number of sites possibly occupied, Maximum possible number of sites).

⁴⁶³ Good means a confident date, bad was a dubious dating or a span exceeding 250 years.

⁴⁶⁴ Perkins 1999, 26.

occupied category than sites with a higher proportion less-reliably dated coarse wares. This might explain both the increase in “farm” sites and the decrease in commoner activity. If a better understanding of the certain/uncertain sites were possible, the pattern of rural activity might appear differently and point towards more continuity than the current data suggests.

The Albegna Valley represents a study area of particular interest; it is one of only three survey areas in this dissertation that saw textually-attested Roman colonization during the period between 500 and 200 (alongside Nettuno and the Liri Valley). Colonization has often been viewed as an important, if not the most important, avenue for the Roman consolidation of hegemony over the Italian peninsula. From Machiavelli to Salmon, colonization has been presented as integral to Rome’s imperial journey.⁴⁶⁵ A recent turn towards landscape studies of Roman colonization, originating with the Dutch teams working in the Pontine plain, has proven to be one of the areas where survey archaeology has made the most headway with Roman historians, suggesting new models that move away from total Roman replacement of local populations towards more nuanced viewpoints of Roman expansion.⁴⁶⁶ Here, then, we can read rural infill against a new set of exogenous processes.

Sustained Roman colonial activity in the Albegna valley is evident from the early third century, with the foundation of Cosa.⁴⁶⁷ The foundation of the colony might be more closely linked to the Pyrrhic War than regional unrest than hegemonic consolidation, but a permanent Roman presence – or as permanent a presence as an oft-failing colony can have – in the area by this time is irrefutable.⁴⁶⁸ Celuzza argues that the creation of Cosa had a dramatic effect on rural

⁴⁶⁵ Salmon 1970 is the seminal, if somewhat dated, work on Republican colonization. For a more recent view, see Stek 2014.

⁴⁶⁶ See, for example, Pelgrom 2012.

⁴⁶⁷ Liv. *Per.* 14; Vell. Pat. 1.14.5; cf. Salmon 1970, 62-3.

⁴⁶⁸ Coles 2009, 61.

habitation in the region. According to this model, Etruscan settlements disappeared in the direct hinterland of Cosa with an increase in rural activity on the left bank of the Albegna associated by the author with the resettlement of these locals to new areas outside of the colonial boundaries.⁴⁶⁹ This has been used to suggest a violent break between old settlement systems, and political authority, and the new Roman regime. A destruction deposit at Saturnia that sits across the entire site and post-dates the fourth century could also suggest some level of violence in the region.⁴⁷⁰ This archaeological horizon has been connected to the abandonment of other Etruscan urban sites in the area such as Doganella and Ghiaccio Forte. A further argument has been made, based on the record of the triumph over nearby Vulci, that this destruction layer is related to this particular conflict between Rome and Vulci.⁴⁷¹ The direct correlation of this archaeological deposit and a triumph related to a conflict with Vulci should not be made uncritically, but there is at least some evidence for conflict in the area during the third century. That the Romans emerged victorious is clear from both the historical sources and the landscape itself. Evidence for centuriation, associated with Roman colonial reorganizations, was detected at Cosa and, in the second century, around Heba and Saturnia after these *coloniae* were founded. These centuriated landscapes were associated with dispersed rural habitation, where autonomous farmers received plots of land as part of this landscape reorganization.

A recent restudy of the Albegna survey material using computer modeling has presented a counter-narrative.⁴⁷² Using GIS tools, the authors analyzed density and spatial patterns of settlement around three colonies – Cosa, Venusia, and Aesernia – to test the centuriated model of dispersed Roman settlement suggested by the Fentress and Celuzza against a new, polynuclear

⁴⁶⁹ Celuzza 2002, 106-9.

⁴⁷⁰ Michelucci 1982.

⁴⁷¹ Fentress 2002, 123.

⁴⁷² Casarotto *et al.* 2016.

model of colonial foundation.⁴⁷³ The study did not find neatly partitioned, centuriated landscapes, but rather village-like sites following a polynuclear distribution.⁴⁷⁴ A nucleated settlement system evident in the seventh and sixth centuries appears to have appeared. Celuzza suggested that these village sites were placed in marginal zones at the limits of the *ager Cosanus* in order to segregate the indigenous population.⁴⁷⁵ Casarotto *et al.* argue against Celuzza, suggesting that if these are non-colonial sites, there are not enough sites present in the landscape to accommodate the new colonists enumerated by Livy and other sources.⁴⁷⁶ Drawing on models suggested by Bintliff, they argue that these nucleated sites are colonial foundations, possibly combining colonists and the original inhabitants in nucleated communities.⁴⁷⁷ It is, perhaps, no coincidence that this polynuclear settlement system bears some resemblance to a multifocal proto-urban settlements that evolved into Latium and Etruria's first cities. A more heterarchical social structure amongst a first rank of colonists, with their dependent commoners settled around them and drawn from both migrants to the region and the indigenous commoners, might create a landscape conducive to stable growth not unlike the leopard spot patterns associated with Italy's first cities. The picture of commoner activity in the Albegna Valley is complicated both by the nature of the published evidence, and the rich set of sources that present narratives of various activities in the region. While commoner activity does not increase in the third century, as seen elsewhere, the rise in "farm" sites associated and a return to a more nucleated settlement pattern suggest commoner resilience and adaptability to the new realities of the colonial territory.

5.14 Rieti

⁴⁷³ For a discussion of polynuclear colonization see Pelgrom 2008, 2014, Stek 2009, 133-170; 2014.

⁴⁷⁴ Casarotto *et al.* 2016, 583.

⁴⁷⁵ Celuzza 2002, 108-110.

⁴⁷⁶ For a discussion of these population figures see Pelgrom 2013.

⁴⁷⁷ Casarotto *et al.* 2016, 583. See also Bintliff 1999, 2000, 2009.

The Rieti Survey systematically examined an intermontane basin northwest of the Sabine center of Reate, eighty kilometers northeast of Rome, between 1988 and 1993. Surrounded by limestone mountains and mostly floored by Holocene sands, clays, and peats (with some interglacial travertines), the basin floor is occupied by many small lakes as well as a series of rivers and their tributaries.⁴⁷⁸ In the Roman period, the *Via Salaria*, linking Rome to *Truentinum* on the Adriatic coast passed through the territory of Reate.⁴⁷⁹ This basin was an important node in the trans-Italic networks linking Rome to the Adriatic and the eastern Mediterranean.⁴⁸⁰ Varro and the elder Pliny reference several agricultural activities that took place in the basin during antiquity, namely various forms of animal husbandry.⁴⁸¹ Horses, mules, and donkeys from the area were viewed to be of high quality, with the *Rosea Campestris* being a famed pasture-land located somewhere in the basin, and there are references to both short and long-distance transhumance routes for sheep in the area.⁴⁸²

The survey designed a judgmental sample of the basin, aiming to examine a representative sample of the basin's topography. To this end, the project explores two south-north running one kilometer by eight-kilometer transects across the lake basin, recovering evidence from the plain and hills, one east-west running seven-kilometer transect to sample the mountainous landscapes, and a final, L-shaped, transect (six by four kilometer) to sample transhumance routes between two gorges.⁴⁸³ Within the 22 km² defined by these transects, fields were walked with teams spaced ten meters apart, with each walker assigned a four-meter transect

⁴⁷⁸ Coccia and Mattingly 1992 213-14.

⁴⁷⁹ See Coccia and Mattingly n. 5 and n. 6 for bibliography on the *Via Salaria*.

⁴⁸⁰ Marcus Terentius Varro, the prolific Latin author best today known for his *De Agri Cultura*, may have been born in Reate (Syammacus Ep. 1.2, although an alternate tradition lists Rome as his birthplace (Aug. Civ. 4,1)). The region makes multiple appearances in the *de Agri Cultura*.

⁴⁸¹ Varro 1.7.7.; 3.14.4. Pliny *NH* 9.73.

⁴⁸² Varro 2.6.2, 2.1.4, 3.2.7, 2.2.9, 2.1.17; Pliny *NH* 31.12.

⁴⁸³ Coccia and Mattingly 1992, 222.

(covering about 40% of the field). All material was collected and studied.⁴⁸⁴ Drawing on methodologies developed by the Gubbio project, the Rieti survey recorded and mapped not only those scatters they determined to be sites, but also “off-site” material.⁴⁸⁵ Occupation sites were categorized along a modified farmstead-farm-villa continuum. Farmsteads were smaller sites (less than 0.2 hectares) with evidence of occupation (ceramic and tile), farms were sites larger than 0.2 hectares with evidence for the storage of goods (namely sherds of *dolia*), villas had evidence of luxurious activities (tesserae, marble, other small finds of note). Sites that did not fit in any of these categories were grouped according to size (small, medium, large) under the catch-all category “probable occupation sites.”⁴⁸⁶ Extensive survey was also carried out in less accessible parts of the landscape. The Rieti Survey identified 64 sites occupied between 700 and 200.⁴⁸⁷ While the area covered was not as large as might be desired, the attention to off-site material, the inclusion of extensive prospection, and the intensity make this data high in quality.

5.14.1 The 7th and 6th centuries

Outside of the nucleated proto-urban activity at Reate, the seventh and sixth centuries did not see significant activity in the survey area (Table 5.12). Two nucleated sites (243 at Madonna del Passo and 9 at Gambaro) represent the most significant evidence for rural activity or commoners. Several “farm” sites saw initial use in this period and continued activity through the first millennium BCE and into the first millennium CE, demonstrating a significant degree of continuity. In general, the Rieti area saw significantly more continuity in settlement patterns than

⁴⁸⁴ Coccia and Mattingly 1992, 225.

⁴⁸⁵ Coccia and Mattingly 1992, 242-250. For a critique of this approach, see Terrenato 1996 and the previous chapter.

⁴⁸⁶ Coccia and Mattingly, 1992, 245. The authors correctly note that re-survey would almost certainly emend the category given to a number of these sites.

⁴⁸⁷ 21 farms, 16 small probable occupation sites, 7 medium probably occupation sites, 4 large sites, 2 sites somewhere between a farm and a villa 5 eventual villa sites, 1 vicus, 4 so-called structures related to villa sites, 3 unknown sites.

other survey areas. It is possible that the high intensity of the survey, as well as the off-site collection and artifact density methods played a role in producing more detailed evidence. Conversely, it is possible that the small survey area creates an artificial picture of settlement continuity.

6.14.2 The 5th to 3rd centuries

The fifth century sees a decline in all types of rural activity, connected by the surveyors with issues in ceramic chronologies.⁴⁸⁸ It is telling that several sites that stop producing material in the fifth century produce visible material again in the fourth or third. The fourth century sees a slight rise in activity across all rural classes, with an increase in dispersed smaller scatters identified by the surveyors as “farm” sites. Particular *impasto* fabrics distinct from the bronze and early Iron Age *impasto* were used as a ceramic marker of the “pre-Roman,” fourth century, rather than the preceding periods, by the surveyors. This different ceramic chronology might account for the more gradual increase in rural activity than what is seen in other surveys, characterized by a sharp rise in site number.⁴⁸⁹ The growth in evidence for rural activity continues through the third century, with the evidence for all forms of activity continuing to increase. Two possible elite sites dating to the sixth century continue to be used and material was recovered at three others for the first time in the third century, suggesting the continued presence of stratification in the landscape. Another notable feature of the data is the increasing numbers of “farm” sites with tile present beginning the fourth century and their dispersion near the rivers and further afield from the urban settlement at Rieti. While the majority of these dispersed scatters are located on the well-watered alluvial fans of the basin and hillslopes, there is also evidence for

⁴⁸⁸ Coccia and Mattingly 1995, 108-9.

⁴⁸⁹ For the *impasto* fabric see Coccia and Mattingly 1995, 114.

the increased commoner activity in the mountain landscapes along the transhumance routes. This suggests a mixture of agriculture and pastoralism leading to more visible local materials. The data from the Rieti basin presents a case for rural infill and diversified commoner economic strategies alongside a persistent elite presence.

The recurrence of material in the fourth and third centuries at sites used in the sixth suggests that there is significant continuity in the region that is masked by visibility biases related to ceramic circulation. The settlement pattern intensifies but does not appear to change dramatically in either its structure or, aside from a minimal capillary diffusion, locational preferences. The area lowlands, even though the Roman period, remain marginal with little evidence for activity aside from a background scatter of off-site scatters. Notably, the region's incorporation into the Roman state, which must have occurred at some point in the third century, does not appear to have had any effect on the settlement system in the area. The intensification of rural activity appears to have begun before Roman incorporation and was not determined or created by Roman intervention.

5.15 Corese Survey

The Corese survey was the more systematic resurvey of the area surrounding the urban site of Cures in Sabina. This region had been examined as part of the *Forma Italiae* series by Muzzioli in the 1970s.⁴⁹⁰ Muzzioli's examination suggested that the territory was sparsely populated during the middle Republic. The Corese project aimed to 1. Assess the validity of these findings 2. Reassess the chronology of settlement in light of new ceramic evidence and 3. Document mid-Republican land divisions.⁴⁹¹

⁴⁹⁰ Muzzioli 1980.

⁴⁹¹ Di Giuseppe *et al.* 2002, 103.

The survey area covered three well-defined ridges separated by fairly deep valleys cut by rivers and streams that connect to the Tiber. Silty loams cover most of the area; these parts were used primarily for agriculture at the time of the survey. The construction of new, large estates subdivided the landscape and limited archaeological visibility in certain areas.⁴⁹² The methodology that was adopted selected a 20% sample of the surface; teams of three to five walkers spaced at roughly ten-meter intervals covered two-meter corridors each, although walker spacing did vary slightly depending on surface visibility. A hybrid site/off-site strategy was deployed; in each field that was walked concentrations of material with higher densities were recorded as sites. The quality of material and size were then further analyzed to assign a function along the farm-villa continuum.⁴⁹³ This survey is a prime example of the negatives associated with a very intensive field survey. The number of sites recovered was rather small, making it difficult to extrapolate broader trends from the Corese data.

5.15.1 The 7th and 6th Centuries

Despite the supposed importance of the area for early Roman history, there was not much settlement evidence recovered by the Corese survey from the seventh or sixth centuries (Table 5.13).⁴⁹⁴ Muzzioli's larger sample size identified evidence for nucleated settlements in the area, but the Corese survey area was too small to identify spatial patterns of this nature. There is no clear evidence for elite activity in the field survey data, but ample evidence for elite groups at Cures.⁴⁹⁵ The sixth century sees a slight intensification in rural activity across all site types.

⁴⁹² *Ibid.*

⁴⁹³ Di Giuseppe *et al.* 2002, 104-107.

⁴⁹⁴ Following the abduction of the Sabine women, the Sabine men allegedly gathered at Cures since it was the largest and most prestigious Sabine city (Dion. Hal. *Ant. Rom.* 2.36.3). Numa Pompilius is alleged to have been a native of Cures (Dion. Hal. *Ant. Rom.* 2.58; Liv. 1.18).

⁴⁹⁵ Mostly from necropoleis. See Di Giuseppe *et al.* 2002.

5.15.2 The 5th to 3rd Centuries

The fifth and fourth centuries see no increase in rural activity, instead the number of sites that produced material remained stable. While there is literary evidence for numerous Roman raids into Sabine territory during this period, a regional lack of diagnostic ceramic, as well as shifts in fine ware distribution patterns appears to be a more likely culprit for this low evidence of activity.⁴⁹⁶ The third century sees a notable increase in rural activity across all but elite site types, which decline. All of the commoner and “farm” sites are used in subsequent periods as well, suggesting that the settlement pattern established in the third century possessed an element of stability.

The area around Cures is the one survey area in my database where a case can be made for rural infill caused by the Roman conquest. According to the *periochae* of the fourteenth book of Livy, Manius Curius Dentatus conquered Sabina in 290.⁴⁹⁷ Part of the population of the region was given citizenship without the vote, and Roman citizens were moved into other parts of the area.⁴⁹⁸ Already in 268, the Sabines received full Roman citizenship and were incorporated into the *tribus Sergia*.⁴⁹⁹ Muzzioli’s study of the area around Cures identified evidence for centuriation based on the location of the modern road network.⁵⁰⁰ She argued that the area was divided on a 10x10 *actus* module which enclosed 50 *iugera* of land.⁵⁰¹ Based on a close reading of the *Corpus Agrimensorum*, Muzzioli dated the construction of the grid to soon after the

⁴⁹⁶ Methodological biases related to the small sample of the survey also cannot be ruled out. For Roman-Sabine conflict see Liv. 2.63.7; 2.64.3-5.

⁴⁹⁷ Liv. *Per.* 14.

⁴⁹⁸ Liv. *Per.* 11.

⁴⁹⁹ Cic. *Vat.* 15.36.

⁵⁰⁰ Muzzioli 1980, 37; Di Giuseppe *et al.* are skeptical, stating that a close study suggests that the modern roads are not necessarily evidence for ancient centuriation, Di Giuseppe *et al.* 2002, 177.

⁵⁰¹ Pelgrom 2012, 120.

conquest of the region in 290.⁵⁰² This would suggest that parts of the land were taken and sold in the period that saw evidence for rural activity increase.

Does this mean that there is evidence for rural infill caused by Roman intervention at Cures? Not necessarily. First of all, the sample of data is quite small due to the intensive nature of the survey. Secondly, there are a number of sites that provide evidence for continuity, especially in the “farm” category, across the period of the Roman conquest. It is possible that a more extensive sample would show even more evidence of continuity. The land might have been divided and parts of it sold, but survey does not provide evidence for who purchased the land. The contemporaneous nature of similar processes in the above regions, where a more robust sample of data exists, also calls a causal link between Roman intervention and the rural infill of the area around Cures into question. Roman action may have facilitated the dispersion of rural settlement through the sale of land, but the process of settlement dispersion was likely underway already and commoner activity would have become more materially visible regardless of Roman intervention. It is also possible that a closer examination of Muzzioli’s study and the Corese data in conjunction with one another might reveal more of this settlement pattern. A larger sample of data is needed to extrapolate general patterns of landscape change and investigate if this is really a true example of Roman-directed landscape transformation. The fact that this is a unique example does not mean that Roman intervention is not the driver of this rural infill, this is one of the few areas where textual information allows a firm data to be suggested for the conquest of

⁵⁰² This argument was based on a passage in the *Liber Colonialium* II that states that land was sold by *quaestores* and enclosed in 50 *iugera* squares. Since, according to Hyginus and Siculus Flaccus, *ager quaestores* was land taken *ex hoste captos* (Hyginus C 82.23; Siculus Flaccus C 104.1), other examples of land sold by *quaestores* showed a quick turnaround between conquest and sale (*e.g.* Campania in 205, Liv. 28.46), and the land near Cures was presented as a classic example of quaestorian land, the sale must have occurred quickly. A polygonal masonry wall was associated with these land divisions by Muzzioli, but Pelgrom is surely correct that this structure is more likely associated with the Caesarian division. See Muzzioli 1975, 226-28; Pelgrom 2012, 121 n.433.

the area. However, even with the small sample size, the continuity of “farm” sites across the conquest boundary suggests that more than political shifts are at play in the area.

5.16 Civitella Cesi

The Civitella Cesi Survey investigated the area surrounding the Etruscan center of San Giovenale, near the modern village of Blera in southern Etruria. The survey was carried out between 1981 and 1989. The publication was originally intended to be part of the *Forma Italiae* series and owes much of its form to the structure of this style of survey.⁵⁰³ Teams of four to five surveyors walked longitudinal transects when possible; however, due to the natural topography, other techniques were often required. For example, in the hilly landscapes that dominated the area, two to three surveyors walked with roughly ten meter spacing, traversing the contour of the hills in a *boustrophedon* style.⁵⁰⁴ Sites were defined as “a concentration of pottery and tile with or without other evidence of building.”⁵⁰⁵ The nomenclature from Roman sites was drawn from the South Etruria survey and each site identified was given a numerical chronology, rather than relying on periodization.⁵⁰⁶

The most prominent topographical features in the survey area are two river valleys belonging to the Fiume Mignone and the Torrente Vesca. About half the area is covered by high, rugged limestone hills, with the rest of the area is covered with older limestone outcroppings, Miocene clay conglomerates, volcanic hills with steep cliffs, and tuffs from the eruption of the Vico volcano.⁵⁰⁷ The surveyors suggest that, if we can extrapolate from the modern situation, the underlying geology likely affected land use patterns in antiquity. The high, rugged limestone

⁵⁰³ Hemphill 2000, 22.

⁵⁰⁴ Hemphill 2000, 23.

⁵⁰⁵ *Ibid.*

⁵⁰⁶ Hemphill 2000, 142-3.

⁵⁰⁷ Hemphill 2000, 19-20.

hills are not well suited to agriculture but do provide arboreal resources and some pastureland. The older limestone hills, Miocene clay beds, and volcanic hills show evidence for past ploughing activity. Stone from the older limestone deposits was used frequently for construction. The areas covered by the Vico tuffs are flat and ideal for occupation as well as agriculture. Sitting only twenty-five kilometers from the Tyrrhenian Sea, elevations vary in the survey area from between 500 and 1800 m above sea level.⁵⁰⁸ The hilly nature of the survey area had direct effects on the recovery of material, scatters on hillsides frequently washed downhill, to a distance of up to 500 meters. High ceramic fragmentation, due to modern ploughing, was also noted.⁵⁰⁹ The Civitella Cesi survey identified fifty-six scatters of variable sizes dated between 700 and 200.

5.16.1 The 7th and 6th centuries

The survey data suggest moderate levels of rural activity in the seventh century, followed by a slight increase in evidence for commoner activity in the sixth (Table 5.14). There is a remarkable degree of continuity at scatters in the area, with seventeen of the twenty commoner sites producing material for more than two centuries. Three possible elite sites produce material dated to the seventh and sixth centuries. One of these appears to have been abandoned in the fourth century, but the other two have long occupation histories that continue through the rest of the first millennium. One of these sites produced *Bucchero*, early black gloss, and tuff blocks in association with concrete and later fine wares. According to Di Giuseppe's methodology outlined in chapter 3, this could be a palatial site similar to the Auditorium site.⁵¹⁰ *Bucchero* is

⁵⁰⁸ Hemphill 2000, 21.

⁵⁰⁹ Hemphill 2000, 21. A site with a 3 m. diameter when first discovered in 1983, when resurveyed in 1987, was measured at 50 m² and had moved downhill up to 40 m.

⁵¹⁰ Site 66, see Hemphill 2001, 46.

more common in this survey area, suggesting a close material association with Caere and other bucchero-producing southern Etruscan centers.

5.16.2 5th to 2nd Centuries

A decline in rural activity in the fifth century is followed by another period of slight decline in the fourth century. The dramatic changes come in the third century, where evidence for commoner activity nearly doubles. While elite activity does not increase dramatically, this is in part due to the longevity of several structures that I categorized as possible elite sites and become villas in later periods.⁵¹¹

The surveyors suggested that the spatial distribution of activities changed between the sixth and third centuries. Across all periods, the majority of sites were located on the tuff plains near the river valleys, although this pattern might be associated with visibility conditions. The third century saw an increase of occupation in more marginal upland areas.⁵¹² The distribution of fine ware also suggests a reorientation of exchange networks. Bucchero appeared primarily in sites in the direct hinterland of San Giovenale or at sites along the Etruscan roadway running southwest into the Mignone river valley. Black gloss, on the other hand, appears in scatters distributed more evenly across the landscape and penetrates the rural landscape beyond the established road system.

The urban site of San Giovenale was largely abandoned by the middle Republican period but the countryside in the area does not see a concurrent decline, in fact, quite the opposite.⁵¹³

The surveyors suggested that rural occupation did not decline in conjunction with San Giovenale

⁵¹¹ For site 134, see Hemphill 2001, 85. The site has a similar material signature (ashlar blocks, concrete building material) but lacks the bucchero, with the earliest fine wares dated to the fourth century.

⁵¹² For discussion see Hemphill 2001, 137.

⁵¹³ Hemphill 1993.

because the region was relatively unimportant. The surveyors suggested that since there was not a major urban site, there was no need for violent conquest by the Romans, allowing settlement continuity.⁵¹⁴ This is the opposite argument to that made by the surveyors of Cures. The absence of an urban site, yet the presence of an increase in rural and commoner activity suggests that the area's rural economy was not tied to the local urban exchange. The presence of elite sites in the area suggests the survival of a local elites and a continuity in their relationships with commoners might have played a role increased rural activities. The changes in the distribution of bucchero and black gloss, one tied to the road networks and the other distributed in a capillary style throughout the region, suggest shifts in exchange networks and the mechanisms that distributed ceramic after the abandonment of San Giovenale. A more urban focused network of exchange may have been inverted, and shifted to focus on rural spaces following the abandonment of the local primary settlement.

5.17 Ager Caeretanus

The *Progetto Ager Caeretanus* examined an area of roughly 100 km² between the Etruscan city of Caere and the Tyrrhenian coast to the south. Over 1,420 hours between 1985 and 1989, nine-hundred and twenty sites were identified and dated from the prehistoric through modern periods.⁵¹⁵ The geological landscape of the area is made up of a mixture of coastal plains (comprising alluvial sediments) and a series of tuff hills.⁵¹⁶ The surveyors took the surface visibility into account and categorized the survey region in a three-tier system.⁵¹⁷ Sixty-six km² were characterized in the highest visibility tier, primarily made up of agricultural land, visited by

⁵¹⁴ Hemphill 2001, 136-7.

⁵¹⁵ Enei 2001 35.

⁵¹⁶ Enei 2001, 20-1.

⁵¹⁷ “1) visibili; 2) a visibilità limitata; 3) a visibilità nulla. (Enei 2001, 35).

plows, twelve km² were in the second tier, primarily made up of woodlands and greenhouses, fourteen km² were not accessible due to quarrying and modern building and assigned to the third tier. The majority of the recovered sites come from these areas of good visibility, suggesting that they might represent a reasonable sample of the area's settlement system. The recovered evidence for rural sites is listed in an extensive catalogue in the project's publication. The site used a classification scheme modeled after South Etruria; sites are classified along the spectrum of huts to villas.⁵¹⁸

5.17.1 The 7th and 6th centuries

There is moderate evidence for all types of rural activity in the seventh century (Table 5.15). The sixth century sees a dramatic rise in commoner activity. The commoner scatters dated to the sixth century are comprised of impasto ceramic and early tile forms. These scatters appeared in diverse landscapes, ranging from tuff hills to fluvial valleys and the coastal plains.⁵¹⁹ Contemporaneous with the appearance of these rural sites, there is also an increase in elite sites, namely rural necropoleis with monumental construction. While most of the rural activity is concentrated in the agricultural interior, there is some evidence for commoner activity along the coast, potentially taking advantage of coastal marine resources. A higher proportion of the sixth century scatters have either bucchero or evidence for a permanent presence in the landscape, primarily tile. Since Caere was an early center for the production of bucchero, its presence and diffusion into the site's hinterland should not necessarily come as a surprise. It is difficult to separate this rise in visible activity from the urbanization taking place at Caere. The growth of

⁵¹⁸ “Come negli agri di Veio e di Cosa, si distinguono grandi complessi propriamente definibili *villae* (categorie A e B) e piccoli insediamenti rustici (categoria C), ai quali sembrano corrispondere meglio gli antichi termini di *casae* e *teguria*, presenti in alternative al termine *villae* nelle opera di Varrone e Columella (Enei 2001, 67).”

⁵¹⁹ Enei 2001, 49.

the urban site likely led to a new demand for various rural products ranging from food to building materials. Bucchero occurs with some frequency at commoner sites, suggesting material surplus amongst the rural population as well as local exchange networks that facilitated the movement of this ceramic.

5.17.2 The 5th to 3rd Centuries

In the fifth and fourth centuries, the *Ager Caeretanus* again follows the general pattern seen elsewhere in southern Etruria: a nadir in visible rural material culture leads to a dramatic decline in evidence for rural activity. There is evidence that this is a regional phenomenon, and likely does not represent rural abandonment but rather a poor understanding of common ware chronologies coupled with shifts in exchange networks that reduced the presence of dateable fine ware.⁵²⁰ The third century is a period of increased activity across all site types. The peak in rural activity is less dramatic than that seen in the sixth century, but this is primarily due to the presence of several single-period sites dated to the Archaic period, perhaps associated with activities occurring in conjunction with this phase of urban growth and then no longer used. Conversely, some of these single period sixth-century sites have ephemeral traces of later occupation in either the later Republic or the Imperial period nearby.⁵²¹ It is possible that ceramic fragmentation or the stochastic nature of surface conditions have overinflated the sixth-century evidence, compressing some of the site chronologies.

Returning to the third century, the majority of new activity areas in the third century are small, less than one hectare in area. The new third century scatters frequently contain either

⁵²⁰ Pottery chronology for these centuries is very unclear. Fine ware in southern Etruria that was believed date to the fifth and fourth centuries at the time of the South Etruria survey, namely gray bucchero and internal-slip ware has been re-evaluated and re-dated to the sixth century and post-fourth century respectively. As a result, until local common ware chronologies are significantly improved, it will be difficult to date sites to these periods. See Patterson *et al.* 2004, 7.

⁵²¹ See sites 234 and 239 Enei 2001, 197-198.

black gloss or tile. Evidence for new, middle Republican activity is not only found in the direct hinterland of Caere or the larger nucleated settlements, but it is also found some distance from these urban spaces.⁵²² There are no rural necropoleis identified for this period, but later villa sites have third-century material suggesting possible elite rural activity areas.

The surveyors at Caere attempted to connect this second peak in rural settlement with Roman intervention, namely the creation of the city as a Roman protectorate and confiscations of land.⁵²³ The historical record paints a bleak picture for the fate of the *Ager Caeretanus*; Dio claims that Caere lost half of its territory after an unsuccessful revolt in the early third century and Roman colonies were founded at Alsium, Pyrgi, and Fregenae, further diminishing the cities territorial extent.⁵²⁴ As the surveyors note, it is difficult to connect the landscape evidence for resurgent settlement in the third century with this political-military event.⁵²⁵ Recent archaeological work at the city of Caere has highlighted a period of urban renewal following the softening of the political boundary between Rome and Caere in the third century.⁵²⁶ It is possible that the rural infill visible at Caere is related to this renewed investment in the urban area, with an increased demand for material necessitating an increase in rural activity. It is also possible that the gradual cessation of hostilities between the various polities of Southern Etruria and northern Latium allowed for more dispersed activities. The sixth century peak in activity, in this model, would have been related to incipient urbanism while the third century peak was caused by both a resurgent urban space and a decrease in the risks associated with rural occupation.

⁵²² See Enei 2001, 65 for a discussion of this point.

⁵²³ Cass. Dio 10. 33; Liv. *Per.* 12.4; Flor. 1.1.21.

⁵²⁴ For the foundation of Alsium see Vell. 1.14.8; for Fregenae see Liv. *Per.* 19.5, Vell. 1.14.8; Pyrgi's colonial foundation is not recorded by any ancient authors, but Livy lists it among maritime colonies in 36.3.6. Roselaar 2010 n. 81 argues that it makes sense for this foundation to have taken place in the context of the First Punic War, although this maritime-imperialist model for colonial foundations should be subjected to scrutiny as we consider more sophisticated models of Roman expansion.

⁵²⁵ Enei 2001, 62.

⁵²⁶ Colivicchi 2015.

5.18 Torrimpietra

A recent contribution to the *Forma Italiae* series, the *Torrimpietra* volume presents the results of a five-year survey of a 100 km² area between the ancient *via Claudia* and *via Aurelia* northwest of Rome.⁵²⁷ The geological landscape of the survey area consists of tuff plateaus deeply cut by watercourses.⁵²⁸ The survey followed the *Forma Italiae* project methodology. Extensive systematic survey over the entire landscape, coupled with the investigation of aerial photos. Teams of three to five fieldwalkers covered the countryside on foot, returning in different seasons and when the ground was in various states of cultivation. While not as intensive as other survey projects in this dossier, the Torrimpietra survey did cover a more significant landscape sample than many surveys, especially in the environs of Rome. No major urban center was present in the area during antiquity, although the survey area does sit between and not too distant from Caere and Rome. One hundred ninety-nine scatters were identified that contained evidence of activity between 700 and 200.⁵²⁹

5.18.1 7th and 6th Centuries

There is minimal evidence for rural activity during the seventh century. This is followed by a dramatic increase in commoner activity in the sixth (Table 5.16). This shift in activity between the seventh and sixth centuries is mostly artificial, however, and related to the dating criteria used by the surveyors.⁵³⁰ Twenty-six of scatters associated with commoner activity have no material post-dating 500, and thirty-five sites have a hiatus in dateable material beginning in

⁵²⁷ I.G.M. 149 I NO – *Torrimpietra*.

⁵²⁸ Tartara 1999, 1-24.

⁵²⁹ This number differs from that recorded by Palmisano in his database for the same period. However, after comparing my database with Palmisano's, Launaro's (Launaro 2011, 231-40), and the *Torrimpietra* volume it appears that Palmisano's database contains errors in date assignation (in Palmisano's database, sites dated from the Archaic through the "Roman" period were recorded as -600 to -500, rather than -600 to 500).

⁵³⁰ Impasto was assigned to the Archaic period, which the surveyors suggest dates from 600 to 500. Tartara 1999, 30. Impasto is certainly also in use during the seventh century.

the fifth century, only to reappear as areas of activity in later periods. The diffusion of sites takes place across the landscape, with little evidence for nucleation.⁵³¹ Six scatters with signs of activity in the sixth century later became villas, tentative evidence for the presence of a local elite.⁵³² Many of the sixth-century areas of commoner activity are relatively ephemeral character, being small in size (the majority is less than 0.02 ha) and lacking any structural materials, namely tile. This suggests that, while there was commoner activity taking place, either the surplus it was producing or the networks bringing material into those area were not particularly robust.

5.18.2 The 5th to 3rd Centuries

The fifth century saw a steep decline in recovered material, which the surveyors associated with a lack of well-dated ceramics. The fourth century likewise lacks well-dated material.⁵³³ In the third century, there is a significant increase in commoner activity; forty-five new sites appear in this period, and twenty-one scatters that have fifth-century material but lack fourth and third-century ceramics, have new evidence for commoner activity in the third century. Sites are spread across the landscape in a similar fashion to the settlement pattern seen in the sixth century, but unlike the sixth century, non-local ceramics and fine ware, primarily black gloss, are found at of these dispersed sites.⁵³⁴ The third century scatters consistently produce tile as well as other ceramic material, suggesting a shift in building techniques towards more durable structures. The reappearance of material at fifth-century scatters in the third century suggests that while new, more visible material culture was making its way into the region and rural surplus

⁵³¹ Tartara 1999, 32.

⁵³² Only one of these sites (Site #92) had any material outside of impasto and tile present that might tentatively suggest a more substantial habitation, it is worth noting the presence of limited, potential continuity in the few sites at the top of the settlement hierarchy.

⁵³³ Taratara 1999, 32.

⁵³⁴ Tartara 1999, 33-4.

was being used in different ways, many of the areas were likely used over these three centuries and the lacuna is related to changes in consumption patterns and material access, rather than population change. Elite sites reappear in the third century, alongside the increase in rural material culture. The rural production system in this region does not appear to have been significantly changed between the sixth and third centuries; instead, there is a general continuity in the areas that produce evidence for commoner activities interrupted by changes in diagnostic ceramic and systems of exchange. Rural infill in this region is significantly less dramatic than those regions further north, in line with the trends in the Ager Caeretanus.

5.19 Collatia

Lorenzo Quilici, aware of the effects that rapid urbanization was having on the archaeological record in the hinterland of Rome, launched a one-person, emergency survey of the territory surrounding the ancient town of Collatia in 1969 in order to recover as much of the surface record as possible before its destruction by new construction.⁵³⁵ Located about fifteen kilometers northeast of Rome along the Via Collatina, the city follows a similar trajectory to its southern neighbor of Gabii. Collatia is a fixture in the legendary, regal history of Rome; conquered by Tarquinius Superbus, it was in Collatia that Sextus Tarquinius was alleged by ancient literary sources to have raped Lucretia, the wife of Lucius Tarquinius Collatinus, a Roman consul with a fascinating mix of Etruscan and Latin names.⁵³⁶ Like Gabii, this Archaic center fell into decline and had contracted significantly by the Republican period before a revival in the early first millennium CE.⁵³⁷ The survey followed the *Forma Italiae* topographical

⁵³⁵ Quilici 1974, 11. He was not wrong as much of the surface was covered in the subsequent decades.

⁵³⁶ For the conquest of Collatia see Dion. Hal. 3.50 or Liv. 1.38; for Lucretia and Sextus see Dion. Hal. 4.64 or Liv. 1.58-59.

⁵³⁷ Quilici 1974, 52. See also *Aeneid* 6.774 where Virgil lists the walls of Gabii and the towers of Collatia in the same breath as sights of Latium still to come. It is worth pondering whether excavations at Collatia would reveal a situation similar to Gabii, where the “decline” needs to be couched in terms of civic transformations.

tradition in defining its boundaries using an I.G.M map, covering an area of 110 km² and cataloguing 856 sites in total. The research area covered a territory that stretched from the Alban hills to the Aniene river, formed primarily by the pyroclastic flow of the extinct regional volcanoes. The scatters that were identified were classified following the historiographical categories used by South Etruria. While the size of the survey team was small, this was a groundbreaking volume for the *Forma Italiae* series in numerous ways. It is the only volume among its contemporaries to give a broad chronological indication for the recovered material, describe ceramic wares, and even providing drawings and photographs for ceramic from more marginal sites. While the intensity of the survey can be questioned, the volume of data is significant and the location of the study area, near the hinterland of Rome, makes it a valuable source of regional information.

5.19.1 7th and 6th Centuries

The Collatia survey recorded little evidence for activity from the seventh century, followed by a notable increase in the sixth century (Table 5.17). These scatters, grouped primarily along the later road system and the Aniene river, were mostly small in dimensions. Roof tiles, impasto, and other common ware ceramics predominated. Fine wares, especially bucchero, were notably absent.⁵³⁸ These small scatters were often nucleated into what the surveyor(s) interpreted to be small villages. There were potential signs of elite activity, namely in the form of scatters identified as necropoleis due to their ceramic and material signatures and metal finds (bronze and iron) potentially related to elite necropoleis.⁵³⁹ There is also ample

⁵³⁸ Found only at sites 206, 265, 332, 419, 782.

⁵³⁹ Sites 11, 100, 332, 265.

evidence that elites were present in the area of Gabii and this situation can likely be extrapolated to Collatia in the same period.

5.19.2 5th to 3rd Centuries

While Quilici notes that it was difficult to differentiate between sixth and fifth-century material in the survey area, a difficulty shared by most of the survey projects in my sample, the fifth century sees a moderate decrease in commoner and rural activity. The ceramic chronologies used to date sites to this period, primarily based on roof tiles and *impasto bruno*, might benefit from revision, and a dose of skepticism should be used when judging this pattern. That caveat aside, the fifth century in this area was a period that saw numerous urban sites such as Collatia, Gabii, and Rome grow in size, suggesting that regional activity may have been focused on these urban sites. The fourth century experiences many of the same issues regarding older ceramic chronologies and a reliance on tile chronology for dating, but there is an increase in the numbers of identified scatters with material dated to the fourth century. There are slightly fewer dispersed commoner activity sites, and perhaps more nucleation. Commoners may have seen increased demand for rural products during another phase of urban growth. Quilici believed that a booming regional rural economy in the Archaic and early Republican period led to the rise in walled houses with tiled roofs, leading to the dating of red-brown ceramics to this period.⁵⁴⁰ The logic might be circular, but a comparison between these roof tiles and tiles from the Area D complex at Gabii might provide a method of better dating this coarse ware ceramic and determining if Quilici's assertion is valid.

The third-century material looks like a canonical case of rural infill. Commoner scatters increase and these newly visible scatters are distributed more widely across the countryside, fine

⁵⁴⁰ Quilici and Quilici Gigli 1980, 283.

wares, namely black gloss, are found at these new scatters much more frequently than in previous periods, and there is more evidence for permanence in the landscape. While tile was previously frequent, now there is evidence for stone construction as well as ample evidence for tiled roofs. It is not only scatters interpreted as commoner activity areas that increase, as Quilici also notes a rise in rural sacred spaces, identified through the presence of terracotta architectonic decorations, tuff altars, and votive deposits.⁵⁴¹ There is less evidence for rural elites, perhaps due to their movement to the regional urban center (*e.g.*, Collatia, Gabii, or Rome). The survey intensity and chronologies are certainly dated, but the evidence from the Collatia survey suggests rural changes taking place between the fifth and third centuries.

The nature of these changes in the hinterland of Collatia, however, needs reinterpretation. Quilici suggests that demographic changes lead to the dynamic rural evidence he recovered (in what is a rote explanation for changes in rural settlement patterns). By now it should be clear that a demographic explanation is difficult to support based on this survey, but even more challenging to justify in this area of Latium that is under demographic pressure from a rapidly growing Rome, not to mention other regional urban sites. Rather than demographic change, the steady rise in rural evidence must relate to the changes in the demand for consumables from the areas new metropole (Rome) and ancillary urban spaces. These demands could lead to changes in rural consumption practices and raise the overall standard of living as more land is exploited, networks crystallize, and commoners have access to more durable material culture.⁵⁴² Despite the absence of elite sites, it seems likely that relationships between urban elites and these dispersed commoners were still important as urban spaces would have been one of the significant markets for various rural goods.

⁵⁴¹ Quilici 1974, 37.

⁵⁴² See Millett 1991 for a discussion of farms, networks, and visibility.

5.20 The Pontine Plain

In 2000, a team of Dutch archaeologists began to investigate the hinterland of Satricum in order to locate protohistoric sites recorded by Piccarreta as part of the *Forma Italiae* project.⁵⁴³ Over the next seven years, the project expanded and grew into an investigation of the territory of the town of Nettuno with the goal of creating a new *Carta Archaeologica di Nettuno*. The surveyors were particularly interested in the early Roman colonization of the area since it sits between two early colonial foundations: Satricum, where a colony was allegedly placed in 385, and Antium, with foundations recorded in both 467 and 338.⁵⁴⁴ Both colonies were not founded *ex novo*, however, as settlements are well attested archaeologically in the early Iron Age at each site.⁵⁴⁵ Multiple spinoff projects arose, leading to a synthetic publication (Attema *et al.* 2010), a publication focused on the early colonial landscape of the area (De Haas 2011), and a more methodological publication that used intensive collection techniques to examine economic questions in the area (Tol 2012). The survey methods are sophisticated, including resurvey and the close consideration of off-site material, and the intensity is high. However, the area covered is relatively small.

The area around Nettuno sits on the Tyrrhenian coast about sixty kilometers south of Rome. The present-day landscape is formed of Aeolian sands, sitting atop volcanic sediments formed during the various volcanic eruptions in the volcanic band in Lazio. The sands form the Latina complex, a marine terrace formed by sea level change during the Pleistocene. The underlying geology (limestone deposits known as *Macco*) is only exposed at isolated points in

⁵⁴³ Piccarreta 1977.

⁵⁴⁴ These early colonies failed. For Satricum see Diod. Sic. 14.102 and Liv. 6.6-8. For Antium see Liv. 8.14.

⁵⁴⁵ Antium is far less well investigated due to the growth of modern Anzio. Most of the remains (including a protohistoric agger defense) were recovered in rescue excavations (for an overview see De Haas 2011, 174). Satricum, conversely, has been subject to extensive systematic excavations by the Dutch (the results of which have already appeared in previous chapters). For an overview of recent work see Gnade 2003, 2006, and 2007.

the valleys of the two rivers that run through the area (the Loricina and Astura) and at specific points along the coast (for example at the Villa Nerone at Antium).⁵⁴⁶ The surveyors noted several geological and anthropogenic factors that have affected the surface archaeological record in the area. The sandy surface soils are prone to erosion and sea levels have risen more than 1.2 meters since Roman times. This has led to the poor preservation of some sites. The growth of Nettuno, one of the coastal resorts south of Rome, has obscured archaeological evidence beneath modern buildings as well as changing the coastal dynamics through the construction of port facilities. Recent land reclamation projects have covered the surface with soil relocated from other areas of the region. Finally, mechanized agriculture and the repeated deep ploughing of fields has led to fragmentation and degradation of archaeological sites.⁵⁴⁷

Modern land use precluded the investigation of more than a small sample, 4.7% of the study area, covering 772 hectares intensively. The survey began exploring previously identified sites along the coast but expanded to include intensive survey. Arable and fallow fields were divided into units (usually 50 by 50-meter grids) and sampled through systematic line walking with a distance of 10 meters between walkers, in total a 20% coverage of the surface assuming complete artifact recovery. All of this data was recorded. When finds densities were high, additional material was collected for dating and interpretive purposes. A catalogue of sites was included in the 2010 synthesis with minimal interpretation (a standard entry reads “The material assemblage indicated occupation somewhere during the Roman Period”) although the text of this volume, Tol’s volume, and De Haas’s volumes include interpretive elements.

5.20.1 The 7th and 6th Centuries

⁵⁴⁶ For a more in-depth discussion see Tol 2012, 1; Attema *et al.* 2010 1-9; De Haas 2011, 6-13, 39, 82-86, 116-120.

⁵⁴⁷ Piccarreta already noted this damage in the 1970s (Piccarreta 1977, 6). See also Tol 2012, 1; Attema *et al.* 2010, 7.

The evidence for rural activity in the area sees an initial peak in the sixth century (Table 5.18). Most of the sixth century scatters are small and consist primarily of tile. The rest of the ceramic assemblage is dominated by coarse wares, although four sites do have bucchero present. De Haas outlined a four-tiered rural settlement hierarchy: the urban centers at Antium and Satricum, one hamlet with nucleated settlement identified in previous fieldwork, sites with both coarse wares and tiles were interpreted as farms, sites without tile but coarse ware pottery were interpreted as huts.⁵⁴⁸ Spatially, these scatters are located on hills and streams, areas well suited to agricultural exploitation.⁵⁴⁹ The increasingly urban nature of Satricum and Antium, as well as the increase in production at those sites, appears to have played a role in the increase in archaeological visibility across the landscape, suggesting an initial period of rural infill. Tile and ceramic were produced in the urban centers, then distributed to rural sites where they were likely exchanged for agricultural products. While there is ample evidence for elites at Satricum, there is minimal evidence for rural elite activity during the seventh and sixth centuries.⁵⁵⁰

5.20.2 The 5th to 3rd Centuries

The fifth century sees a slight dip in rural and commoner activity, but this is far less dramatic than seen elsewhere in central Italy. The increased knowledge of fifth-century ceramics, in this case namely a yellow-white fired tile fabric dated through excavations at Satricum to this period, played a significant role in identifying evidence for post-Archaic settlement continuity in the countryside between Antium and Satricum.⁵⁵¹ This provides an important blueprint for best practices when investigating middle Republican rural activity – local ceramic chronologies and

⁵⁴⁸ For a farm site see Attema *et al.* 2010, site 1508. For the discussion of the hamlet see Attema *et al.* 2007/8 Fig. 14.

⁵⁴⁹ De Haas 2011, 182-3.

⁵⁵⁰ The only possible elite site is a villa that produces evidence for material from 1000 BCE through 600 CE. Continuous elite habitation at this site would show an almost unbelievable degree of continuity.

⁵⁵¹ Tol 2012, 370.

coarse ware chronologies in particular are crucial for a holistic view of rural change. De Haas argues that the increased presence of this tile at rural sites suggests that many of these scatters are farms.⁵⁵² The fourth century sees another increase in evidence for rural and commoner activity. The actual changes in visible activity might be higher than what is represented in Figure 5.18, as several sites were identified as “possibly occupied” during this period by the surveyors. These sites were not included in my database due to a lack of dateable ceramics.⁵⁵³ Rural scatters dispersed across the landscape as nucleated sites were abandoned in favor of more isolated areas. Signs of economic growth in the countryside and improving standards of living are high in this period, namely black gloss and imported amphorae appear more frequently at sites of commoner activity.⁵⁵⁴

Rural infill takes place in the Pontine plain earlier than in the other regions examined here: first in the sixth century and then in the fourth. The sixth-century peak is likely related to the development of Satricum and Antium into urban centers, leading to an increased exchange between town and country as demand for rural goods rose, and new networks of exchange were created. Similar patterns were visible in various survey areas, especially in the Ager Caeretanus and the hinterland of Collatia. This pattern also echoes the argument made for Northern France in Chapter 2, that a rise in higher order nucleated sites led to agricultural changes and more intense rural activity. The fourth-century rural infill does not afford as clear an explanation. The various studies of the area suggest multiple possible causes for this increase in rural commoner activity. Demographic changes, perhaps taken from the declining population at Satricum, are

⁵⁵² A somewhat teleological argument (De Haas 2011, 186, especially n. 706). All of the post-Archaic sites have tile, but it was also the primary dating material for this period. Rather than an increase in permanence in the landscape, I think this should rather be read as a continuity in a permanent commoner presence already seen in the Archaic period.

⁵⁵³ See De Haas 2011, 191 for a full discussion.

⁵⁵⁴ De Haas 2011, 193.

suggested, although it is also noted that Antium appears to expand during the same period.⁵⁵⁵ The increase is not significant enough to suggest a massive influx of colonists, rather perhaps some degree of natural demographic growth. From a historical perspective, the fourth century sees the end of major conflicts between the Volscians and the Romans; the more stable military and political situation might also have allowed for a shift between nucleated and dispersed settlement.⁵⁵⁶ Changes in material networks must also be taken into account, although the changing nature of regional urbanism, one site in decline, the other persistent, paints a more complicated picture for new networks than the sixth-century scenario. New roads are put in place, allowing for easier movement through the landscape, and there is evidence for an increase in the use of marginal land through drainage activities in particularly swampy areas.⁵⁵⁷ Indeed, the reclamation of marginal land is seen by De Haas as an action that is directly related to the colonial foundations in the area, part of *viridane* distributions.⁵⁵⁸ Finally, there is the specter of Rome and the demand the growing metropolis would place on the areas surrounding the city. Notably, the colonies at Satricum and Antium, founded earlier and located on previously occupied Latin sites do not produce a nucleated settlement plan similar to that suggested for Cosa. The only possible elite sites are a series of late Republican and Imperial villas that produce very little material from the middle Republic. The low evidence for elite presence might be due to the nearby urban sites. Two other factors cannot be ruled out regarding the trend in rural activity noted for this area. The better understanding of coarse ware ceramics may have meant that the pattern recognized here, notably the fourth century initial period of rural infill, is more indicative of what would be seen in some other regions if we possessed a better grasp of coarse

⁵⁵⁵ Attema *et al.* 2012.

⁵⁵⁶ De Haas 2011, 193.

⁵⁵⁷ De Haas 2011, 269-70.

⁵⁵⁸ This historical bases for this is the creation of the *tribus Oufentina* named after the river in that area.

ware chronologies. At the same time, despite the intensity of the investigations, this survey was only covering a small sample of the survey area and it is very possible that a more general regional sample might present a slightly different picture.

5.21 The Liri Valley

The lower Liri valley fell in the hinterland of two Roman colonial foundations, Fregellae and Interamna Lirenas (founded in 328 and 312 respectively). A team from McMaster University systematically examined the lower Liri Valley between 1978 and 1983. Since 2010, a team from Cambridge University, the *Roman Colonial Landscapes* field project, has been systematically examining Interamna Lirenas, using a combination of rural survey, urban survey, magnetometry, and excavation.⁵⁵⁹ I will consider the evidence from both projects. The more recent project at Interamna has a more sophisticated methodology but is yet to publish their full results. The Liri Valley project is published, but is assuredly a product of its time. The lower Liri Valley is part of a larger intermontane basin related to the Apennine Mountains, a depression created by faults in Mesozoic rocks and was partially filled by volcanic and fluvial/lacustrine sediments during the Pleistocene.⁵⁶⁰ The landscape of the valley can be divided into three major categories: mountains, mountain slopes, valley floor. Numerous rivers cross the valley (the Liri, Gari, and Melfa) creating fluvial deposits that have buried some Roman period sites beneath alluvial deposits.⁵⁶¹

The Liri Valley Survey team used various methods to investigate the landscape. Sites that had previously been recovered, usually in the commercial excavation of sand and gravel, were revisited to collect new material. Mountain areas, caves, and rock shelters were visited for

⁵⁵⁹ See Bellini, Launaro and Millett 2014; Launaro and Leone 2018; Ballantyne et al. 2016.

⁵⁶⁰ Martini 1994, 5.

⁵⁶¹ Martini 1994, 6-9.

prehistoric material. Extensive survey was carried out along potential ancient roadways and river crossing, and intensive survey took place “whenever ‘settlement survey’ was paramount.”⁵⁶² This phrase is difficult to parse, and does call into question the representativeness of the sample. The surveyors chose bounded blocks of land, between 0.5 and one kilometer long, and walked them with 2-4 fieldwalkers at a distance of 15-25 m., zigzagging slightly. Whenever between two to three objects were observed together, an intensive “combing” took place.⁵⁶³ This terminology is, once more, difficult to define in more scientific terms. Sites were categorized based on a mixture of artifact density, the presence or absence of certain fine wares, and overall size as either Villas, Major Sites, Minor Sites, or Scatters.⁵⁶⁴ The Roman Colonial Landscape team intensively surveyed four km² in the hinterland of Interamna, walking with 3-5 meters between fieldwalkers in freshly ploughed fields. All material was collected (resulting in 6,365 finds).⁵⁶⁵ The Roman Colonial Landscape team, however, is only interested in the colonial life of the site and thus only recorded evidence post-dating the middle of the fourth century and in the catchment area of the colonial site.

5.21.1 The 7th and 6th Centuries

The Canadian Liri Valley survey team recovered evidence for ample commoner and rural activity in the seventh century (Table 5.19). Much of this evidence took the form of small scatters of material, although there were also a number of larger scatters from this period identified as both Minor and Major Sites by the surveyors. Many of these scatters contained

⁵⁶² Martini 1994, 3. In a frustrating choice, what exactly that phrase means is never explained nor does a maps show investigated fields.

⁵⁶³ *Ibid.*

⁵⁶⁴ Villas were sites 2200 m² or larger with building evidence (e.g. plaster, marble, terracing) and fine wares; Major sites were between 1800 and 2200 m² with a dense scatter of pot sherds (interpreted as small villas or large farms); Minor sites were between 1200 and 1800 m² with less dense material and primarily coarse wares; scatters are small and undifferentiated (comparable to off-site material).

⁵⁶⁵ Launaro and Leone 2018, 329.

almost exclusively impasto ceramics, difficult to date with any precision. The collections of material identified as Minor and Major Sites tended to be nucleated into what were interpreted as village communities, related to a regional trend pattern of greater community organization, also seen by an increase in evidence for fortified sites in this period.⁵⁶⁶ It is possible that small-scale conflict between various regional groups necessitated this type of nucleated settlement. Many of the activity areas were materially poor, with little fine ware or evidence for durable construction. The sixth century saw a decline in commoner scatters and rural material, although some of this decline can be attributed to coarse ware ceramics with a wide chronology like impasto.

5.21.2 The 5th to 3rd Centuries

The fifth and fourth centuries saw a small growth in rural material, followed by a significant rise in evidence for rural activity in the Canadian survey's data set during the third century; evidence for rural commoner activity rose across the landscape, including the areas around Interamna, Fregellae. In particular, there were increases in both nucleated and dispersed scatters, as the areas around the colonies produced more nucleated material while further afield isolated scatters also became materially manifest. Interestingly, there are fewer sites in the hinterland of the colonial site of Interamna Lirenas than in the area around Fregellae, a pattern that has drawn the attention of more recent research.

The Roman Colonial Landscapes project, while not complete, can help contextualize this evidence from the more extensive work carried out by the Canadian team. Already, in his reanalysis of the Canadian team's data, Pelgrom had identified a nucleated settlement pattern around Interamna reminiscent of the Ager Cosanus. Two clusters of third-century material were

⁵⁶⁶ Hayes and Martini 1994, 178-9.

recovered near the new colony.⁵⁶⁷ The Canadian team found evidence for what might be dispersed commoner settlements in other areas of the valley, but the typical pattern of increases in dispersed settlements is not present around Interamna. This does not mean, however, that there was not a shift in material consumption patterns during this period. The Roman Colonial Landscapes project analyzed the material recovered from their surveys to create trendlines that model the circulation of material in both town and countryside.⁵⁶⁸ The rural evidence shows a gradual increase towards a peak in material evidence over the course of the third century, the same period that sees evidence for rural infill in the Canadian data (Figure 5.). Fine wares, in particular, move into the countryside with increasing frequency over the course of the third century. The data from the Roman Colonial Landscapes project is difficult to integrate with my database, mostly due to its lack of interest in evidence predating the middle of the fourth century, but it is suggestive of interesting patterns of both rural growth and differences in consumption patterns between two sites within the same region. While the area around Fregellae sees a pattern of rural change that is similar to the rest of the sample, there are more nucleated sites in the area around Interamna. In both cases, the third century saw an increase in fine wares moving into the countryside, suggesting rural economic growth. In one case, this growth appears to have been kept under tighter control in nucleated sites near the colonial center, while in the other a capillary diffusion took place.

The evidence from the Liri Valley is both suggestive and, in its own way, frustrating. The Canadian survey team's extensive methodologies recovered much evidence, but evidence that needs more contextualization and better ceramic chronologies. The Roman Colonial Landscapes project has methodological rigor, but the project's utility is limited due to its intense focus on the

⁵⁶⁷ Pelgrom 2008, 348.

⁵⁶⁸ Launaro and Leone 2018, 335 fig. 4-fig .9.

colonial period and limited coverage. The area is undoubtedly of interest, as a corridor of great importance for Roman expansion into Campania and the foundation of two colonies in the area attests to its connections to the Rome's hegemonic expansion. If, with a healthy dose of skepticism, we look at the collected evidence we can see three general patterns emerge: 1. an increase in commoner activity in rural environments in the third century, 2. changes in rural networks of exchange that might allow for a deeper penetration of durable material to commoners in the landscape, and 3. an increase in both nucleated settlements and dispersed sites that represent heterogeneous rural settlement in the face of Roman colonial activity. Again, it is possible that at new foundations like Interamna the control afforded by nucleated sites dictated settlement patterns, in the following periods, nucleation gave way to a more dispersed settlement pattern in the area. Perhaps with the full publication of diachronic evidence from the Roman Colonial Landscapes team, a clearer picture will emerge.

5.22 Summary

Data from the nineteen surveys and about 2,500 sites from Latium and Etruria have been collected into one table (Table 5.20). Each of these projects has provided calibrated figures for “commoner,” “elite,” and “rural” activity as well as “farm” sites for the five centuries between 700 and 200. At the same time, relative trends between the various periods have been calculated and expressed as percentages.⁵⁶⁹ The summary table has been used to create both graphs showing relative trends in different types of activity during the period under study (Table 5.21) and a graph focusing on changes in commoner activity between the fourth and third centuries

⁵⁶⁹ There are a number of cases where the derived trends point towards infinite growth. This is due to mathematical issues; since there were no sites of certain classes attested for various periods. In these cases, growth has been expressed as +100* to express significant growth.

specifically (Table 5.22). In both cases, it is clear that rural infill takes place in the form of more durable material culture recovered through field survey during – especially – the third century.

What do these figures actually mean? These relative trends express diachronic change, they do not reflect absolute numbers of settlements,⁵⁷⁰ rather they are a representation of changes in evidence for activity over time. They say very little about the number of people who were living in these various areas; survey allows rural infill to be examined as a material pattern, rather than a demographic change.

Table 5.22 provides a synthetic view of rural infill in central Italy as represented by changes in rural activity, commoner activity, and elite activity. The tables imply a good deal of approximation and must wrestle with issues of small sample sizes: especially in those areas with less data, the presence or absence of just a few sites can cause the data to move around significantly. Undue weight should not be placed on the numerical values here, these numbers are a means of representing an overall pattern of change. They are visual metaphors for a material process. Despite their differences in methodology, across the Tyrrhenian central Italy, the weight of published survey data points towards significant growth in rural and commoner activity over period between 500 and 200.

If we look at evidence for commoner activity, there is a generalized pattern of growth in visible activity in the third century. In the three cases where there is evidence for decline in commoner activity, it appears that rather than a significantly different pattern of rural change, infill happens during the fourth century rather than the third. Local conditions are one possible explanation, as I suggested in the case of the Albegna valley and the area around Nettuno. None of the surveys in my sample suggest dramatic decline in rural activity during the third century.

⁵⁷⁰ See Launaro 2011, 151.

It is important to stress certain elements of regional diversity: in no two places does rural infill look the exact same and the general picture of an increase in small farm sites across the countryside of central Italy is too simplistic. We cannot interpret all traces of commoner activity as small peasant farms, many of these scatters probably represent productive activities ranging from agricultural to arboreal exploitation. In some cases, the third century evidence for an intensification of commoner activity follows a similar pattern to the evidence from earlier periods, often the sixth century. The changes in visibility of commoners are related to changes in material culture, not necessarily changes in populations or a complete reorientation of production in the countryside. In the next chapter I will expand on these patterns and pull out some general trends related to commoners and rural infill.

Chapter 6 Commoners and Rural Infill

6.1 Rural Infill

My survey of archaeological data for rural settlement in central Italy leaves no doubt that rural infill took place in the region between 500 and 200. In each of the survey areas investigated by this project, the overall trends in rural settlement point to an increase in visible rural material culture during this period. In almost all cases, this increase in settlement activity was particularly marked during the third century. While there are inevitably significant differences in both research coverage and the exact nature this landscape transformation took between surveys, this dossier of evidence has produced a significant outcome: the frequent anecdotal mentions of diffuse rural activity during the “Hellenistic” period are accurate for central Italy. It is not just in regions, such as Southern Etruria, where Potter connected this landscape change with Roman expansion. Instead, a model of increasing rural activity is relevant from the hills of Tuscany to the dunes of the Pontine plain.

While “rural infill” provided the point of departure for this investigation, the homogeneity implied by a single model for this apex in rural activity does not stand up to the heterogeneity presented in my survey of surveys. Rural infill as a concept should not be done away with, but the picture that the different survey narratives paint, in conjunction with the extensive survey in Chapter Two, highlights the need to qualify what rural infill means in particular landscapes and move away from monolithic, Romanocentric explanations of this transformative process. For this reason, I approached rural infill with the intention of examining

this landscape change from the perspective of rural non-elites. Commoner, although an aggregate category whose material culture encompass several diverse activities and subgroups, provides a useful frame for repopulating this process of rural transformation and envisioning rural infill not only as a change in site numbers but as a pattern of changing activities, material, and human interactions amongst non-elites.

6.2 Commoners and Rural Infill

The evidence collected and analyzed from intensive and systematic survey can give an overall picture of the trends in rural activity between the seventh and third centuries. The first trend that jumps out is the existence of substantial commoner rural activity in most of the regions in my survey already during the seventh and sixth centuries. Many of the scatters of material connected with commoner activity were closely associated with nucleated settlements or sites that suggest an elite presence. Most activity areas did not possess evidence for a more permanent connection with the landscape such as stone construction or tiles, but this was not a universal pattern. In the *comune* of Murlo, roof tiles were present at more than a few commoner sites already in the sixth century. This suggests that local production networks, in this case probably oriented around the palatial building at Poggio Civitate, played a significant role in facilitating the visibility of commoners in the Archaic period. Ties between the elite lineage group at the Poggio Civitate complex and the commoners in the area might be detectable in this distribution pattern. In the areas close to Rome, namely Collatia and the region surrounding Nettuno, evidence for dispersed commoner activity is visible in the fourth century rather than the third, suggesting that the growing urban sites in the area may have galvanized processes of commoner consumption earlier than in regions more distant from urban centers. It is difficult to identify the presence of lineage groups and elites through the survey evidence without excavation to

contextualize the data. However, while sporadic, there is good evidence to suggest that in many of the areas included in my database the seventh and sixth century landscape were populated by elites. Nucleated areas of activity would have afforded a degree of control: control in production and also control in the patterns of consumption. It is possible that material was not dispersed across the landscape in many of these areas because elites dominated these exchange mechanisms, and elites were located in more centralized locations. Commoners were either invisible, not producing enough material to be recovered through field survey, or tied to elite groups. Not every commoner was tied to an elite kinship group, but most of the commoners whose activities are visible in the archaeological record appear to have been. Structural and economic factors play a role in this increased visibility. The fifth and fourth centuries see this pattern change, but this downward trend in evidence for rural and commoner activity is almost universally associated with patterns of material change: ceramic materials are less diagnostic and chronologies are missing wares dated to these periods.

In the third century, there appears to have been a significant material change – in many cases, rural activity that had been mostly invisible in the fifth and fourth centuries – and possibly also in the seventh and sixth – became not only visible once more, but was also characterized by patterns of increased consumption of more archaeologically visible ceramic materials – especially at commoner sites. The locations of these areas of activity was also noticeably different in the third century: in most of the surveys, the recovered sites suggest a movement out from nucleated areas in order to be located closer to areas of rural production – fields, forests, groves. The surveys of the Chianti senese, the Val d'Elsa, the territories of Rieti, Civitella Cesi, Collatia, and the area around Nettuno all noted an increase in commoner activity in areas they

noted as marginal land, suggesting more intensive production or the exploitation of new resources.

No two surveyed areas presented the same regional narratives of rural infill. Commoner histories are localized, emblematic of the rural commoner's close relationship with their environment. Some areas saw peaks in rural activity in the fourth century, rather than the third such as the *comune* of San Giovanni d'Asso and the Albegna Valley. The Albegna valley saw a significant drop-off in site number during the third century, a pattern not seen elsewhere. If we add the supraregional sample from Chapter Two, the chronologies of rural infill are even more variable. France saw increased rural site numbers a century after most of my survey areas, Metapontum in the fourth century. Sardinia and Sicily the fifth. The variable timelines of this change suggest that local conditions played a significant role in the individual regional trajectories. Global patterns of material culture exchange were intersecting with local networks in complex ways. It is difficult to move beyond this aggregate picture with the current state of the evidence. In many of the cases in my dossier, these regions were peripheral to both excavated areas and historical narratives of the Roman world. There are not textual accounts to connect with these commoner histories. More data, namely through excavation, is needed to more fully reconstruct the diversities of rural infills in these various regions. Nevertheless, some overall patterns become clear from this evidence.

6.3 Rural Infill and the Roman Conquest

The supraregional evidence of rural infill in Chapter Two already suggested that the Roman conquest did not match up chronologically with the increase in the number of rural sites noted around the Mediterranean. The central Italian data provides further evidence that the conquest of central Italy by the Romans was not the cause of an increase in dispersed rural

activity. Only in the area around Cures in Sabina was there evidence for direct Roman impact on local settlement as well as a dispersed settlement pattern. In this case, however, the attribution of these changes to the Romans was based on a small-scale survey that covered a limited area. More extensive research is needed to confirm that this pattern represents an archaeological reality that can be linked with textual accounts. The Albegna Valley presents the opposite picture, one of disjunction between Roman conquest and an increase in dispersed activity, as a pattern of dispersed activity was present prior to notable Roman incursion, and the Roman presence appears to have caused landscape change that returned the area to a more nucleated system reminiscent of its sixth century state.

This lack of correlation between landscape change and Roman expansion leads to two important points. First, it is difficult to connect the data from survey archaeology directly with historical processes drawn from our literary record. It is doubtful that the surviving textual sources discuss any of the sites that form my database. These scatters represent another level of history, distinct from what our textual sources discuss. This does not mean that textual sources need to be ignored, but rather that the models they suggests for global change need to be contextualized within local frameworks built on material evidence. In addition, the lack of conjunction between Roman expansion and rural infill calls into question a picture of violent conquest. Outside of the Albegna case, Roman expansion and incorporation appear to have had minimal effect on settlement patterns of these various regions one way or another. Political and agrarian spaces did not affect each other in the manner some might assume. Instead, the changes related to rural infill are probably better understand as a series of long-term transformations. The greater interconnectivity of these regions, as well as the incorporation of these regions into broader networks of exchange that allowed more durable material culture to spread to new areas

of the landscape is likely related to the developing interconnectivity that characterized Roman expansion as well – conquest through violence, yes, but also conquest through tighter incorporation. This was not only an elite phenomenon; although commoners were not necessarily interacting with peers in neighboring polities, they do appear to have been interacting more intensively with their neighbors and the inhabitants of their regions.

It is possible that broad patterns of conflict did affect these site distribution patterns: raiding warfare would have been standard practice in the seventh and sixth centuries, while by the fourth and third larger-scale conflict appears to have become more regular.⁵⁷¹ These larger scale conflicts were more destructive but also easier to avoid if one was in a dispersed location. The argument has been made that the decline in raiding warfare could lead to an increase in olive and grape cultivation in particular.⁵⁷² These plants need more consistent attention than grain for their large-scale exploitation.⁵⁷³ Trees require pruning, and their trunks need to be kept clear of weeds that might compete for nutrients. Fruit tempts animals and humans alike, so proximity is required to protect the produce. The planting of olive trees or vines is a substantial investment in time, resources, and labor. Furthermore, the destruction of these crops, which take far longer to grow than grains, would render rural commoner particularly vulnerable.

It is surprising, then, to find little evidence for the intensification of these particular products. It has already been noted that the palynological record suggests that the increase of olive and vine production predates the fifth century, and is, instead, a feature of the Orientalizing and Archaic periods.⁵⁷⁴ Olive oil and wine were still being produced, of course, but if rural infill represents an increase in the scale of production, the pollen data complicates this particular

⁵⁷¹ Armstrong 2016; Rosenstein 2005.

⁵⁷² Terrenato 2019, 100.

⁵⁷³ Foxhall 2007, 97-129.

⁵⁷⁴ Stoddart *et al.* 2019.

conclusion. It is notable that within my database, there is a significant absence of evidence for the movement of oil and wine in the ceramic data. Part of this absence might be chronological, the boom in Greco-Italic amphorae production in northern Italy might fall outside of my chronological period, but it also might be that the period between 500 and 200 sits at a liminal point in the development of oil and wine as resources. Following the boom in environmental data from the eighth century, the landscape was not yet stable enough, nor were the macroregional networks robust enough, to support the export of these products outside of many local areas. The wine or oil that was produced may have been moved locally, in less distinctive ceramic forms. This, in turn, might have provided an impetus for the development of local exchange networks. It is notable that in southern Italy, discussed in Chapter 2, there was more evidence for the exploitation of these traditional Mediterranean crops. Excavation and botanical study would be useful to test the chronologies of this increase and either connect or disconnect rural infill from an increase in olive and wine production. It is also possible that the increase in the export of Italian wine and oil in the second century was predicated on rural infill, which began a process of olive and wine cultivation in the third. It is also possible that, like Roman expansion, the boom in oil and wine export is a long-term outcome of rural infill – the more interconnected and intensively cultivated areas of central Italy facilitated the creation of the mechanisms necessary for external trade on a significant scale.

6.4 Rural Infill and Agricultural Intensification

Even if olive and wine production did not increase, agricultural intensification likely did take place in conjunction with rural infill, but the scale of this increase in intensive agriculture is difficult to quantify. The pollen data suggests that the fourth and third centuries witnessed deforestation events possibly related to increased agriculture, but the growth of cities in the same

period as well as the increase in ceramic and tile production, both of which would have required a notable quantity of wood, likely contributed to this shift. Furthermore, in almost every study area, there was evidence for a significant degree of commoner activity already in the sixth century, suggesting that agricultural production was already significant. While agricultural strategies may have changed to a certain degree in the third century, there was not a meteoric rise in the intensity of cultivation.

This sixth-century evidence needs to be integrated more fully into a discussion of landscape change. Rural infill does not exist in isolation. It is part of a long-term pattern; the visible scale of rural activity in central Italy moves in fits and starts. The fifth and fourth centuries are also in need of more systematic studies. The collapse in site numbers in the fifth century might mean increased settlement nucleation, although many of the areas that saw a decline in material already exhibited nucleated settlement patterns. Population decline is likewise hard to model considering the poor ceramic chronologies for this period. The uniformity of the pattern in my database also makes it hard to believe that across various regions, a precipitous population decline occurred simultaneously. A better understanding of coarse ware ceramic chronologies, the dream of many archaeologists, would go a long way towards helping understand this nadir in activity. Excavation at sites, like in the area around Torrimpietra, that stopped producing material in the fifth century, and then resumed in the third, could prove essential for reconstructing what, in central Italy at least, appears to be a pan-regional transformation that affected all segments of society from commoner up to elite.

Most previous research on “decline” in the fifth and fourth centuries has focused on Latium, due to the magnetism of Rome’s literary history. The Tiber Valley Project has noted a decline in the number of sites in the area of Veii, and Crustumerium is abandoned around this

period. Tol has suggested that in this period, connections between pontine sites, Satricum, and Antium are noticeably weaker.⁵⁷⁵ Most of the surveys in my study can be added to this list. Not only site numbers decline, but necropoleis also frequently fall out of use or are temporarily materially invisible.⁵⁷⁶ In Latium, this is often associated with sumptuary laws, but the ubiquity of this pattern far from Rome suggests other factors must be in play, not only legal codes.⁵⁷⁷ While agricultural changes like intensification are easy to model for rural infill, unless there was a rise in “estate” agriculture (which seems unlikely), no concurrent agricultural pattern seems to apply to the decrease in visible activity during the fifth and fourth centuries.

6.5 Rural Infill and Land Ownership

Returning to rural infill, commoner sites draw the most attention. They are the most numerous, and they see the most significant rise and fall in evidence between the fifth and second centuries. While these sites should not be interpreted as farmsteads on the Garnsey model, they do represent the base from which various activities were carried out by commoners in the countryside. It has been suggested in Greece that a lack of continuity between periods in survey data can mark a shift in land ownership patterns.⁵⁷⁸ Even if these sites of commoner activity are rural storage structure, pens, processing sites instead used seasonally or year-round, rather than rural residences, their more materially robust presence suggests some change in relationships between commoners and the land.

In the second chapter, I presented Osanna’s argument that changes in land ownership are one possible explanation for the changes in land use patterns his survey identified in the territory

⁵⁷⁵ Patterson *et al.* 2004; Camporeale 2004, 90-3; Attema *et al.* 2014; Tol 2012, 370-1.

⁵⁷⁶ See in Massa-Pairault, 1990.

⁵⁷⁷ See Evans 2014, 51-75.

⁵⁷⁸ Foxhall 2007, 38-40.

of Grottole. The surveys around Metapontum suggested a similar process for the increase in dispersed settlement in the territory of that site. In chapter five, changes in land ownership patterns were used in the Chianti senese and the Val d'Elsa to explain rural infill. It is worth considering whether the increase in material at dispersed locations is evidence for land ownership or if instead, the higher investment by commoners at various sites further away from nucleated settlements allowed land ownership systems to develop. It would be easier for a commoner to negotiate what must have been a radical process from a place of surplus, suggested by the greater investment seen in tile and fine ware at many of the dispersed sites, than from the lack of moveable surplus implied by the archeological invisibility of many commoner sites prior to the third century.

An increase in evidence for more permanent construction, the use of tile and stone at these more dispersed sites, occurs at the same time as this potential shift in land ownership, Investment based on ownership, however, is not the only possible explanation. Technological changes – ranging from an increase in metal tools to new building techniques – might have proliferated in an increasingly connected central Italy. The development of new construction techniques in growing cities could be one source of this transformation. The cases of Murlo, Collatia, and Nettuno, the three areas that had a significant number of commoner sites with tile preceding the fourth century, do suggest that any technological change needs to be contextualized in terms of access to urban and elite production. Both inter-regional and trans-regional networks appear to have been expanding between the fourth and third centuries. As has become a mantra of this project, more excavation is needed to contextualize whether there is a construction revolution in rural spaces that lies behind this material pattern.

It is not only the presence of these materials at more dispersed locations that is significant. The materials themselves, while susceptible to the whims of stochastic post-depositional process, trace general patterns of interaction that produce notable data for understanding the evolving middle Republican countryside. The third century sees these networks materialize in a more robust fashion suggesting an increase in the amount of connectivity amongst commoners and also an increase in the amount of material that commoners could exchange.

The rise of nucleated, urban settlements across central Italy must also be considered in conjunction with these data. After all the growing populations of these cities were likely consuming some of the products produced by rural commoners. The peak in occupied urban sites in Italy is dated by Jamie Sewell to the period between 350 and 300, in the century preceding the most significant upwards trends in rural commoner sites.⁵⁷⁹ The integration of rural commoners with new urban areas must have taken place, and is perhaps evident in the areas of my survey in the nearer hinterlands of urban sites, such as in the Pontine Plain, near Collatia, and in Chianti Senese around Cetamura.

The diffusion of manufactured material further into the countryside also suggests a significant degree of rural-rural exchange amongst commoners; integration and intense interaction between these dispersed and materially visible activity areas must have taken place. A scatter of tiles in the hinterland of Collatia, after all, is not autochthonous. It had to be produced, moved, and used. At each stage in this process, a series of interactions took place that brought these rural commoners into contact with one another. Interaction and communication are an important foundation for community formation.⁵⁸⁰ The new networks of exchange and

⁵⁷⁹ Sewell 2016.

⁵⁸⁰ Blake 2014.

interaction, materially manifest in the middle Republic, must represent a bringing together of these rural communities into more tightly knit entities. Likely, these networks were not new, and it is unlikely that isolated farmers, disconnected from their rural neighbors, dominated any period. Nevertheless, one of the central aspects of a definition of a tradition peasantry is community reproduction. The increase in connectivity amongst commoners that is materialized in rural infill – the creation of networks that could sustain and reproduce themselves apart from urban or elite interests – might have led to the creation of a “peasantry” in some parts of central Italy.

Consumption patterns clearly shifted as rural infill took place. While rural infill has often been thought of in either spatial, agricultural, or political terms (dispersion, intensification, conquest, colonization), this study has foregrounded the material nature of this change by building my analysis from the sherd up. It is not necessarily that new sites are appearing *ex novo* or new people are moving into the landscape, but rather that sites are consuming more durable and datable material. This suggests a rise in the ability of commoners across regions to produce a surplus in whatever activities they undertook – agriculture, arboreal exploitation, mixed strategies. Rural “peasant” economies are traditionally envisioned as subsistence based. In this view peasants are isolated from the world, producing only what they need to survive. Surplus was rare. A basic assumption of peasant agriculture is that rural non-elites will resist producing more than they need for subsistence as an act of risk management.⁵⁸¹ Peter Garnsey suggested that the very practice of engaging with the vicissitudes of the economic markets put a peasant at risk.⁵⁸² More recent studies, however, have argued against this static picture and suggested

⁵⁸¹ This is Boserup’s so-called “Law of Least-Effort.” See Boserup 1965; Chayanov 1966; Sahlins 1972

⁵⁸² Garnsey 1989, 56.

rationality in rural commoner practices.⁵⁸³ While it is unlikely that the Mediterranean was home to a proto-capitalist, connected market economy between 500 and 200,⁵⁸⁴ exchange was undoubtedly taking place, and it appears that it involved rural commoners. Horden and Purcell have suggested that rather than Garnsey's picture of isolation as a measure for risk management, Mediterranean peasants inserted themselves into networks of exchange to counter the risks inherent in agriculture.⁵⁸⁵ This interconnected peasantry, however, is not a novel feature of the middle Republic, Horden and Purcell suggest it is a very long term pattern in rural interaction.⁵⁸⁶ It appears that especially in the third century, the scale and nature of this integration shifted dramatically across the countrysides of central Italy. Rural producers had access to expanding networks of exchange and enough surplus to consume significantly higher quantities of durable materials.

6.6 Commoners, Elites, and Rural Infill

In Chapter 1, I argued for the importance of changing relationships between commoners and elite both as a tool for defining commoners, and as a potential explanation for rural infill. My database suggests that, while these relationships shifted from location to location, this period was marked by a combination of continuity and change. Despite frequently going missing for a century or two between 500 and 300, elites did not disappear. In many of the survey areas, possible elite sites and necropoleis not only persisted but followed a similar pattern of material transformation over the three centuries as their commoner neighbors: a sixth-century presence, followed by a gap in visible activity, only to re-manifest in the third century alongside rural

⁵⁸³ See Masschaele 1997; Firth and Yamley 2013; De Ligt 1993; Morley 2002; Kron 2008; Ghisleni *et al.* 2011.

⁵⁸⁴ Specialized production for the market was too risky in a primarily agrarian state and the technology for the movement of goods was too expensive. See Horden and Purcell 2000, 272; Bang 2008, 73.

⁵⁸⁵ Horden and Purcell 2000, ch. 6.

⁵⁸⁶ *Ibid.*

infill. This pattern, possibly the result of my overly schematic classification scheme, needs to be tested with further excavation.

These potential elite sites did not, as a general rule, follow the same spatial patterning as commoner sites, remaining less diffuse. The importance of ceramic networks for survey visibility cannot be overstated as the fifth and fourth-century lacuna obscures two important centuries, but the reoccurrence of these groups in the third century points towards continuity. Just as an increase in material linking rural-rural exchange networks suggests more tightly connected commoner communities, the persistence of elites at both ends of my chronological sample, and the role they must have played in as nodes in broader exchange networks, points towards continuity in vertical hierarchies. This is a period of renegotiation, not disjunction. While the nature of survey data makes it challenging to track individual elite trajectories, the presence of elite necropoleis in many areas that were in use across all three centuries between 500 and 200 suggests that the inhabitants of the landscapes under survey— both commoners and elites – did not see their social structures completely reworked. There may have been a gradual loosening of earlier bonds – the greater separation between commoner activity areas from nucleated sites does point to this process – but rural infill did not disrupt the landscape so much as diversify commoner opportunities. Old elite connections were still present, but there was also an increase in materially beneficial ties amongst commoners.

Even once rural commoners began to own property, or at least settled more permanently on property further away from elite control, the nature of Mediterranean agriculture, and climate, in particular, conspired to maintain ties of dependency between commoners and elites. This is not to say that the climate is strictly deterministic of the social organization of Mediterranean societies, but instead that the climate constitutes one of many factors operating at a level of the

longue durée to direct human action. In central Italy, climate and rainfall rates are disparate even at a local level.⁵⁸⁷ Even opposing sides of the same river valley can receive different amounts of moisture through the course of an agricultural season.⁵⁸⁸ This creates instability for a rural commoner who works a single plot or a series of small plots, whose crops have a significant chance of failure in a given year. There are a number of different strategies that have been developed by rural commoners to cope with this unpredictability, many of which serve to strengthen the bonds between commoners and commoners as well as commoners and elites. One possible method is storing the surplus in good years against productive failures.⁵⁸⁹ This storage strategy could take a number of forms: direct storage (preservation of crops with the household or community), indirect storage (the conversion of surplus agricultural stores into animals such as sheep, or cattle) or social (the ability to activate relationships that allow individuals access to surplus of others in times of need)⁵⁹⁰

Rural commoners would have used all three types of storage, but it is the third type, social storage, that has most significant implications for understanding local social systems.⁵⁹¹ While vertical exchange was an option, this type of relationship produced debts that carried a weight of dependency. Rural commoners might have first sought to activate horizontal relationships instead, amongst their peers. A more robust series of horizontal relationships is suggested by the increase in visible commoner activity areas, interconnected and supporting one another. When that was not an option, elites and vertical relationships were required.

Relationships of dependency likely grew out of a situation where a commoner or a group of

⁵⁸⁷ Halstead 1989, 71-3; Horden and Purcell 2000, 59; Garnset 1989 8-10.

⁵⁸⁸ Horden and Purcell 2000, 59.

⁵⁸⁹ Halstead 1989, 73; Halstead and O'Shea 1982, 93.

⁵⁹⁰ Halstead 1989, 73-75.

⁵⁹¹ Halstead 1989, 74-5.

commoners were in need of aid and unable to reciprocate when called upon. The inability to reciprocate could lead to claims on labor, political support, and property. There is a long history of these dependency relationships in central Italy, stretching back to the Orientalizing and Archaic periods. However, in the period between the fifth and second centuries, there is evidence that many of these ties of dependency were loosening or shifting. Although poorly understood, *nexum*, may be one example. The exact nature of *nexum* is difficult to reconstruct and represents a dissertation in its own right. It is generally equated with a form of debt-bondage – an exchange of labor for property.⁵⁹² Cornell suggests that, “it is virtually certain that the function of *nexum* in early Rome was to provide dependent labor for exploitation by large landowners.”⁵⁹³ *Nexum*, however, was outlawed by the *lex Papiria Poetelia* either in 326 or 313.⁵⁹⁴

The presence and persistence of *lautni*, an Etruscan dependent population often equated to serfs, is another of these dependency structures. The status of Etruscan dependents is complicated, and there is a lively debate about the exact nature of the lower classes in Etruria.⁵⁹⁵ But, there is good evidence for social tension in Etruria during the late fourth and early third centuries possibly related to the erosion of these traditional bonds. An uprising in Arretium in 302 and a revolt in Volsinii in 265-264 are preserved in the literary record and both appear to have roots in elite-commoner tensions.⁵⁹⁶ A number (around 200) of *lautni/lautne* inscriptions also appear in funerary contexts beginning in the third century. The increased formal burial of what might have been a dependent, commoner group suggests changes in their access to durable materiel culture either through a rise in their own means, or different connections with elites. Just

⁵⁹² For a recent discussion of *nexum* see Bernard 2016, esp. 322-3.

⁵⁹³ Cornell 1994, 283.

⁵⁹⁴ Liv. 8.28 for 326; Varro *Ling* 7.105 for 313. Livy attributes the abolition of *nexum* to the consulship of C. Poetelius Libo Visolus; Varro to the dictatorship of Poetelius' son.

⁵⁹⁵ Torelli 2014; Amann 2017.

⁵⁹⁶ Marcone 2017, 1192.

like *nexum*, it appears that certain aspects of elite-commoner dependency relationships were being renegotiated in the fourth and third centuries.

At the same time, while these structures were perhaps being broken down, in other regions the systems of elite commoner relationships appear mostly the same as had been in the sixth, lineage groups with control over landed resources parceling it to their relatives and dependents.⁵⁹⁷ The continued prevalence of the same families such as the Caecinae at Volterra and the Cilnii at Arezzo through the middle Republic supports the survival of some of these wealthy lineage groups through the Civil Wars of Marius and Sulla. I would suggest there existed a range of options. Commoner networks were growing, but elites still represented an important outlet in times of crises. Rural infill should not be considered as the liberation of the commoner, many of the old systems of subordination appear to have persisted through the third century and the subsequent period would bear witness to significant landscape changes once more. Rather, in a region where ties of dependency had been a central feature of commoner life, new options in rural areas that were both more connected in material terms, but more diffuse in terms of power structures, led to new trajectories of settlement and commoner activity.

6.7 Future Research and Concluding Remarks

This dissertation aimed to test two hypotheses: first, that rural infill took place between 500 and 200 in central Italy. My survey data proves that this is the case. Trends in every survey region under study point towards increases in rural material during either the fourth or third century. The second goal, to foreground the role of commoners in this process, will require further research but the work of this dissertation has begun the process of refocusing studies of middle Republican Italy on the lower end of the social hierarchy. My work has collated a wealth

⁵⁹⁷ Torelli 1984, 74, See Capogrossi Colognesi 2000, 185-189 for arguments related to Rome.

of data as well as suggesting numerous productive avenues for approaching this topic in light of this reinterpreted survey data in the future. Tracking commoners in the archaeological record, especially with data from field survey, is not straightforward and requires numerous interpretative leaps as well as the elision of a significant degree of complexity in order to foreground this understudied group. Aggregate data is not ideal, but it is also most of the data that we have. More data is needed. More excavations of commoner sites identified through field survey should be a first priority. Sites are needed in sufficient numbers to draw meaningful conclusions about the broad patterns visible at both the regional and supraregional level if rural infill is to be contextualized and commoners examined in meaningful detail.

This increase in excavated data is a long term goal, but legacy survey data does have more to offer when it comes to addressing commoners and the middle Republic. Many of the surveys examined in this project do not furnish the published information needed to examine commoners beyond the broad dichotomy explored in this dissertation. However, the CAPS projects as well as the data from the survey of the Cecina Valley – not included in this dissertation but under study at the moment by the author with the goal of a full publication – are both projects with a modern methodology and a wealth of raw data well suited for enriching the study of commoners. An intensive analysis of this data – and data from similarly rigorous and well published surveys outside of central Italy – could introduce a degree of heterogeneity and perhaps provide a picture of various categories amongst commoners and the changes in these categories over time. As discussed in chapters 2 and 4, I am conscious of the fact that the broad dichotomy between elites and commoners explored in this dissertation is a schematic representation of what must have been a far more diverse lived reality during the middle Republic in central Italy. Internal stratification amongst commoners is suggested both in the

comparison with studies of other premodern states – for example Brumfiel and Robin’s study of Aztec society discussed in chapter 2 – as well as limited documentary evidence from contemporaneous central Italian polities. Archaeological evidence can reveal this heterogeneity – and perhaps most interestingly suggest some of the shifting groupings amongst commoners – but the new methods and different data are required.

While legal and literary sources do not provide a wealth of evidence, the close reading of this data could also offer important contextualization for this type of study. As a starting point, the centuriate assembly in Rome (*comitia centuriata*), allegedly founded by Servius Tullius in 509 but likely dating to the period under study in this dissertation and a result not of royal decree but internal developments – divided the citizen population of the Roman state not into two groups but instead into various classes based on property – although it must be said that two basic distinctions did exist based on service in the infantry or cavalry.⁵⁹⁸ While the aristocratic *Senatores* and *Equites* can be attributed to an elite group, if we equate commoners and *plebeians*, then commoners are subdivided into five different property classes as well as the unlanded *proletarii*.⁵⁹⁹ Since these divisions are based, at least in part, on landed property ownership it might be possible to look for archaeological correlates, if one wished, for these divisions. If nothing else, this division suggests that in the period under study by this dissertation, at least one central Italian community conceived of its internal makeup through divisions and subdivisions along axes based on property. There are, however, issues with this approach. Rome is but one well attested example of what might have been variable social structures in the area. As discussed previously, Etruscan social structure appears to have, at least initially, been far more stratified between commoners and elites. The publication of the Tiber Valley data, forthcoming

⁵⁹⁸ Liv. 1.43

⁵⁹⁹ Cornell 1995, 179.

and perhaps arriving soon, and an analysis of the Suburbium data if it becomes more widely available would allow for the environs of Rome to be added to my data set and provide archaeological information related to this literary picture of internal, commoner stratification discussed above. When and if these data become available, a case study might be possible combining an area with a rich literary and archaeological tradition, a combination unavailable in the data under study here.

The divide between urban and rural as well must be taken into account, Rome in the middle Republic was not yet the archetypal city in its late Republican form, and likely had many rural characteristics. Rural society, with lineage groups and dependent commoners, might also have certain urban characteristics. The data, however, to make these comparisons needs to be carefully analyzed and rural data placed into dialogue with urban information. One of the advantages of commoners as an heuristic category for studying non-elites is that it can straddle the line between urban and rural and deal with the gray areas that must have been the norm during the period of urbanization in central Italy. Future research will take advantage of this terminological flexibility. More urban data, like an increase in rural data, would be very useful. In the cities of central Italy, we have even less evidence suitable for answering questions such as where commoners lived, what they ate, and how they interacted with one another or their social/economic superiors. While broad patterns of landscape use and site location can suggest shifts in social hierarchies within regions, only through a better understanding of the material realities of the commoners of central Italy will the full implications of this landscape transformation be revealed. This project represents an important starting point, a shift in focus towards commoners that will lead to a nuanced considerations of this heterogenous category.

The next steps in this research program necessitate the deconstruction of the binary class system discussed above. This dissertation has demonstrated the limits of using survey data to write a history from below that examines commoners in middle Republican central Italy. The thinner nature of survey data elicits a significant degree of complexity amongst Italian non-elites. A regional coverage necessitates this inclusion of data that cannot stand up to the scrutiny of complex analyses. This regional coverage will not be sacrificed as I continue to pursue this project, rather it will be expanded with more data from non-central Italian regions included to build a wider database of both thin data, but also thicker and more robust data such as those provided by CAPS and the Cecina Valley – as well as, I hope, a survey and excavation in the hinterland of Gabii that would allow for a rich narrative of long-term social development when coupled with excavations at the Gabii currently underway. The thinner data will allow for more, and disparate, stories of rural infill to be compared across the entirety of the Italian peninsula, including areas that are exposed to different forces of urbanization, colonization, and conquest. More regional comparanda will produce a more nuanced picture. In addition to this expansion, however, more numerous and thicker data sets from the most methodologically rigorous and well published surveys allow for a new scale of analysis – regional case studies that are suited to more inductive approaches and analyses of the survey data might be able to suggest patterns of stratification amongst commoners and diversify our understanding of rural infill in order to move closer to the people who must populate this pattern. The excavation of small sites can provide a final, nested component that – while not necessarily representative – does provide important ground truthing. Rather than focusing on rural infill, these data can shift the narrative to one of commoners more generally and invert our historical hierarchies in order to focus on the majority of the population in their own right. Rural infill is well attested in our data, and visible as a

pattern of regional change, but it is tied to a picture of urban change in its original conception. New terminology, as suggested in the introduction is needed that is not dependent on the previous elite and urban dominated picture of the period. Non-elites represent one of the areas within studies of the Roman world that is open to the most significant growth – as archaeological techniques become more sophisticated and theoretical considerations more nuanced, this previously inaccessible segment of the population is slowly becoming more accessible. This dissertation represents an initial foray into the rich world of the Italian commoner; future research will nuance this picture and further interrogate questions of commoner agency in the changing world of the middle Republic.

Figures



Figure 1.1: Google Earth View of the Region Considered in This Work.



Figure 2.1: Google Earth View of the Mediterranean with Evidence for Rural Infill.



Figure 2.2: Sites in the hinterland of Carthage. a. In the second half of the 6th and 5th centuries BCE; b. in the 4th century; c. in the 3rd and 2nd centuries (After Greene, 1986).

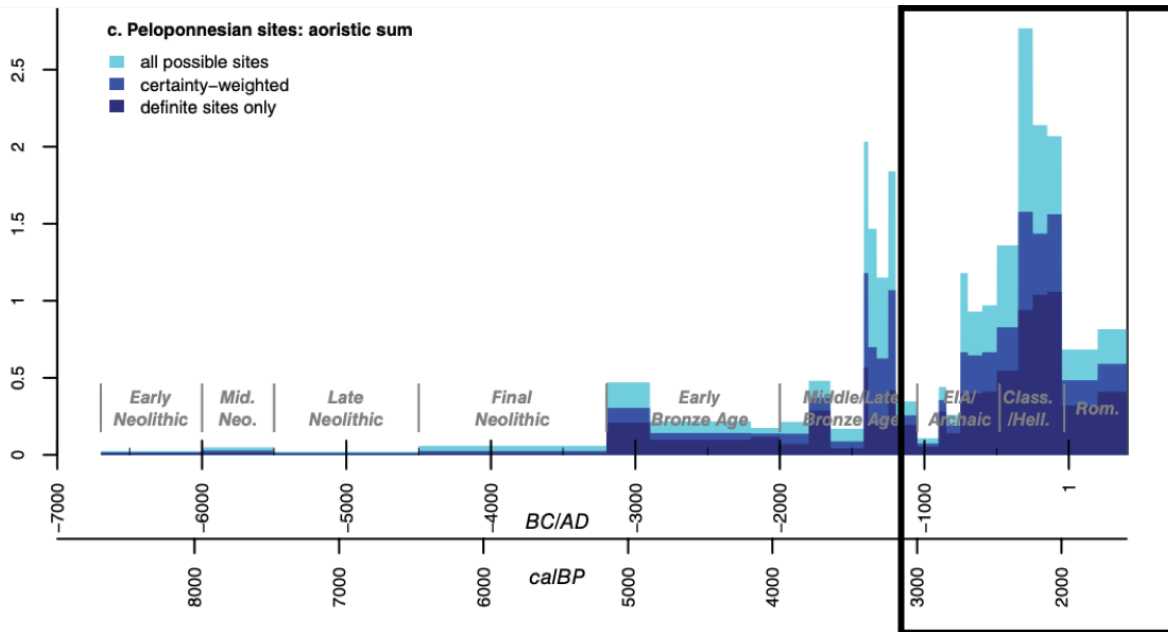


Figure 2.3: Aoristic sum of sites that might fall in a given year (the three colors indicate how the calculations change if we take optimistic, moderate, and pessimistic assumptions about dating certainty). After Weiberg et al. 2018, Fig. 5.

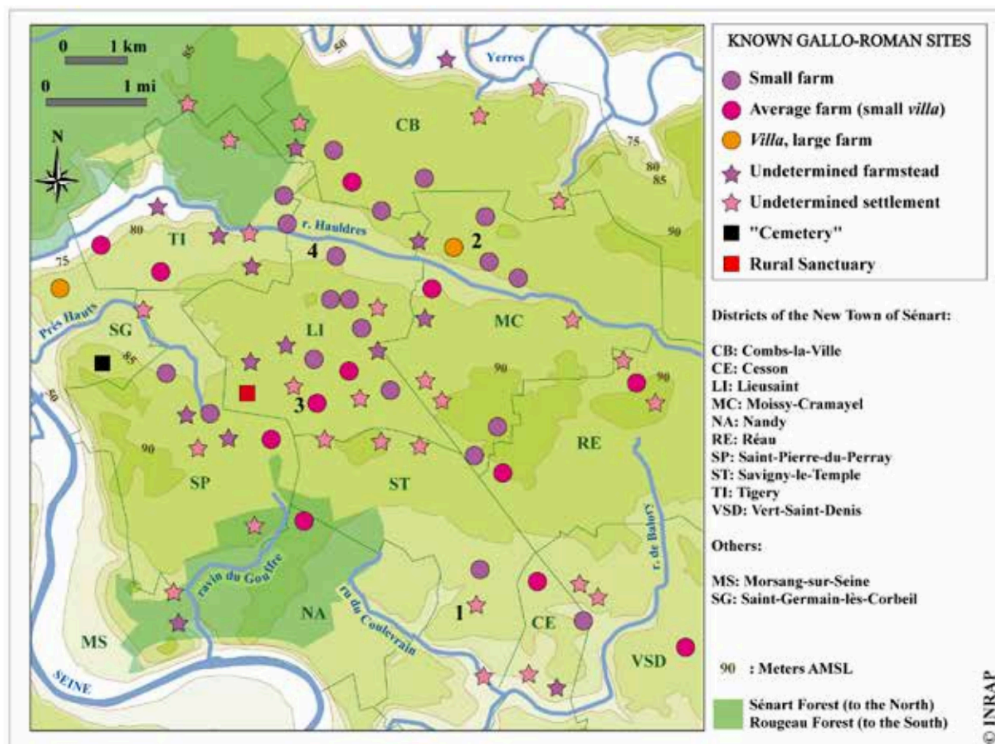


Figure 2.4: Gallo-Roman sites on the Sénart Plateau. After Desrayaud 2014, Fig.2.

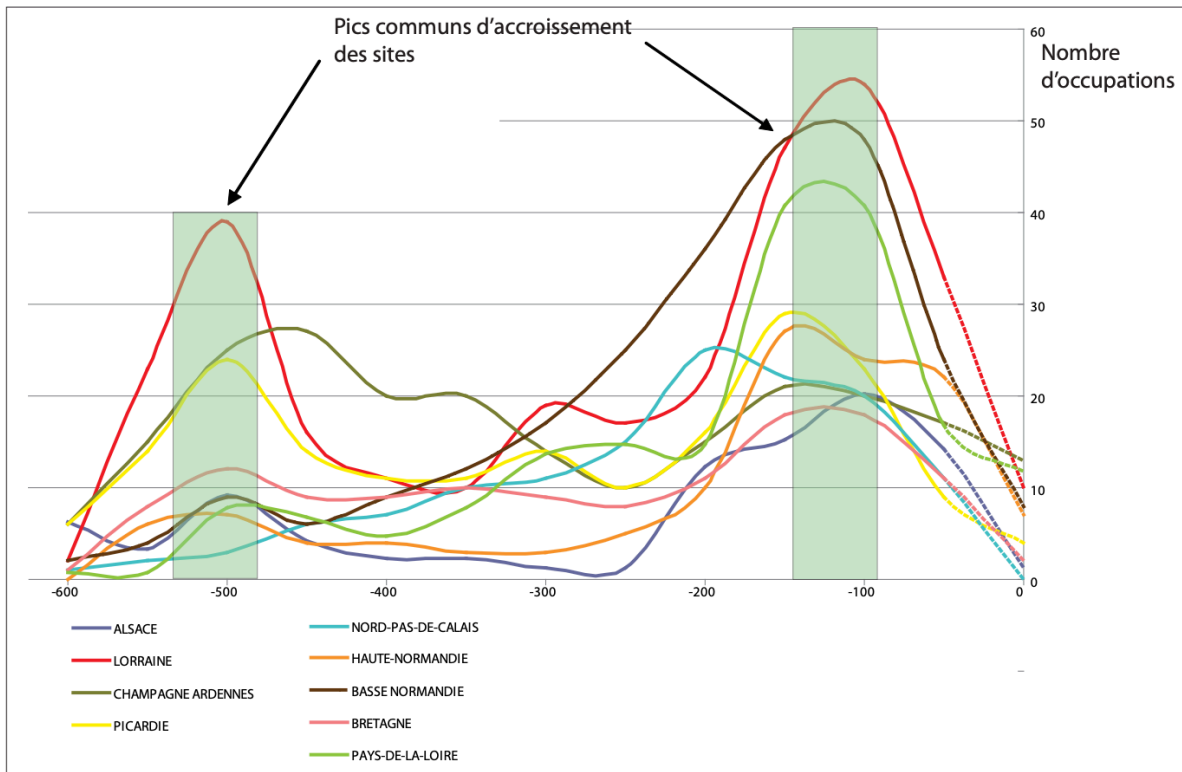


Figure 2.5: The change in site numbers for multiple regions of northern France over the first millennium BCE. Two peaks in settlement are visible, one in the fifth century and one in the second century. After Malarin et al. 2015, Fig. 3.



Figure 2.6: Google Earth Image with Surveys Discussed in Southern Italy.

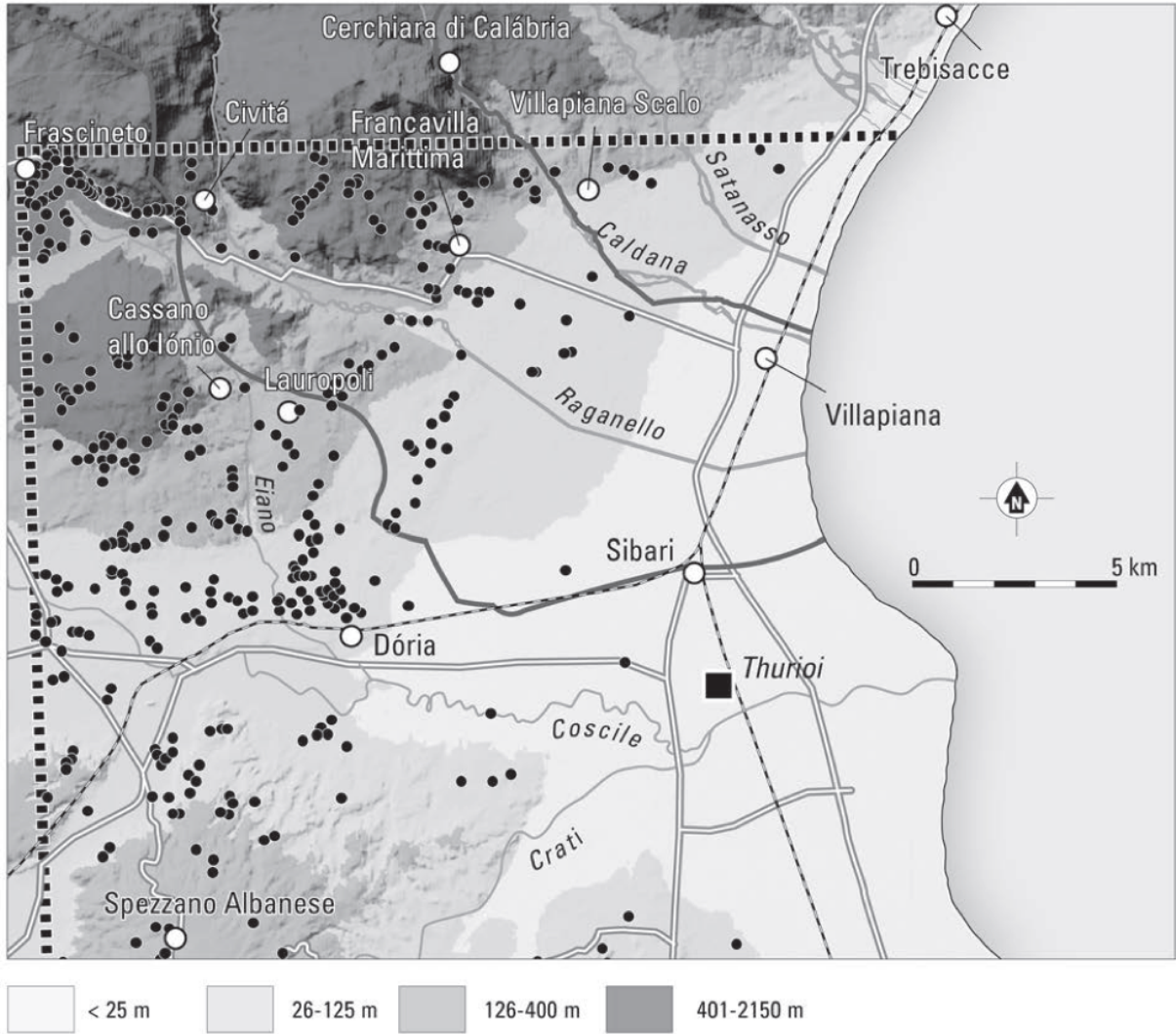


Figure 2.7: Distribution of Hellenistic rural sites in the Sibaritide. After Attema et al. 2010, Fig. 4.9.

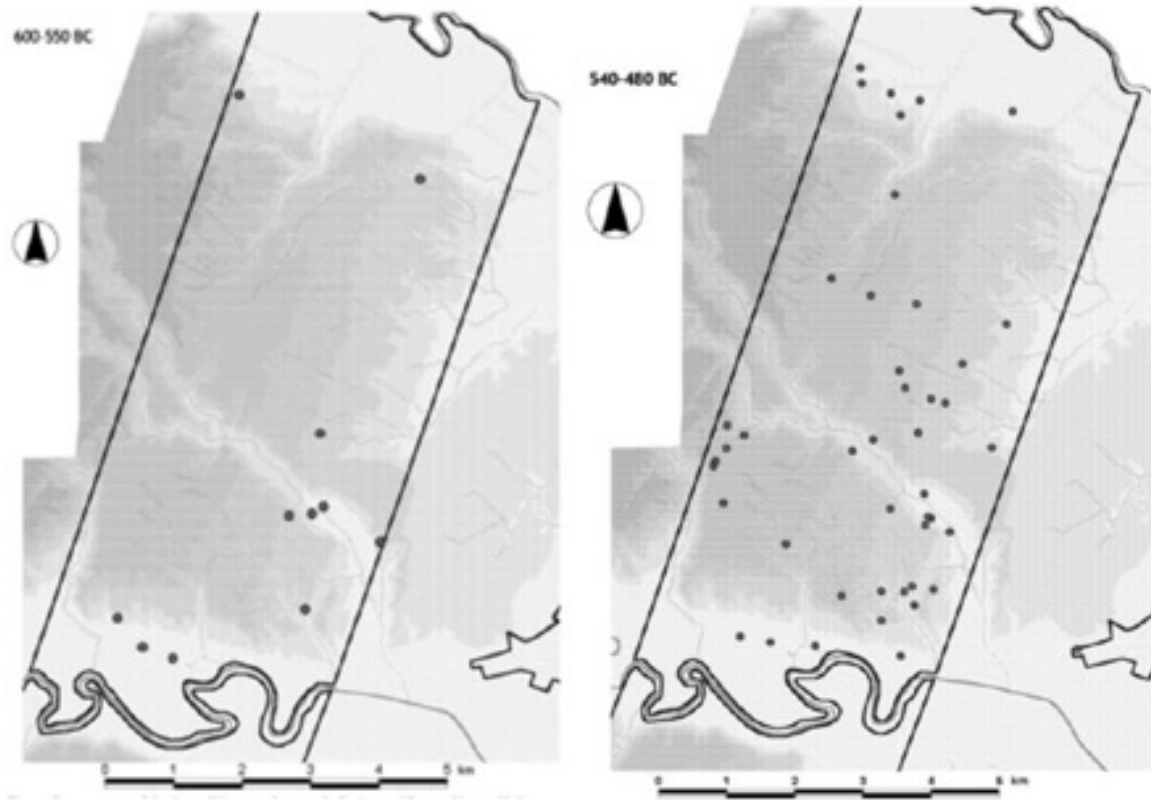


Figure 2.8 Map of the distribution of sites in the hinterland of Metapontum between the Archaic (600-550) and Classical (540-480) periods. After Carter 2006, 211-212.

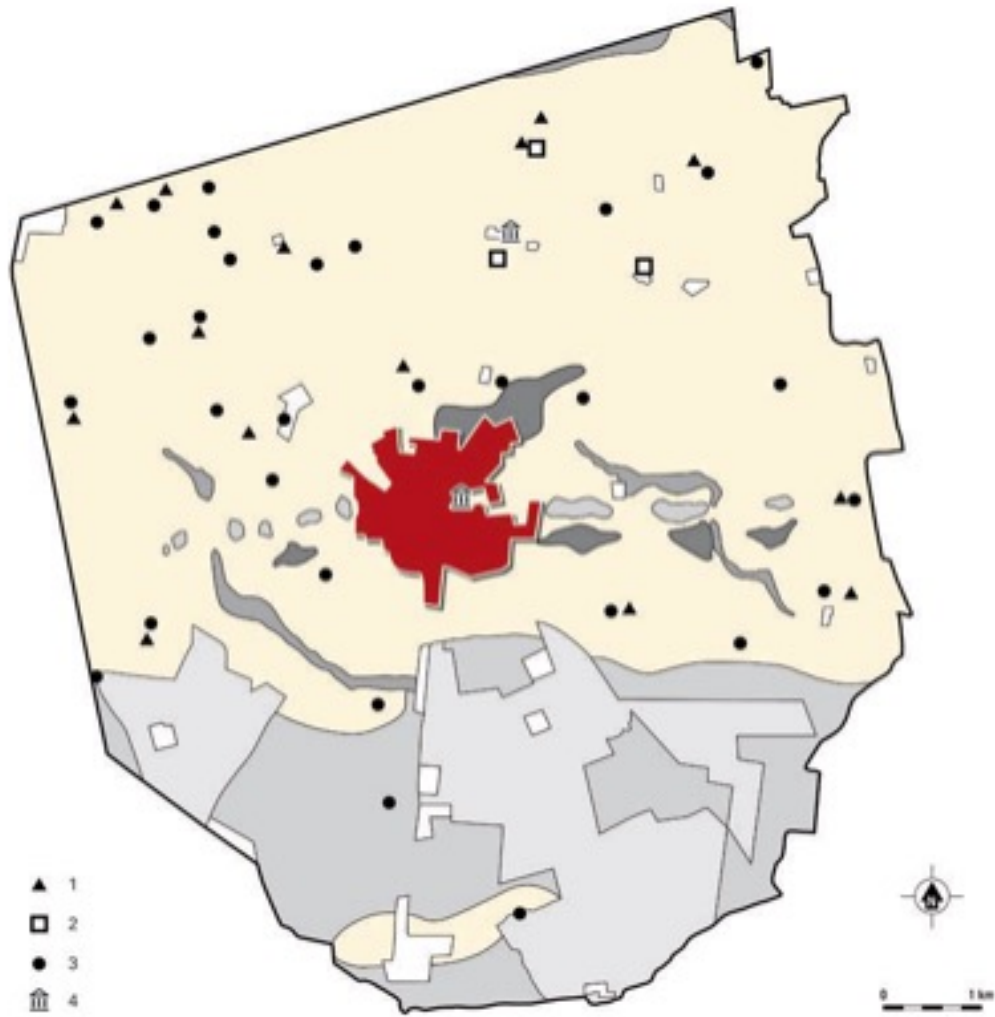


Figure 2.9: Distribution of early Hellenistic sites in the Oria survey area. 1. Necropoleis, 2. Hamlets 3. Isolated Farms 4. Sanctuaries. The colors represent different geophysical units (after Yntema 1993, fig. 74).

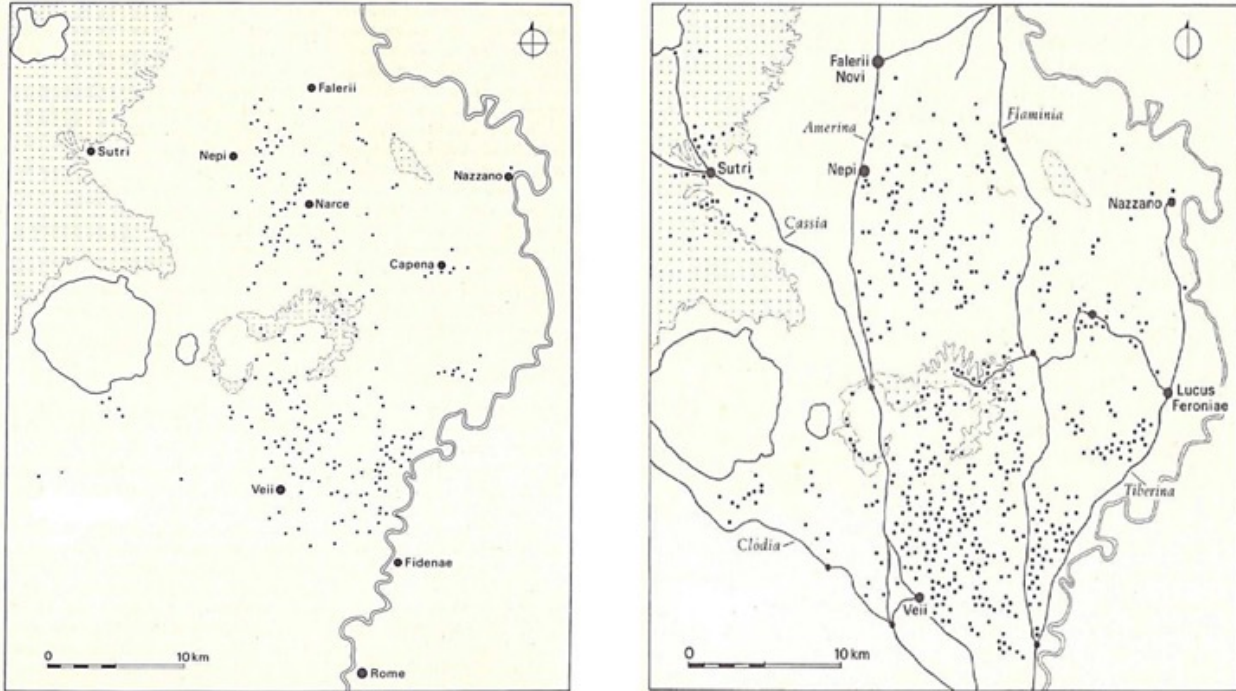


Figure 2.11 Map with the distribution of sites recovered by the South Etruria Survey dated to the fifth and fourth centuries (L), third to first centuries (R). After Potter 1979, 88 and 97.

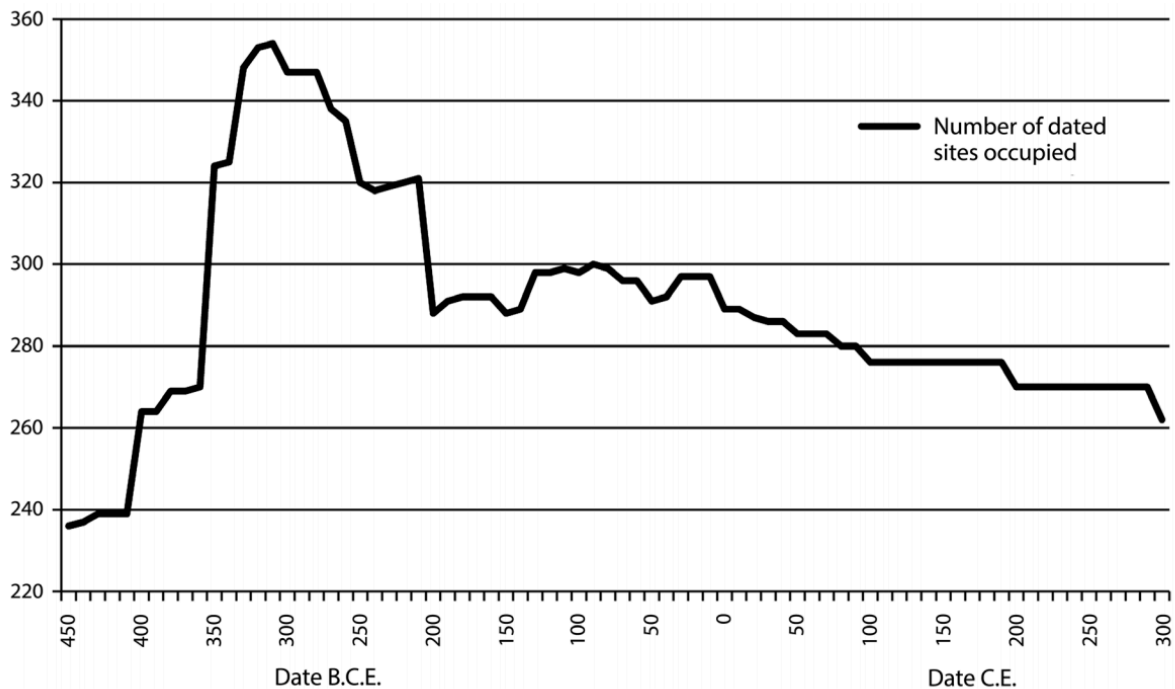


Figure 2.12: Variations in the number of occupied sites existing between 450 B.C.E. and 300 C.E. (restricted to sites with occupation chronologies tagged with medium and high confidence ratings: 438 sites in total. After Sewell 2016, Fig. 2.

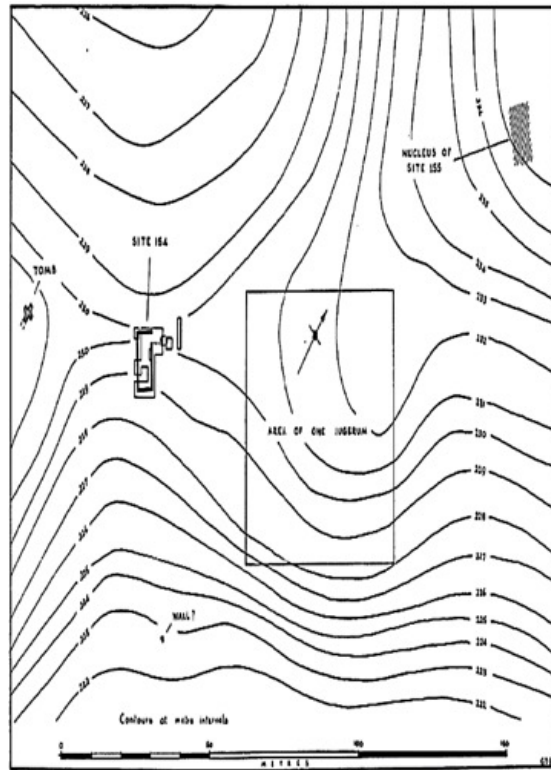


Figure 3.1: Plan of the area around Site 154 and 155 in the Ager Capenas, After Jones 1963, 148.

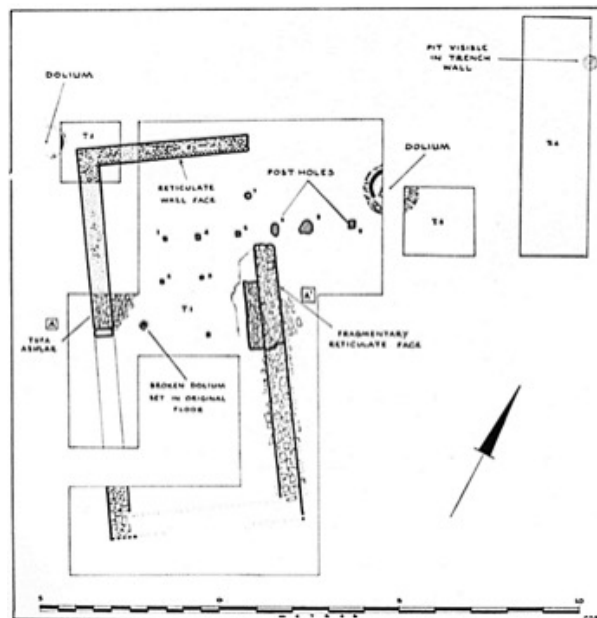


Figure 3.2 Plan of the excavations of site 154 at Monte Forco. After Jones 1963, 149.

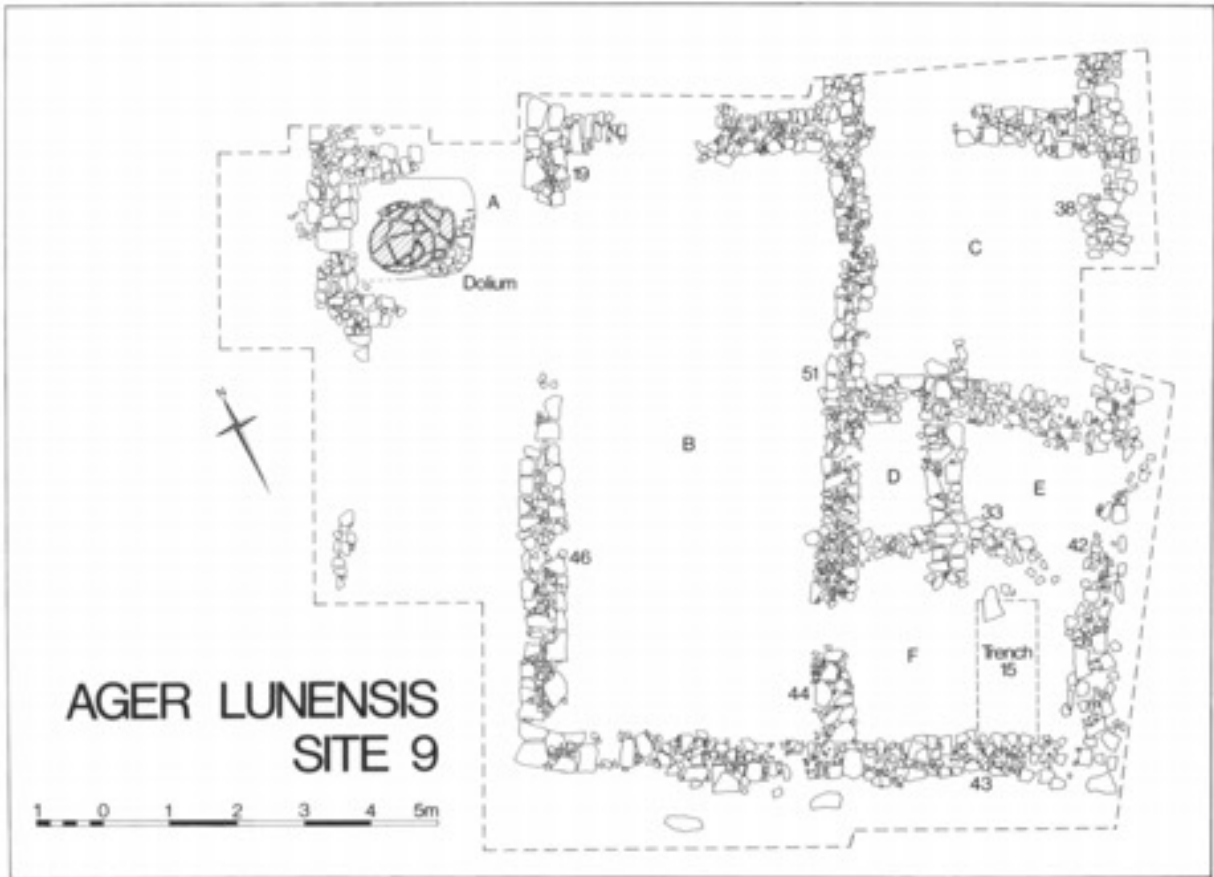


Figure 3.3: Plan of Site 9 excavated at Luni. After Delano-Smith et al. Fig. 12.



Figure 3.4 Plan of the site at Podere San Mario, in the Cecina Valley near Volterra. After Motta et al. 1993, 110.

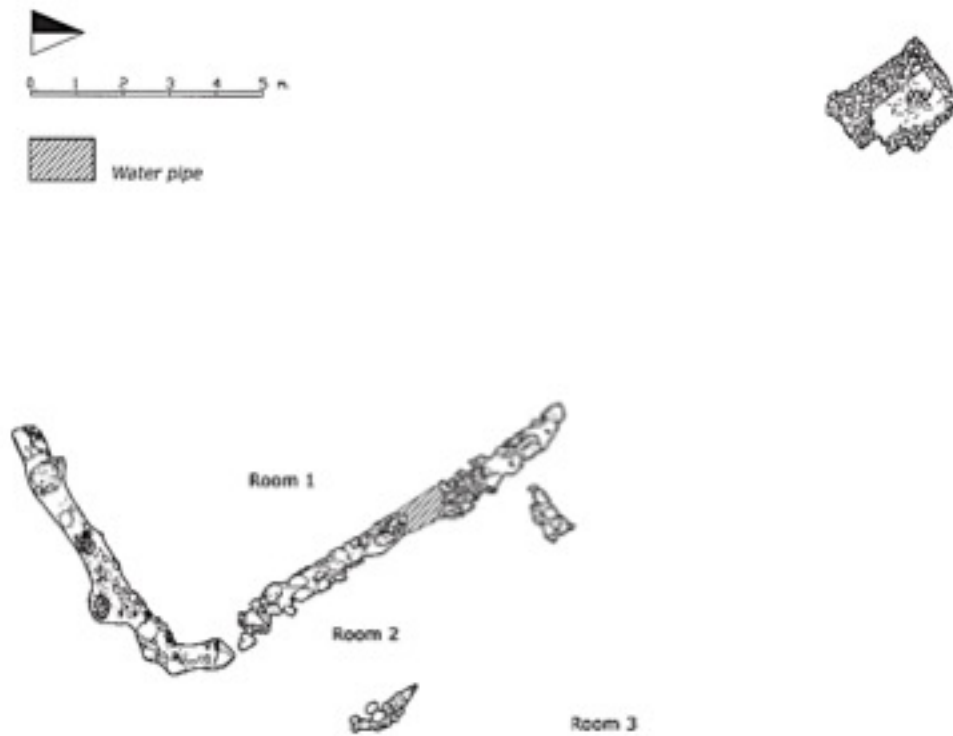


Figure 3.5 Plan of the Podere Cosciano site, near Volterra. After Camin and McCall 2002, 21

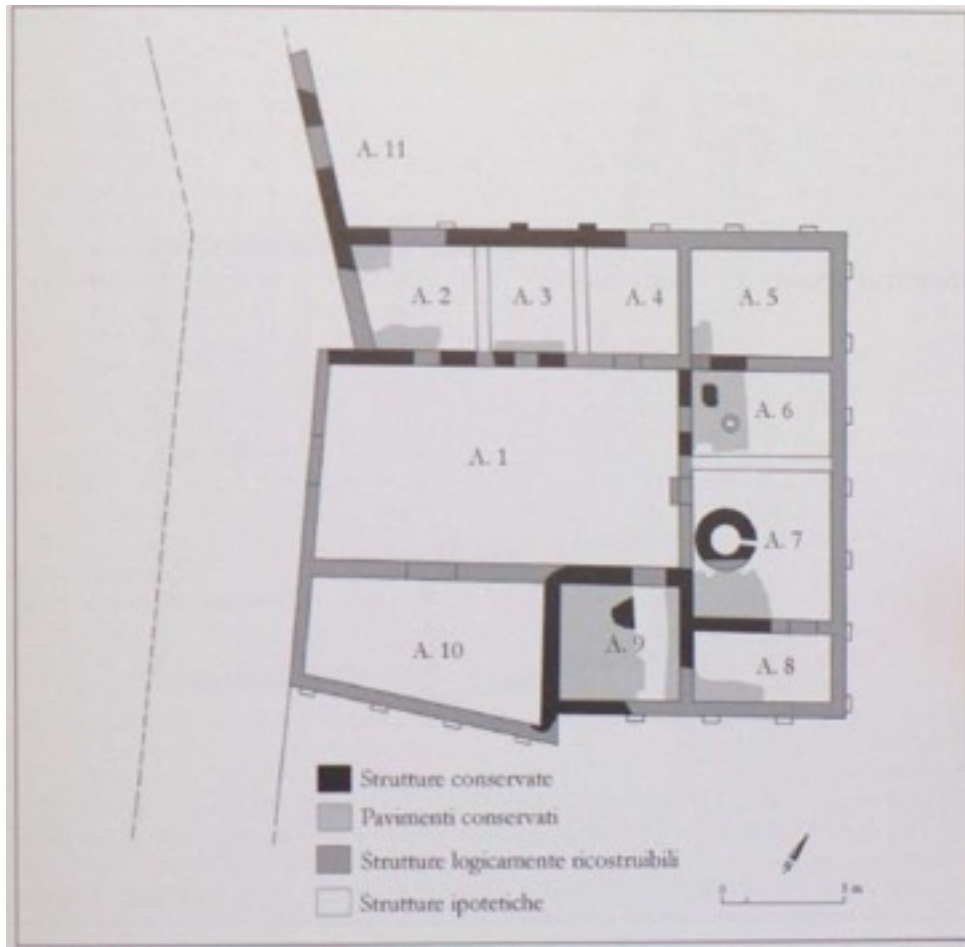


Figure 3.6: Auditorium Site Period 1 Phase 2. After Carandini et al. 2006, 87.

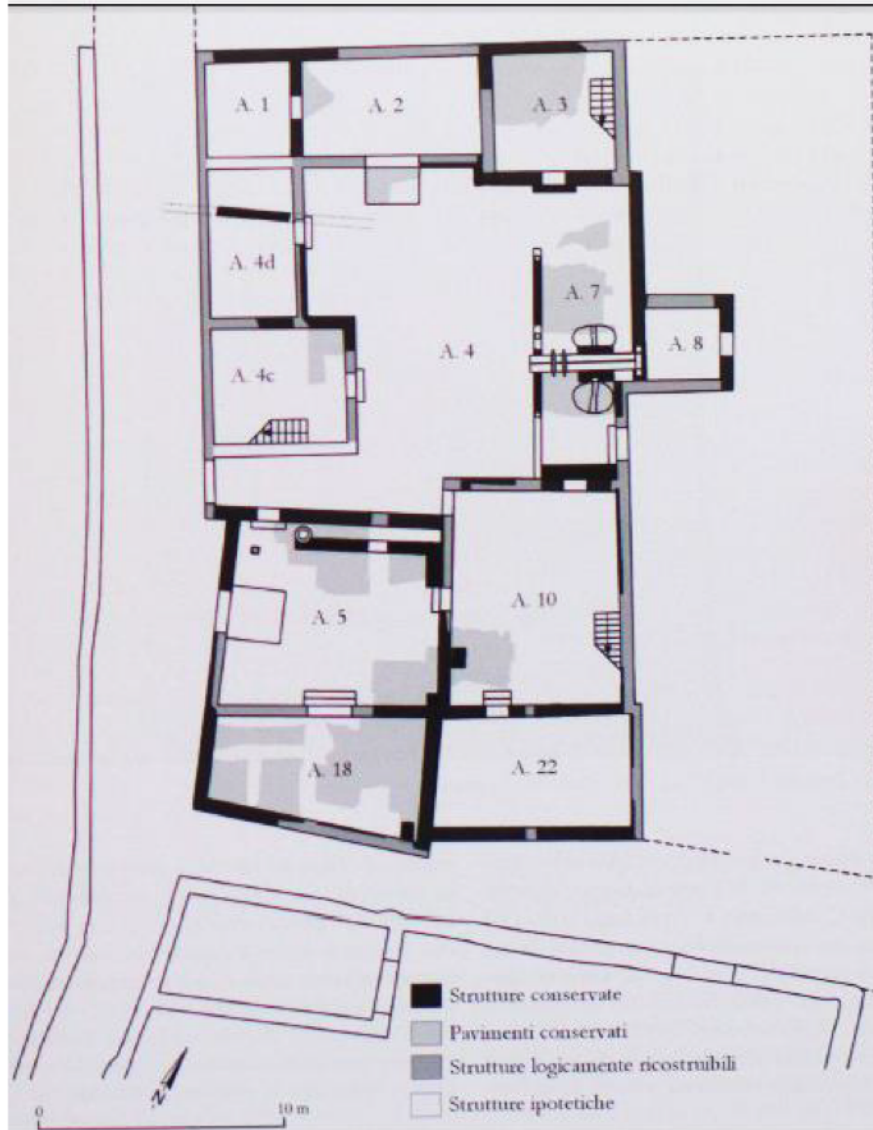


Figure 3.7 Plan of the Auditorium site Period 2, phase 1. After Carandini et al. 2006, 143.

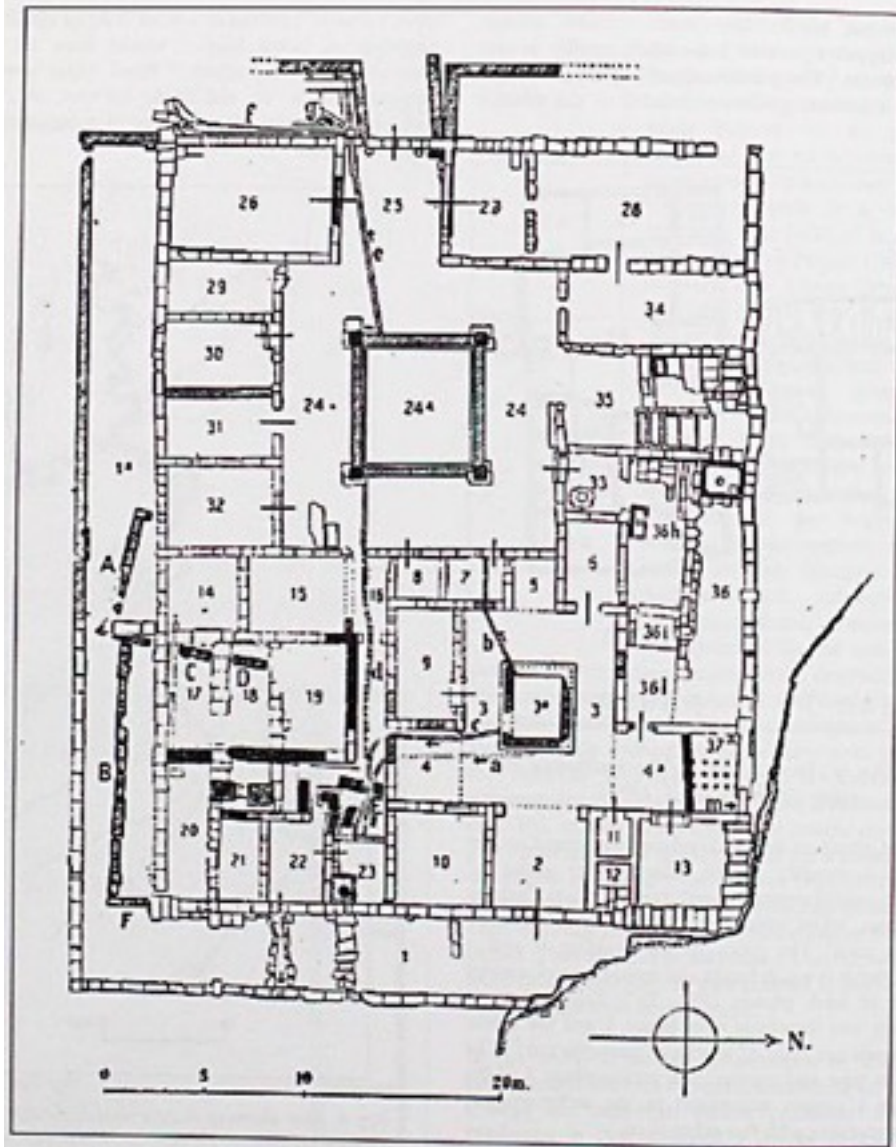


Figure 3.8 Plan of the Villa della Grote at Grottarossa. After Becker 2005, 816.

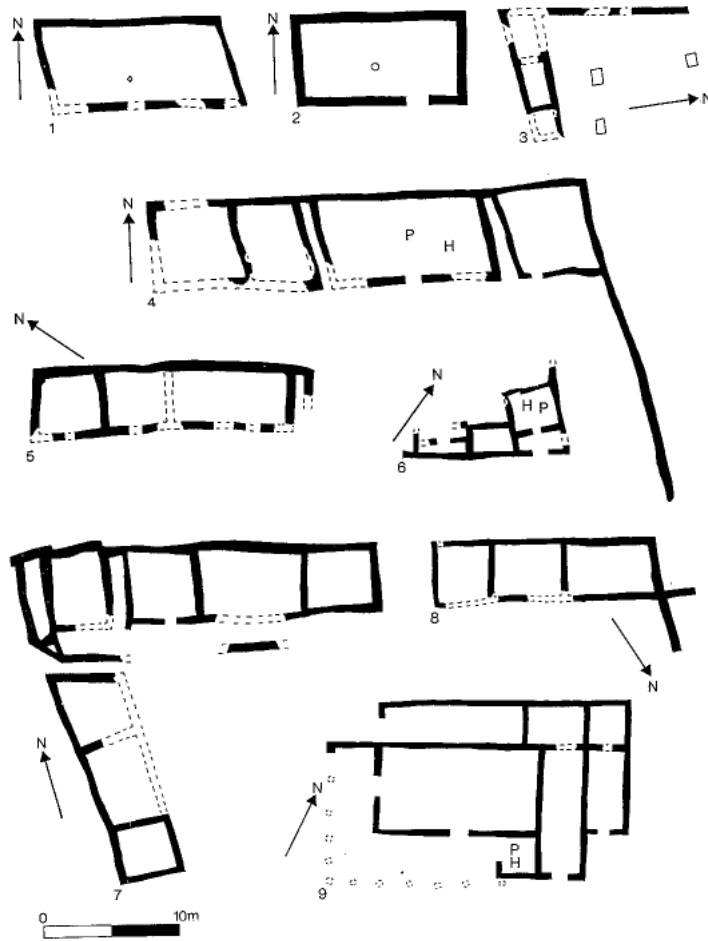


Figure 3.9 "Archaic Farms" 1. Tartuchino Phase I; 2. Luni sul Mignone; 3. Torrino; 4. Tartuchino Phase II; 5. Ficana zone 5b Phase III; 6. Veii Macchia Grande; 7. Lago dell'Accesa complexes VII and VIII Phases II and III; 8. Lago dell'Accesa complex; 9. Lavinium after Attolini and Perkins 1992, fig. 21.

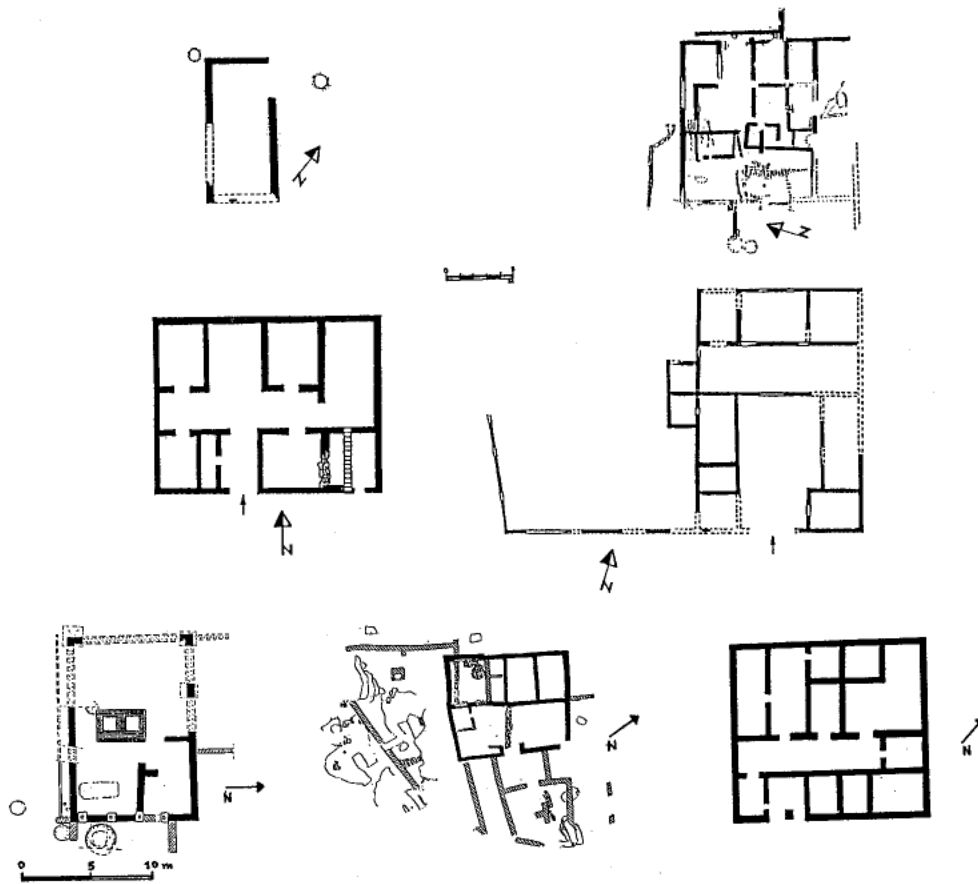


Figure 3.10 "Hellenistic Farms" from left to right and top to bottom. Monteforco; Giardino Vecchio; Villa Sambuco; Via Gabina; Nocelli; Mancamasone; Posta Crusta (after Volpe 1990).

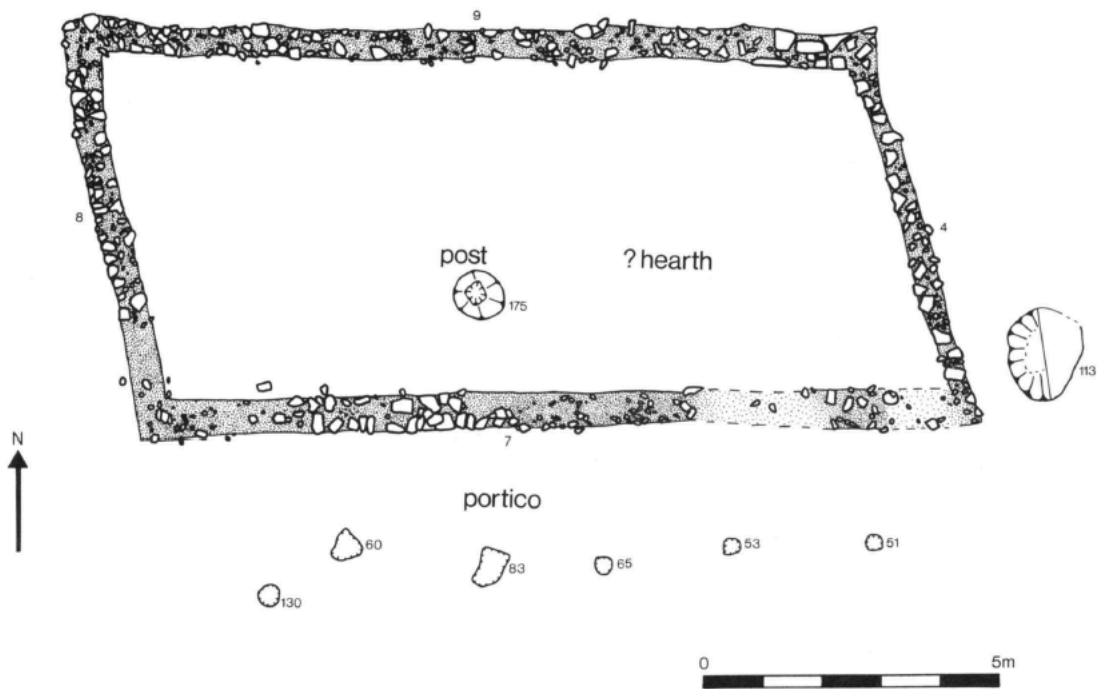


Figure 3.11 Plan of the Phase 1 Building at Podere Taruchino, After Perkins and Attolini 1992, Fig.5.

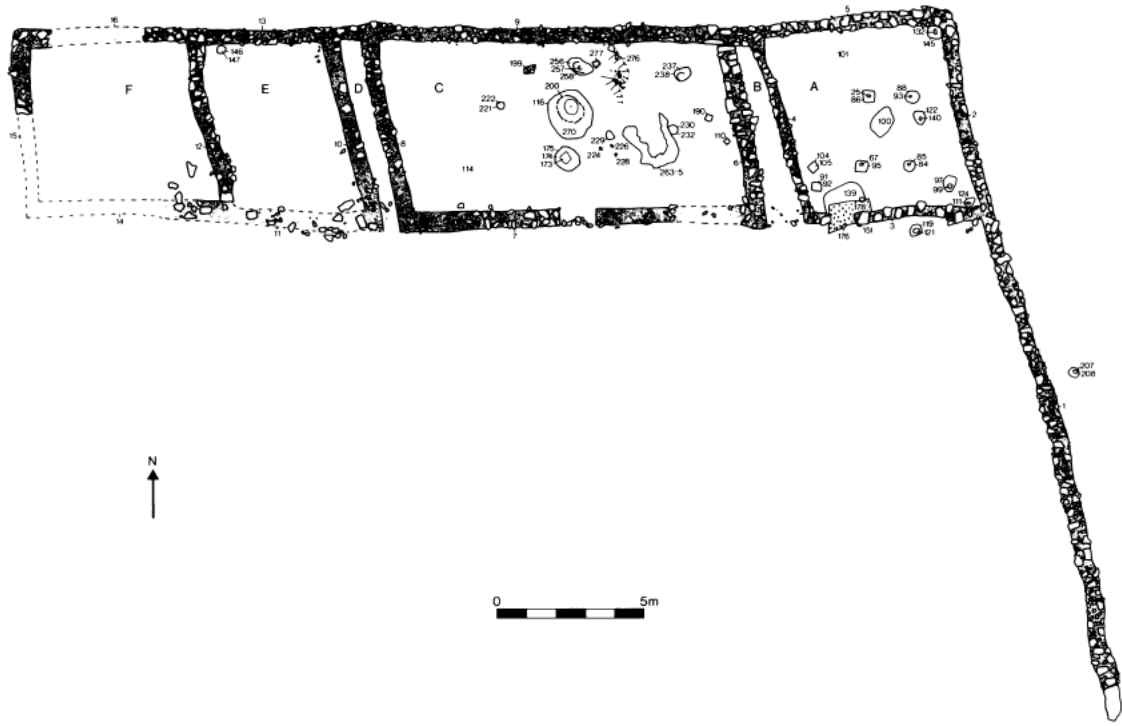


Figure 3.12 Phase 2 building at Podere Taruchino. After Perkins and Attolini 1992, Fig.6.

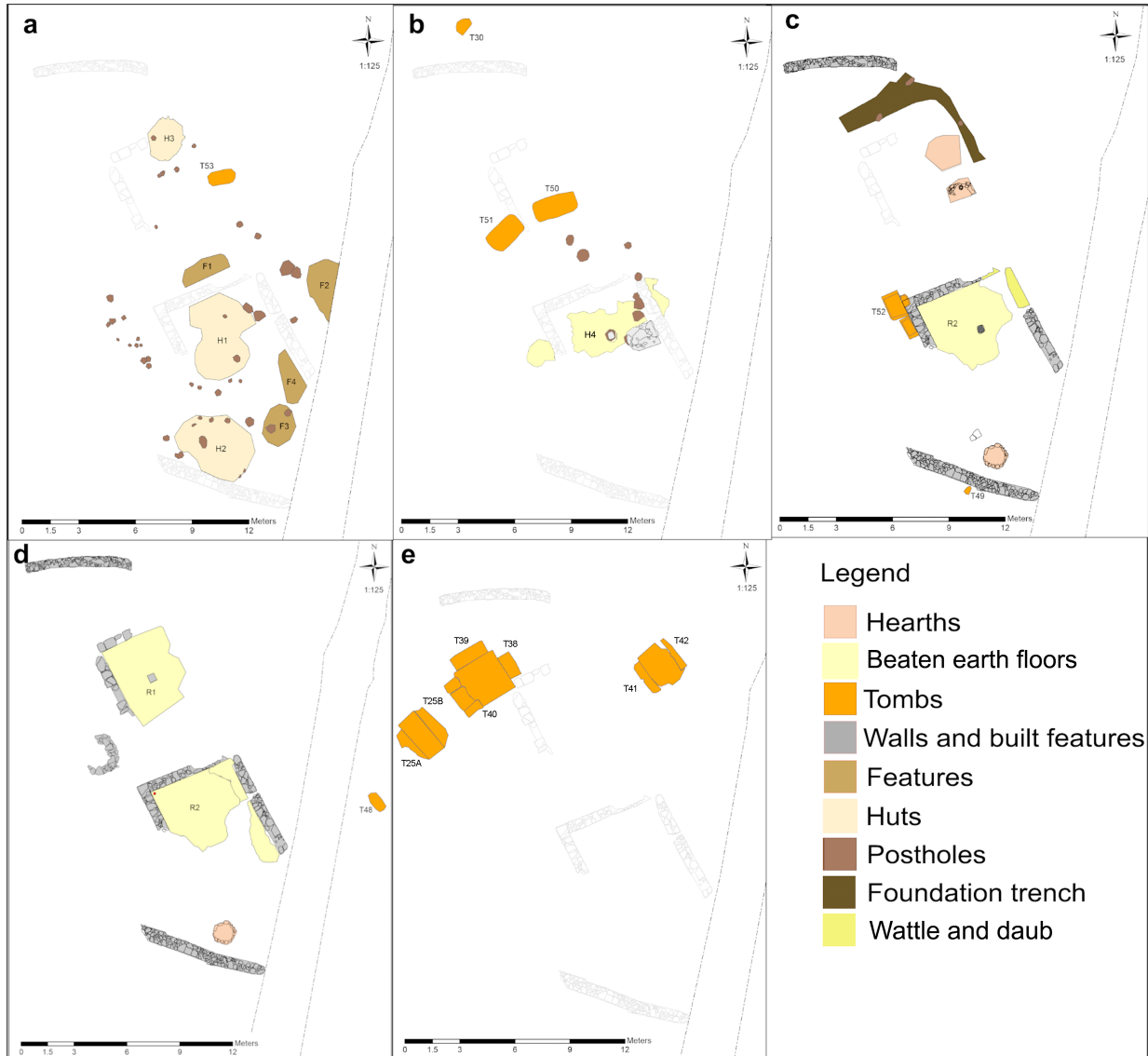


Figure 3.13 Plan of the development of Gabii Area D. Phases c and d correspond to the Archaic structure. After Evans et al., forthcoming.

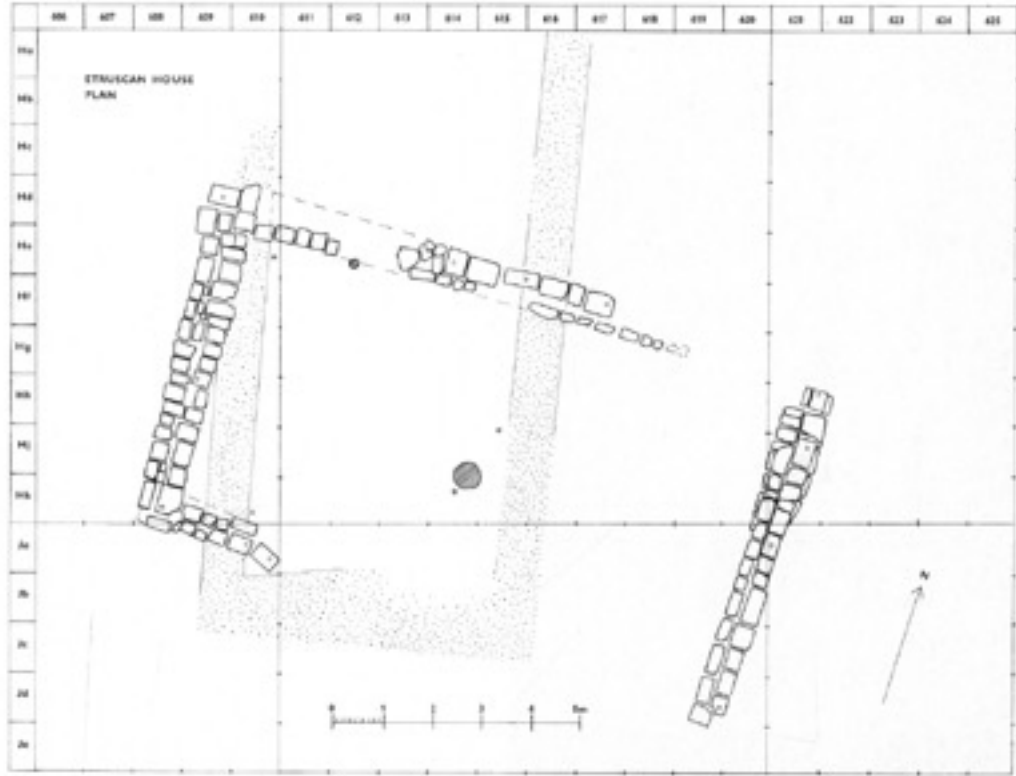


Figure 3.14 Plan of House B, a "Hellenistic farm" at Luni. After Östenberg, 1969 Fig.2.



Figure 5.1 Google Earth Image with surveys in my dossier labeled.

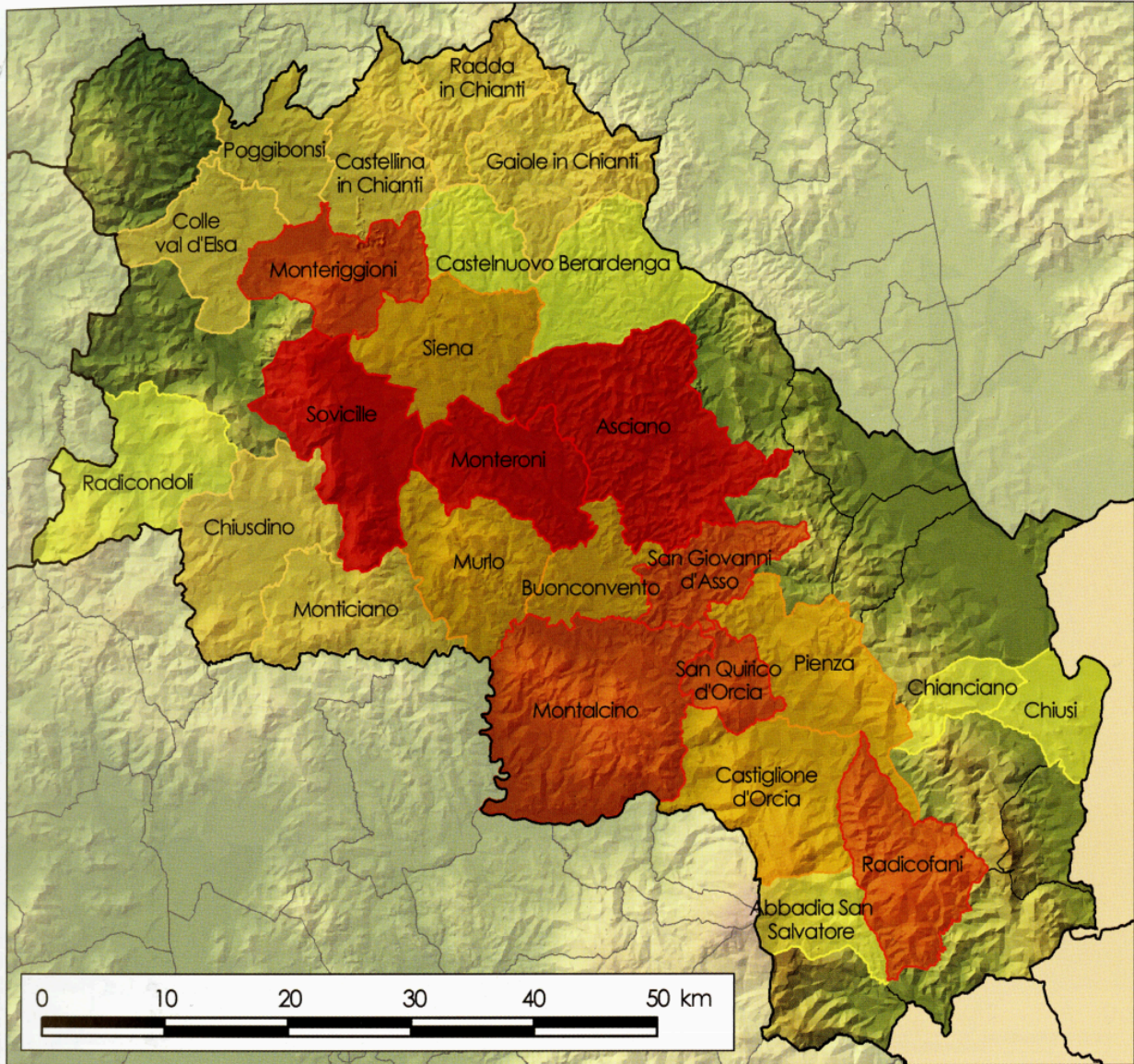


Figure 5.2 Map of the CAPS study area with comuni marked, after Salzotti 2012.

Montalcino	Castelnuovo dell'Abate	Sant'Angelo in Colle	Sant'Antimo	Camigliano	Poggio alle Mura	Monte Amiata	Tavernelle
<i>alfni</i>	<i>ainei</i>	<i>cecnei</i>	<i>atinei</i>	<i>vipinei</i>	<i>aθnui</i>	<i>zuθini</i>	<i>kaunis</i>
<i>anaini</i>	<i>alufnei</i>	<i>eicvasa</i>	<i>atini</i>	<i>θurici</i>	<i>alfnei</i>		<i>kinaχ</i>
<i>ancarni</i>	<i>arntle</i>	<i>s'alχjes</i>	<i>eteri</i>	<i>lecnei</i>	<i>anies</i>		
<i>anes</i>	<i>arntles</i>	<i>felis'i</i>		<i>plance</i>	<i>arnti</i>		
<i>arntlei</i>	<i>aruntle</i>			<i>pupus</i>	<i>auta</i>		
<i>atinei</i>	<i>atainei</i>			<i>reisnei</i>	<i>caznei</i>		
<i>aulni</i>	<i>ecnatnei</i>			<i>secu</i>	<i>secu</i>		
<i>caes</i>	<i>vescu</i>			<i>secui</i>			
<i>etus'nui</i>	<i>vesu(</i>			<i>secus'</i>			
<i>laru</i>				<i>titi</i>			
<i>macia</i>							
<i>melci</i>							
<i>teti</i>							
<i>tus'nui</i>							

Figure 5.3 Evidence for the presence of Etruscan families in the territory of Montalcino based on epigraphic evidence. After Campana 2013, Table 2.

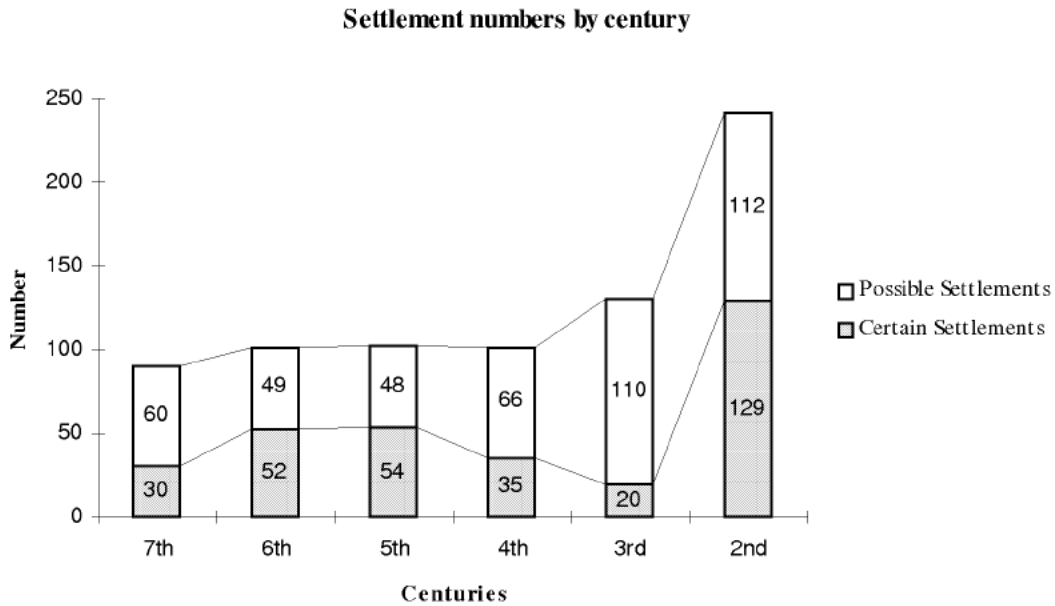


Figure 5.4 Graphical summary of possible versus certain site numbers in the Albegna Valley samples. After Perkins 1999, Fig. 3.2.1.

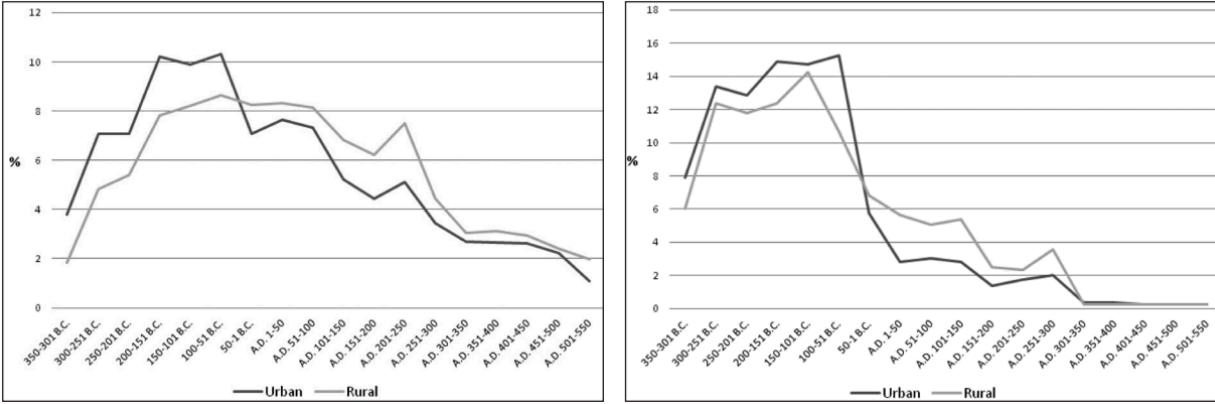


Figure 5.5 Percentage distribution of all ceramic sherds (l) and fine ware (r) in the city of Interamna Lirenas (dark line) and in the countryside (gray line).

Tables

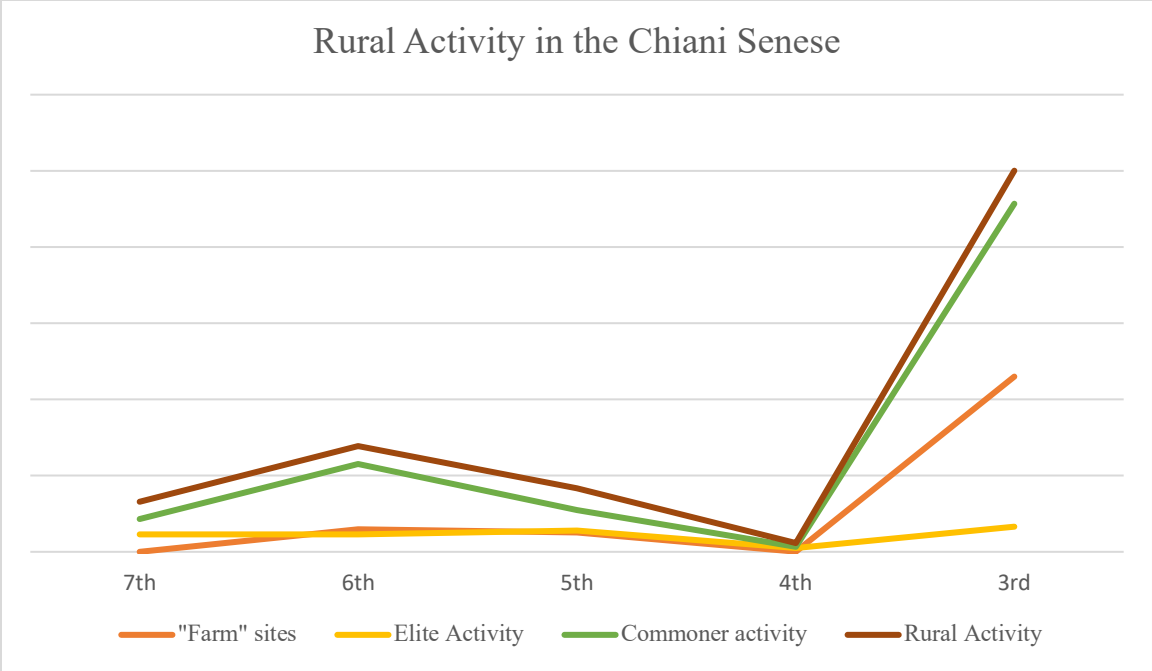
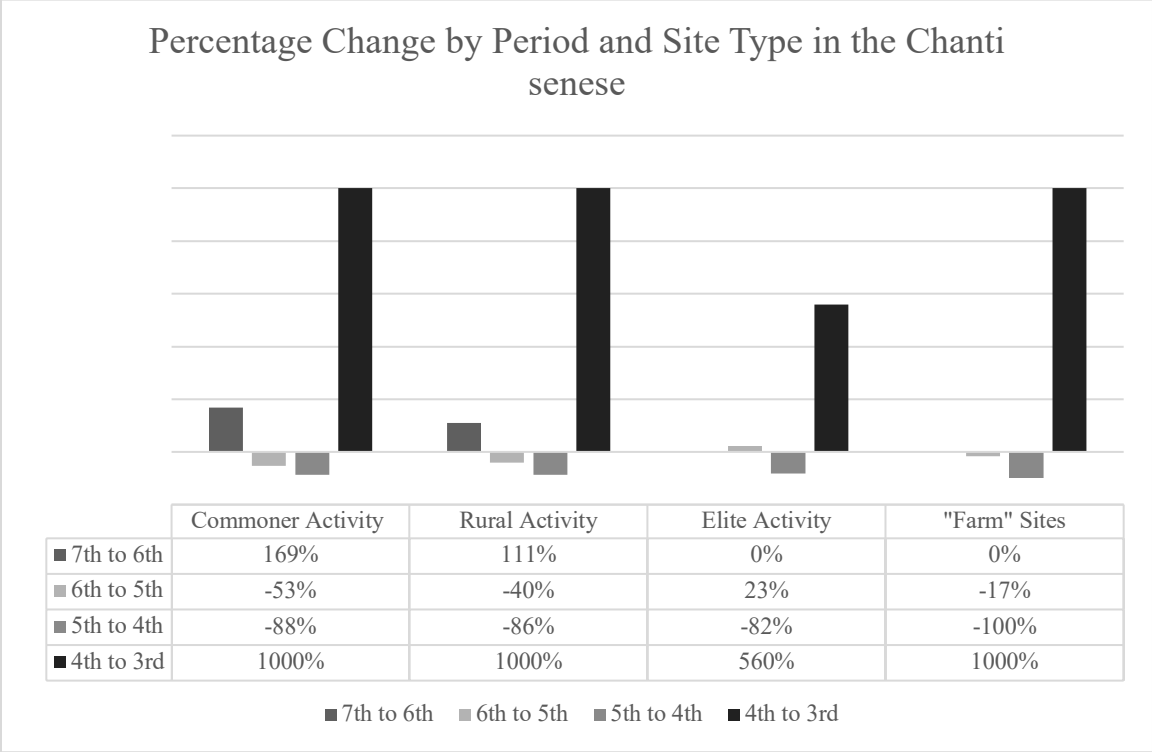


Table 5.1: Changes in evidence for rural activity in the Chianti senese⁶⁰⁰



⁶⁰⁰ 1000 is given as a generic percentage for any change over 1000.

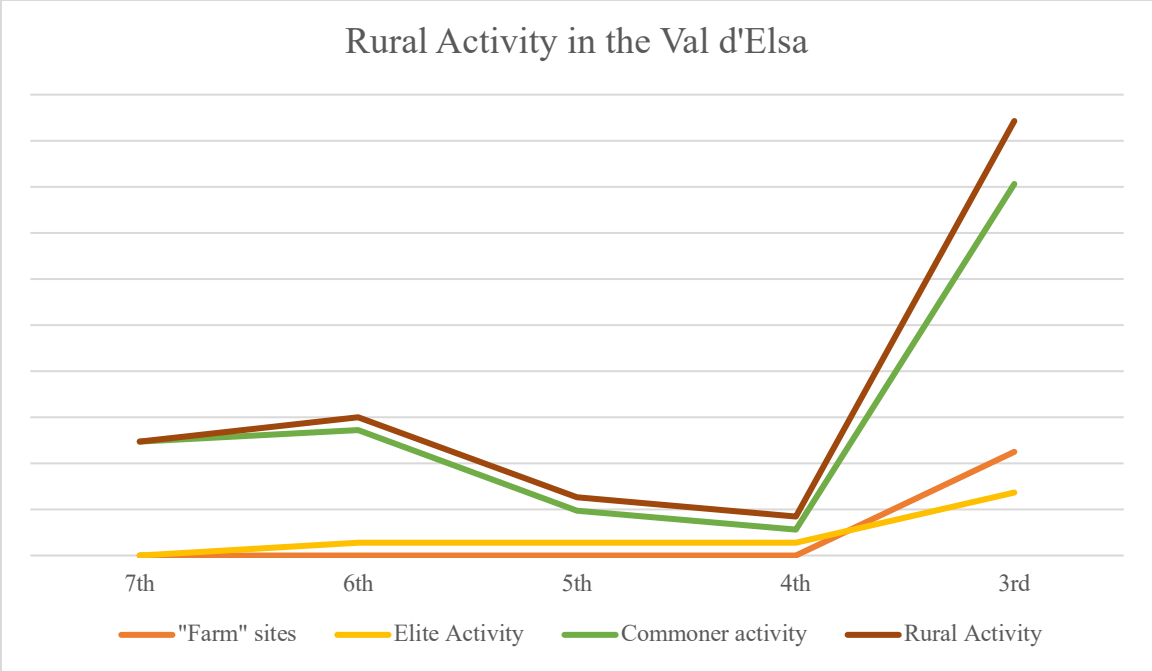
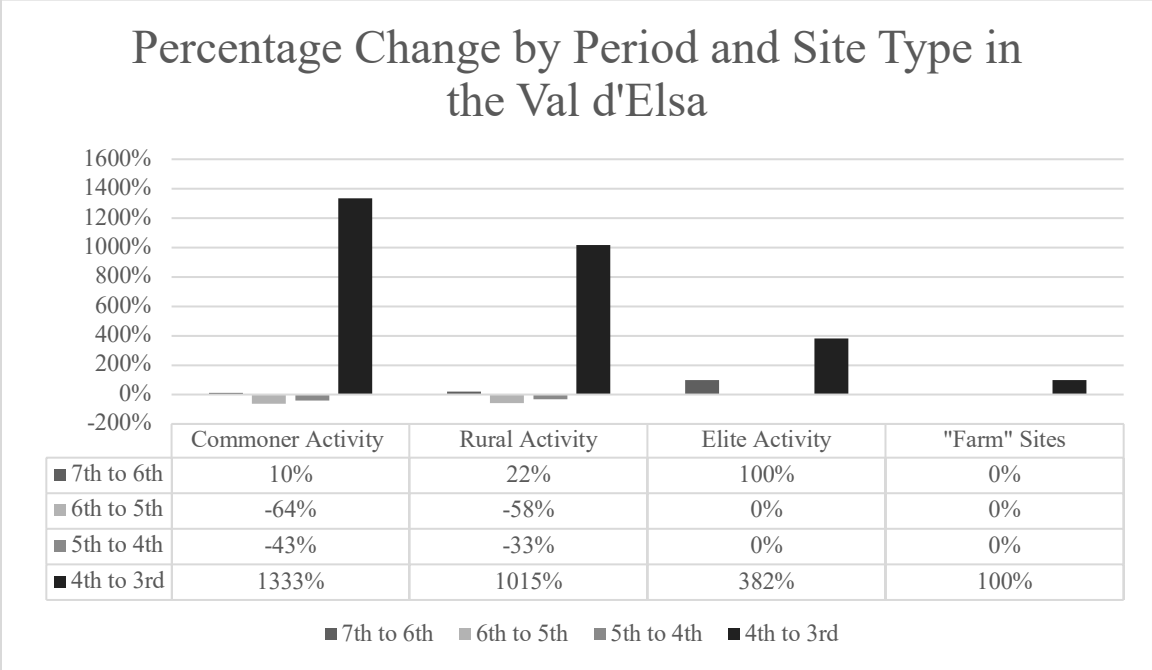


Table 5.2 Changes in evidence for rural activity in the Val d'Elsa



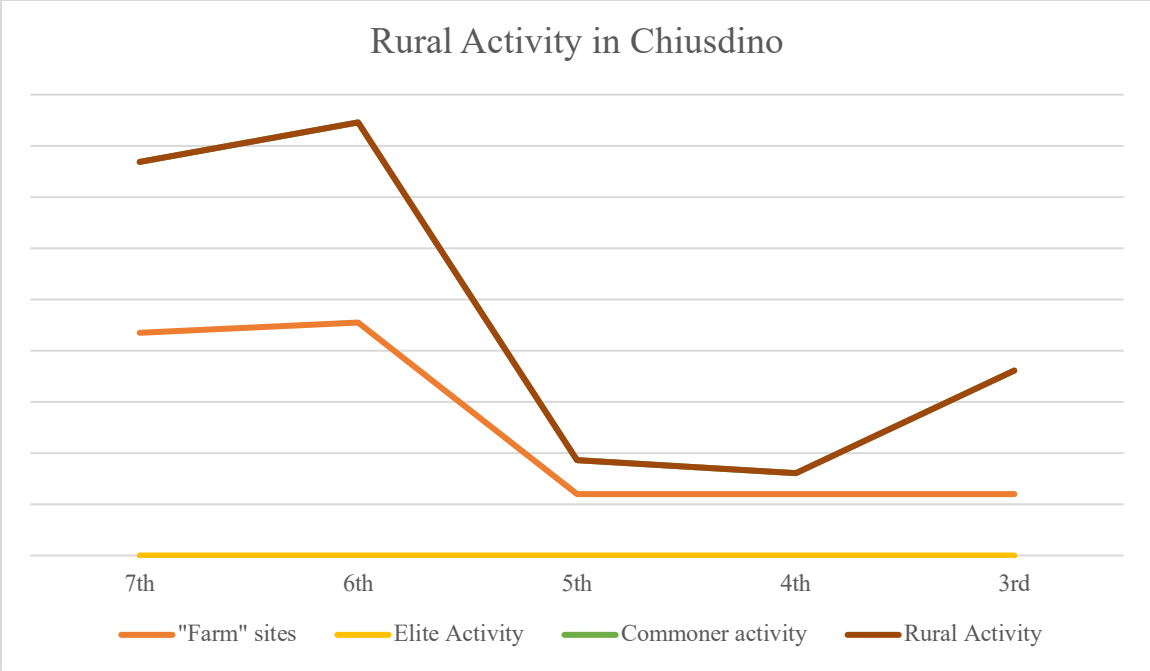
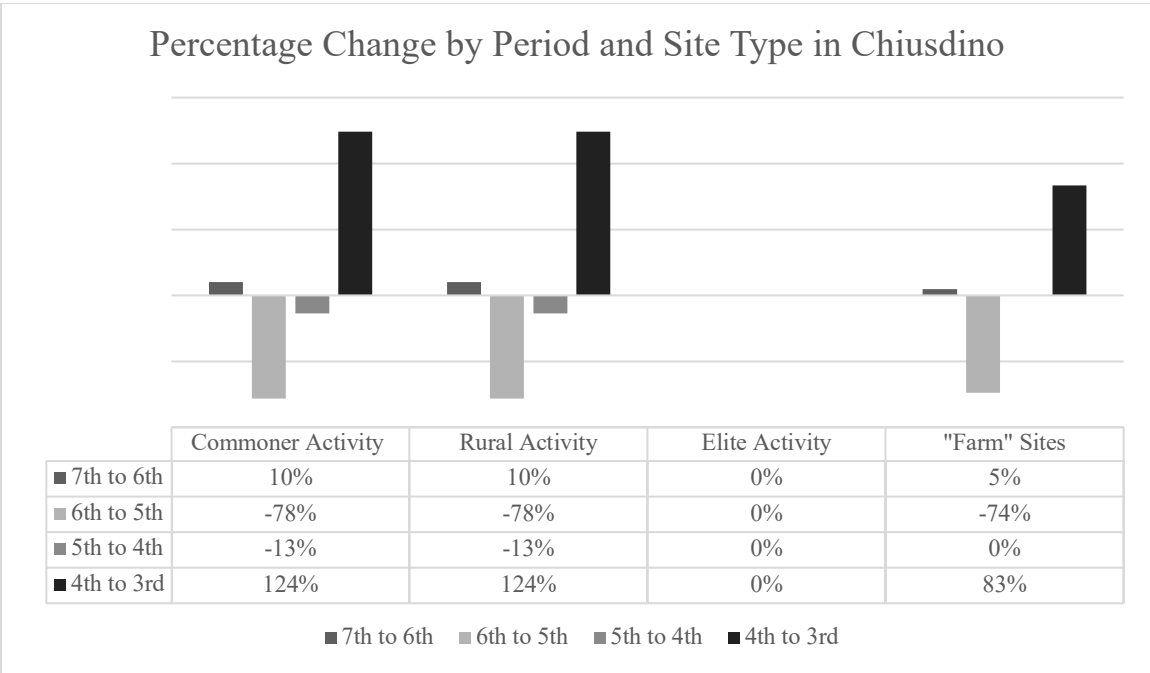


Table 5.3 Changes in evidence for rural activity in Chiusdino



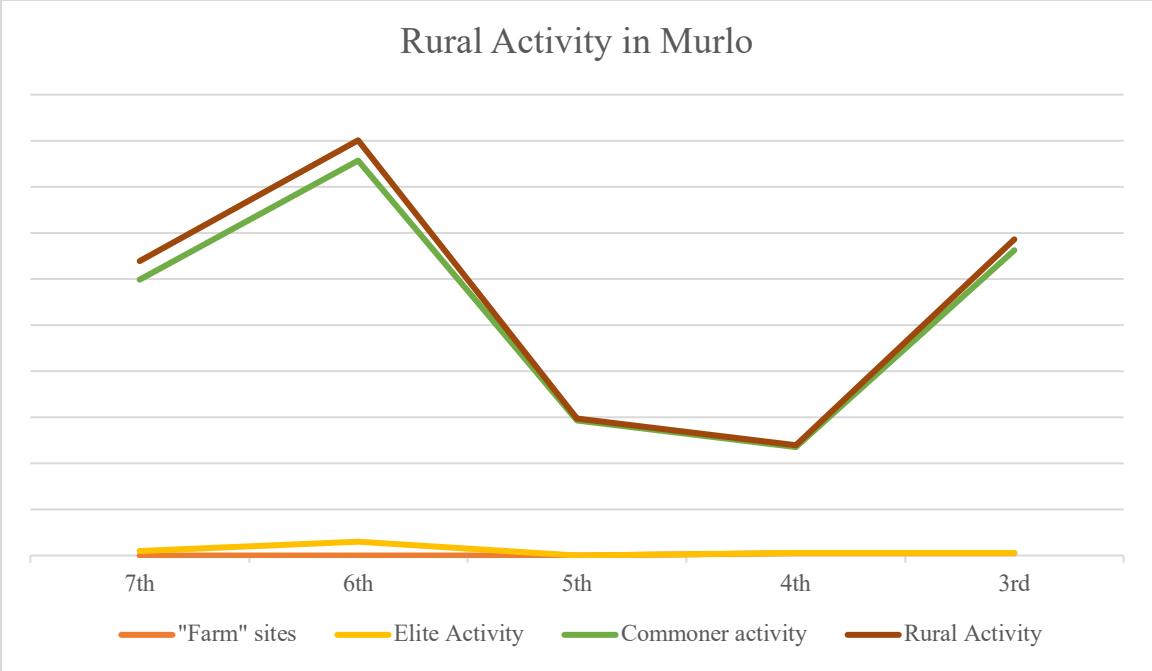
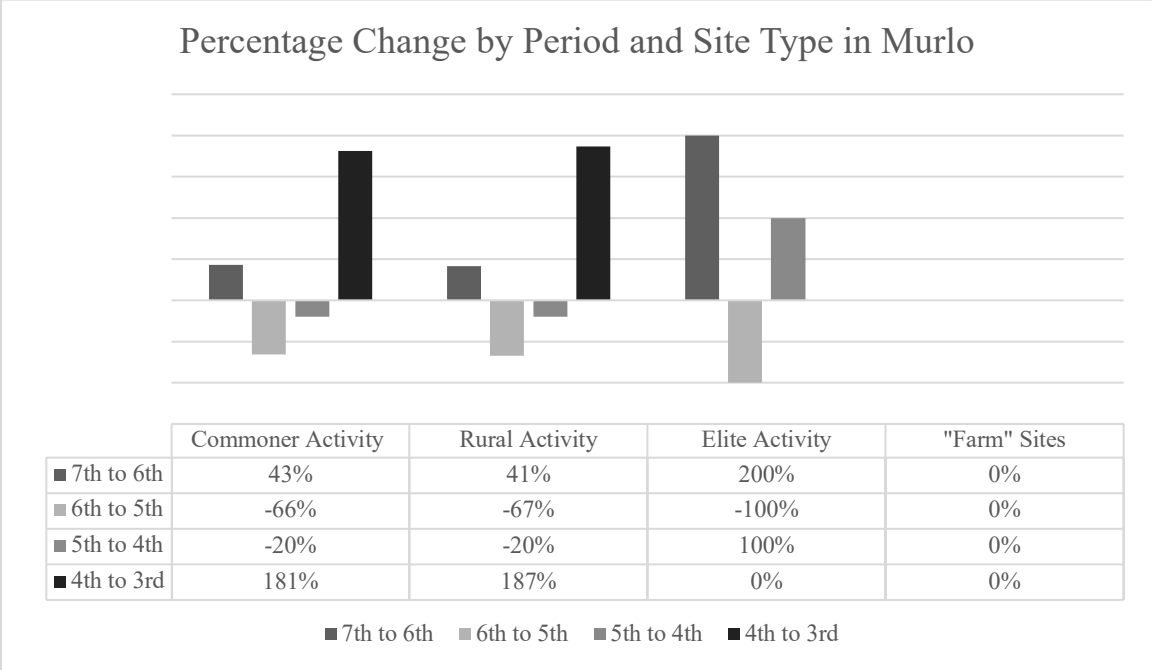


Table 5.4 Changes in evidence for rural activity in Murlo



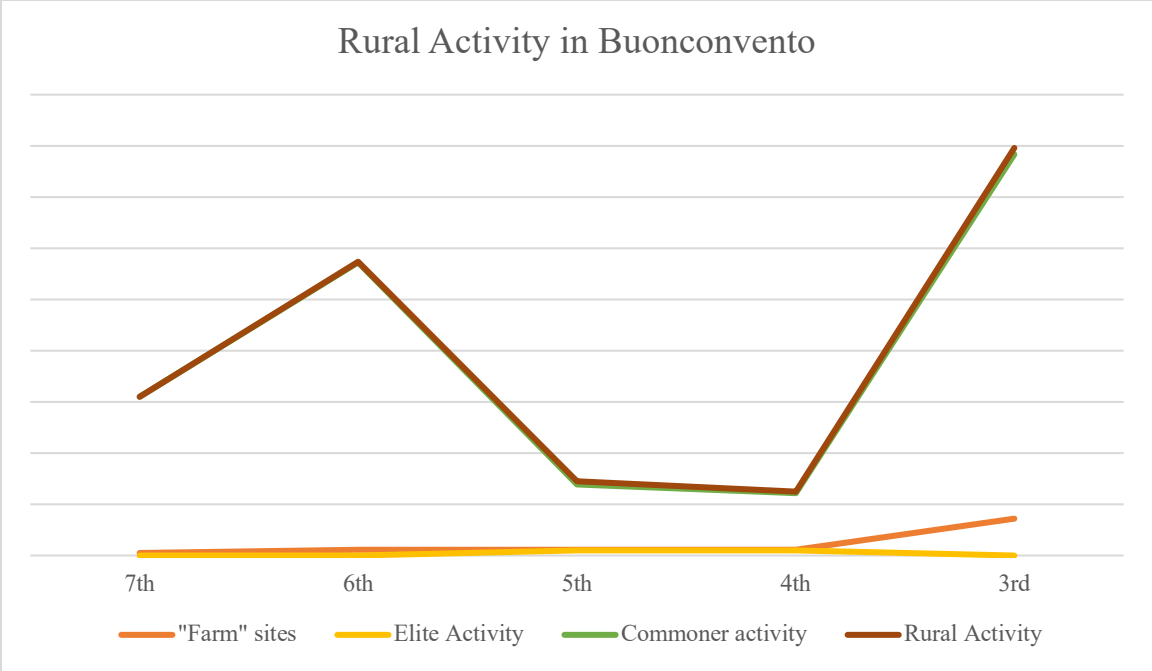
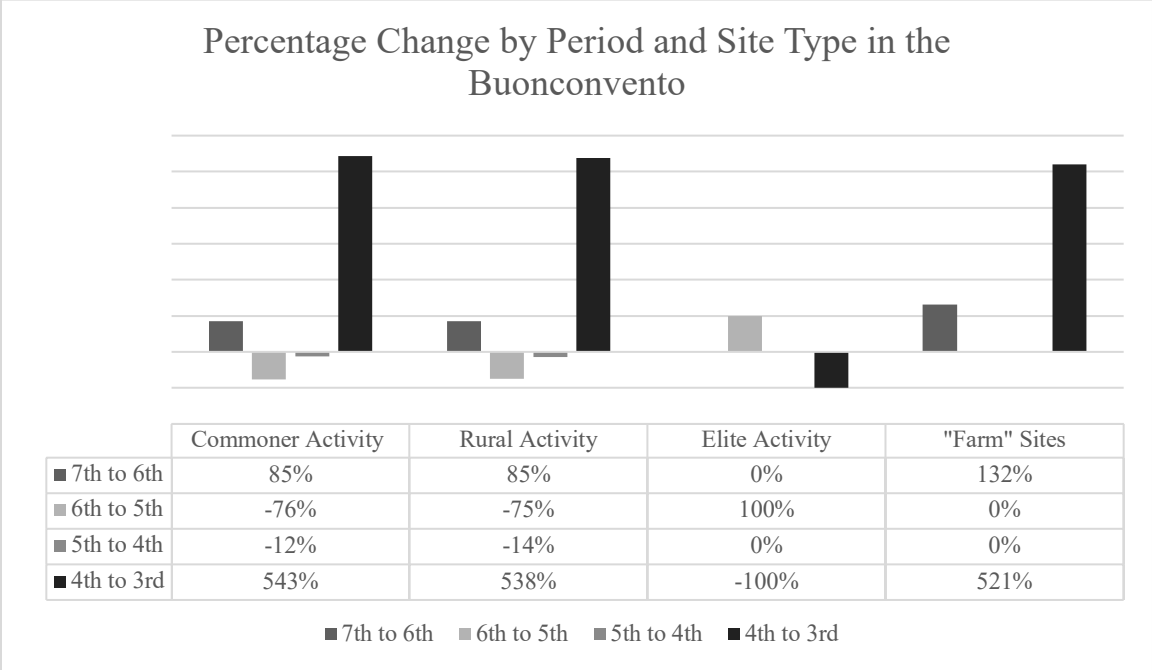


Table 5.5 Changes in evidence for rural activity in the Buonconvento



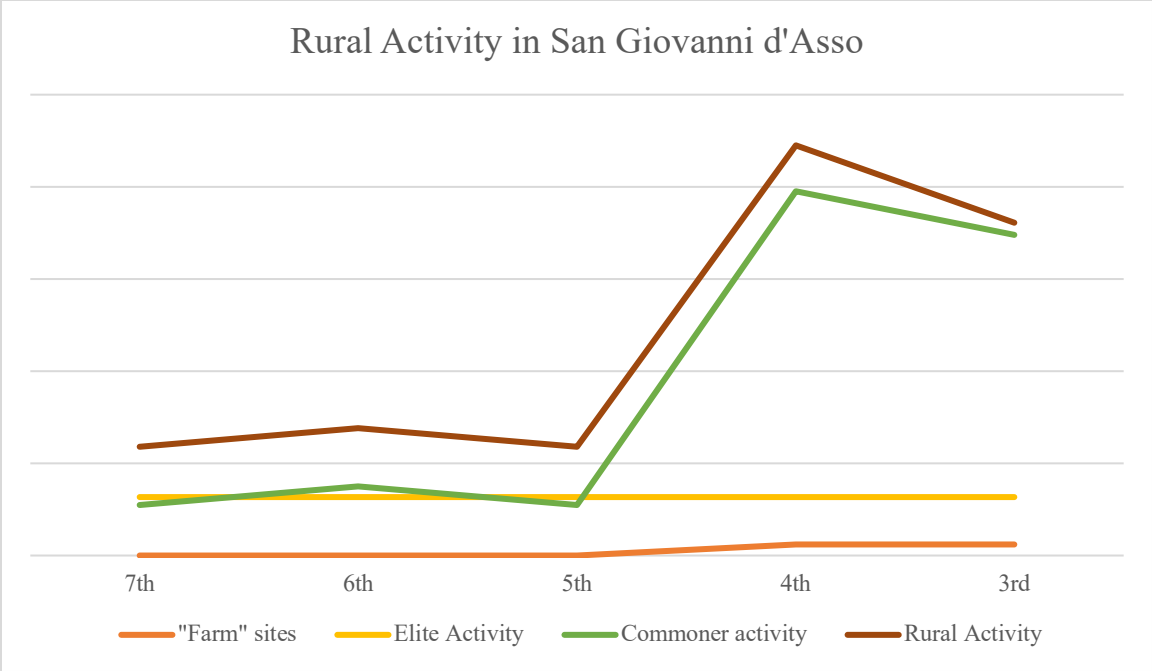
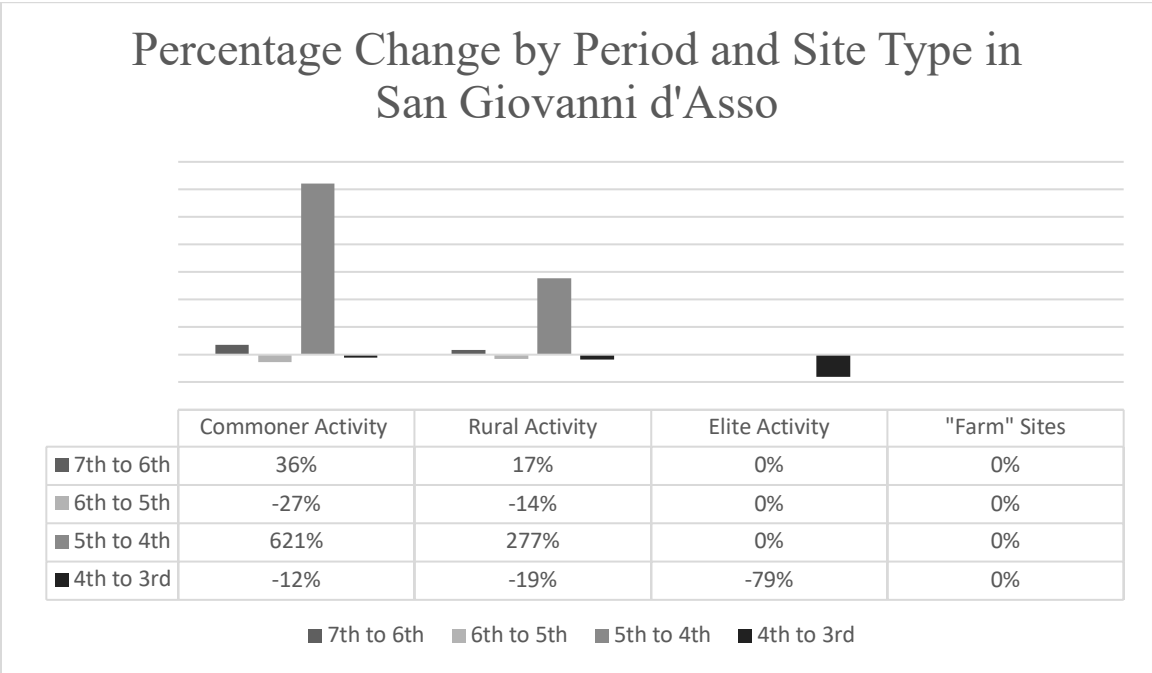


Table 5.6 Changes in evidence for rural activity in San Giovanni d'Asso



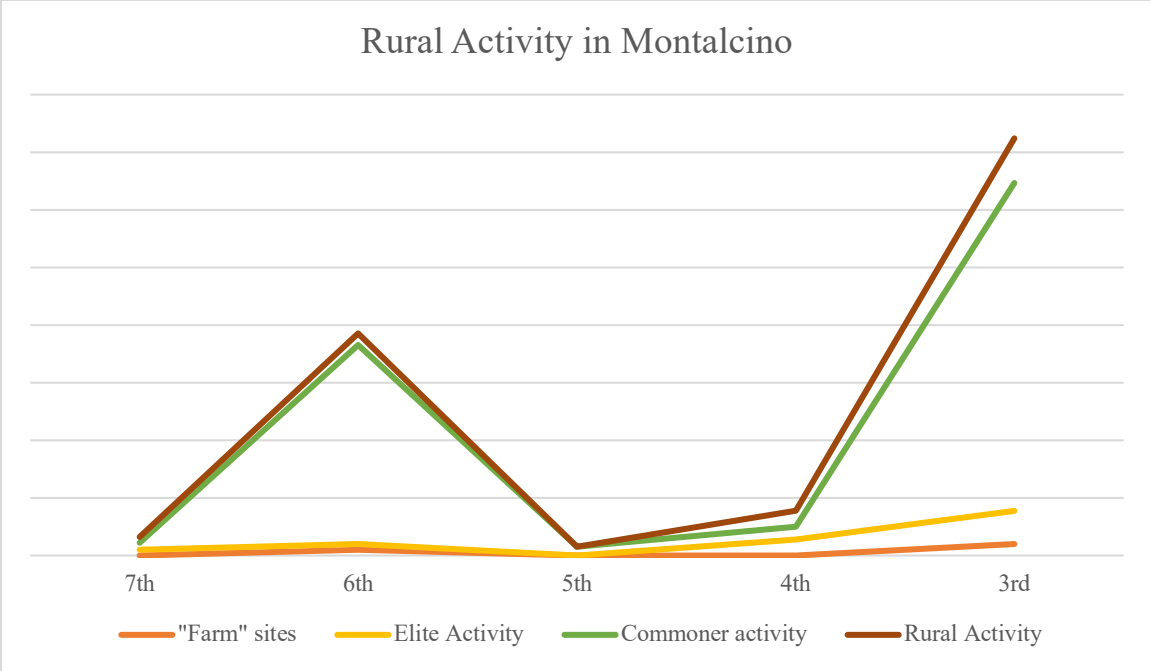
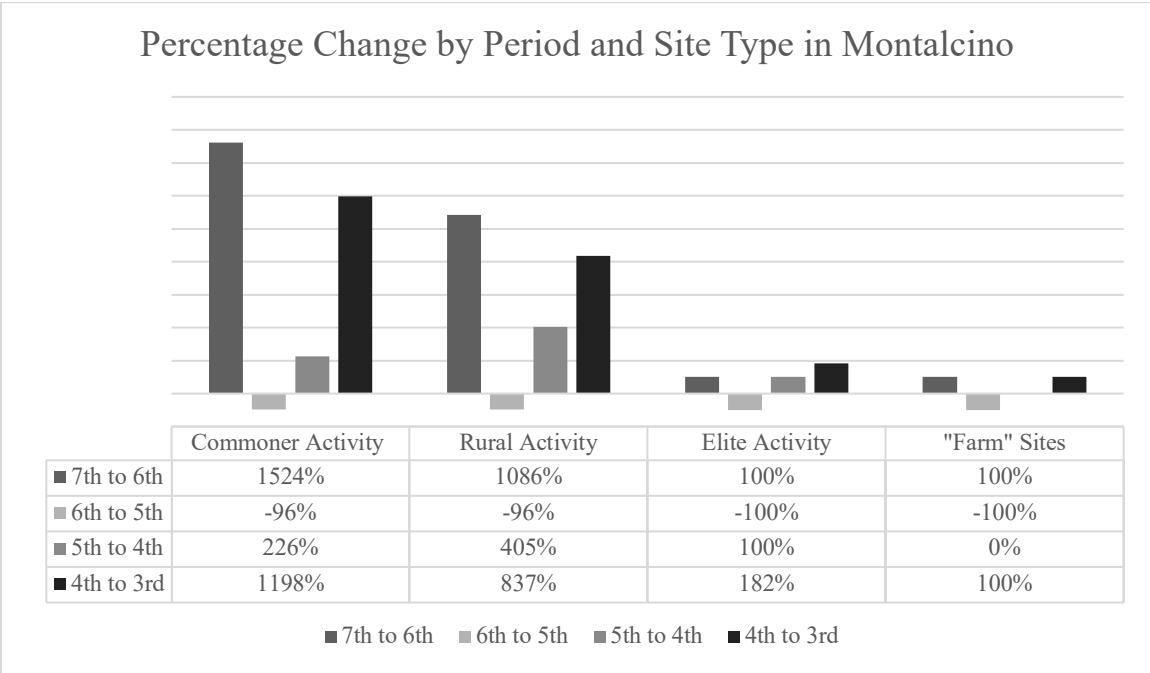


Table 5.7 Changes in evidence for rural activity in Montalcino



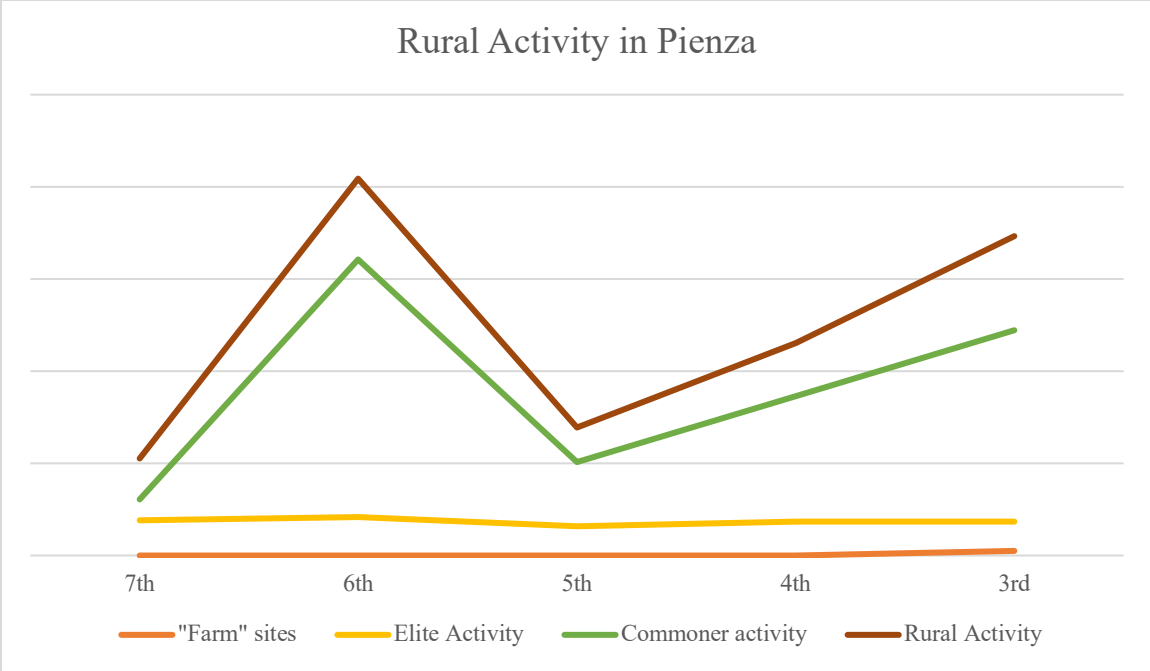
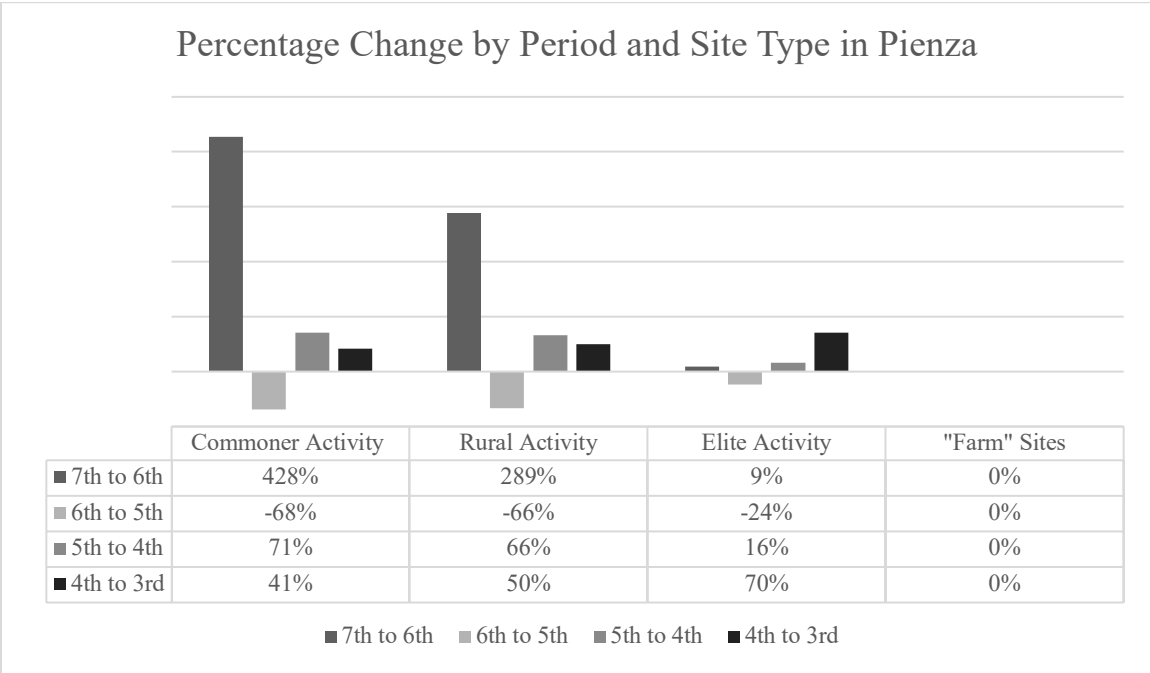


Table 5.8 Changes in evidence for rural activity in Pienza



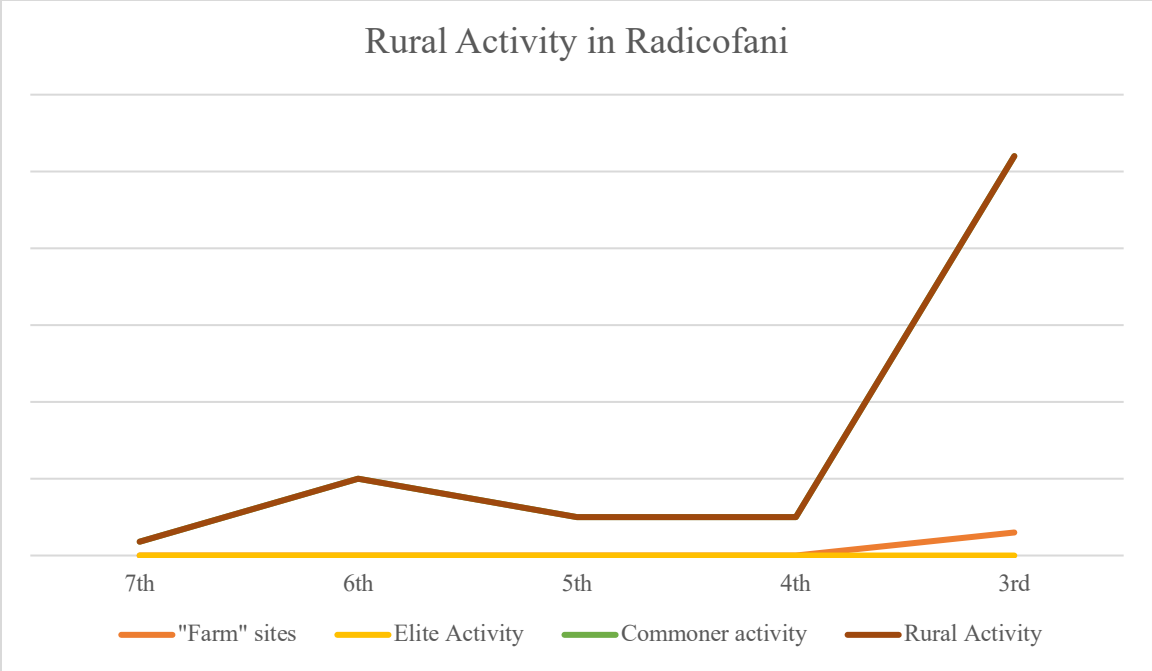
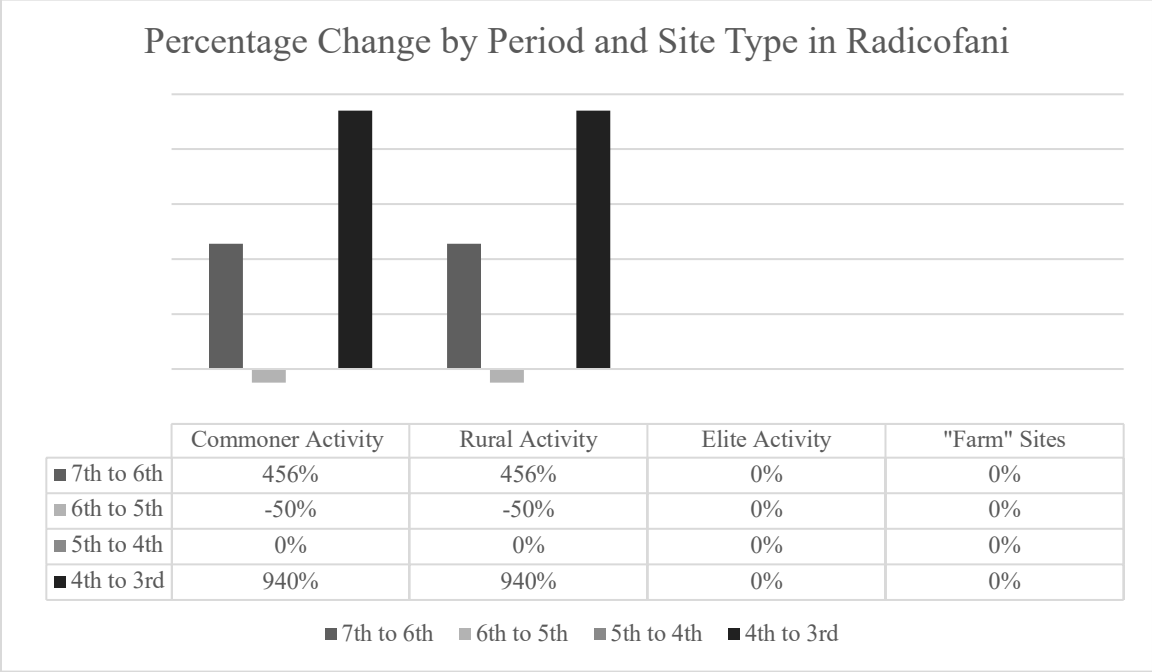


Table 5.9 Changes in evidence for rural activity in Radicofani



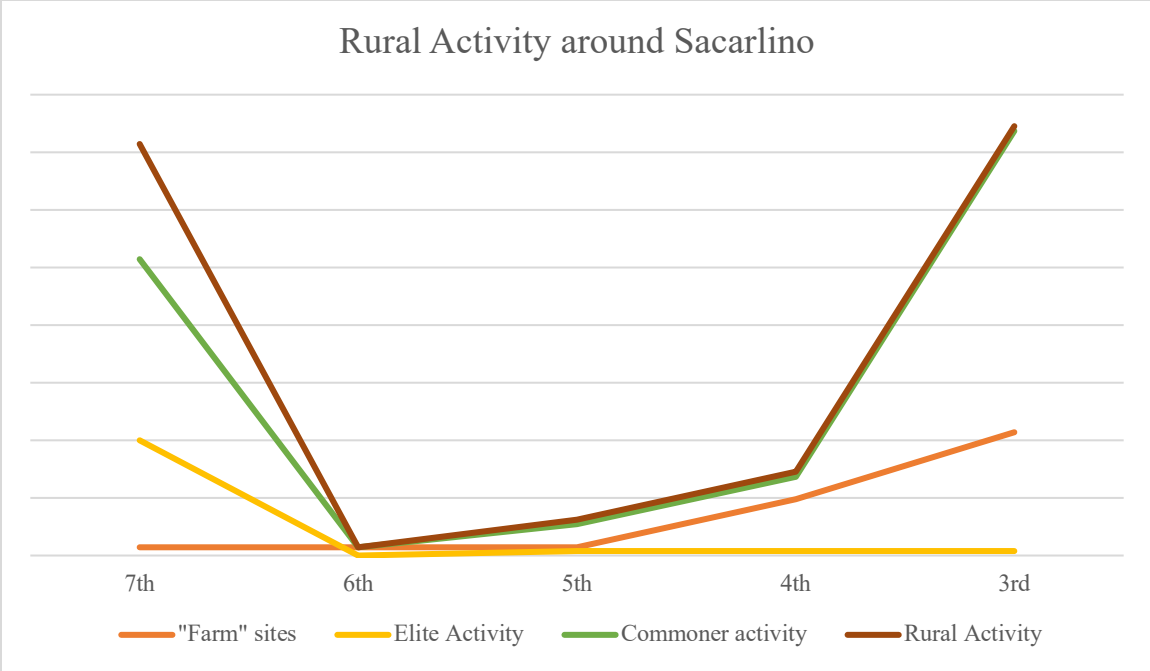
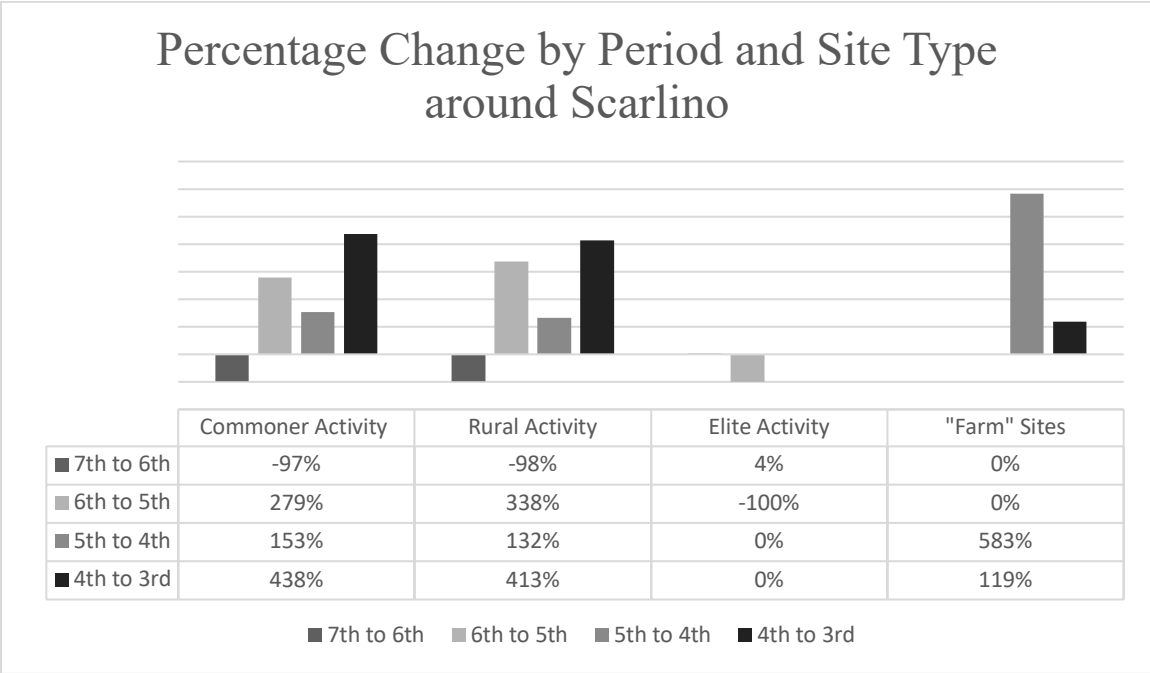


Table 5.10 Changes in evidence for rural activity around Scarlino



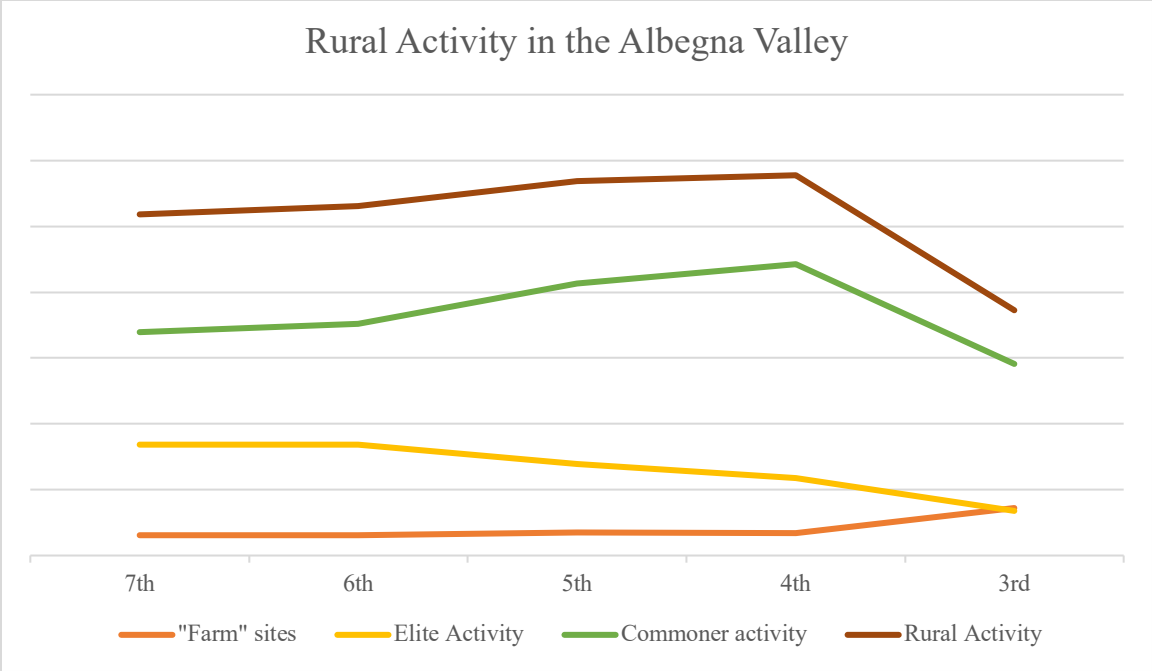
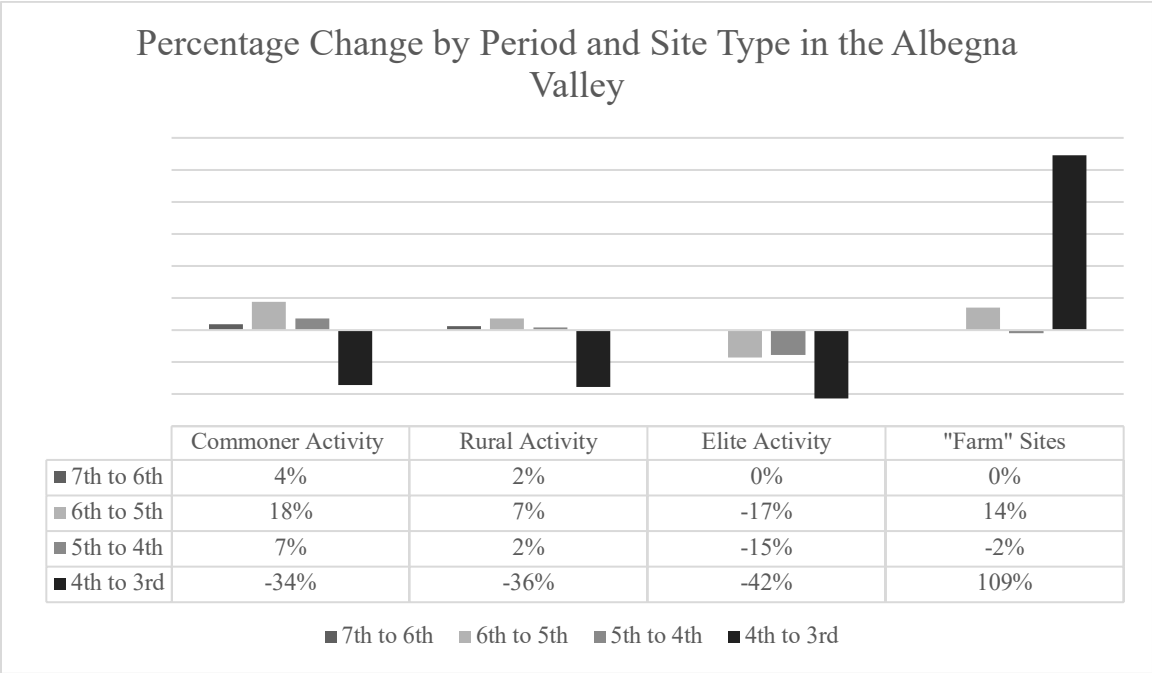


Table 5.11 Changes in evidence for rural activity in the Albegna Valley



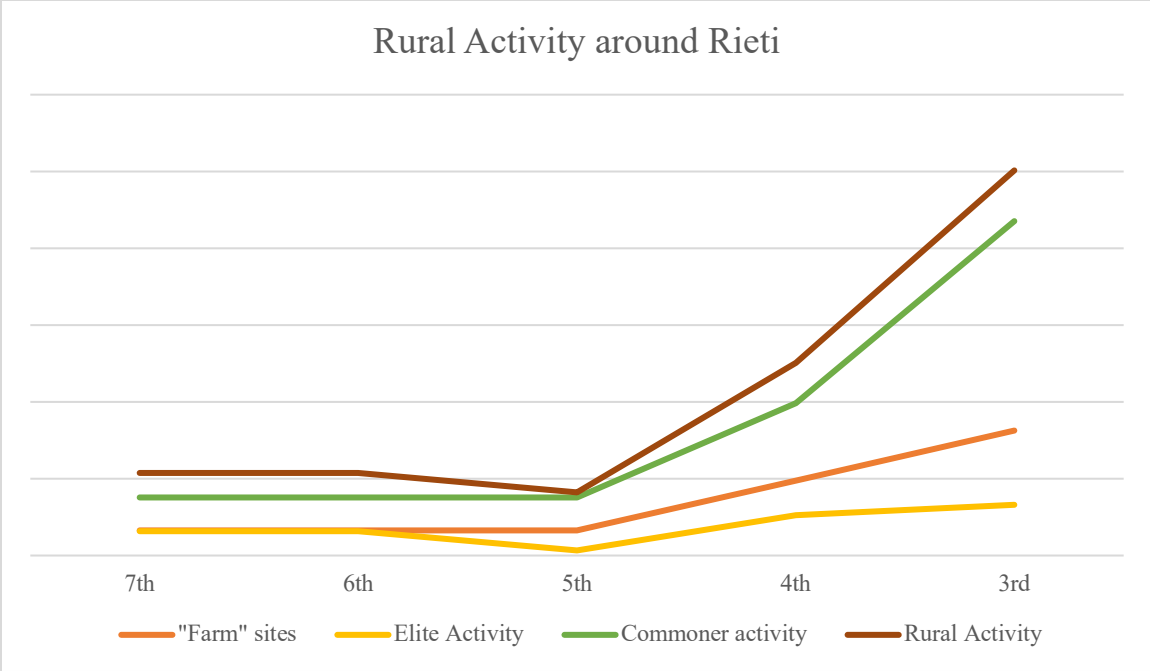
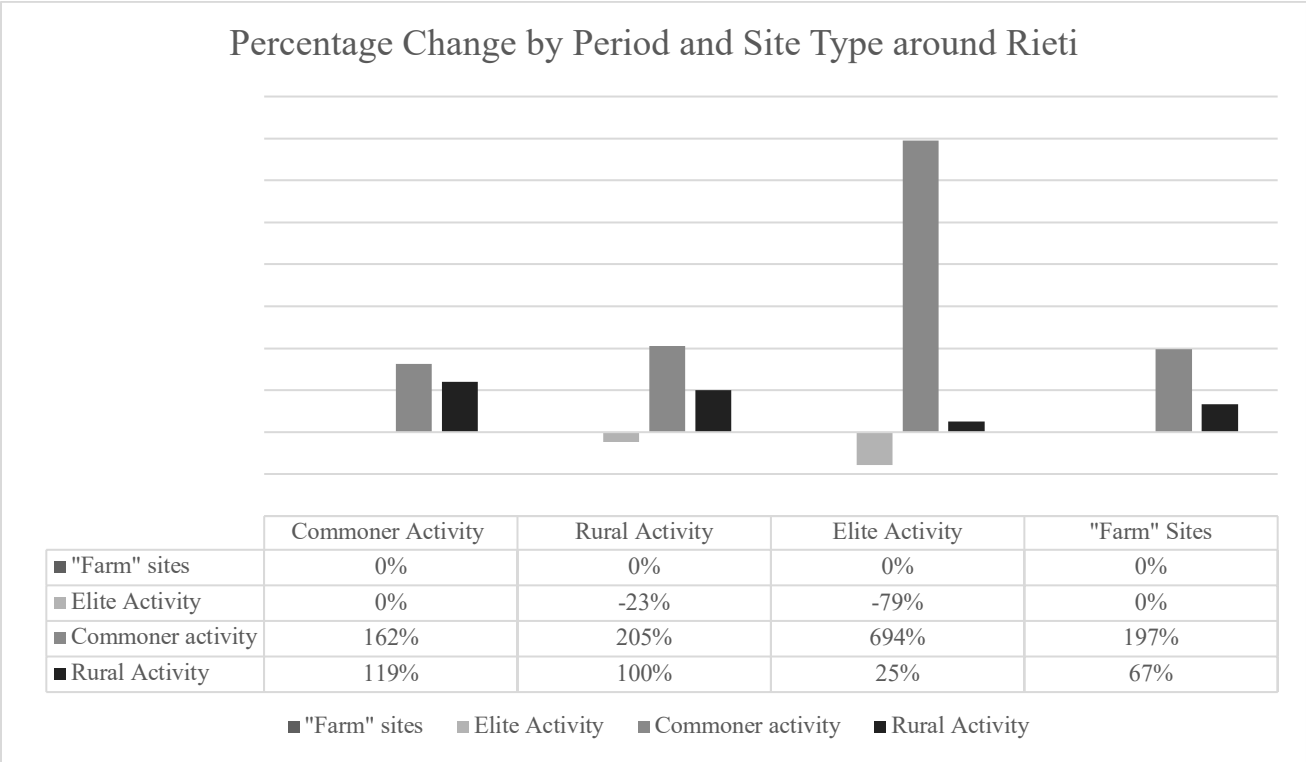


Table 5.12 Changes in evidence for rural activity around Rieti



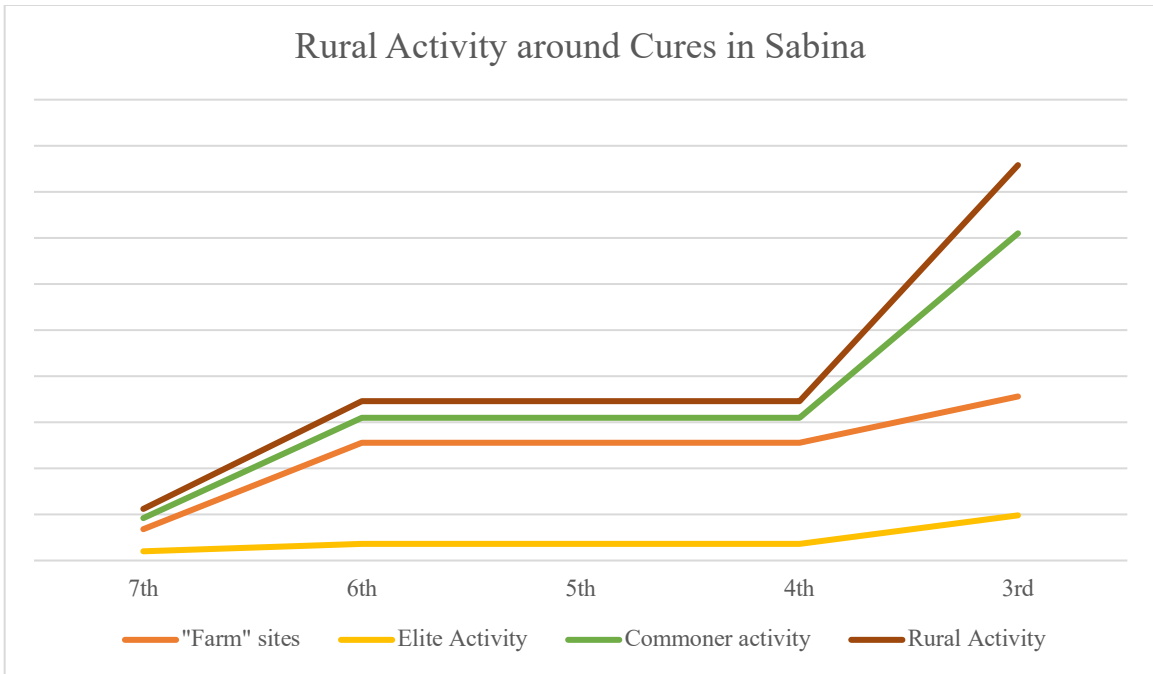
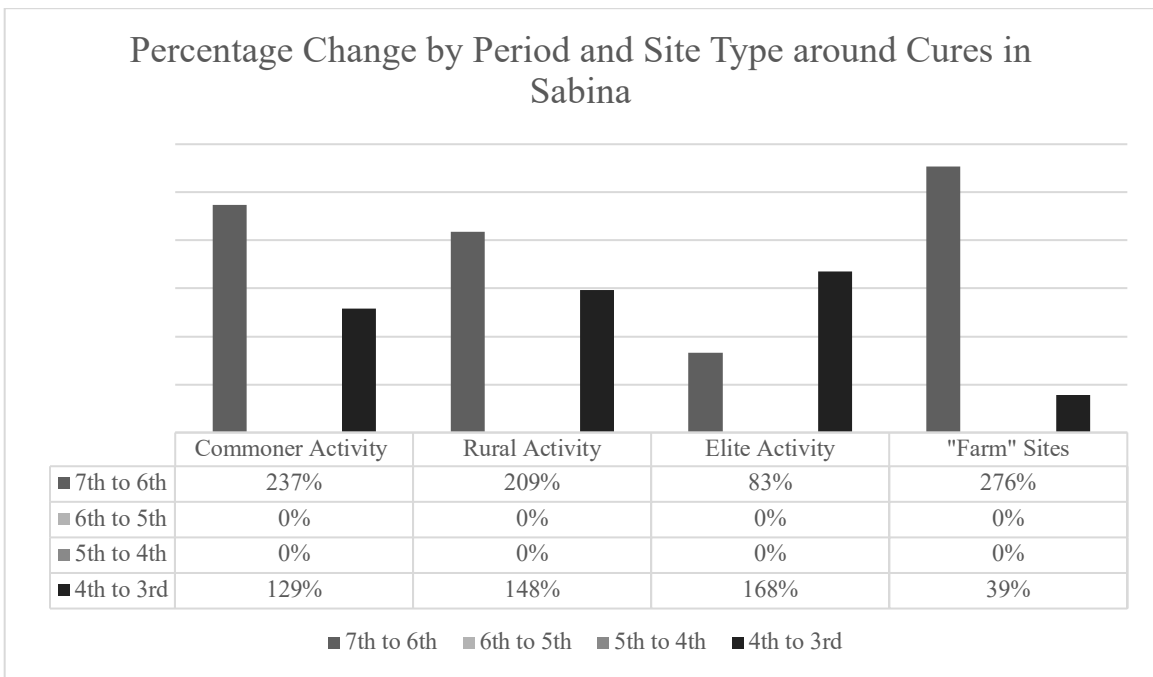


Table 5.13 Changes in evidence for rural activity around Cures in Sabina



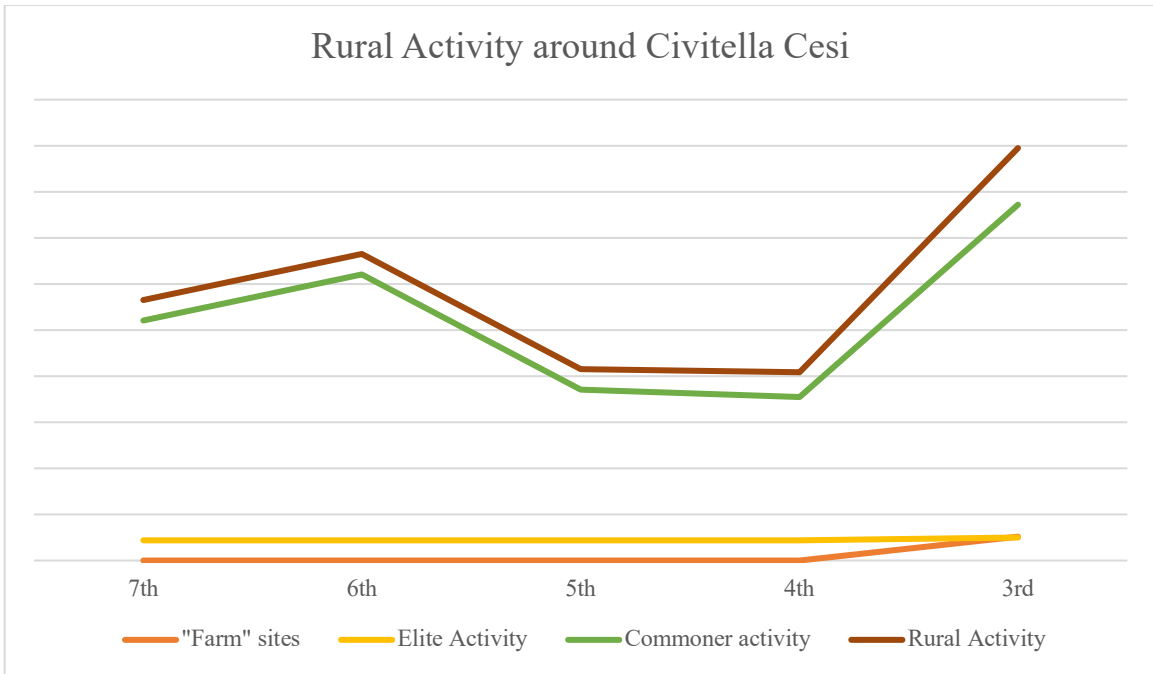
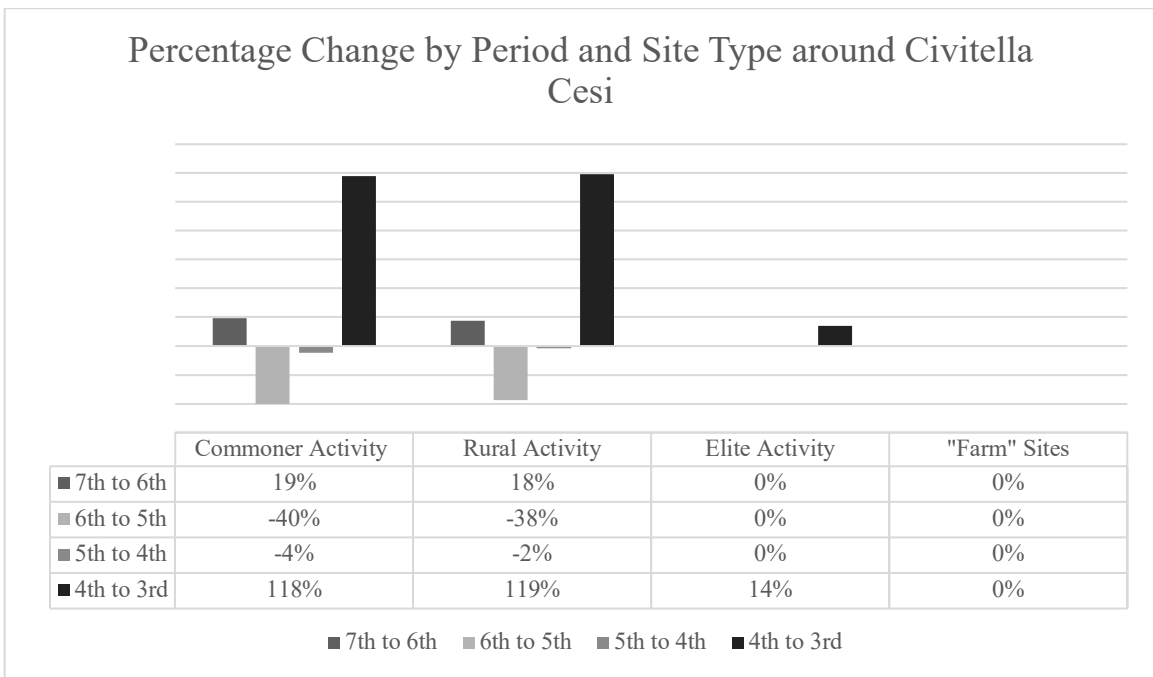


Table 5.14 Changes in evidence for rural activity around Civitella Cesi



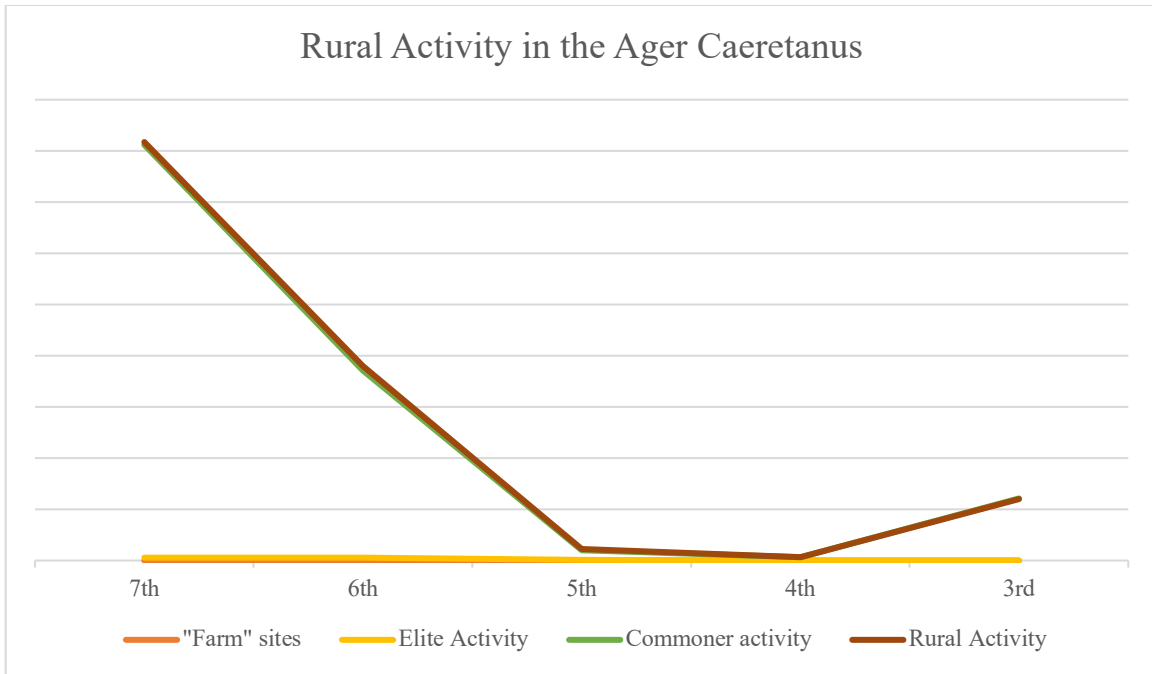
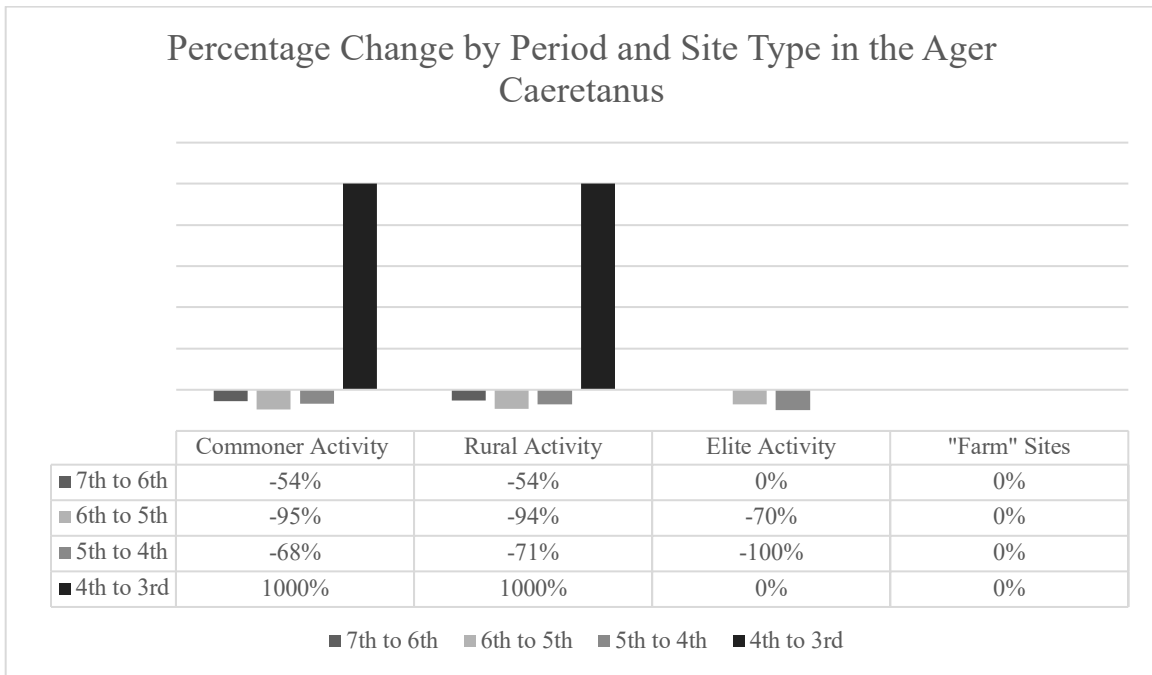


Table 5.15 Changes in evidence for rural activity in the Ager Caeretanus⁶⁰¹



⁶⁰¹ 1000 is given as a generic percentage for any change over 1000

Rural Activity around Torrimpietra

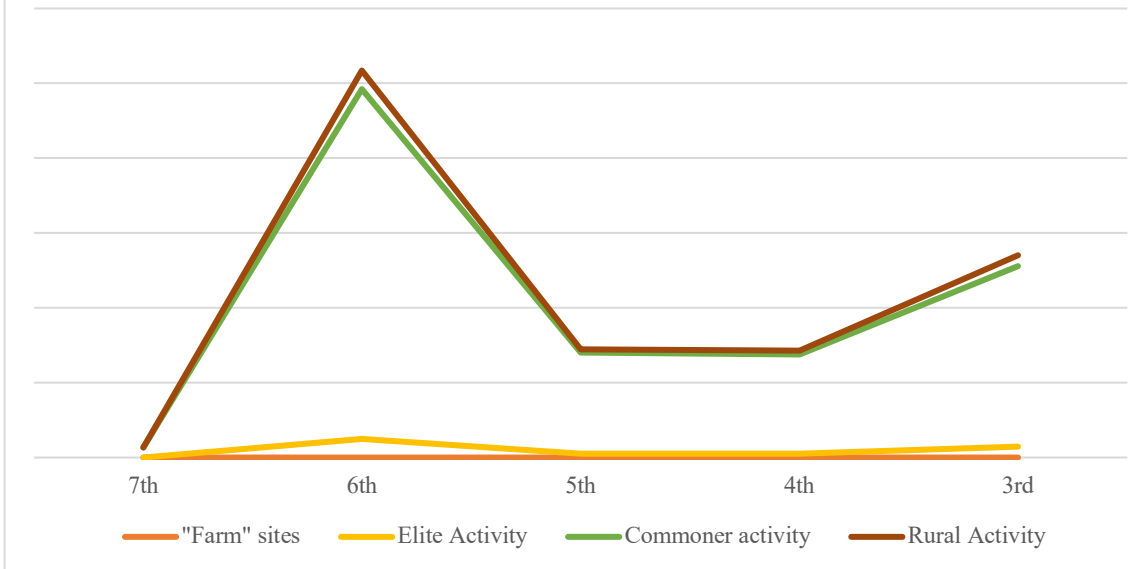
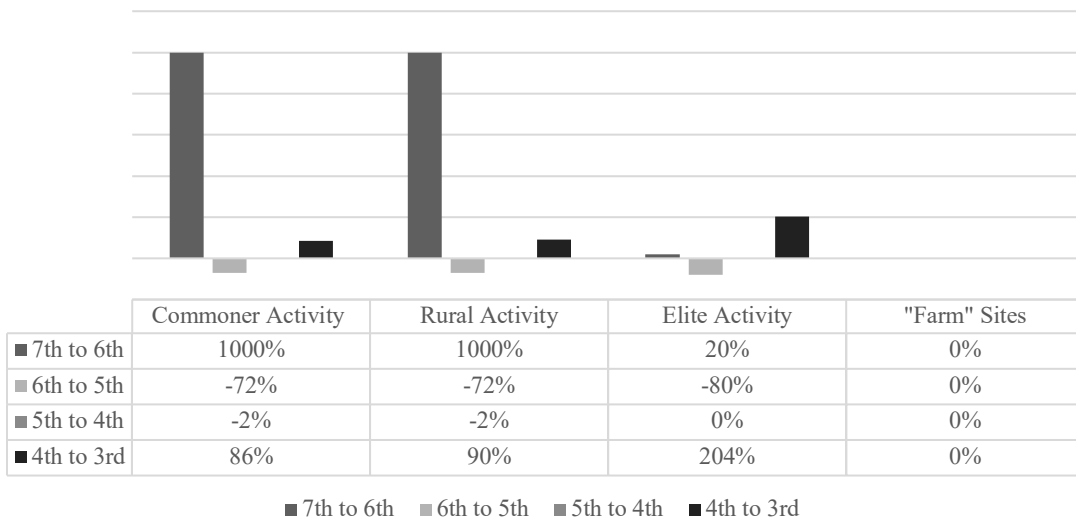


Table 5.16 Changes in evidence for rural activity around Torrimpietra

Percentage Change by Period and Site Type around Torrimpietra



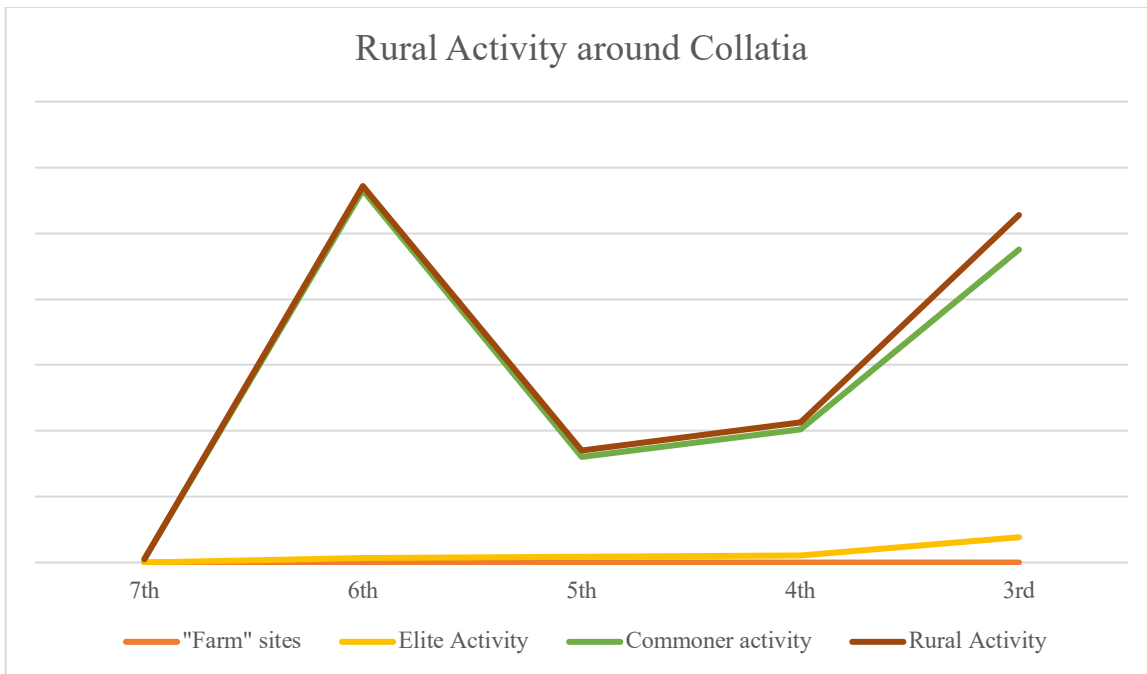
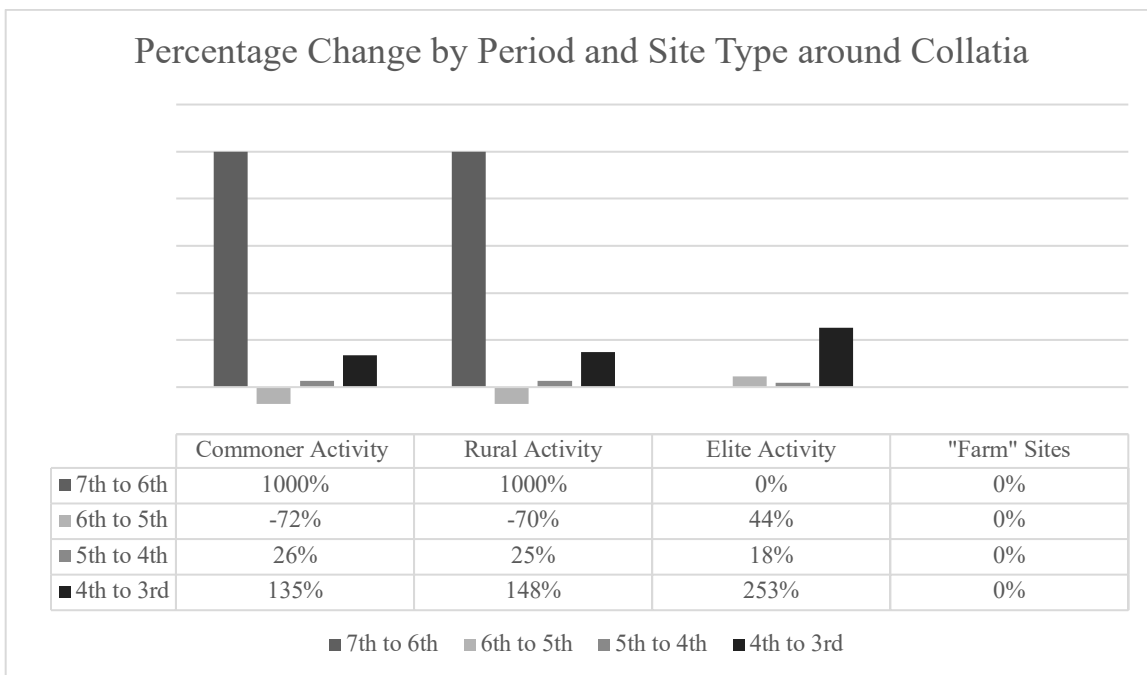


Table 5.17 Changes in evidence for rural activity around Collatia⁶⁰²



⁶⁰² 1000 is given as a generic percentage for any change over 1000

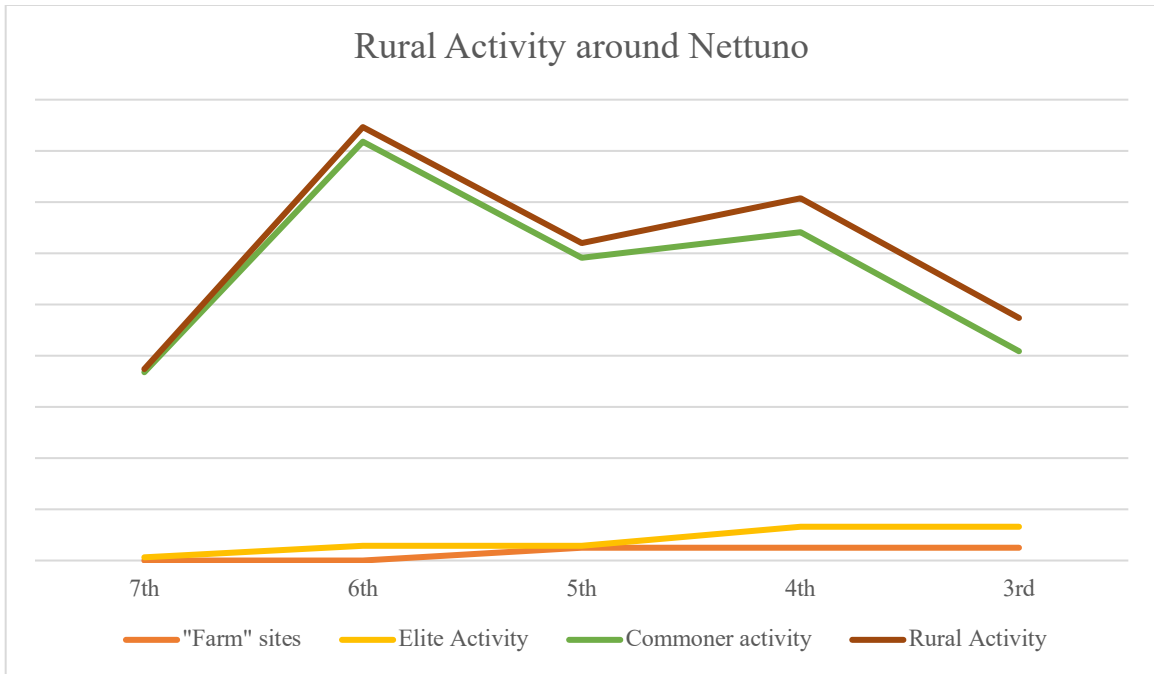
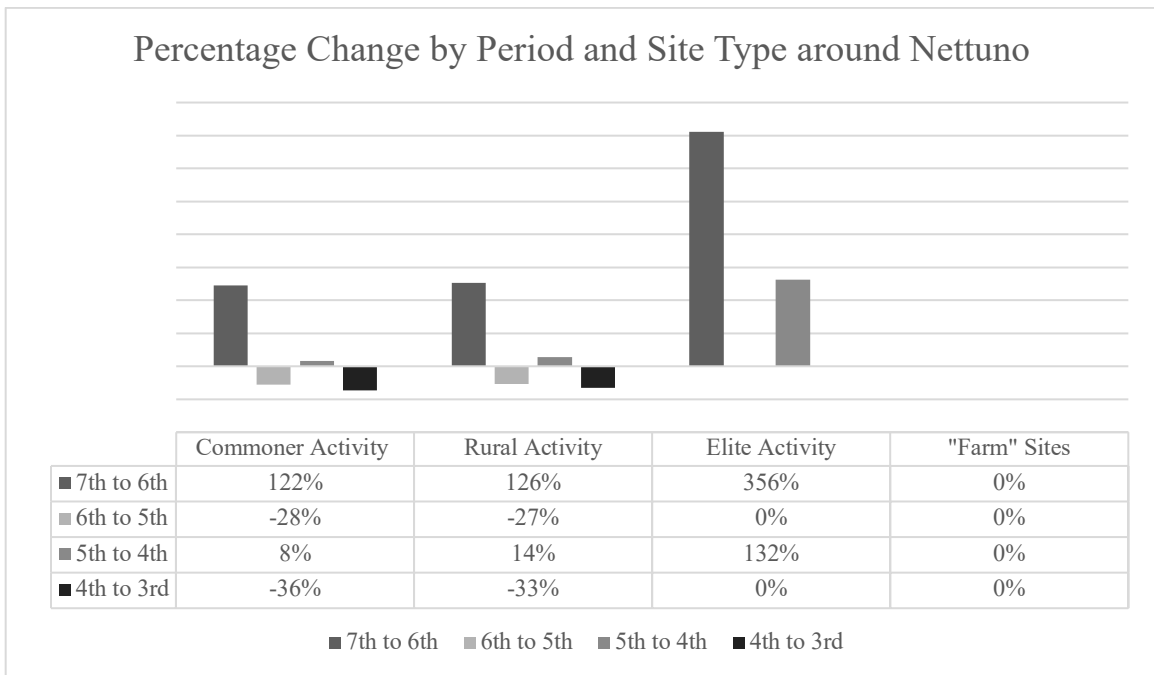


Table 5.18 Changes in evidence for rural activity around Nettuno



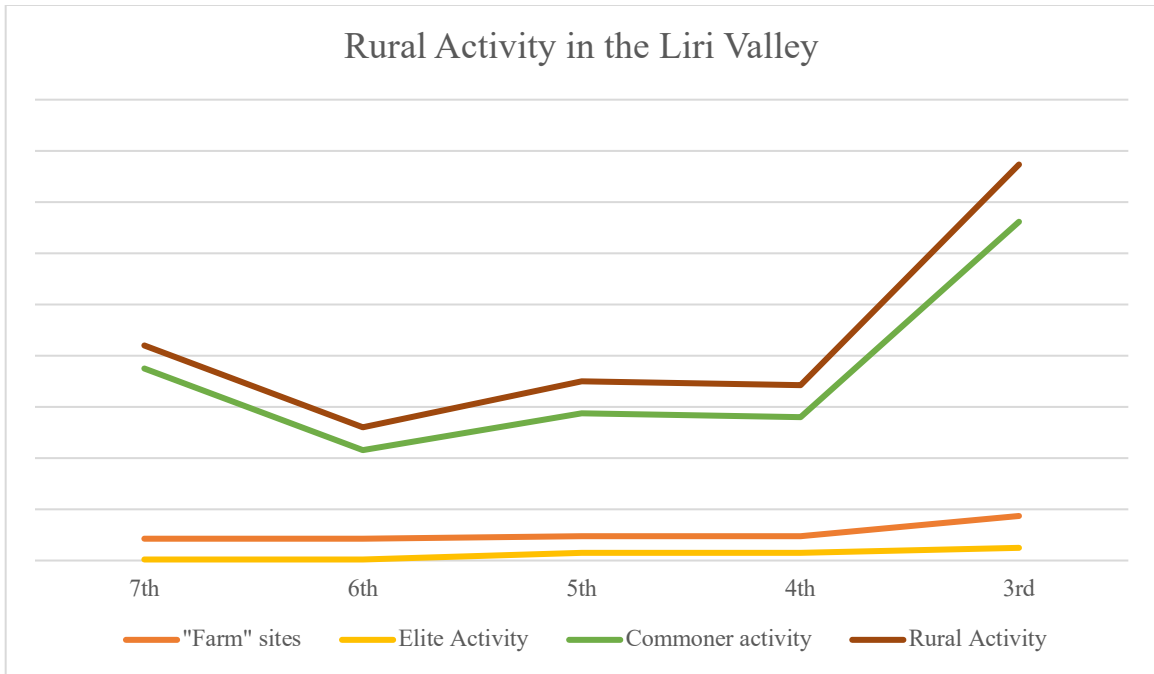


Table 5.19 Changes in evidence for rural activity in the Liri Valley

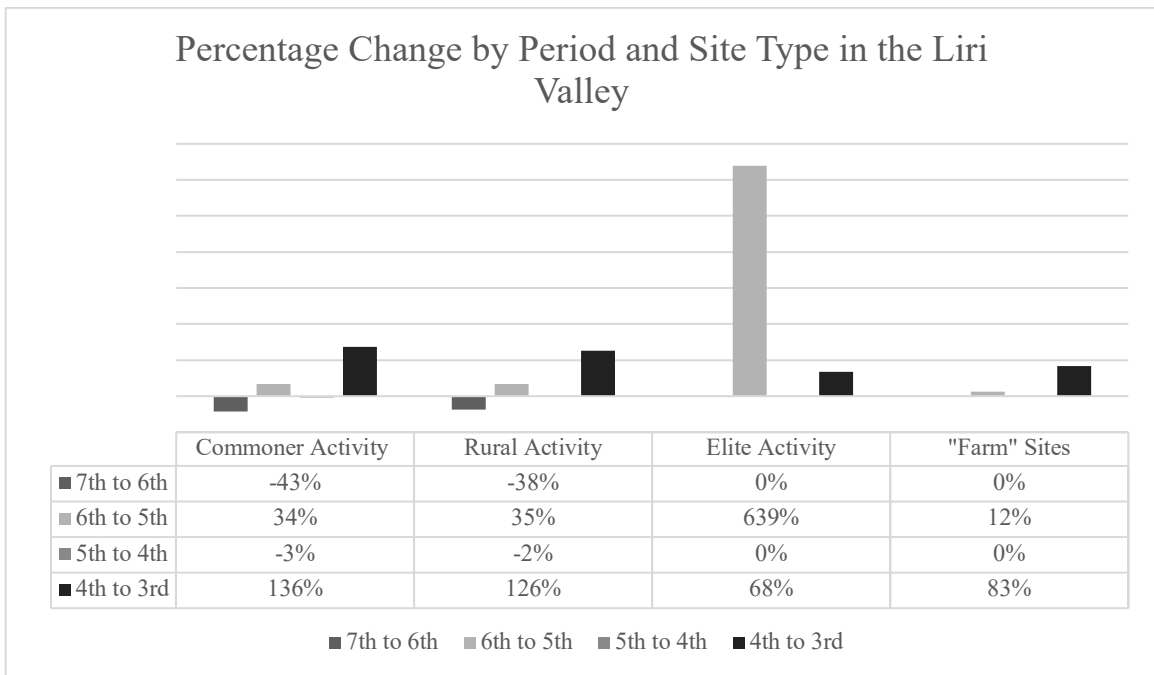


Table 5.20 Summary table with values for different categories and different surveys

	Commoner Activity					RURAL ACTIVITY	
	600	500	400	300	200	600	500
SUM VALUES	345.20	442.49	187.49	211.88	466.15	398.25	501.53
LIRI VALLEY	18.78	10.78	14.40	14.00	33.08	21.01	13.01
NETTUNO	3.68	8.18	5.92	6.42	4.08	3.74	8.46
COLLATIA	0.50	56.55	16.06	20.21	47.57	0.50	57.19
TORRIMPIE TRA	1.34	49.23	14.00	13.75	25.56	1.34	51.71
AGER CAERETAN	162.34	74.36	4.05	1.31	24.30	163.46	75.98
GIVITTELLA CESI	5.21	6.21	3.71	3.55	7.72	5.65	6.65
CORESE	0.46	1.55	1.55	1.55	3.55	0.56	1.73
RIETI	1.51	1.51	1.51	3.97	8.71	2.14	2.14
ALBEGNA VALLEY	67.79	70.29	82.64	88.51	58.20	103.59	106.09
SCARLINO	5.14	0.14	0.54	1.37	7.37	7.14	0.14
RADICOFANI	0.36	2.00	1.00	1.00	10.40	0.36	2.00
PIENZA	3.04	16.06	5.06	8.64	12.23	5.26	20.45
MONTALCINO	2.25	36.53	1.53	4.98	64.67	3.25	38.53
SAN GIOVANNI BUONCONVENTO	2.74	3.74	2.74	19.76	17.41	5.90	6.90
MURLO	29.93	42.85	14.68	11.77	33.10	31.93	45.05
CHIUSDINO	15.37	16.92	3.72	3.22	7.22	15.37	16.92
VAL D'ELSA	4.93	5.43	1.96	1.13	16.13	4.93	6.00
CHIANTI SENESE	4.30	11.56	5.49	0.66	45.69	6.60	13.90

233.69	255.63	520.73	ELITE ACTIVITY	47.03	51.19	40.14	37.89	42.31	18.38
17.52	17.12	38.67		0.10	0.10	0.74	0.74	1.24	2.13
6.20	7.08	4.74		0.06	0.28	0.28	0.66	0.66	0.00
16.99	21.30	52.75		0.00	0.64	0.92	1.09	3.84	0.00
14.49	14.24	27.03		0.00	2.49	0.49	0.49	1.48	0.00
4.48	1.31	23.91		1.13	1.13	0.33	0.00	0.10	0.00
4.15	4.09	8.95		0.44	0.44	0.44	0.44	0.50	0.00
1.73	1.73	4.29		0.10	0.18	0.18	0.18	0.49	0.34
1.64	5.02	10.03		0.63	0.63	0.13	1.05	1.32	0.65
113.79	115.52	74.50		33.68	33.68	27.88	23.58	13.56	6.17
0.63	1.45	7.45		2.00	0.00	0.08	0.08	0.08	0.14
1.00	1.00	10.40		0.00	0.00	0.00	0.00	0.00	0.00
6.95	11.53	17.32		1.92	2.09	1.59	1.84	1.84	0.00
1.53	7.73	72.42		1.00	2.00	0.00	2.75	7.75	0.00
5.90	22.25	18.06		3.17	3.17	3.17	3.17	3.17	0.00
7.25	6.24	39.80		0.00	0.00	0.50	0.50	0.00	0.25
14.88	11.97	34.30		0.50	1.50	0.00	0.25	0.25	0.00
3.72	3.22	7.22		0.00	0.00	0.00	0.00	0.00	8.70
2.53	1.69	18.86		0.00	0.57	0.57	0.57	2.73	0.00
8.33	1.15	50.03		2.30	2.30	2.83	0.50	3.30	0.00
400	300	200		600	500	400	300	200	600

24.05	17.22	17.56	63.92
2.13	2.38	2.38	4.35
0.00	0.25	0.25	0.25
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
1.28	1.28	1.28	1.78
0.00	0.00	0.00	0.52
0.65	0.65	1.95	3.25
6.17	7.03	6.90	14.43
0.14	0.14	0.98	2.14
0.00	0.00	0.00	0.60
0.00	0.00	0.00	0.25
1.00	0.00	0.00	2.00
0.00	0.00	0.60	0.60
0.58	0.58	0.58	3.60
0.00	0.00	0.25	0.25
9.10	2.40	2.40	2.40
0.00	0.00	0.00	4.50
3.00	2.50	0.00	23.00
500	400	300	200

Summary table with changes in site types for all surveys between 7th and 2nd centuries

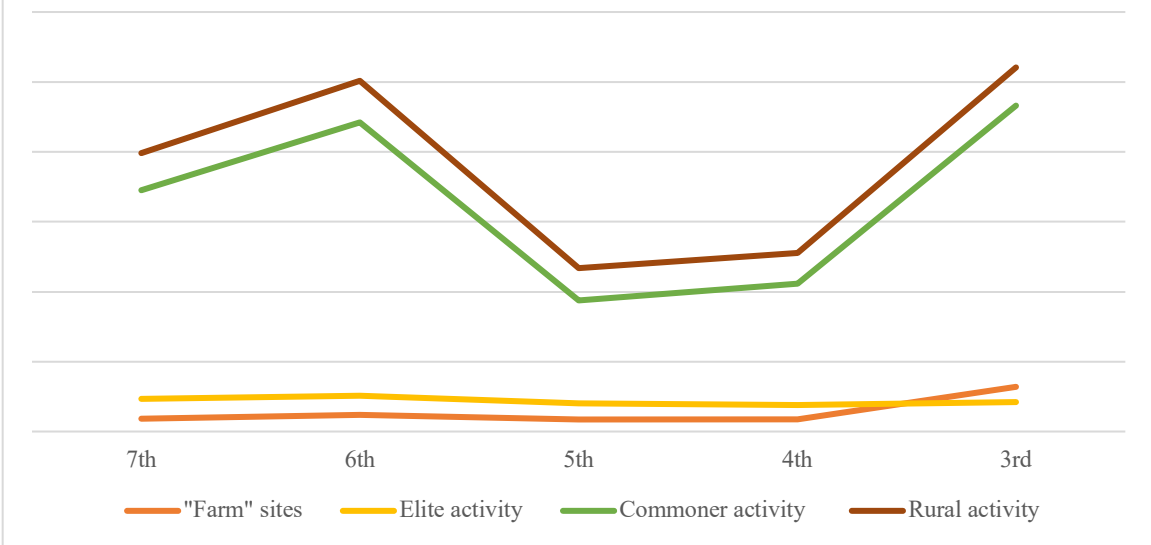


Table 5.21: Summary Table for Changes by Site for the Entire Database

Percentage Change by Period and Site Type for the Entire Database

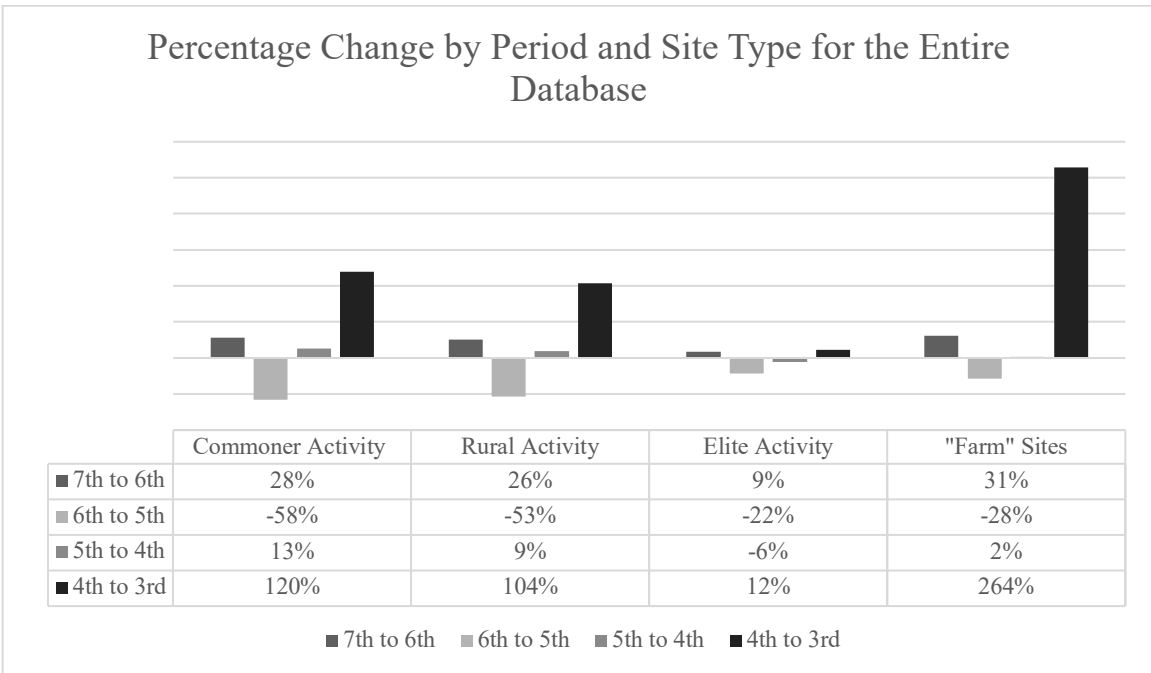
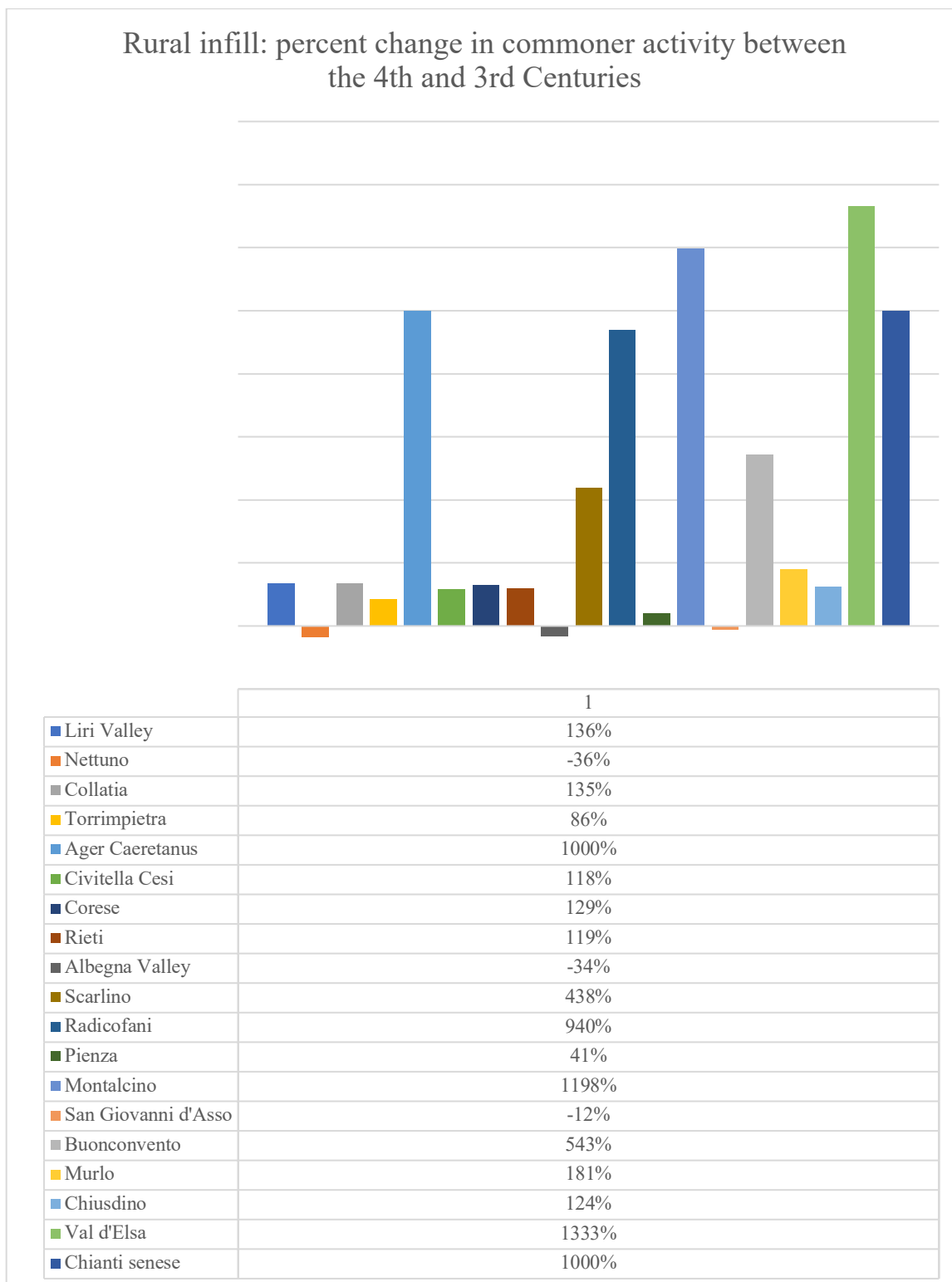


Table 5.22: Trends in commoner activity between the fourth and third centuries across survey projects



Appendices

Appendix 1: Il Chianti senese

(T stands for Tile, F stands for Fine ware)

Table A23 Site information for Il Chianti senese

SITE NUMBER	SURVEY	TYPE	CHRON.	AREA (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1	CAPS II Chianti Senese	Commoner activity	300 BCE - 0	-	-	Y	Y	Valenti 1995, 201
2	CAPS II Chianti Senese	Elite activity	300 BCE - 0	-	-	N	N	Valenti 1995, 201
11	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	48		8	N Y	Valenti 1995, 203
14	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	40		10	N N	Valenti 1995, 203
15	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	48		10	N N	Valenti 1995, 203
16	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	300		14	N Y	Valenti 1995, 204
17	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		17	N Y	Valenti 1995, 204
20	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		8	N Y	Valenti 1995, 204
23	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	21		10	N Y	Valenti 1995, 205
24	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	24		10	N Y	Valenti 1995, 205
25	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	40		12	N Y	Valenti 1995, 206
2.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	60		12	N Y	Valenti 1995, 210
2.3	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	56		12	N Y	Valenti 1995, 210
4.1	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	35		12	N Y	Valenti 1995, 210
5	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	48		10	N Y	Valenti 1995, 211
8	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		3	N N	Valenti 1995, 212
9	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	48		10	N Y	Valenti 1995, 212
12	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	54		14	N Y	Valenti 1995, 213
30.1	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	60		16	N Y	Valenti 1995, 217
30.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	63		15	N Y	Valenti 1995, 217
31	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	80		10	N Y	Valenti 1995, 217
34	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	48		10	N N	Valenti 1995, 218
35	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		8	N N	Valenti 1995, 218

38	CAPS II Chianti Senese	Commoner activity	600 - 400 BCE	-	-		N	N	Valenti 1995, 219
40	CAPS II Chianti Senese	Elite activity	400 - 200 BCE	-	-		N	N	Valenti 1995, 219
45	CAPS II Chianti Senese	Commoner activity	300 BCE - 0	-	-		N	N	Valenti 1995, 220
61	CAPS II Chianti Senese	"Farm" site	600 - 400 BCE	500		16	N	N	Valenti 1995, 224
67	CAPS II Chianti Senese	Commoner activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 225
86	CAPS II Chianti Senese	Commoner activity	300 BCE - 100CE	-		6	N	Y	Valenti 1995, 230
88	CAPS II Chianti Senese	Commoner activity	600 - 500 BCE	2700		12	N	N	Valenti 1995, 231
90	CAPS II Chianti Senese	Elite activity	800 - 600 BCE	-	-		N	N	Valenti 1995, 232
96	CAPS II Chianti Senese	Elite activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 233
99.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	48		16	N	N	Valenti 1995, 234
99.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	70		14	N	N	Valenti 1995, 234
103	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	80		12	N	Y	Valenti 1995, 235
105	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	72		10	N	Y	Valenti 1995, 236
106	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	72		10	N	Y	Valenti 1995, 236
108.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	56		10	N	Y	Valenti 1995, 236
108.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	54		10	N	Y	Valenti 1995, 237
108.3	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	60		10	N	Y	Valenti 1995, 237
108.4	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	80		10	N	Y	Valenti 1995, 237
108.5	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	250		10	N	Y	Valenti 1995, 237
109	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	300		12	N	Y	Valenti 1995, 237
110	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	120		14	N	Y	Valenti 1995, 237
111	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	150		8	N	Y	Valenti 1995, 238
113	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		15	N	Y	Valenti 1995, 238
114	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	600		18	N	Y	Valenti 1995, 238
115	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		5	N	Y	Valenti 1995, 239
117.1	CAPS II Chianti Senese	Elite activity	300 - 100 BCE	196		15	N	Y	Valenti 1995, 239
117.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	80		15	N	Y	Valenti 1995, 239
118.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	40		12	N	Y	Valenti 1995, 240
118.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	40		10	N	Y	Valenti 1995, 240
118.3	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	60		15	N	Y	Valenti 1995, 240
127.1	CAPS II Chianti Senese	Elite activity	300 - 100 BCE	144		10	N	Y	Valenti 1995, 242
127.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		15	N	Y	Valenti 1995, 242
128	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	80		10	N	Y	Valenti 1995, 242
134.3	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	70		8	N	Y	Valenti 1995, 244
139	CAPS II Chianti Senese	Commoner activity	600 BCE - 0	-	-		N	Y	Valenti 1995, 245

140	CAPS II Chianti Senese	Elite activity	500 - 400 BCE	-	-		N	N	Valenti 1995, 245
141	CAPS II Chianti Senese	Elite activity	500 - 400 BCE	-	-		N	N	Valenti 1995, 245
148	CAPS II Chianti Senese	Elite activity	300 - 100 BCE	-	-		N	N	Valenti 1995, 246
173	CAPS II Chianti Senese	Rural activity	300 - 100 BCE	-	-		N	Y	Valenti 1995, 251
174	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		48	12	N	Y	Valenti 1995, 251
209	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		8	N	Y	Valenti 1995, 260
211	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		10	N	Y	Valenti 1995, 285
212	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		81.6	12	N	Y	Valenti 1995, 286
215	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		120	12	N	Y	Valenti 1995, 286
218.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		60	12	N	Y	Valenti 1995, 287
224	CAPS II Chianti Senese	Elite activity	300 BCE - 0	-	-		N	N	Valenti 1995, 288
239	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-	-		N	Y	Valenti 1995, 290
1.5	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-	-		N	N	Valenti 1995, 292
1.6	CAPS II Chianti Senese	"Farm" site	300 - 200 BCE	-	-		N	Y	Valenti 1995, 292
2	CAPS II Chianti Senese	Commoner activity	300 BCE - 0	-	-		N	Y	Valenti 1995, 292
4	CAPS II Chianti Senese	Elite activity	300 BCE - 0	-	-		N	N	Valenti 1995, 293
5.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		50	12	N	Y	Valenti 1995, 294
7.3	CAPS II Chianti Senese	Commoner activity	700 - 500 BCE		80	10	N	N	Valenti 1995, 295
13.5	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		7	10	N	Y	Valenti 1995, 297
16	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		144	18	N	Y	Valenti 1995, 298
18	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		8	N	Y	Valenti 1995, 299
19	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		42	10	N	N	Valenti 1995, 300
20	CAPS II Chianti Senese	Commoner activity	600 - 400, 300 BCE - 100 CE	-		18	N	Y	Valenti 1995, 301
21	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		10	N	Y	Valenti 1995, 301
24	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-		6	N	N	Valenti 1995, 301
64	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		30	10	N	Y	Valenti 1995, 313
86	CAPS II Chianti Senese	Rural activity	300 - 100 BCE	-	-		N	N	Valenti 1995, 317
97.3	CAPS II Chianti Senese	"Farm" site	700 - 500 BCE		12	10	N	N	Valenti 1995, 321
99	CAPS II Chianti Senese	Commoner activity	600 - 400 BCE		2880	12	N	N	Valenti 1995, 321
101	CAPS II Chianti Senese	Commoner activity	700 - 500 BCE		2800	14	N	Y	Valenti 1995, 322
104.1	CAPS II Chianti Senese	"Farm" site	600 - 400 BCE		26	8	N	N	Valenti 1995, 323
104.2	CAPS II Chianti Senese	"Farm" site	600 - 400 BCE		42	8	N	Y	Valenti 1995, 323
104.3	CAPS II Chianti Senese	"Farm" site	600 - 400 BCE		48	8	N	N	Valenti 1995, 323
105.2	CAPS II Chianti Senese	"Farm" site	600 - 400 BCE		56	8	N	N	Valenti 1995, 323
116	CAPS II Chianti Senese	Elite activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 328

118	CAPS II Chianti Senese	Commoner activity	600 - 100 BCE	-		8	N	Y	Valenti 1995, 328
119	CAPS II Chianti Senese	Elite activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 329
120.2	CAPS II Chianti Senese	Commoner activity	1200 BCE - 1000 CE	16000	-		N	Y	Valenti 1995, 329
142	CAPS II Chianti Senese	Rural activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 334
143	CAPS II Chianti Senese	Rural activity	700 - 500 BCE	-	-		N	N	Valenti 1995, 334
153	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		40	8	N	Y	Valenti 1995, 336
2	CAPS II Chianti Senese	Elite activity	700 - 400 BCE	-	-		N	N	Valenti 1995, 338
6.1	CAPS II Chianti Senese	Commoner activity	600 - 400 BCE		28	20	N	Y	Valenti 1995, 340
10	CAPS II Chianti Senese	Rural activity	300 BCE - 100 CE	-	-		N	N	Valenti 1995, 342
15	CAPS II Chianti Senese	Commoner activity	600 - 400 BCE	-		4	N	N	Valenti 1995, 343
18.4	CAPS II Chianti Senese	Commoner activity	600 - 0 BCE	-	-		N	Y	Valenti 1995, 344
19	CAPS II Chianti Senese	Commoner activity	700 - 500 BCE		400	10	N	N	Valenti 1995, 344
22.6	CAPS II Chianti Senese	Elite activity	600 - 400 BCE	-	-		N	N	Valenti 1995, 345
25	CAPS II Chianti Senese	Commoner activity	700 - 500 BCE	-		4	N	N	Valenti 1995, 345
28	CAPS II Chianti Senese	Commoner activity	700 - 400 BCE	-	-		N	N	Valenti 1995, 346
31.1	CAPS II Chianti Senese	Commoner activity	600 - 500 BCE		20	12	N	N	Valenti 1995, 347
37.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		288	14	N	Y	Valenti 1995, 349
37.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		560	18	N	Y	Valenti 1995, 349
38.1	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		20	N	Y	Valenti 1995, 350
6.1	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		100	14	N	Y	Valenti 1995, 352
6.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		24	12	N	Y	Valenti 1995, 353
10.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		40	8	N	Y	Valenti 1995, 353
13	CAPS II Chianti Senese	Elite activity	300 BCE - 0	-	-		N	N	Valenti 1995, 355
16	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-	-		N	N	Valenti 1995, 356
17	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		60	10	N	Y	Valenti 1995, 356
28.1	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		100	15	N	Y	Valenti 1995, 358
28.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		30	12	N	Y	Valenti 1995, 359
28.3	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		42	16	N	Y	Valenti 1995, 359
32.3	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		63	16	N	Y	Valenti 1995, 364
33	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	-		8	N	Y	Valenti 1995, 364
34.2	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		20	8	N	Y	Valenti 1995, 365
34.3	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		30	12	N	Y	Valenti 1995, 365
38	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE		48	12	N	Y	Valenti 1995, 367
46.4	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	-	-		N	Y	Valenti 1995, 368
49	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE		200	12	N	Y	Valenti 1995, 369

50.1	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	96	14	N	Y	Valenti 1995, 369
50.2	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	80	12	N	Y	Valenti 1995, 369
50.3	CAPS II Chianti Senese	Commoner activity	300 - 100 BCE	84	10	N	Y	Valenti 1995, 370
51	CAPS II Chianti Senese	"Farm" site	300 - 100 BCE	63	16	N	Y	Valenti 1995, 370

Appendix 2: Val d'Elsa

Table A24 Site information for the Val d'Elsa

SITE NUMBER	SURVEY	TYPE	CHRON.	AREA M ²	AVERAGE SHERD COUNT PER M ²	T	F	CITATION	
11	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	56		1	Y	Y	Valenti 1999, 116
54	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	72		4	N	N	Valenti 1999, 138
78	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	-	-		N	N	Valenti 1999, 188
80	CAPS Val d'Elsa	Commoner activity	500 BCE - 300 CE	-	-		N	N	Valenti 1999, 188
91.1	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	12		2	N	Y	Valenti 1999, 199
96	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	56		5	N	Y	Valenti 1999, 201
97	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	130		5	N	N	Valenti 1999, 201
107.1	CAPS Val d'Elsa	Commoner activity	1000 - 500 BCE	-	-		N	N	Valenti 1999, 205
108	CAPS Val d'Elsa	Commoner activity	1000 - 500 BCE	-	-		N	N	Valenti 1999, 206
116.2	CAPS Val d'Elsa	Commoner activity	1000 - 500 BCE	-		3	N	N	Valenti 1999, 208
117	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	-		6	N	N	Valenti 1999, 209
123.1	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		10	N	N	Valenti 1999, 210
123.3	CAPS Val d'Elsa	"Farm" site	250 - 200 BCE	-		9	N	N	Valenti 1999, 211
124	CAPS Val d'Elsa	Elite activity	580 - 0 BCE	-	-		N	N	Valenti 1999, 211
129	CAPS Val d'Elsa	Elite activity	300 BCE - 0	-	-		N	N	Valenti 1999, 213
131	CAPS Val d'Elsa	Elite activity	600 - 100 BCE	-	-		N	N	Valenti 1999, 213
146.2	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	36		12	N	Y	Valenti 1999, 221
146.3	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	40		12	N	Y	Valenti 1999, 221
146.4	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	48		8	N	N	Valenti 1999, 221
146.6	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	12		8	N	N	Valenti 1999, 221
146.7	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	30		10	N	N	Valenti 1999, 221-222
146.8	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	60		10	N	Y	Valenti 1999, 222
146.9	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	24		6	N	Y	Valenti 1999, 222
147.1	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	12		6	N	N	Valenti 1999, 222
147.2	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	-		6	N	N	Valenti 1999, 222
148.1	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	160		12	N	N	Valenti 1999, 222
148.2	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	72		10	N	N	Valenti 1999, 223

148.3	CAPS Val d'Elsa	Elite activity	300 - 100 BCE	48		10	N	N	Valenti 1999, 223
153.1	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	60		9	N	Y	Valenti 1999, 225
153.2	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		6	N	Y	Valenti 1999, 225
153.4	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	9		6	N	N	Valenti 1999, 226
153.5	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	15		4	N	Y	Valenti 1999, 226
173	CAPS Val d'Elsa	Commoner activity	300 BCE - 0	-		16	N	N	Valenti 1999, 234
189.2	CAPS Val d'Elsa	Commoner activity	700 - 300 BCE	21		4	N	N	Valenti 1999, 240
190	CAPS Val d'Elsa	"Farm" site	300 - 100 BCE	15		5	N	N	Valenti 1999, 240
200.2	CAPS Val d'Elsa	Commoner activity	700 - 400 BCE	24		3	N	N	Valenti 1999, 242
208	CAPS Val d'Elsa	Elite activity	600 - 100 BCE	-	-		N	N	Valenti 1999, 245
221	CAPS Val d'Elsa	Elite activity	300 - 100 BCE	-	-		N	N	Valenti 1999, 251
222	CAPS Val d'Elsa	Elite activity	300 - 100 BCE	-	-		N	N	Valenti 1999, 251
226.1	CAPS Val d'Elsa	Commoner activity	600 - 400 BCE	63		3	N	N	Valenti 1999, 253
229	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		3	N	N	Valenti 1999, 254
230	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		4	N	Y	Valenti 1999, 254
231.1	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	48		3	N	N	Valenti 1999, 254
231.3	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	-		4	N	N	Valenti 1999, 255
232	CAPS Val d'Elsa	Commoner activity	700 - 500 BCE	-		1	N	N	Valenti 1999, 255
235.2	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		2	N	N	Valenti 1999, 257
239	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	1		4	N	N	Valenti 1999, 257
255.2	CAPS Val d'Elsa	Commoner activity	700 BCE - 300 CE	-	-		N	N	Valenti 1999, 262
264	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	25		6	N	N	Valenti 1999, 264
4.1	CAPS Val d'Elsa	Commoner activity	500 - 300 BCE	-	-		N	N	Valenti 1999, 289
9	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	48		5	N	N	Valenti 1999, 290
10	CAPS Val d'Elsa	Commoner activity	250 - 100 BCE	-		8	N	N	Valenti 1999, 290
15.1	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	-		2	N	N	Valenti 1999, 292
15.2	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	120		6	N	Y	Valenti 1999, 292
19	CAPS Val d'Elsa	Commoner activity	300 - 100 BCE	30		2	N	N	Valenti 1999, 293

Appendix 3 Chiusdino

Table A25 Site information for Chiusdino

SITE NUMBER	SURVEY	TYPE	CHRON.	AREA M ²	AVE SHERD COUNT PER M ²	T	F	CITATION
2	CAPS Chiusdino	"Farm" site	300 - 100 BCE	24		2	N N	Nardini 2001, 49
4.1	CAPS Chiusdino	"Farm" site	300 - 100 BCE	24		4	N Y	Nardini 2001, 50
4.2	CAPS Chiusdino	Commoner activity	300 - 100 BCE	4		1	N Y	Nardini 2001, 50
7.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	72		7	N N	Nardini 2001, 51
7.2	CAPS Chiusdino	Commoner activity	700 - 500 BCE	4		4	N N	Nardini 2001, 51-52
7.3	CAPS Chiusdino	"Farm" site	700 - 500 BCE	24		2	N N	Nardini 2001, 52
7.4	CAPS Chiusdino	"Farm" site	300 - 100 BCE	30		2	N N	Nardini 2001, 52
7.5	CAPS Chiusdino	"Farm" site	700 - 500 BCE	12		1	N N	Nardini 2001, 52
7.6	CAPS Chiusdino	"Farm" site	700 - 500 BCE	20		1	Y N	Nardini 2001, 52
7.7	CAPS Chiusdino	"Farm" site	500 - 300 BCE	24		3	N N	Nardini 2001, 52
7.8	CAPS Chiusdino	"Farm" site	500 - 300 BCE	12		4	N N	Nardini 2001, 53
7.9	CAPS Chiusdino	"Farm" site	500 - 300 BCE	30		5	N N	Nardini 2001, 53
7.10.	CAPS Chiusdino	"Farm" site	500 - 300 BCE	40		2	N N	Nardini 2001, 53
7.11	CAPS Chiusdino	Commoner activity	700 - 500 BCE	-	-		N N	Nardini 2001, 53
7	CAPS Chiusdino	Commoner activity	700 - 100 BCE	-	-		N N	Nardini 2001, 53
8	CAPS Chiusdino	Commoner activity	600 - 400 BCE	-	-		N N	Nardini 2001, 53-54
9	CAPS Chiusdino	"Farm" site	300 - 100 BCE	20		1	N N	Nardini 2001, 54
10.1	CAPS Chiusdino	"Farm" site	300 - 100 BCE	-		2	Y N	Nardini 2001, 54
10.2	CAPS Chiusdino	Commoner activity	300 - 100 BCE	-		1	N N	Nardini 2001, 54
12.2	CAPS Chiusdino	Commoner activity	301 - 100 BCE	42		1	N N	Nardini 2001, 55
15	CAPS Chiusdino	Commoner activity	700 - 500 BCE	6		2	N N	Nardini 2001, 56
16	CAPS Chiusdino	"Farm" site	700 - 500 BCE	20		2	N N	Nardini 2001, 56
17.1	CAPS Chiusdino	Commoner activity	701 - 500 BCE	6		1	N N	Nardini 2001, 57
17.2	CAPS Chiusdino	Commoner activity	702 - 500 BCE	18		1	N N	Nardini 2001, 57
60	CAPS Chiusdino	Commoner activity	700 - 500 BCE	6		1	N N	Nardini 2001, 86
65	CAPS Chiusdino	Commoner activity	701 - 500 BCE	-		1	N N	Nardini 2001, 88

66.1	CAPS CHIUSDINO	"FARM" SITE	700 - 500 BCE	24		5	N	N	NARDINI 2001, 88
66.2	CAPS Chiusdino	Commoner activity	700 - 500 BCE	42		3	N	N	Nardini 2001, 89
66.3	CAPS Chiusdino	Commoner activity	700 - 500 BCE	5		2	N	N	Nardini 2001, 89
67	CAPS Chiusdino	Commoner activity	701 - 500 BCE	20		1	N	N	Nardini 2001, 89
68	CAPS Chiusdino	Commoner activity	702 - 500 BCE	-		1	N	N	Nardini 2001, 89
69	CAPS Chiusdino	"Farm" site	700 - 500 BCE	-		2	N	N	Nardini 2001, 89-90
70.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	20		3	N	N	Nardini 2001, 90
71.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	12		5	N	N	Nardini 2001, 90
71.2	CAPS Chiusdino	"Farm" site	700 - 500 BCE	20		1	N	N	Nardini 2001, 90
72.2	CAPS Chiusdino	"Farm" site	300 - 100 BCE	-	4 or 5		N	Y	Nardini 2001, 91
74.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	42		2	N	N	Nardini 2001, 92
74.3	CAPS Chiusdino	Commoner activity	700 - 500 BCE	63		3	N	N	Nardini 2001, 92
75.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	25		3	N	N	Nardini 2001, 93
75.2	CAPS Chiusdino	Commoner activity	700 - 500 BCE	-		1	N	N	Nardini 2001, 93
76	CAPS Chiusdino	Commoner activity	700 - 500 BCE	-	-		N	N	Nardini 2001, 93
80	CAPS Chiusdino	"Farm" site	700 - 500 BCE	-		1	N	N	Nardini 2001, 95
81	CAPS Chiusdino	"Farm" site	700 - 500 BCE	12		1	N	N	Nardini 2001, 96
82.1	CAPS Chiusdino	"Farm" site	300 - 100 BCE	12		2	N	N	Nardini 2001, 96
82.2	CAPS Chiusdino	"Farm" site	300 - 100 BCE	18		4	N	N	Nardini 2001, 96
82.3	CAPS Chiusdino	Commoner activity	300 - 100 BCE	24		3	N	N	Nardini 2001, 96
83	CAPS Chiusdino	Commoner activity	600 - 100 BCE	-		2	N	N	Nardini 2001, 97
84	CAPS Chiusdino	"Farm" site	600 - 100 BCE	6		1	N	N	Nardini 2001, 97
85	CAPS Chiusdino	"Farm" site	700 - 500 BCE	12		2	N	N	Nardini 2001, 97
86	CAPS Chiusdino	Commoner activity	300 - 100 BCE	-		2	N	N	Nardini 2001, 97
87	CAPS Chiusdino	"Farm" site	700 - 500 BCE	35		3	N	N	Nardini 2001, 98
88	CAPS Chiusdino	"Farm" site	300 - 100 BCE	-		3	Y	N	Nardini 2001, 98
89	CAPS Chiusdino	Commoner activity	700 - 500 BCE	12	3 or 4		N	N	Nardini 2001, 99
90	CAPS Chiusdino	Commoner activity	700 - 500 BCE	6		2	N	N	Nardini 2001, 99
91	CAPS Chiusdino	Commoner activity	600 - 100 BCE	-		1	N	N	Nardini 2001, 99
92	CAPS Chiusdino	Commoner activity	600 - 200 BCE	2		2	N	N	Nardini 2001, 99
93	CAPS Chiusdino	Commoner activity	700 - 500 BCE	12	2 or 3		N	N	Nardini 2001, 99
94.1	CAPS Chiusdino	"Farm" site	700 - 500 BCE	20		1	N	N	Nardini 2001, 100
94.2	CAPS Chiusdino	"Farm" site	700 - 500 BCE	-		1	N	N	Nardini 2001, 100
95	CAPS Chiusdino	"Farm" site	600 - 100 BCE	56	<1		N	N	Nardini 2001, 100
102	CAPS Chiusdino	"Farm" site	601 - 100 BCE	15		3	N	N	Nardini 2001, 101
162	CAPS Chiusdino	Commoner activity	700 - 500 BCE	-	<1		N	N	Nardini 2001, 127

Appendix 4 Murlo

Table A26 Site information for Murlo

SITE NUMBER	SURVEY	TYPE	CHRON	AREA M ²	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1	CAPS Murlo	Rural activity	500 - 200 BCE	-	-	N	N	Campana 2001, 74
2	CAPS Murlo	Elite activity	600 - 100 BCE	-	-	N	N	Campana 2001, 74
3	CAPS Murlo	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2001, 74
5	CAPS Murlo	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2001, 74
23.1	CAPS Murlo	Commoner activity	700 - 500 BCE	50	6.38	N	Y	Campana 2001, 86
23.2	CAPS Murlo	"Farm" site	600 - 500 BCE	-	-	Y	N	Campana 2001, 86
23.3	CAPS Murlo	Commoner activity	700 - 500 BCE	16	3.25	N	N	Campana 2001, 87
23.4	CAPS Murlo	Commoner activity	700 - 500 BCE	84	0.46	N	N	Campana 2001, 87
23.5	CAPS Murlo	Commoner activity	700 - 500 BCE	40	1.50	N	N	Campana 2001, 87
23.6	CAPS Murlo	Commoner activity	700 - 500 BCE	24	1.13	N	Y	Campana 2001, 87
23.7	CAPS Murlo	Commoner activity	700 - 500 BCE	48	0.73	N	N	Campana 2001, 87
23.8	CAPS Murlo	Commoner activity	700 - 500 BCE	28	0.46	N	N	Campana 2001, 88
23.9	CAPS Murlo	Commoner activity	700 - 500 BCE	80	0.44	N	N	Campana 2001, 88
25.1	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	N	N	Campana 2001, 88-89
26	CAPS Murlo	Commoner activity	700 - 500 BCE	48	1.13	N	N	Campana 2001, 89
28.1	CAPS Murlo	Commoner activity	700 - 500 BCE	84	0.99	Y	N	Campana 2001, 90
28.2	CAPS Murlo	Commoner activity	300 - 100 BCE	48	1.00	N	N	Campana 2001, 90-91
29	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2001, 91
30	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2001, 91
32	CAPS Murlo	Commoner activity	300 - 100 BCE	150	0.11	N	Y	Campana 2001, 92
35	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	N	Campana 2001, 93
37	CAPS Murlo	Commoner activity	600 - 400 BCE	30	1.30	N	N	Campana 2001, 93
38	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	N	Campana 2001, 93
39	CAPS Murlo	Commoner activity	400 - 100 BCE	-	-	N	Y	Campana 2001, 94
41	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 95
42.2	CAPS Murlo	Commoner activity	600 - 400 BCE	-	-	Y	N	Campana 2001, 95

42.3	CAPS MURLO	COMMONER ACTIVITY	700 - 500 BCE	63	0.60	Y	N	CAMPANA 2001, 95-96
43	CAPS Murlo	Commoner activity	700 - 500 BCE	35	1.49	N	N	Campana 2001, 96
47.1	CAPS Murlo	Commoner activity	400 - 200 BCE	48	0.79	N	Y	Campana 2001, 98
47.2	CAPS Murlo	Commoner activity	700 - 500 BCE	108	0.13	N	N	Campana 2001, 98
47.3	CAPS Murlo	Commoner activity	300 - 100 BCE	54	0.26	N	Y	Campana 2001, 98
47.4	CAPS Murlo	Commoner activity	300 - 100 BCE	54	0.59	N	Y	Campana 2001, 99
47.5	CAPS Murlo	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2001, 99
48	CAPS Murlo	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2001, 99
50.1	CAPS Murlo	Commoner activity	600 - 400 BCE	54	1.22	N	Y	Campana 2001, 100
57.1	CAPS Murlo	Commoner activity	580 BCE - 200 CE	-	-	N	Y	Campana 2001, 102
57.2	CAPS Murlo	Commoner activity	580 BCE - 200 CE	-	-	N	Y	Campana 2001, 103
58	CAPS Murlo	Commoner activity	700 - 500 BCE	35	1.91	Y	Y	Campana 2001, 103
59.1	CAPS Murlo	Commoner activity	300 - 200 BCE	35	0.89	Y	Y	Campana 2001, 104
59.2	CAPS Murlo	Commoner activity	300 - 200 BCE	35	2.40	Y	Y	Campana 2001, 104
59.3	CAPS Murlo	Commoner activity	700 - 500 BCE	72	0.82	Y	Y	Campana 2001, 104
60	CAPS Murlo	Commoner activity	300 - 100 BCE	50	1.08	N	Y	Campana 2001, 105
64	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 106
65	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 106
66	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 106
67.1	CAPS Murlo	"Farm" site	300 - 200 BCE	24	1.42	Y	Y	Campana 2001, 107
67.2	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 107
68.1	CAPS Murlo	Commoner activity	400 BCE - 0	28	1.54	N	Y	Campana 2001, 107
68.2	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	N	Campana 2001, 107
69.1	CAPS Murlo	Commoner activity	700 - 500 BCE	54	1.43	N	N	Campana 2001, 108
69.2	CAPS Murlo	Commoner activity	700 - 400 BCE	54	1.50	N	Y	Campana 2001, 108
69.3	CAPS Murlo	Commoner activity	700 - 400 BCE	35	1.03	N	N	Campana 2001, 108
69.4	CAPS Murlo	Commoner activity	700 - 400 BCE	28	1.25	Y	N	Campana 2001, 108
70	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 109
71	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	Y	Campana 2001, 109
73	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 110
74	CAPS Murlo	Commoner activity	600 BCE - 0	-	-	N	Y	Campana 2001, 110-111
75	CAPS Murlo	Commoner activity	400 BCE - 0	54	0.57	N	Y	Campana 2001, 111
76.2	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 111
2.1	CAPS Murlo	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2001, 112
2.2	CAPS Murlo	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2001, 112
2.6	CAPS Murlo	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2001, 112
8.2	CAPS Murlo	Commoner activity	700 BCE - 300 CE	-	-	N	N	Campana 2001, 112
10	CAPS Murlo	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2001, 113-115
2.42	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 132
2.44.1	CAPS Murlo	Commoner activity	300 - 100 BCE	35	3.94	Y	Y	Campana 2001, 132
2.44.3	CAPS Murlo	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2001, 132
2.45.1	CAPS Murlo	Commoner activity	600 - 500 BCE	24	5.79	Y	Y	Campana 2001, 133
2.45.2	CAPS Murlo	Commoner activity	300 - 100 BCE	54	1.61	Y	Y	Campana 2001, 134
2.46.1	CAPS Murlo	Commoner activity	300 - 200 BCE	-	-	Y	Y	Campana 2001, 134
2.46.2	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 134
2.47	CAPS Murlo	Commoner activity	700 - 500 BCE	28	1.29	Y	Y	Campana 2001, 134
2.49	CAPS Murlo	Commoner activity	300 - 100 BCE	72	1.68	N	Y	Campana 2001, 136
2.50.0	CAPS Murlo	Commoner activity	300 - 200 BCE	42	0.57	Y	Y	Campana 2001, 136
2.52.1	CAPS Murlo	Commoner activity	700 - 500 BCE	48	0.63	Y	Y	Campana 2001, 137
2.52.2	CAPS Murlo	Commoner activity	300 - 100 BCE	54	0.83	N	Y	Campana 2001, 137
2.52.3	CAPS Murlo	Commoner activity	300 - 100 BCE	35	0.97	N	Y	Campana 2001, 137
2.59.2	CAPS Murlo	Commoner activity	300 BCE - 0	30	0.37	Y	Y	Campana 2001, 140
2.56	CAPS Murlo	Commoner activity	300 - 100 BCE	75	0.39	N	Y	Campana 2001, 138

2.58	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2001, 139
2.59.1	CAPS Murlo	Commoner activity	700 - 500 BCE	84	0.27	Y	Y	Campana 2001, 139
2.62	CAPS Murlo	Commoner activity	400 - 200 BCE	-	-	N	Y	Campana 2001, 141
2.65.1	CAPS Murlo	Commoner activity	500 - 300 BCE	54	2.30	N	Y	Campana 2001, 142
2.65.2	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	Y	Campana 2001, 142
2.66.2	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	Y	Campana 2001, 143
2.66.3	CAPS Murlo	Commoner activity	600 - 400 BCE	72	0.56	Y	Y	Campana 2001, 143
2.66.4	CAPS Murlo	Commoner activity	400 - 100 BCE	72	0.69	N	Y	Campana 2001, 143
2.66.5	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	N	Y	Campana 2001, 143
2.67.2	CAPS Murlo	Commoner activity	300 - 100 BCE	48	0.77	N	Y	Campana 2001, 144
2.67.3	CAPS Murlo	Commoner activity	700 - 500 BCE	24	1.58	Y	Y	Campana 2001, 144
2.67.4	CAPS Murlo	Commoner activity	400 BCE - 0	30	0.53	Y	Y	Campana 2001, 144-145
2.68	CAPS Murlo	Commoner activity	600 - 400 BCE	54	0.54	Y	N	Campana 2001, 145
2.69.3	CAPS Murlo	Commoner activity	300 - 100 BCE	35	1.20	Y	Y	Campana 2001, 146
2.69.4	CAPS Murlo	Commoner activity	300 - 200 BCE	-	-	N	Y	Campana 2001, 146
2.71.1	CAPS Murlo	Commoner activity	300 - 100 BCE	42	5.07	N	Y	Campana 2001, 147
2.73.3	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	Y	Y	Campana 2001, 150
2.76	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	Y	N	Campana 2001, 154
2.77	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 154
2.78	CAPS Murlo	Commoner activity	300 - 100 BCE	60	1.73	N	Y	Campana 2001, 154
2.81	CAPS Murlo	Commoner activity	700 - 500 BCE	35	4.60	N	Y	Campana 2001, 157
2.83	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 157
2.84	CAPS Murlo	Commoner activity	700 - 500 BCE	50	0.58	Y	Y	Campana 2001, 158
2.86	CAPS Murlo	Commoner activity	700 - 500 BCE	42	0.29	Y	Y	Campana 2001, 158
2.88.1	CAPS Murlo	Commoner activity	300 - 200 BCE	-	-	N	Y	Campana 2001, 159
2.88.2	CAPS Murlo	Commoner activity	400 - 200 BCE	12	6.83	N	Y	Campana 2001, 159
2.89.3	CAPS Murlo	Commoner activity	400 BCE - 0	40	1.03	N	Y	Campana 2001, 160
2.92.1	CAPS Murlo	Commoner activity	600 - 400 BCE	54	0.37	Y	Y	Campana 2001, 161
2.93	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	Y	Y	Campana 2001, 162
2.97	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	N	Y	Campana 2001, 163
2.98	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 163
2.100.0	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	N	Y	Campana 2001, 163
2.102.1	CAPS Murlo	Commoner activity	300 - 200 BCE	54	-	N	Y	Campana 2001, 164
2.102.3	CAPS Murlo	Commoner activity	700 - 500 BCE	30	1.53	Y	Y	Campana 2001, 164
2.102.4	CAPS Murlo	Commoner activity	600 - 500 BCE	-	-	N	Y	Campana 2001, 165
2.104.2	CAPS Murlo	Commoner activity	400 - 300 BCE	24	1.71	N	Y	Campana 2001, 166
2.104.4	CAPS Murlo	Commoner activity	400 - 300 BCE	35	0.83	N	Y	Campana 2001, 166
2.105	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 166
2.107	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 167
2.108	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 167
2.110.1	CAPS Murlo	Commoner activity	300 - 100 BCE	54	1.80	Y	Y	Campana 2001, 168
2.111	CAPS Murlo	Commoner activity	300 - 100 BCE	-	-	Y	Y	Campana 2001, 168
2.112	CAPS Murlo	Commoner activity	700 - 500 BCE	-	-	Y	Y	Campana 2001, 168
2.113.1	CAPS Murlo	Commoner activity	400 - 300 BCE	20	7.30	Y	Y	Campana 2001, 169
2.114.1	CAPS Murlo	Commoner activity	700 - 500 BCE	48	2.77	Y	Y	Campana 2001, 170
2.114.3	CAPS Murlo	Commoner activity	700 - 500 BCE	40	0.98	Y	Y	Campana 2001, 171
2.115.2	CAPS Murlo	Commoner activity	300 - 100 BCE	54	0.69	N	Y	Campana 2001, 171
2.116.2	CAPS Murlo	Commoner activity	600 - 500 BCE	54	0.43	N	Y	Campana 2001, 172
2.116.3	CAPS Murlo	Commoner activity	700 - 500 BCE	48	0.63	N	Y	Campana 2001, 172
2.116.4	CAPS Murlo	Commoner activity	300 - 100 BCE	48	0.79	N	Y	Campana 2001, 172
2.117.1	CAPS Murlo	Commoner activity	300 - 100 BCE	54	4.04	N	Y	Campana 2001, 172
2.118	CAPS Murlo	Commoner activity	300 - 100 BCE	28	1.50	Y	Y	Campana 2001, 174
2.120.3	CAPS Murlo	Commoner activity	700 - 500 BCE	48	0.54	Y	Y	Campana 2001, 175
2.121.1	CAPS Murlo	Commoner activity	300 - 100 BCE	35	1.14	Y	N	Campana 2001, 175

2.121.2	CAPS Murlo	Commoner activity	600 - 500 BCE	54	1.00	Y	Y	Campana 2001, 176
2.122	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 176
2.123	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 176
2.124.1	CAPS Murlo	Commoner activity	700 - 500 BCE	28	1.96	Y	Y	Campana 2001, 177
2.124.2	CAPS Murlo	Commoner activity	400 BCE - 0	40	1.95	N	Y	Campana 2001, 177
2.125.3	CAPS Murlo	Commoner activity	300 - 200 BCE	150	0.85	N	Y	Campana 2001, 178
2.125.4	CAPS Murlo	Commoner activity	300 - 100 BCE	84	0.90	N	Y	Campana 2001, 178
2.128.1	CAPS Murlo	Commoner activity	300 - 100 BCE	35	1.06	N	Y	Campana 2001, 180
2.130.1	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	Y	Campana 2001, 181
2.131	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 181
2.133	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 182
2.136	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	N	N	Campana 2001, 183
2.138.2	CAPS Murlo	Commoner activity	400 BCE - 0	24	1.29	N	Y	Campana 2001, 184
2.139	CAPS Murlo	Commoner activity	600 - 400 BCE	35	0.77	Y	N	Campana 2001, 185
2.140.0	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 185
2.141	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 185
2.142	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 185
2.144	CAPS Murlo	Commoner activity	400 BCE - 0	28	0.79	N	Y	Campana 2001, 186
2.145	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 186
2.146.1	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	Y	Campana 2001, 187
2.150.1	CAPS Murlo	Commoner activity	300 - 200 BCE	54	1.02	N	Y	Campana 2001, 189
2.151.1	CAPS Murlo	Commoner activity	400 BCE - 0	28	0.89	N	Y	Campana 2001, 189
2.151.2	CAPS Murlo	Commoner activity	400 BCE - 0	54	1.44	N	Y	Campana 2001, 189
2.151.3	CAPS Murlo	Commoner activity	400 BCE - 0	40	0.40	N	Y	Campana 2001, 190
2.152.2	CAPS Murlo	Commoner activity	400 BCE - 0	28	0.54	N	Y	Campana 2001, 190
2.153.2	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 190-191
2.157	CAPS Murlo	Commoner activity	600 - 500 BCE	75	0.25	Y	Y	Campana 2001, 192
2.158	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 192
2.159	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 192
2.160.0	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	Y	Campana 2001, 193
2.161	CAPS Murlo	Commoner activity	400 BCE - 0	18	2.39	N	Y	Campana 2001, 193
2.162.1	CAPS Murlo	Commoner activity	700 - 500 BCE	70	0.86	Y	Y	Campana 2001, 193
2.166	CAPS Murlo	Commoner activity	700 - 400 BCE	-	-	Y	N	Campana 2001, 195
2.167	CAPS Murlo	Commoner activity	400 BCE - 0	-	-	N	N	Campana 2001, 195

Appendix 5 Buonconvento

Table A27 Site information for Buonconvento

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M2)	AVERAGE SHERD COUNT PER M2	T	F	CITATION
8.1	CAPS Buonconvento	"Farm" site	600 - 300 BCE	27	7	N	Y	Cenni 2007, 69
8.2	CAPS Buonconvento	Commoner activity	500 - 300 BCE	126	2	N	N	Cenni 2007, 69
9.2	CAPS Buonconvento	Commoner activity	300 - 100 BCE	79.8	4	N	N	Cenni 2007, 71
9.3	CAPS Buonconvento	Commoner activity	300 - 200 BCE	-	3	N	N	Cenni 2007, 71
9.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	42	2	N	N	Cenni 2007, 71
9.5	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	5	Y	N	Cenni 2007, 71
9.6	CAPS Buonconvento	Commoner activity	300 BCE - 0	30.25	3	N	Y	Cenni 2007, 72
9.11	CAPS Buonconvento	Commoner activity	300 BCE - 0	16	-	N	N	Cenni 2007, 72
11.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	4	N	Y	Cenni 2007, 73
11.3	CAPS Buonconvento	Commoner activity	300 - 100 BCE	45.5	3	N	N	Cenni 2007, 74
11.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	Y	Cenni 2007, 74
15	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	2	N	N	Cenni 2007, 75
16	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 75
25.5	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	-	N	N	Cenni 2007, 84
28.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	10	2	N	N	Cenni 2007, 85
28.2	CAPS Buonconvento	Commoner activity	600 - 500 BCE	61.75	3	N	Y	Cenni 2007, 85
28.3	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	3	N	N	Cenni 2007, 86
30.5	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	3	N	Y	Cenni 2007, 87
34.5	CAPS Buonconvento	Commoner activity	300 BCE - 0	65	3	N	N	Cenni 2007, 89
34.6	CAPS Buonconvento	Commoner activity	300 - 100 BCE	63	1	N	Y	Cenni 2007, 89
34.7	CAPS Buonconvento	Commoner activity	700 BCE - 300 CE	-	-	N	N	Cenni 2007, 89
35.2	CAPS Buonconvento	Elite activity	600 - 400 BCE	192	-	N	Y	Cenni 2007, 90
36	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	-	N	N	Cenni 2007, 90
37.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	77	4	Y	Y	Cenni 2007, 92
46.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	3	Y	N	Cenni 2007, 96
49.1	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	4	N	N	Cenni 2007, 100
49.3	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 100

49.4	CAPS BUONCONVENTO	COMMONER ACTIVITY	700 - 500 BCE	20	4	N	N	CENNI 2007, 100
49.5	CAPS Buonconvento	Commoner activity	700 - 500 BCE	168	3	N	N	Cenni 2007, 100
49.2	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	Y	N	Cenni 2007, 100
49.6	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	1	N	N	Cenni 2007, 100
49.7	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 100
49.8	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 100
49.9	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 100
50.2	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	-	Y	N	Cenni 2007, 101
51.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	44.1	4	N	N	Cenni 2007, 101
51.2	CAPS Buonconvento	Commoner activity	700 BCE - 300 CE	-	-	N	N	Cenni 2007, 101
53.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	57	2	Y	N	Cenni 2007, 102
53.2	CAPS Buonconvento	Commoner activity	700 - 300 BCE	77	2	N	N	Cenni 2007, 102
55.2	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	Y	N	Cenni 2007, 102
55.5	CAPS Buonconvento	Commoner activity	600 - 400 BCE	-	-	N	Y	Cenni 2007, 103
55.6	CAPS Buonconvento	Commoner activity	300 BCE - 0	54	4	N	N	Cenni 2007, 103
56	CAPS Buonconvento	"Farm" site	600 - 300 BCE	54	14	Y	N	Cenni 2007, 103
60.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	104	14	N	Y	Cenni 2007, 107
60.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	2	N	Y	Cenni 2007, 107
60.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	102	4	N	Y	Cenni 2007, 107
60.11	CAPS Buonconvento	Commoner activity	300 - 100 BCE	43.4	11	N	Y	Cenni 2007, 110
60.12	CAPS Buonconvento	Commoner activity	300 BCE - 0	88	2	Y	Y	Cenni 2007, 110
60.14	CAPS Buonconvento	Commoner activity	300 BCE - 0	102	2	Y	Y	Cenni 2007, 110
60.17	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 111
61.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 111
61.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 111
62.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	108	1	Y	N	Cenni 2007, 111
62.2	CAPS Buonconvento	Commoner activity	700 - 500 BCE	297	-	N	N	Cenni 2007, 112
62.3	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 112
62.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	703	-	Y	N	Cenni 2007, 112
63	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	-	N	N	Cenni 2007, 112
64	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 112
65.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	1140	4	N	Y	Cenni 2007, 112
65.2	CAPS Buonconvento	"Farm" site	300 BCE - 0	-	1	N	Y	Cenni 2007, 112
65.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 112
66.3	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	5	N	Y	Cenni 2007, 114
72.1	CAPS Buonconvento	"Farm" site	300 - 100 BCE	-	-	N	N	Cenni 2007, 117
75	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	2	N	N	Cenni 2007, 118
76.1	CAPS Buonconvento	"Farm" site	300 BCE - 0	72	8	N	Y	Cenni 2007, 118
76.2	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	3	N	N	Cenni 2007, 119
76.3	CAPS Buonconvento	Commoner activity	300 - 100 BCE	35	5	N	Y	Cenni 2007, 119

76.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	2	Y	N	Cenni 2007, 119
76.5	CAPS Buonconvento	Commoner activity	300 - 100 BCE	160	2	N	N	Cenni 2007, 119
76.6	CAPS Buonconvento	Commoner activity	300 - 100 BCE	100	3	N	N	Cenni 2007, 119
76.7	CAPS Buonconvento	Commoner activity	300 BCE - 0	84	3	N	N	Cenni 2007, 119
76.8	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 119
77.1	CAPS Buonconvento	Commoner activity	600 - 500 BCE	72	3	N	N	Cenni 2007, 120
77.2	CAPS Buonconvento	Commoner activity	600 - 500 BCE	24	6	Y	N	Cenni 2007, 120
77.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	320	2	Y	N	Cenni 2007, 120
78.1	CAPS Buonconvento	"Farm" site	300 BCE - 0	142.8	12	N	Y	Cenni 2007, 120
78.2	CAPS Buonconvento	"Farm" site	300 BCE - 0	105	4	N	N	Cenni 2007, 120
78.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	63	3	Y	N	Cenni 2007, 121
78.6	CAPS Buonconvento	Commoner activity	300 - 100 BCE	33.75	6	N	N	Cenni 2007, 121
78.7	CAPS Buonconvento	Commoner activity	300 - 100 BCE	14.8	5	N	Y	Cenni 2007, 121
78.8	CAPS Buonconvento	Commoner activity	300 - 100 BCE	32.5	5	N	Y	Cenni 2007, 121
78.9	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 122
78.1	CAPS Buonconvento	Commoner activity	300 - 100 BCE	114	5	N	Y	Cenni 2007, 122
78.11	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 122
79.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	Y	N	Cenni 2007, 125
81	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	8	N	N	Cenni 2007, 126
82.2	CAPS Buonconvento	Commoner activity	200 - 0 BCE	22.5	3	Y	N	Cenni 2007, 126
83	CAPS Buonconvento	"Farm" site	700 - 300 BCE	144	1	N	N	Cenni 2007, 126
89	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	-	N	N	Cenni 2007, 129
93	CAPS Buonconvento	Commoner activity	300 - 100 BCE	120	3	N	N	Cenni 2007, 131
95.1	CAPS Buonconvento	Commoner activity	600 - 500, 100 - 0 BCE	-	4	N	Y	Cenni 2007, 131
95.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	1	N	Y	Cenni 2007, 132
95.4	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 132
98	CAPS Buonconvento	Commoner activity	700 BCE - 300 CE	-	1	Y	N	Cenni 2007, 134
101.3	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 135
101.4	CAPS Buonconvento	Commoner activity	700 - 500 BCE	49	3	N	N	Cenni 2007, 136
101.5	CAPS Buonconvento	Commoner activity	700 - 500 BCE	40	3	N	N	Cenni 2007, 136
101.6	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	1	N	N	Cenni 2007, 136
105.2	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	2	N	Y	Cenni 2007, 138
105.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	96	8	Y	N	Cenni 2007, 138
105.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	4	Y	N	Cenni 2007, 139
105.5	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	-	N	Y	Cenni 2007, 139
106	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	2	N	N	Cenni 2007, 139
107.1	CAPS Buonconvento	Commoner activity	300 - 100 BCE	54	-	Y	Y	Cenni 2007, 139
108	CAPS Buonconvento	Commoner activity	400 - 0 BCE	-	-	Y	Y	Cenni 2007, 140
109.1	CAPS Buonconvento	"Farm" site	300 - 100 BCE	162	8	N	Y	Cenni 2007, 140
110	CAPS Buonconvento	Commoner activity	400 - 0 BCE	-	-	N	N	Cenni 2007, 140

112	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 141
113	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	Y	N	Cenni 2007, 141
118.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	532	-	Y	N	Cenni 2007, 142
133.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	42	11	N	Y	Cenni 2007, 160
133.2	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	Y	Cenni 2007, 160
133.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	72	-	N	N	Cenni 2007, 161
134.2	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	-	N	N	Cenni 2007, 161
135	CAPS Buonconvento	Commoner activity	300 BCE - 0	94.5	6	N	Y	Cenni 2007, 162
138	CAPS Buonconvento	Commoner activity	300 BCE - 0	22.75	2	N	Y	Cenni 2007, 163
140	CAPS Buonconvento	Commoner activity	700 - 500 BCE	-	-	N	N	Cenni 2007, 163
148.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	Y	Cenni 2007, 182
152	CAPS Buonconvento	Commoner activity	700 - 300 BCE	-	-	N	N	Cenni 2007, 183
157.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	130	2	N	Y	Cenni 2007, 184
157.2	CAPS Buonconvento	Commoner activity	300 - 100 BCE	65	1	N	N	Cenni 2007, 184
161.1	CAPS Buonconvento	Commoner activity	700 - 500 BCE	55	1	N	N	Cenni 2007, 185
161.2	CAPS Buonconvento	Commoner activity	600 - 500 BCE	32	1	N	N	Cenni 2007, 185
165.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	104.4	4	N	Y	Cenni 2007, 187
165.3	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	1	N	N	Cenni 2007, 188
165.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	Y	Cenni 2007, 188
165.5	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	Y	N	Cenni 2007, 188
165.6	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 188
168.1	CAPS Buonconvento	Commoner activity	600 - 500 BCE	-	-	Y	N	Cenni 2007, 189
170	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 190
171	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 190
173.1	CAPS Buonconvento	Commoner activity	700 BCE - 300 CE	72	3	N	N	Cenni 2007, 191
174.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	122.5	3	N	N	Cenni 2007, 191
174.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	68.25	2	Y	N	Cenni 2007, 193
174.4	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	2	N	N	Cenni 2007, 193
175.1	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	8	N	Y	Cenni 2007, 193
175.2	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	4	N	N	Cenni 2007, 193
175.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	144	3	N	N	Cenni 2007, 194
175.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	2	N	N	Cenni 2007, 194
175.6	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	5	Y	Y	Cenni 2007, 194
176.1	CAPS Buonconvento	Commoner activity	400 - 100 BCE	36	3	N	Y	Cenni 2007, 194
183.1	CAPS Buonconvento	Commoner activity	600 - 500 BCE	168	2	N	N	Cenni 2007, 197
195.4	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	N	Cenni 2007, 201
204	CAPS Buonconvento	Rural activity	500 - 200 BCE	-	-	N	N	Cenni 2007, 207
205	CAPS Buonconvento	Commoner activity	500 - 400 BCE	-	-	N	N	Cenni 2007, 207
211.1	CAPS Buonconvento	"Farm" site	300 BCE - 0	238	3	N	N	Cenni 2007, 215
211.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	63	3	N	Y	Cenni 2007, 215

211.3	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	N	Y	Cenni 2007, 216
211.5	CAPS Buonconvento	Commoner activity	400 - 100 BCE	300	-	N	Y	Cenni 2007, 216
211.8	CAPS Buonconvento	Commoner activity	300 - 100 BCE	-	4	N	N	Cenni 2007, 216
211.9	CAPS Buonconvento	Commoner activity	300 BCE - 300 CE	-	-	Y	N	Cenni 2007, 217
211.10.	CAPS Buonconvento	"Farm" site	300 - 100 BCE	105	6	N	Y	Cenni 2007, 217
211.11	CAPS Buonconvento	Commoner activity	500 - 100 BCE	40	6	N	Y	Cenni 2007, 217
211.12	CAPS Buonconvento	Commoner activity	300 - 100 BCE	51	4	N	N	Cenni 2007, 217
211.13	CAPS Buonconvento	"Farm" site	300 - 100 BCE	120	3	N	N	Cenni 2007, 217
211.14	CAPS Buonconvento	Commoner activity	300 - 100 BCE	60.5	3	N	Y	Cenni 2007, 217
211.16	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	1	N	N	Cenni 2007, 218
212.1	CAPS Buonconvento	Commoner activity	300 - 100 BCE	24	6	N	Y	Cenni 2007, 218
212.2	CAPS Buonconvento	Commoner activity	300 BCE - 0	-	-	Y	N	Cenni 2007, 219
218.1	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	1	Y	N	Cenni 2007, 222
222	CAPS Buonconvento	Commoner activity	700 BCE - 0	-	-	N	N	Cenni 2007, 223

Appendix 6 San Giovanni d'Asso

Table A28 Site information for San Giovanni d'Asso

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
2	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 94
3	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 94
6	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 95
7	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 95
8	CAPS San Giovanni d'Asso	Elite activity	700 BCE - 0	-	-	N	N	Felici 2012, 96
13	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 98
14	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 98
15	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 98
16	CAPS San Giovanni d'Asso	Elite activity	700 BCE - 0	-	-	N	N	Felici 2012, 99
17	CAPS San Giovanni d'Asso	Elite activity	700 BCE - 0	-	-	N	N	Felici 2012, 99
52	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 116
1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 131
2.1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 132
2.2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	660	-	Y	Y	Felici 2012, 132
2.3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 132
2.4	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 132
2.5	CAPS San Giovanni d'Asso	"Farm" site	400 - 100 BCE	30	-	Y	Y	Felici 2012, 133
2.6	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 133
2.7	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 133
2.8	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	156	-	N	Y	Felici 2012, 134
2.9	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	861	-	Y	Y	Felici 2012, 134
2.10.0	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	20	-	Y	Y	Felici 2012, 134
2.11	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 135
2.12	CAPS San Giovanni d'Asso	"Farm" site	400 - 100 BCE	391	-	Y	Y	Felici 2012, 135
3	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2012, 135
11.1	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 0	-	-	Y	Y	Felici 2012, 139
19.1	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2012, 143

19. 2	CAPS SAN GIOVANNI D'ASSO	COMMONER ACTIVITY	700 - 300 BCE	-	-	Y	Y	FELICI 2012, 143
19. 3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 143
19. 4	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	N	Felici 2012, 144
21. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 146
25	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	Y	N	Felici 2012, 148
26. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 149
26. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 149
26. 3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	300	-	Y	Y	Felici 2012, 149
27	CAPS San Giovanni d'Asso	Commoner activity	600 - 500 BCE	-	-	N	Y	Felici 2012, 149
30	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 150
31	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	Y	N	Felici 2012, 151
34	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 151
36	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2012, 152
37. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 152
37. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 153
37. 3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 153
37. 4	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 153
37. 5	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 154
38	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 154
39	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 154
40	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	Y	Y	Felici 2012, 155
41	CAPS San Giovanni d'Asso	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2012, 155
42	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	N	Y	Felici 2012, 156
43. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 156
43. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 156
44	CAPS San Giovanni d'Asso	Elite activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 157
45. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 157
45. 3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 157
47. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 158
47. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 159
48	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 159
49. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 159
49. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 159
50	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 160
52. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	38.4	-	Y	Y	Felici 2012, 160
52. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 161

52. 3	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 161
52. 4	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	Y	Felici 2012, 161
54. 1	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	Y	Y	Felici 2012, 162
54. 3	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	Y	Y	Felici 2012, 163
55. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	99	-	Y	Y	Felici 2012, 163
55. 3	CAPS San Giovanni d'Asso	Elite activity	400 - 100 BCE	462	-	N	Y	Felici 2012, 164
56. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	300	-	Y	Y	Felici 2012, 164
56. 2	CAPS San Giovanni d'Asso	Elite activity	400 - 100 BCE	-	-	N	Y	Felici 2012, 164
58	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	Y	Y	Felici 2012, 165
59	CAPS San Giovanni d'Asso	Elite activity	400 - 100 BCE	5040	-	Y	Y	Felici 2012, 165
60	CAPS San Giovanni d'Asso	Elite activity	300 BCE - 600 CE	-	-	N	N	Felici 2012, 167
61	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2012, 167
62	CAPS San Giovanni d'Asso	Commoner activity	700 BCE - 300 CE	-	-	Y	Y	Felici 2012, 167
64. 1	CAPS San Giovanni d'Asso	Elite activity	300 BCE - 600 CE	-	-	N	N	Felici 2012, 169
64. 2	CAPS San Giovanni d'Asso	Elite activity	300 BCE - 600 CE	-	-	N	N	Felici 2012, 170
87. 1	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	Y	N	Felici 2012, 183
89. 2	CAPS San Giovanni d'Asso	Commoner activity	400 - 100 BCE	-	-	N	N	Felici 2012, 184
90	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 184
95	CAPS San Giovanni d'Asso	Elite activity	300 BCE - 0	-	-	N	N	Felici 2012, 186
96	CAPS San Giovanni d'Asso	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2012, 186
103	CAPS San Giovanni d'Asso	Elite activity	300 BCE - 0	-	-	N	N	Felici 2012, 189

Appendix 7 Montalcino

Table A29 Site information for Montalcino

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
8	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 76
101	CAPS Montalcino	Commoner activity	600 - 500 BCE	35	-	N	N	Campana 2013, 86
102.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	54	-	N	N	Campana 2013, 87
102.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	35	-	N	N	Campana 2013, 87
102.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	32	-	N	N	Campana 2013, 87
102.4	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 87
103	CAPS Montalcino	Commoner activity	600 - 500 BCE	50	-	N	N	Campana 2013, 87
111.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	42	-	N	N	Campana 2013, 91
112	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 91
113.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	77	-	N	N	Campana 2013, 92
117.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 93
118.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	84	-	N	Y	Campana 2013, 94
118.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	48	-	N	Y	Campana 2013, 94
120	CAPS Montalcino	Commoner activity	300 - 100 BCE	60	-	N	Y	Campana 2013, 95
121	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 95
122	CAPS Montalcino	Commoner activity	300 - 100 BCE	60	-	N	Y	Campana 2013, 95
123.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	96	-	N	Y	Campana 2013, 95
123.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	112	-	N	Y	Campana 2013, 95
123.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	40	-	N	Y	Campana 2013, 96
123.4	CAPS Montalcino	Commoner activity	300 - 100 BCE	16	-	N	N	Campana 2013, 96
124	CAPS Montalcino	Commoner activity	300 - 100 BCE	96	-	N	Y	Campana 2013, 96
125.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 96
125.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	180	-	N	Y	Campana 2013, 96
125.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	78	-	N	Y	Campana 2013, 96
125.4	CAPS Montalcino	"Farm" site	300 - 100 BCE	130	-	N	N	Campana 2013, 97
126.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	66	-	N	Y	Campana 2013, 97
126.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	96	-	N	Y	Campana 2013, 97

127.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	72	-	N	Y	Campana 2013, 97
127.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	48	-	N	Y	Campana 2013, 97
128.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	70	-	N	Y	Campana 2013, 98
128.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	42	-	N	Y	Campana 2013, 98
129	CAPS Montalcino	Commoner activity	300 - 100 BCE	70	-	N	Y	Campana 2013, 98
130	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 99
143	CAPS Montalcino	Commoner activity	700 BCE - 300 CE	79550	-	N	N	Campana 2013, 102
146.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	80	-	Y	N	Campana 2013, 103
150.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	70	-	N	Y	Campana 2013, 104
160	CAPS Montalcino	Commoner activity	300 - 100 BCE	300	-	N	Y	Campana 2013, 106
161.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	300	-	N	Y	Campana 2013, 107
162	CAPS Montalcino	Commoner activity	300 - 100 BCE	261250	-	N	Y	Campana 2013, 107
3	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 109
5	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 111
6.1	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 111
6.2	CAPS Montalcino	Commoner activity	400 BCE - 0	-	-	N	N	Campana 2013, 111
7.1	CAPS Montalcino	Commoner activity	700 - 500 BCE	-	-	N	N	Campana 2013, 111
7.2	CAPS Montalcino	Rural activity	700 - 600 BCE	-	-	N	N	Campana 2013, 111
7.3	CAPS Montalcino	Oppidum	400 - 200 BCE	-	-	N	N	Campana 2013, 112
8	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 113
14	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 114
25	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 116
27	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 116
28.1	CAPS Montalcino	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2013, 116
30	CAPS Montalcino	Commoner activity	700 - 300 BCE	-	-	N	N	Campana 2013, 117
32	CAPS Montalcino	Commoner activity	400 BCE - 100 CE	-	-	N	N	Campana 2013, 117
39	CAPS Montalcino	Commoner activity	400 - 300 BCE	-	-	N	N	Campana 2013, 118
40	CAPS Montalcino	Elite activity	700 - 500 BCE	-	-	N	N	Campana 2013, 118
45	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 119
104.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 130
104.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	63	-	N	Y	Campana 2013, 130
104.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	120	-	N	N	Campana 2013, 130
104.4	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 130
104.5	CAPS Montalcino	Commoner activity	600 - 500 BCE	24	-	N	Y	Campana 2013, 130
104.6	CAPS Montalcino	Commoner activity	600 - 500 BCE	24	-	N	Y	Campana 2013, 130
140.7	CAPS Montalcino	Commoner activity	600 - 500 BCE	40	-	N	Y	Campana 2013, 131
140.8	CAPS Montalcino	Commoner activity	300 - 100 BCE	50	-	N	Y	Campana 2013, 131
140.9	CAPS Montalcino	Commoner activity	300 - 100 BCE	56	-	N	Y	Campana 2013, 131
150.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	24	-	N	Y	Campana 2013, 131

150.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 131
107.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	40	-	N	N	Campana 2013, 132
107.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	45	-	N	N	Campana 2013, 132
108.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	143	-	N	N	Campana 2013, 132
109.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	Y	Campana 2013, 133
109.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	90	-	N	N	Campana 2013, 133
109.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	88	-	N	N	Campana 2013, 133
110	CAPS Montalcino	Commoner activity	300 BCE - 0	104	-	N	N	Campana 2013, 134
111.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	91	-	N	N	Campana 2013, 134
112	CAPS Montalcino	Commoner activity	300 - 100 BCE	66	-	N	N	Campana 2013, 134
113	CAPS Montalcino	Commoner activity	600 - 500 BCE	216	-	N	N	Campana 2013, 135
114	CAPS Montalcino	Commoner activity	600 - 500 BCE	60	-	N	N	Campana 2013, 135
116.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	60	-	N	N	Campana 2013, 135
118	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 136
122.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 138
124.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	96	-	N	N	Campana 2013, 140
124.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	200	-	N	N	Campana 2013, 140
124.4	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 140
125.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 140
126.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 141
127.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	216	-	N	N	Campana 2013, 141
127.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	190	-	N	N	Campana 2013, 142
128.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	70	-	N	N	Campana 2013, 142
128.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	N	Campana 2013, 142
132	CAPS Montalcino	Commoner activity	700 - 300 BCE	-	-	N	N	Campana 2013, 143
134	CAPS Montalcino	Commoner activity	700 - 300 BCE	-	-	N	N	Campana 2013, 143
135	CAPS Montalcino	Commoner activity	700 - 300 BCE	-	-	N	N	Campana 2013, 144
139	CAPS Montalcino	Commoner activity	300 BCE - 600 CE	-	-	N	N	Campana 2013, 146
146.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	216	-	N	Y	Campana 2013, 149
146.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	180	-	N	Y	Campana 2013, 149
146.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	120	-	N	N	Campana 2013, 150
147.1	CAPS Montalcino	Commoner activity	400 - 200 BCE	77	-	N	Y	Campana 2013, 150
147.2	CAPS Montalcino	Commoner activity	400 - 200 BCE	77	-	N	Y	Campana 2013, 150
164.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 154
165.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 154
166.1	CAPS Montalcino	Commoner activity	600 - 500 BCE	91	-	N	N	Campana 2013, 155
166.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	45	-	N	N	Campana 2013, 155
169.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	80	-	N	Y	Campana 2013, 156
169.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	96	-	N	Y	Campana 2013, 156
169.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	120	-	N	Y	Campana 2013, 156

171	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 156
172	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 156
175	CAPS Montalcino	Commoner activity	300 - 100 BCE	10 x 770	-	N	Y	Campana 2013, 157
177.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 158
177.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	80	-	N	Y	Campana 2013, 158
178.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2013, 158
178.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	66	-	N	Y	Campana 2013, 159
179.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	900	-	N	Y	Campana 2013, 159
179.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 159
180.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	800	-	N	Y	Campana 2013, 159
180.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 159
188	CAPS Montalcino	Commoner activity	300 - 100 BCE	70	-	N	Y	Campana 2013, 161
191	CAPS Montalcino	Commoner activity	300 - 100 BCE	608	-	N	Y	Campana 2013, 162
193	CAPS Montalcino	Commoner activity	300 - 100 BCE	180	-	N	Y	Campana 2013, 162
194	CAPS Montalcino	Commoner activity	300 - 100 BCE	96	-	N	Y	Campana 2013, 163
195	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 163
196.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	1500	-	N	Y	Campana 2013, 163
197	CAPS Montalcino	Commoner activity	300 - 100 BCE	200	-	N	Y	Campana 2013, 164
198	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2013, 164
3	CAPS Montalcino	Elite activity	400 - 300 BCE	-	-	N	N	Campana 2013, 166
4	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 166
5.1	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 167
5.3	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 167
102.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	45	-	N	Y	Campana 2013, 174
102.5	CAPS Montalcino	Commoner activity	400 - 200 BCE	160	-	N	Y	Campana 2013, 174
102.6	CAPS Montalcino	Commoner activity	600 - 500 BCE	-	-	N	N	Campana 2013, 174
102.7	CAPS Montalcino	Commoner activity	300 - 100 BCE	45	-	N	Y	Campana 2013, 175
102.8	CAPS Montalcino	Commoner activity	300 - 100 BCE	45	-	N	Y	Campana 2013, 175
103.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	88	-	N	Y	Campana 2013, 176
103.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	45	-	N	N	Campana 2013, 176
103.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	108	-	N	N	Campana 2013, 176
104	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 176
105.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 177
107.1	CAPS Montalcino	Commoner activity	700 - 500 BCE	-	-	N	N	Campana 2013, 178
107.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	Y	N	Campana 2013, 178
107.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	Y	N	Campana 2013, 178
108.3	CAPS Montalcino	Commoner activity	600 - 500 BCE	96	-	N	Y	Campana 2013, 180
109	CAPS Montalcino	Commoner activity	300 - 100 BCE	126	-	N	Y	Campana 2013, 180
111.2	CAPS Montalcino	"Farm" site	300 - 100 BCE	112	-	N	Y	Campana 2013, 181
112	CAPS Montalcino	Commoner activity	300 - 100 BCE	28	-	N	Y	Campana 2013, 181

115.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	121	-	N	Y	Campana 2013, 183
115.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	121	-	N	Y	Campana 2013, 183
118.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 184
118.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	208	-	N	Y	Campana 2013, 184
118.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	144	-	N	Y	Campana 2013, 184
118.4	CAPS Montalcino	Commoner activity	300 - 100 BCE	195	-	N	Y	Campana 2013, 185
118.5	CAPS Montalcino	"Farm" site	300 - 100 BCE	154	-	N	Y	Campana 2013, 185
118.6	CAPS Montalcino	"Farm" site	300 - 100 BCE	80	-	N	Y	Campana 2013, 185
118.7	CAPS Montalcino	Commoner activity	300 - 100 BCE	144	-	N	Y	Campana 2013, 185
122.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 187
122.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	72	-	N	Y	Campana 2013, 187
122.4	CAPS Montalcino	Commoner activity	300 - 100 BCE	72	-	N	Y	Campana 2013, 187
122.5	CAPS Montalcino	Commoner activity	300 - 100 BCE	72	-	N	Y	Campana 2013, 187
123.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	63	-	N	Y	Campana 2013, 188
126.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 188
126.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 189
126.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 189
5.1	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 190
6	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 190
7.1	CAPS Montalcino	Elite activity	600 - 500 BCE	-	-	N	N	Campana 2013, 190
7.2	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 191
8.2	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 191
10	CAPS Montalcino	Commoner activity	400 - 200 BCE	-	-	N	N	Campana 2013, 191
13	CAPS Montalcino	Elite activity	400 BCE - 0	-	-	N	N	Campana 2013, 192
14	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 193
19	CAPS Montalcino	Elite activity	300 - 100 BCE	-	-	N	N	Campana 2013, 195
103.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 212
103.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 213
103.6	CAPS Montalcino	Commoner activity	600 - 100 BCE	-	-	N	N	Campana 2013, 213
104.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 214
108.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	84	-	N	Y	Campana 2013, 215
109	CAPS Montalcino	Commoner activity	300 - 100 BCE	70	-	N	Y	Campana 2013, 216
111	CAPS Montalcino	Commoner activity	300 - 100 BCE	54	-	N	Y	Campana 2013, 216
121	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	N	Campana 2013, 220
124	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2013, 221
127.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	63	-	N	Y	Campana 2013, 223
127.5	CAPS Montalcino	Commoner activity	300 - 100 BCE	-	-	N	Y	Campana 2013, 223
128.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	63	-	N	Y	Campana 2013, 224
128.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	81	-	N	Y	Campana 2013, 224
129.1	CAPS Montalcino	Commoner activity	600 BCE - 600 CE	-	-	N	Y	Campana 2013, 224

131.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	24	-	N	Y	Campana 2013, 226
131.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	24	-	N	Y	Campana 2013, 226
131.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	80		N	Y	Campana 2013, 226
134	CAPS Montalcino	Commoner activity	300 BCE - 100 CE	-		N	N	Campana 2013, 227
135.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	63		N	Y	Campana 2013, 227
135.2	CAPS Montalcino	Commoner activity	600 - 500 BCE	75		N	Y	Campana 2013, 227
139	CAPS Montalcino	Commoner activity	300 BCE - 100 CE	45		N	N	Campana 2013, 230
141.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	25		N	N	Campana 2013, 230
141.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	-		N	N	Campana 2013, 230
141.3	CAPS Montalcino	Commoner activity	300 - 100 BCE	-		N	N	Campana 2013, 230
142	CAPS Montalcino	Commoner activity	600 - 500 BCE	45000		N	N	Campana 2013, 230
144.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	-		N	Y	Campana 2013, 231
144.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	20		N	Y	Campana 2013, 231
145.1	CAPS Montalcino	Commoner activity	300 - 100 BCE	-		N	N	Campana 2013, 231
145.2	CAPS Montalcino	Commoner activity	300 - 100 BCE	-		N	N	Campana 2013, 231

Appendix 8 Pienza

Table A30 Site information for Pienza

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1.4	CAPS Pienza	Elite activity	300 BCE - 0	-	-	N	N	Felici 2004, 68
1.7	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 69
2.5	CAPS Pienza	Rural activity	300 BCE - 0	-	-	N	N	Felici 2004, 76
3.3	CAPS Pienza	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2004, 77
3.4	CAPS Pienza	Elite activity	300 BCE - 0	-	-	N	N	Felici 2004, 78
6.2	CAPS Pienza	Elite activity	300 BCE - 0	-	-	N	N	Felici 2004, 84
28.1	CAPS Pienza	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2004, 99
29	CAPS Pienza	Elite activity	700 - 00 BCE	-	-	N	N	Felici 2004, 100
29.3	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	Y	Felici 2004, 100
31.1	CAPS Pienza	Elite activity	300 BCE - 0	-	-	N	N	Felici 2004, 101
34.2	CAPS Pienza	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2004, 102
36.1	CAPS Pienza	Commoner activity	500 - 400 BCE	-	-	N	N	Felici 2004, 102
39.2	CAPS Pienza	Rural activity	300 BCE - 0	-	-	N	N	Felici 2004, 103
41.1	CAPS Pienza	Rural activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 104
-	CAPS Pienza	Elite activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 104
51.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	Y	Y	Felici 2004, 105
54.1	CAPS Pienza	Elite activity	1000 BCE - 300 CE	-	-	N	N	Felici 2004, 107
57.1	CAPS Pienza	Oppidum	300 BCE - 0	-	-	N	N	Felici 2004, 111
57.4	CAPS Pienza	Elite activity	700 - 500 BCE	-	-	N	N	Felici 2004, 111
83.1	CAPS Pienza	Elite activity	300 - 200 BCE, 0 - 200 CE	-	-	N	Y	Felici 2004, 121
86.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2004, 123
93.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	Y	N	Felici 2004, 125
96.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	Y	Y	Felici 2004, 126
97.1	CAPS Pienza	Elite activity	300 BCE - 500 CE	-	-	N	Y	Felici 2004, 127
100.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 128
103.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 128
106.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 130

107.1	CAPS Pienza	Elite activity	300 BCE - 100 CE	-	-	N	Y	Felici 2004, 130
107.2	CAPS Pienza	Commoner activity	400 - 100 BCE	-	-	N	N	Felici 2004, 130
108.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	Y	Felici 2004, 131
117.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	Y	Y	Felici 2004, 133
119.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2004, 134
119.2	CAPS Pienza	Elite activity	700 - 300 BCE	-	-	N	N	Felici 2004, 134
130.2	CAPS Pienza	Commoner activity	600 BCE - 0	-	-	N	N	Felici 2004, 138
130.3	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 138
132.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 139
139.2	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 139
136.1	CAPS Pienza	Elite activity	600 BCE - 0	-	-	N	Y	Felici 2004, 141
140.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 142
141.2	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	N	Felici 2004, 142
142.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2004, 142
144.2	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	Y	Felici 2004, 143
148.1	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 144
152.1	CAPS Pienza	Commoner activity	600 - 200 BCE	-	-	N	N	Felici 2004, 145
152.2	CAPS Pienza	Commoner activity	600 - 100 BCE	-	-	N	N	Felici 2004, 145
155.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2004, 146
161.1	CAPS Pienza	"Farm" site	300 BCE - 100 CE	-	-	N	Y	Felici 2004, 148
162.1	CAPS Pienza	Commoner activity	700 - 0 BCE	-	-	N	Y	Felici 2004, 148
163.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	N	Felici 2004, 149
164.1	CAPS Pienza	Commoner activity	700 - 300 BCE	-	-	N	N	Felici 2004, 149
168.1	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 150
168.2	CAPS Pienza	Commoner activity	300 - 200 BCE	-	-	N	Y	Felici 2004, 150
168.4	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	Y	Felici 2004, 151
169.3	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 152
172.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 153
173.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	Y	Y	Felici 2004, 153
179.1	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	Y	Felici 2004, 155
179.2	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 155
180.3	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 156
180.4	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 156
180.5	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 156
181.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	N	Felici 2004, 157
181.2	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 157
181.4	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 157-158
181.5	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 158
181.6	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 158

184.1	CAPS Pienza	Commoner activity	600 - 100 BCE	-	-	N	N	Felici 2004, 159
185.1	CAPS Pienza	Commoner activity	600 - 100 BCE	-	-	N	Y	Felici 2004, 159
185.2	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	Y	Y	Felici 2004, 159
187.2	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	Y	Felici 2004, 160
187.4	CAPS Pienza	Elite activity	300 BCE - 100 CE	-	-	N	Y	Felici 2004, 161
202.1	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 166
202.2	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	N	Felici 2004, 166
203.1	CAPS Pienza	Commoner activity	400 - 300 BCE	-	-	N	N	Felici 2004, 166
209.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 169
215.1	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	Y	Felici 2004, 170
215.2	CAPS Pienza	Commoner activity	600 - 500 BCE	-	-	N	N	Felici 2004, 170
215.3	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	N	Felici 2004, 171
216.1	CAPS Pienza	Commoner activity	300 - 100 BCE	-	-	N	N	Felici 2004, 171
217.1	CAPS Pienza	Commoner activity	300 BCE - 0	-	-	N	N	Felici 2004, 171
225.1	CAPS Pienza	Elite activity	400 BCE - 0	-	-	N	N	Felici 2004, 173
315.6	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 189
316.1	CAPS Pienza	Elite activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 190
322.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 193
325.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 194
328.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 195
329.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	N	Felici 2004, 195
330.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 196
332.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	N	Felici 2004, 196
333.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 197
333.2	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 197
333.3	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	Y	Y	Felici 2004, 197
336.3	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 200
336.4	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 200
336.11	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 200
337.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 202
339.1	CAPS Pienza	Commoner activity	700 BCE - 300 CE	-	-	N	N	Felici 2004, 202
341.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 203
348.1	CAPS Pienza	Commoner activity	400 BCE - 0	-	-	N	Y	Felici 2004, 203

Appendix 9 Radicofani

Table A31 Site information for Radicofani

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M2)	AVERAGE SHERD COUNT PER M2	T	F	CITATION
1	CAPS Radicofani	Commoner activity	300 BCE - 0	100		1	N	Y Botarelli 2004, 75
28	CAPS Radicofani	Commoner activity	700 - 500 BCE	400		1	N	N Botarelli 2004, 82
34	CAPS Radicofani	Commoner activity	300 BCE - 0	375		5	N	N Botarelli 2004, 83
38	CAPS Radicofani	Commoner activity	300 BCE - 0	1474		8	N	Y Botarelli 2004, 84
45	CAPS Radicofani	Commoner activity	300 BCE - 0	900		5	Y	N Botarelli 2004, 87
47	CAPS Radicofani	"Farm" site	300 BCE - 0	11700		1	N	N Botarelli 2004, 87
48	CAPS Radicofani	"Farm" site	300 BCE - 0	625		8	Y	N Botarelli 2004, 88
52	CAPS Radicofani	Commoner activity	300 BCE - 0	225		3	Y	Y Botarelli 2004, 88
55	CAPS Radicofani	Commoner activity	300 BCE - 0	378		1	N	N Botarelli 2004, 89
60	CAPS Radicofani	Commoner activity	300 BCE - 0	2000		1	Y	N Botarelli 2004, 90
67	CAPS Radicofani	Commoner activity	300 BCE - 0	-	-		N	N Botarelli 2004, 92
69	CAPS Radicofani	Commoner activity	300 BCE - 0	414		2	Y	N Botarelli 2004, 93
72	CAPS Radicofani	Commoner activity	300 BCE - 0	600		1	Y	N Botarelli 2004, 93
79	CAPS Radicofani	Commoner activity	700 - 500 BCE	-	-		N	N Botarelli 2004, 96
80	CAPS Radicofani	Commoner activity	700 BCE - 300 CE	400		3	Y	N Botarelli 2004, 96
87	CAPS Radicofani	Commoner activity	300 BCE - 0	180		1	N	N Botarelli 2004, 98
96	CAPS Radicofani	Commoner activity	700 - 300 BCE	-	-		N	N Botarelli 2004, 101
99	CAPS Radicofani	Commoner activity	300 BCE - 0	-		2	Y	N Botarelli 2004, 101
100	CAPS Radicofani	Commoner activity	300 BCE - 0	-	-		N	N Botarelli 2004, 101
101	CAPS Radicofani	Commoner activity	300 BCE - 0	165		1	Y	Y Botarelli 2004, 102
118	CAPS Radicofani	Commoner activity	700 - 600 BCE	625		10	N	N Botarelli 2004, 106
119	CAPS Radicofani	Commoner activity	700 - 600 BCE	130		5	N	N Botarelli 2004, 106
122	CAPS Radicofani	Commoner activity	300 BCE - 0	-	-		N	N Botarelli 2004, 107
126	CAPS Radicofani	Commoner activity	700 BCE - 0	225		1	Y	N Botarelli 2004, 108
127	CAPS Radicofani	Commoner activity	300 BCE - 0	225		1	Y	N Botarelli 2004, 108
128	CAPS Radicofani	Commoner activity	300 BCE - 0	100		2	N	N Botarelli 2004, 108
130	CAPS Radicofani	Commoner activity	300 BCE - 0	105		2	Y	N Botarelli 2004, 109

131	CAPS Radicofani	Commoner activity	300 BCE - 0	152	2	N	N	Botarelli 2004, 109
132	CAPS Radicofani	Commoner activity	300 BCE - 0	156	2	N	N	Botarelli 2004, 109
133	CAPS Radicofani	Commoner activity	300 BCE - 0	160	2	N	N	Botarelli 2004, 109
134	CAPS Radicofani	Commoner activity	300 BCE - 0	108	2	N	N	Botarelli 2004, 109
143	CAPS Radicofani	Commoner activity	300 BCE - 0	176	1	N	N	Botarelli 2004, 112
145	CAPS Radicofani	Commoner activity	300 BCE - 0	210	1	Y	N	Botarelli 2004, 113
147	CAPS Radicofani	Commoner activity	300 BCE - 0	84	6	Y	N	Botarelli 2004, 113
149	CAPS Radicofani	Commoner activity	300 BCE - 0	144	3	Y	N	Botarelli 2004, 114
155	CAPS Radicofani	Commoner activity	700 - 0 BCE	450	3	Y	N	Botarelli 2004, 120
157	CAPS Radicofani	Commoner activity	600 BCE - 100 CE	74400	9	N	N	Botarelli 2004, 120
159	CAPS Radicofani	Commoner activity	600 BCE - 300 CE	900	6	N	N	Botarelli 2004, 121
160	CAPS Radicofani	Commoner activity	600 BCE - 300 CE	400	7	Y	N	Botarelli 2004, 121
162	CAPS Radicofani	Commoner activity	300 BCE - 0	900	2	Y	N	Botarelli 2004, 121

Appendix 10 Scarlino

Table A32 Site information for Scarlino

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
17	Scarlino	Commoner activity	500 BCE - 0	900	-	N	Y	Francovich et al. 1985, 174
18	Scarlino	Commoner activity	300 - 100 BCE	150	-	N	Y	Francovich et al. 1985, 174
51	Scarlino	Commoner activity	300 BCE - 0	400	-	N	N	Francovich et al. 1985, 187
52	Scarlino	Commoner activity	300 - 100 BCE	2500	-	N	Y	Francovich et al. 1985, 188
63	Scarlino	Commoner activity	700 - 600 BCE	225	-	N	N	Francovich et al. 1985, 190
98	Scarlino	"Farm" site	700 BCE - 0	10000	-	N	N	Francovich et al. 1985, 202
99	Scarlino	Elite activity	700 - 600 BCE	-	-	N	N	Francovich et al. 1985, 202
126	Scarlino	"Farm" site	300 - 100 BCE	100	-	N	Y	Francovich et al. 1985, 218
133	Scarlino	Commoner activity	300 BCE - 300 CE	400	-	N	N	Francovich et al. 1985, 220
134	Scarlino	Elite activity	700 - 600 BCE	-	-	N	N	Francovich et al. 1985, 220
143	Scarlino	Commoner activity	300 BCE - 0	200	-	N	N	Francovich et al. 1985, 223
144	Scarlino	Commoner activity	300 - 100 BCE	-	-	N	N	Francovich et al. 1985, 223
146	Scarlino	Commoner activity	300 BCE - 0	200	-	N	N	Francovich et al. 1985, 226
151	Scarlino	Commoner activity	700 - 600 BCE	-	-	N	N	Francovich et al. 1985, 227
160	Scarlino	"Farm" site	300 BCE - 0	3000	-	N	Y	Francovich et al. 1985, 232
167	Scarlino	Commoner activity	700 - 600 BCE	150	-	N	Y	Francovich et al. 1985, 233
168	Scarlino	Commoner activity	300 BCE - 0	150	-	N	Y	Francovich et al. 1985, 233
171	Scarlino	Commoner activity	700 - 600 BCE	3000	-	N	N	Francovich et al. 1985, 234
173	Scarlino	"Farm" site	300 BCE - 0	400	-	N	Y	Francovich et al. 1985, 234
175	Scarlino	Commoner activity	300 BCE - 0	-	-	N	Y	Francovich et al. 1985, 235
178	Scarlino	"Farm" site	400 - 200 BCE	900	-	N	Y	Francovich et al. 1985, 237
187	Scarlino	"Farm" site	400 - 100 BCE	400	-	Y	N	Francovich et al. 1985, 241
189	Scarlino	Commoner activity	300 BCE - 0	600	-	Y	N	Francovich et al. 1985, 241
191	Scarlino	Commoner activity	700 - 600 BCE	5000	-	N	N	Francovich et al. 1985, 242
200	Scarlino	Commoner activity	300 BCE - 0	-	-	N	Y	Francovich et al. 1985, 243
204	Scarlino	Commoner activity	300 BCE - 0	600	-	N	N	Francovich et al. 1985, 245
205	Scarlino	Commoner activity	500 BCE - 0	-	-	Y	N	Francovich et al. 1985, 245

206	Scarlino	Commoner activity	300 BCE - 0	600	-	N	Y	Francovich et al. 1985, 245
235	Scarlino	Elite activity	500 BCE - 700 CE	-	-	N	N	Francovich et al. 1985, 265

Appendix 11 Albegna Valley

Table A33 Site information for the Albegna Valley

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
CAP 1	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	2500	-	-	-	Carandini et al. 2002, 378
CAP 2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 10.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 378
CAP 10.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 13	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	20	-	-	-	Carandini et al. 2002, 378
CAP 19	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	900	-	-	-	Carandini et al. 2002, 378
CAP 24	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 27	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 29	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 30	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 31	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 32	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 33	Paesaggi D'Etruria	"Farm" site	500 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 378
CAP 34	Paesaggi D'Etruria	Elite activity	700 - 200 BCE	2500	-	-	-	Carandini et al. 2002, 378
CAP 37	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 38	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	225	-	-	-	Carandini et al. 2002, 378
CAP 39	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	900	-	-	-	Carandini et al. 2002, 378
CAP 41	Paesaggi D'Etruria	Elite activity	500 - 200 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 43	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	100	-	-	-	Carandini et al. 2002, 378
CAP 44	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	625	-	-	-	Carandini et al. 2002, 378
CAP 46	Paesaggi D'Etruria	Commoner activity	700 BCE - 100 CE	10000	-	-	-	Carandini et al. 2002, 378
CAP 47	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 48	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 50	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 378
CAP 52	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 54	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 55	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378

CAP 56	Paesaggi D'Etruria	"Farm" site	400 - 300 BCE	625	-	-	-	Carandini et al. 2002, 378
CAP 57	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 58	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	600	-	-	-	Carandini et al. 2002, 378
CAP 59	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 63	Paesaggi D'Etruria	Elite activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 64	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 65	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 80	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 88.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 88.2	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 378
CAP 89	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 93	Paesaggi D'Etruria	Elite activity	700 - 50 BCE	10000	-	-	-	Carandini et al. 2002, 378
CAP 95	Paesaggi D'Etruria	Elite activity	700 - 50 BCE	10000	-	-	-	Carandini et al. 2002, 378
CAP 96	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	50	-	-	-	Carandini et al. 2002, 378
CAP 97	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	25000	-	-	-	Carandini et al. 2002, 378
CAP 98.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 98.2	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	30000	-	-	-	Carandini et al. 2002, 378
CAP 99	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 100	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	8000	-	-	-	Carandini et al. 2002, 378
CAP 152	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 153.1	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 153.2	Paesaggi D'Etruria	Elite activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 157	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 378
CAP 158	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 159	Paesaggi D'Etruria	Elite activity	700 - 50 BCE	25000	-	-	-	Carandini et al. 2002, 378
CAP 164	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	40000	-	-	-	Carandini et al. 2002, 378
CAP 172	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 174	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 192	Paesaggi D'Etruria	Elite activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 253	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 255	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	400	-	-	-	Carandini et al. 2002, 378
CAP 256	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 378
CAP 259	Paesaggi D'Etruria	Elite activity	500 - 200 BCE	25	-	-	-	Carandini et al. 2002, 378
CAP 266	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	40000	-	-	-	Carandini et al. 2002, 378
CAP 267	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 297	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 298	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 299	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 320	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378

CAP 321	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 322	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 323	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 324	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 251	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 258.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	25	-	-	-	Carandini et al. 2002, 378
CAP 258.2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 378
CAP 260	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 378
COL 1	Paesaggi D'Etruria	Commoner activity	500 BCE - 100 CE	225	-	-	-	Carandini et al. 2002, 379
COL 2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	300	-	-	-	Carandini et al. 2002, 379
COL 3	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	225	-	-	-	Carandini et al. 2002, 379
COL 5	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	600	-	-	-	Carandini et al. 2002, 379
FP 4	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	450	-	-	-	Carandini et al. 2002, 380
FP 5	Paesaggi D'Etruria	Commoner activity	400 - 200 BCE	1200	-	-	-	Carandini et al. 2002, 380
FP 8.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 380
FP 13.3	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 380
FP 20	Paesaggi D'Etruria	"Farm" site	300 BCE - 200 CE	6600	-	-	-	Carandini et al. 2002, 380
FP 23	Paesaggi D'Etruria	"Farm" site	700 - 500 BCE	2000	-	-	-	Carandini et al. 2002, 380
FP 24.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 380
FP 25	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 380
FP 28	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	300	-	-	-	Carandini et al. 2002, 380
FP 34.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 380
FP 38	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	600	-	-	-	Carandini et al. 2002, 380
FP 61.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100000	-	-	-	Carandini et al. 2002, 380
FP 74.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	1500	-	-	-	Carandini et al. 2002, 381
FP 77.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	625	-	-	-	Carandini et al. 2002, 381
FP 100	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	25	-	-	-	Carandini et al. 2002, 381
FP 102.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	625	-	-	-	Carandini et al. 2002, 381
FP 110	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	500	-	-	-	Carandini et al. 2002, 381
FP 102.2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 381
FP 111	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 381
FP 113	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	750	-	-	-	Carandini et al. 2002, 381
FP 114.1	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	225	-	-	-	Carandini et al. 2002, 381
FP 114.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	25	-	-	-	Carandini et al. 2002, 381
FP 114.3	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	100	-	-	-	Carandini et al. 2002, 381
FP 114.4	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	100	-	-	-	Carandini et al. 2002, 381
FP 114.5	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	100	-	-	-	Carandini et al. 2002, 381
FP 115.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	25	-	-	-	Carandini et al. 2002, 381
FP 116.1	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	225	-	-	-	Carandini et al. 2002, 381
FP 116.2	Paesaggi D'Etruria	Rural activity	700 - 400 BCE	50	-	-	-	Carandini et al. 2002, 381

FP 116.3	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	50	-	-	-	Carandini et al. 2002, 381
FP 116.4	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	25	-	-	-	Carandini et al. 2002, 381
FP 300	Paesaggi D'Etruria	"Farm" site	300 BCE - 500 CE	6000	-	-	-	Carandini et al. 2002, 381
FP 353	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	150	-	-	-	Carandini et al. 2002, 381
FP 359	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	750	-	-	-	Carandini et al. 2002, 381
FP 360	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	300	-	-	-	Carandini et al. 2002, 381
LC 1	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	225	-	-	-	Carandini et al. 2002, 384
LC 2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	3000	-	-	-	Carandini et al. 2002, 384
LC 5	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 384
LC 8	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	10000	-	-	-	Carandini et al. 2002, 384
LC 9	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 384
LC 10.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 400 CE	1600	-	-	-	Carandini et al. 2002, 384
LC 10.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 384
LC 25	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 384
LC 30	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	750	-	-	-	Carandini et al. 2002, 384
LC 32.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 384
LC 34.1	Paesaggi D'Etruria	Rural activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 384
LC 34.2	Paesaggi D'Etruria	Rural activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 384
LC 39.1	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	140	-	-	-	Carandini et al. 2002, 384
LC 42.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	1200	-	-	-	Carandini et al. 2002, 384
LC 43	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	1600	-	-	-	Carandini et al. 2002, 384
LC 44	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	625	-	-	-	Carandini et al. 2002, 384
LC 45	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	750	-	-	-	Carandini et al. 2002, 384
LC 47	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	2000	-	-	-	Carandini et al. 2002, 384
LC 50	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	1800	-	-	-	Carandini et al. 2002, 384
LC 51	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	750	-	-	-	Carandini et al. 2002, 384
LC 52	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 384
LC 101.1	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	2500	-	-	-	Carandini et al. 2002, 384
LC 101.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 384
LC 103.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 384
LC 103.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 300 CE	150	-	-	-	Carandini et al. 2002, 384
LC 104	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	225	-	-	-	Carandini et al. 2002, 384
LC 112	Paesaggi D'Etruria	"Farm" site	700 - 500 BCE	400	-	-	-	Carandini et al. 2002, 384
LC 113	Paesaggi D'Etruria	"Farm" site	700 - 50 BCE	625	-	-	-	Carandini et al. 2002, 384
LC 114.1	Paesaggi D'Etruria	Rural activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 384
LC 116	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	900	-	-	-	Carandini et al. 2002, 384
LC 117	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 384
MAG 4	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	1600	-	-	-	Carandini et al. 2002, 385
MAG 5	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	25	-	-	-	Carandini et al. 2002, 385
MAG 5	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	25	-	-	-	Carandini et al. 2002, 385

MAG 17	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 385
MAG 19	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	625	-	-	-	Carandini et al. 2002, 385
MAG 20	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	2000	-	-	-	Carandini et al. 2002, 385
MAG 22.2	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 24	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	25	-	-	-	Carandini et al. 2002, 385
MAG 50.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	750	-	-	-	Carandini et al. 2002, 385
MAG 52.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 54.1	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 56.1	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	300	-	-	-	Carandini et al. 2002, 385
MAG 56.3	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 57.2	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	600	-	-	-	Carandini et al. 2002, 385
MAG 58.3	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 62.3	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 385
MAG 73.1	Paesaggi D'Etruria	"Farm" site	300 BCE - 400 CE	1500	-	-	-	Carandini et al. 2002, 386
MAG 73.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 77	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	1600	-	-	-	Carandini et al. 2002, 386
MAG 78.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	600	-	-	-	Carandini et al. 2002, 386
MAG 78.2	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	10500	-	-	-	Carandini et al. 2002, 386
MAG 80	Paesaggi D'Etruria	Commoner activity	400 - 200 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 83	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	10000	-	-	-	Carandini et al. 2002, 386
MAG 87.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 88	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 100	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 101	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 102	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 103	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 152.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 160.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	400	-	-	-	Carandini et al. 2002, 386
MAG 160.2	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 161.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 386
MAG 162	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	400	-	-	-	Carandini et al. 2002, 386
MAG 163.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	900	-	-	-	Carandini et al. 2002, 386
MAG 164	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 386
MAG 165	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	150	-	-	-	Carandini et al. 2002, 386
MAG 200	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 201	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 386
MAG 304	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 386
MAN 2	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	225	-	-	-	Carandini et al. 2002, 387
MAN 3.1	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	900	-	-	-	Carandini et al. 2002, 387
MAN 54.4	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	600	-	-	-	Carandini et al. 2002, 387

MAN 72.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 73	Paesaggi D'Etruria	"Farm" site	400 - 300 BCE	1500	-	-	-	Carandini et al. 2002, 387
MAN 74.1	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 77.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 79.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 87	Paesaggi D'Etruria	Elite activity	300 BCE - 300 CE	9600	-	-	-	Carandini et al. 2002, 387
MAN 88.2	Paesaggi D'Etruria	"Farm" site	700 - 400 BCE	1600	-	-	-	Carandini et al. 2002, 387
MAN 88.7	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	500	-	-	-	Carandini et al. 2002, 387
MAN 93	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	150	-	-	-	Carandini et al. 2002, 387
MAN 94	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	25	-	-	-	Carandini et al. 2002, 387
MAN 96.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	200	-	-	-	Carandini et al. 2002, 387
MAN 97	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	25	-	-	-	Carandini et al. 2002, 387
MAN 99	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	5000	-	-	-	Carandini et al. 2002, 387
MAN 101.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	900	-	-	-	Carandini et al. 2002, 387
MAN 103.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 106	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	500	-	-	-	Carandini et al. 2002, 387
MAN 107.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 108	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	5625	-	-	-	Carandini et al. 2002, 387
MAN 109	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	3000	-	-	-	Carandini et al. 2002, 387
MAN 109	Paesaggi D'Etruria	Elite activity	300 BCE - 300 CE	3000	-	-	-	Carandini et al. 2002, 387
MAN 110.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 387
MAN 113.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 387
MAN 116	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	900	-	-	-	Carandini et al. 2002, 387
MAN 117	Paesaggi D'Etruria	Commoner activity	400 - 200 BCE	1400	-	-	-	Carandini et al. 2002, 387
MAN 118.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 387
MAN 119	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 387
MAN 119	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	400	-	-	-	Carandini et al. 2002, 387
MAN 121.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 388
MAN 152.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	16	-	-	-	Carandini et al. 2002, 388
MAN 160	Paesaggi D'Etruria	Commoner activity	500 BCE - 200 CE	50	-	-	-	Carandini et al. 2002, 388
MAN 252.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	450	-	-	-	Carandini et al. 2002, 388
MAN 254	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 388
MAN 257	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	375	-	-	-	Carandini et al. 2002, 388
MAN 258	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	1200	-	-	-	Carandini et al. 2002, 388
MAN 260	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	300	-	-	-	Carandini et al. 2002, 388
MAN 262	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	875	-	-	-	Carandini et al. 2002, 388
MAN 263	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	150	-	-	-	Carandini et al. 2002, 388
MAN 266	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 388
MAN 271.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 388
MAN 300.3	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 388

MAN 301	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 388
MAN 302.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 388
MARS 1	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	15000	-	-	-	Carandini et al. 2002, 389
MARS 2.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 389
MARS 6	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	100	-	-	-	Carandini et al. 2002, 389
MARS 9	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	7000	-	-	-	Carandini et al. 2002, 389
MARS 13	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	100	-	-	-	Carandini et al. 2002, 389
MARS 14	Paesaggi D'Etruria	Commoner activity	500 - 200 BCE	400	-	-	-	Carandini et al. 2002, 389
MARS 16	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 389
MARS 18	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	1500	-	-	-	Carandini et al. 2002, 389
MARS 18	Paesaggi D'Etruria	Elite activity	300 - 200 BCE	1500	-	-	-	Carandini et al. 2002, 389
MARS 19.1	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	15000	-	-	-	Carandini et al. 2002, 389
MARS 19.3	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 389
MARS 21.2	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 389
MARS 22.1	Paesaggi D'Etruria	Elite activity	300 BCE - 300 CE	3000	-	-	-	Carandini et al. 2002, 389
MARS 27	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	1200	-	-	-	Carandini et al. 2002, 389
MARS 31	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 389
MARS 35.1	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	900	-	-	-	Carandini et al. 2002, 389
MARS 35.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 389
MARS 37	Paesaggi D'Etruria	"Farm" site	700 BCE - 200 CE	3000	-	-	-	Carandini et al. 2002, 389
MARS 40.1	Paesaggi D'Etruria	Elite activity	300 BCE - 300 CE	4200	-	-	-	Carandini et al. 2002, 389
MARS 41	Paesaggi D'Etruria	Commoner activity	500 BCE - 200 CE	100	-	-	-	Carandini et al. 2002, 389
MARS 43	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 389
MARS 44	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	600	-	-	-	Carandini et al. 2002, 389
MARS 45.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	225	-	-	-	Carandini et al. 2002, 389
MARS 46	Paesaggi D'Etruria	Elite activity	300 - 200 BCE	15000	-	-	-	Carandini et al. 2002, 389
MARS 46	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	15000	-	-	-	Carandini et al. 2002, 389
MARS 47	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	25	-	-	-	Carandini et al. 2002, 389
MARS 53.2	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 390
MARS 63	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	5625	-	-	-	Carandini et al. 2002, 390
MARS 64	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	180	-	-	-	Carandini et al. 2002, 390
MARS 66	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	9900	-	-	-	Carandini et al. 2002, 390
MARS 70	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	2000	-	-	-	Carandini et al. 2002, 390
MARS 75	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	300	-	-	-	Carandini et al. 2002, 390
MARS 75	Paesaggi D'Etruria	Elite activity	300 - 200 BCE	300	-	-	-	Carandini et al. 2002, 390
MARS 79.1	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	375	-	-	-	Carandini et al. 2002, 390
MARS 80	Paesaggi D'Etruria	"Farm" site	500 - 400 BCE	1500	-	-	-	Carandini et al. 2002, 390
MARS 85	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 390
MARS 86	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 390
MARS 87.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 390

MARS 88	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	2000	-	-	-	Carandini et al. 2002, 390
MARS 91	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 92	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 93	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 94	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 95	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	25	-	-	-	Carandini et al. 2002, 390
MARS 96	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 97	Paesaggi D'Etruria	"Farm" site	300 BCE - 600 CE	3000	-	-	-	Carandini et al. 2002, 390
MARS 98	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	625	-	-	-	Carandini et al. 2002, 390
MARS 99	Paesaggi D'Etruria	"Farm" site	700 - 400 BCE	3000	-	-	-	Carandini et al. 2002, 390
MARS 101	Paesaggi D'Etruria	"Farm" site	500 - 50 BCE	2100	-	-	-	Carandini et al. 2002, 390
MARS 102	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 105	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	900	-	-	-	Carandini et al. 2002, 390
MARS 106	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 110	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	75	-	-	-	Carandini et al. 2002, 390
MARS 111	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	4900	-	-	-	Carandini et al. 2002, 390
MARS 112	Paesaggi D'Etruria	Rural activity	500 - 400 BCE	800	-	-	-	Carandini et al. 2002, 390
MARS 114	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	125	-	-	-	Carandini et al. 2002, 390
MARS 121	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	600	-	-	-	Carandini et al. 2002, 390
MARS 122	Paesaggi D'Etruria	Commoner activity	500 BCE - 100 CE	4000	-	-	-	Carandini et al. 2002, 390
MARS 123	Paesaggi D'Etruria	"Farm" site	500 BCE - 100 CE	4500	-	-	-	Carandini et al. 2002, 390
MARS 124	Paesaggi D'Etruria	"Farm" site	400 BCE - 100 CE	1400	-	-	-	Carandini et al. 2002, 390
MARS 125	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	240	-	-	-	Carandini et al. 2002, 390
MARS 127	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	140	-	-	-	Carandini et al. 2002, 390
MARS 129	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 390
MARS 131	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 390
MARS 131	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 390
MARS 150.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	20000	-	-	-	Carandini et al. 2002, 390
MARS 200	Paesaggi D'Etruria	Commoner activity	300 BCE - 300 CE	375	-	-	-	Carandini et al. 2002, 390
MARS 202	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	150	-	-	-	Carandini et al. 2002, 390
MARS 205	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	3000	-	-	-	Carandini et al. 2002, 390
MARS 209	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	100	-	-	-	Carandini et al. 2002, 390
MARS 210.1	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	625	-	-	-	Carandini et al. 2002, 390
MARS 210.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 390
MARS 213	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	1600	-	-	-	Carandini et al. 2002, 390
MARS 215	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 390
MARS 216	Paesaggi D'Etruria	Elite activity	700 - 50 BCE	1000	-	-	-	Carandini et al. 2002, 390
MARS 220	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	1225	-	-	-	Carandini et al. 2002, 390
MARS 221	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 390
MARS 222	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	400	-	-	-	Carandini et al. 2002, 390

MARS 223	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	150	-	-	-	Carandini et al. 2002, 390
MARS 224	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	375	-	-	-	Carandini et al. 2002, 390
MARS 225	Paesaggi D'Etruria	"Farm" site	700 - 400 BCE	750	-	-	-	Carandini et al. 2002, 390
MARS 226	Paesaggi D'Etruria	"Farm" site	700 - 50 BCE	900	-	-	-	Carandini et al. 2002, 390
MARS 227	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	900	-	-	-	Carandini et al. 2002, 390
MARS 228	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 230.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 390
MARS 231	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	1500	-	-	-	Carandini et al. 2002, 390
MARS 233	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	225	-	-	-	Carandini et al. 2002, 390
MARS 234	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	8000	-	-	-	Carandini et al. 2002, 392
MAR 300	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	300	-	-	-	Carandini et al. 2002, 392
MAR 302	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	900	-	-	-	Carandini et al. 2002, 392
MAR 303	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	20000	-	-	-	Carandini et al. 2002, 392
MAR 304	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 392
MAR 309	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 392
ORB 17	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	7000	-	-	-	Carandini et al. 2002, 393
ORB 18	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 393
ORB 20	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	600	-	-	-	Carandini et al. 2002, 393
ORB 23.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	10000	-	-	-	Carandini et al. 2002, 393
ORB 34	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 393
ORB 35	Paesaggi D'Etruria	Elite activity	300 BCE - 100 CE	10000	-	-	-	Carandini et al. 2002, 393
ORB 39.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 393
ORB 40	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	25000	-	-	-	Carandini et al. 2002, 393
ORB 41	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	10000	-	-	-	Carandini et al. 2002, 393
ORB 45	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	400	-	-	-	Carandini et al. 2002, 393
ORB 46	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	225	-	-	-	Carandini et al. 2002, 393
ORB 67	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	225	-	-	-	Carandini et al. 2002, 393
ORB 72	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	600	-	-	-	Carandini et al. 2002, 393
ORB 73	Paesaggi D'Etruria	Commoner activity	700 BCE - 1200 CE	-	-	-	-	Carandini et al. 2002, 393
ORB 74	Paesaggi D'Etruria	"Farm" site	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 393
ORB 75	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 393
ORB 76	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 393
ORB 79	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 393
ORB 88	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 101	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	2500	-	-	-	Carandini et al. 2002, 394
ORB 102	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	600	-	-	-	Carandini et al. 2002, 394
ORB 103	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	3600	-	-	-	Carandini et al. 2002, 394
ORB 104	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	2400	-	-	-	Carandini et al. 2002, 394
ORB 106.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 107	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	3000	-	-	-	Carandini et al. 2002, 394

ORB 108	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	200	-	-	-	Carandini et al. 2002, 394
ORB 112.1	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	3500	-	-	-	Carandini et al. 2002, 394
ORB 112.2	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 394
ORB 113.1	Paesaggi D'Etruria	Elite activity	400 - 300 BCE	800	-	-	-	Carandini et al. 2002, 394
ORB 114	Paesaggi D'Etruria	"Farm" site	400 - 300 BCE	900	-	-	-	Carandini et al. 2002, 394
ORB 116.2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 117	Paesaggi D'Etruria	Elite activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 394
ORB 118	Paesaggi D'Etruria	Elite activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 119	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 120	Paesaggi D'Etruria	Elite activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 121	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 122	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 139.2	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 141	Paesaggi D'Etruria	Rural activity	700 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 394
ORB 142	Paesaggi D'Etruria	Rural activity	300 BCE - 500 CE	-	-	-	-	Carandini et al. 2002, 394
ORB 150	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 151	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 394
ORB 152	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 153	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 154	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 200	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	100	-	-	-	Carandini et al. 2002, 394
ORB 201	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	200	-	-	-	Carandini et al. 2002, 394
ORB 204	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	100	-	-	-	Carandini et al. 2002, 394
ORB 205	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	225	-	-	-	Carandini et al. 2002, 394
ORB 209	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	100	-	-	-	Carandini et al. 2002, 394
ORB 210	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	900	-	-	-	Carandini et al. 2002, 394
ORB 211	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 394
ORB 213	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	100	-	-	-	Carandini et al. 2002, 394
ORB 214	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 394
ORB 216	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	150	-	-	-	Carandini et al. 2002, 394
ORB 218.4	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
ORB 222	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 394
PF 1.2	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	1250	-	-	-	Carandini et al. 2002, 396
PF 1.3	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 2	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	2500	-	-	-	Carandini et al. 2002, 396
PF 3.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 400 CE	-	-	-	-	Carandini et al. 2002, 396
PF 5	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 396
PF 6	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 7	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	2500	-	-	-	Carandini et al. 2002, 396
PF 8	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	2500	-	-	-	Carandini et al. 2002, 396

PF 9.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 396
PF 9.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 10	Paesaggi D'Etruria	Commoner activity	500 - 50 BCE	400	-	-	-	Carandini et al. 2002, 396
PF 12	Paesaggi D'Etruria	Elite activity	300 - 200 BCE	100	-	-	-	Carandini et al. 2002, 396
PF 13	Paesaggi D'Etruria	"Farm" site	500 - 300 BCE	1050	-	-	-	Carandini et al. 2002, 396
PF 16.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	900	-	-	-	Carandini et al. 2002, 396
PF 17.1	Paesaggi D'Etruria	"Farm" site	700 - 500 BCE	900	-	-	-	Carandini et al. 2002, 396
PF 20.1	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	900	-	-	-	Carandini et al. 2002, 396
PF 20.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 396
PF 25	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 396
PF 26.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	225	-	-	-	Carandini et al. 2002, 396
PF 26.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 28	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 396
PF 30	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 396
PF 33	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	300	-	-	-	Carandini et al. 2002, 396
PF 36	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	225	-	-	-	Carandini et al. 2002, 396
PF 41	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 100.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	200	-	-	-	Carandini et al. 2002, 396
PF 100.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 101.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 101.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	100	-	-	-	Carandini et al. 2002, 396
PF 102.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 396
PF 102.3	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 103	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 396
PF 104	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	150	-	-	-	Carandini et al. 2002, 396
PF 105.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 396
PF 106	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 396
PF 107.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 107.2	Paesaggi D'Etruria	Commoner activity	600 - 300 BCE	250	-	-	-	Carandini et al. 2002, 397
PF 108	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 109	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 110	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 111	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 112	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 113	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 114	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 117	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	750	-	-	-	Carandini et al. 2002, 397
PF 118.3	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	3500	-	-	-	Carandini et al. 2002, 397
PF 119.2	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 397
PF 120	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	900	-	-	-	Carandini et al. 2002, 397

PF 121.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 122	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 397
PF 123.1	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 123.2	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 397
PF 124	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 397
PR 1	Paesaggi D'Etruria	Rural activity	300 BCE - 200 CE	60000	-	-	-	Carandini et al. 2002, 398
PR 3	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	300	-	-	-	Carandini et al. 2002, 398
PR 4	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	125000	-	-	-	Carandini et al. 2002, 398
PR 7.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 600 CE	-	-	-	-	Carandini et al. 2002, 398
PR 9	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	40000	-	-	-	Carandini et al. 2002, 398
PR 10	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	1200	-	-	-	Carandini et al. 2002, 398
PR 11.1	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	2500	-	-	-	Carandini et al. 2002, 398
PR 13	Paesaggi D'Etruria	Commoner activity	900 - 200 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 16.1	Paesaggi D'Etruria	"Farm" site	800 - 400 BCE	700	-	-	-	Carandini et al. 2002, 398
PR 16.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 600 CE	700	-	-	-	Carandini et al. 2002, 398
PR 18.1	Paesaggi D'Etruria	Commoner activity	500 - 50 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 19.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 398
PR 19.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 22	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 23.2	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 24	Paesaggi D'Etruria	Commoner activity	600 - 300 BCE	2400	-	-	-	Carandini et al. 2002, 398
PR 25	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 27.1	Paesaggi D'Etruria	Commoner activity	600 - 500 BCE	1500	-	-	-	Carandini et al. 2002, 398
PR 27.2	Paesaggi D'Etruria	"Farm" site	900 - 200 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 32	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	25	-	-	-	Carandini et al. 2002, 398
PR 35	Paesaggi D'Etruria	Commoner activity	600 - 400 BCE	100	-	-	-	Carandini et al. 2002, 398
PR 36	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	10000	-	-	-	Carandini et al. 2002, 398
PR 38	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	400	-	-	-	Carandini et al. 2002, 398
PR 39	Paesaggi D'Etruria	Elite activity	300 BCE - 100 CE	400	-	-	-	Carandini et al. 2002, 398
PR 40	Paesaggi D'Etruria	Elite activity	300 BCE - 600 CE	-	-	-	-	Carandini et al. 2002, 398
PR 43.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 44	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	200	-	-	-	Carandini et al. 2002, 398
PR 45	Paesaggi D'Etruria	Elite activity	400 - 50 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 46.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 46.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 398
PR 48	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	225	-	-	-	Carandini et al. 2002, 398
PR 52.1	Paesaggi D'Etruria	Commoner activity	800 - 500 BCE	500	-	-	-	Carandini et al. 2002, 398
PR 52.2	Paesaggi D'Etruria	Commoner activity	400 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 398
PF 55	Paesaggi D'Etruria	"Farm" site	600 - 300 BCE	225	-	-	-	Carandini et al. 2002, 399
PF 56A	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	100	-	-	-	Carandini et al. 2002, 399

PR 56B	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	100	-	-	-	Carandini et al. 2002, 399
PR 57	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 58	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	12000	-	-	-	Carandini et al. 2002, 399
PR 59.1	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 59.2	Paesaggi D'Etruria	Elite activity	300 BCE - 500 CE	-	-	-	-	Carandini et al. 2002, 399
PR 60.1	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	400	-	-	-	Carandini et al. 2002, 399
PR 60.2	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	600	-	-	-	Carandini et al. 2002, 399
PR 61.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 64	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 66	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 399
PR 67	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	400	-	-	-	Carandini et al. 2002, 399
PR 69	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 70.1	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	600	-	-	-	Carandini et al. 2002, 399
PR 70.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	600	-	-	-	Carandini et al. 2002, 399
PR 71	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 72	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	900	-	-	-	Carandini et al. 2002, 399
PR 73	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 76.1	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	375	-	-	-	Carandini et al. 2002, 399
PR 76.2	Paesaggi D'Etruria	Elite activity	300 BCE - 1200 CE	-	-	-	-	Carandini et al. 2002, 399
PR 77	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 399
PR 78	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 79	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 399
PR 80.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	30000	-	-	-	Carandini et al. 2002, 399
PR 80.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 82.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 84.1	Paesaggi D'Etruria	Commoner activity	700 - 50 BCE	-	-	-	-	Carandini et al. 2002, 399
PR 85	Paesaggi D'Etruria	Elite activity	400 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 399
PS 5	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 400
PS 10	Paesaggi D'Etruria	Commoner activity	900 - 300 BCE	-	-	-	-	Carandini et al. 2002, 400
SAM 3.3	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 4	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	400	-	-	-	Carandini et al. 2002, 401
SAM 6.2	Paesaggi D'Etruria	Elite activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 11	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	1000	-	-	-	Carandini et al. 2002, 401
SAM 11	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	1000	-	-	-	Carandini et al. 2002, 401
SAM 17	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	2800	-	-	-	Carandini et al. 2002, 401
SAM 19	Paesaggi D'Etruria	Commoner activity	800 - 500 BCE	1200	-	-	-	Carandini et al. 2002, 401
SAM 22.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 400 CE	18000	-	-	-	Carandini et al. 2002, 401
SAM 23.2	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 26	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	150	-	-	-	Carandini et al. 2002, 401
SAM 27.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	150	-	-	-	Carandini et al. 2002, 401

SAM 27.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 28.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 29.3	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 401
SAM 31.3	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 401
SAM 41.1	Paesaggi D'Etruria	"Farm" site	700 - 500 BCE	3000	-	-	-	Carandini et al. 2002, 401
SAM 42	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	12000	-	-	-	Carandini et al. 2002, 401
SAM 46.2	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 48.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 51.3	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 52.1	Paesaggi D'Etruria	Elite activity	300 BCE - 300 CE	10000	-	-	-	Carandini et al. 2002, 402
SAM 54.3	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	750	-	-	-	Carandini et al. 2002, 402
SAM 101.1	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	300	-	-	-	Carandini et al. 2002, 402
SAM 101.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 102.2	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 106.1	Paesaggi D'Etruria	"Farm" site	400 BCE - 100 CE	1000	-	-	-	Carandini et al. 2002, 402
SAM 106.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 107	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 109.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 111.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 500 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 112	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	100	-	-	-	Carandini et al. 2002, 402
SAM 113.1	Paesaggi D'Etruria	Elite activity	700 - 200 BCE	1500	-	-	-	Carandini et al. 2002, 402
SAM 113.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	100	-	-	-	Carandini et al. 2002, 402
SAM 113.3	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 114	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	100	-	-	-	Carandini et al. 2002, 402
SAM 115.3	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 116.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 119.1	Paesaggi D'Etruria	"Farm" site	400 - 300 BCE	450	-	-	-	Carandini et al. 2002, 402
SAM 119.3	Paesaggi D'Etruria	Commoner activity	400 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 124.1	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	150	-	-	-	Carandini et al. 2002, 402
SAM 124.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 125.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 300 CE	-	-	-	-	Carandini et al. 2002, 402
SAM 127	Paesaggi D'Etruria	"Farm" site	500 - 400 BCE	20000	-	-	-	Carandini et al. 2002, 402
SAM 128.1	Paesaggi D'Etruria	"Farm" site	300 - 200 BCE	1000	-	-	-	Carandini et al. 2002, 402
SAM 128.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 130.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 131	Paesaggi D'Etruria	"Farm" site	700 BCE - 100 CE	100	-	-	-	Carandini et al. 2002, 402
SAM 132	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	50	-	-	-	Carandini et al. 2002, 402
SAM 133.1	Paesaggi D'Etruria	"Farm" site	500 - 400 BCE	750	-	-	-	Carandini et al. 2002, 402
SAM 133.2	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	-	-	-	-	Carandini et al. 2002, 402
SAM 134	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	225	-	-	-	Carandini et al. 2002, 402

SAM 135	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	150	-	-	-	Carandini et al. 2002, 402
SAM 201	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	15	-	-	-	Carandini et al. 2002, 402
SAM 202	Paesaggi D'Etruria	"Farm" site	700 - 300 BCE	2460	-	-	-	Carandini et al. 2002, 402
SAM 500	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 402
SD 2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 41	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	10000	-	-	-	Carandini et al. 2002, 404
SD 55	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	625	-	-	-	Carandini et al. 2002, 404
SD 56	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	225	-	-	-	Carandini et al. 2002, 404
SD 125	Paesaggi D'Etruria	Commoner activity	300 BCE - 500 CE	900	-	-	-	Carandini et al. 2002, 404
SD 132.1	Paesaggi D'Etruria	"Farm" site	300 - 200 BCE	4800	-	-	-	Carandini et al. 2002, 404
SD 132.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	4800	-	-	-	Carandini et al. 2002, 404
SD 133	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	600	-	-	-	Carandini et al. 2002, 404
SD 141.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	1800	-	-	-	Carandini et al. 2002, 404
SD 141.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	150	-	-	-	Carandini et al. 2002, 404
SD 141.3	Paesaggi D'Etruria	Elite activity	500 - 300 BCE	3000	-	-	-	Carandini et al. 2002, 404
SD 142	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	1800	-	-	-	Carandini et al. 2002, 404
SD 149.2	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 150.3	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 150.5	Paesaggi D'Etruria	Rural activity	500 - 300 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 156	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	120	-	-	-	Carandini et al. 2002, 404
SD 157	Paesaggi D'Etruria	Elite activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 158	Paesaggi D'Etruria	Elite activity	500 - 400 BCE	200	-	-	-	Carandini et al. 2002, 404
SD 165	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	750	-	-	-	Carandini et al. 2002, 404
SD 166	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	8000	-	-	-	Carandini et al. 2002, 404
SD 168	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	200	-	-	-	Carandini et al. 2002, 404
SD 170	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 404
SD 174	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 183	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	100	-	-	-	Carandini et al. 2002, 405
SD 184.1	Paesaggi D'Etruria	Elite activity	700 - 500 BCE	20000	-	-	-	Carandini et al. 2002, 405
SD 184.2	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 186.1	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 188.2	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	900	-	-	-	Carandini et al. 2002, 405
SD 188.3	Paesaggi D'Etruria	Elite activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 405
SD 189	Paesaggi D'Etruria	Elite activity	500 - 200 BCE	9	-	-	-	Carandini et al. 2002, 405
SD 195	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	300	-	-	-	Carandini et al. 2002, 405
SD 204	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 204	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 215.1	Paesaggi D'Etruria	Commoner activity	900 - 500 BCE	7	-	-	-	Carandini et al. 2002, 405
SD 215.2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	16	-	-	-	Carandini et al. 2002, 405
SD 216.1	Paesaggi D'Etruria	Rural activity	300 - 200 BCE	49	-	-	-	Carandini et al. 2002, 405

SD 216.2	Paesaggi D'Etruria	Rural activity	700 - 400 BCE	40	-	-	-	Carandini et al. 2002, 405
SD 222	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	450	-	-	-	Carandini et al. 2002, 405
SD 225.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	600	-	-	-	Carandini et al. 2002, 405
SD 250.3	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	168	-	-	-	Carandini et al. 2002, 405
SD 250.5	Paesaggi D'Etruria	Rural activity	700 - 300 BCE	2	-	-	-	Carandini et al. 2002, 405
SD 252	Paesaggi D'Etruria	"Farm" site	300 - 50 BCE	1200	-	-	-	Carandini et al. 2002, 405
SD 254	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	2800	-	-	-	Carandini et al. 2002, 405
SD 255.2	Paesaggi D'Etruria	Commoner activity	300 - 200 BCE	300	-	-	-	Carandini et al. 2002, 405
SD 255.4	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	70	-	-	-	Carandini et al. 2002, 405
SD 256.2	Paesaggi D'Etruria	Elite activity	700 - 300 BCE	375	-	-	-	Carandini et al. 2002, 405
SD 257.2	Paesaggi D'Etruria	Elite activity	400 BCE - 200 CE	90	-	-	-	Carandini et al. 2002, 405
SD 260.1	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	300	-	-	-	Carandini et al. 2002, 405
SD 261.1	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	750	-	-	-	Carandini et al. 2002, 405
SD 262	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	400	-	-	-	Carandini et al. 2002, 405
SD 263	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	50	-	-	-	Carandini et al. 2002, 405
SD 270	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	500	-	-	-	Carandini et al. 2002, 405
SD 271	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	300	-	-	-	Carandini et al. 2002, 405
SD 272	Paesaggi D'Etruria	Commoner activity	700 - 200 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 277.2	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 278	Paesaggi D'Etruria	Commoner activity	400 - 200 BCE	-	-	-	-	Carandini et al. 2002, 405
SD 280	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	100	-	-	-	Carandini et al. 2002, 405
SD 282	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	100	-	-	-	Carandini et al. 2002, 405
SD 300	Paesaggi D'Etruria	Commoner activity	500 - 300 BCE	1000	-	-	-	Carandini et al. 2002, 405
SD 301	Paesaggi D'Etruria	Elite activity	300 BCE - 100 CE	1500	-	-	-	Carandini et al. 2002, 405
SC 158	Paesaggi D'Etruria	Commoner activity	400 - 300 BCE	100	-	-	-	Carandini et al. 2002, 407
SC 171	Paesaggi D'Etruria	"Farm" site	300 BCE - 100 CE	2000	-	-	-	Carandini et al. 2002, 407
SC 174	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	50	-	-	-	Carandini et al. 2002, 407
TAL 1.3	Paesaggi D'Etruria	Commoner activity	700 - 500 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 10	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 408
TAL 51	Paesaggi D'Etruria	"Farm" site	700 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 408
TAL 101.3	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 104	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 408
TAL 110.1	Paesaggi D'Etruria	Commoner activity	500 - 400 BCE	120000	-	-	-	Carandini et al. 2002, 408
TAL 110.2	Paesaggi D'Etruria	Rural activity	300 BCE - 200 CE	1400	-	-	-	Carandini et al. 2002, 408
TAL 110.4	Paesaggi D'Etruria	Elite activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 113.3	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 155	Paesaggi D'Etruria	"Farm" site	700 - 400 BCE	2500	-	-	-	Carandini et al. 2002, 408
TAL 203	Paesaggi D'Etruria	Commoner activity	400 - 50 BCE	400	-	-	-	Carandini et al. 2002, 408
TAL 204	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	400	-	-	-	Carandini et al. 2002, 408
TAL 206	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 408

TAL 216.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	-	-	-	-	Carandini et al. 2002, 408
TAL 218	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 408
TAL 302.1	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	625	-	-	-	Carandini et al. 2002, 408
TAL 302.2	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	-	-	-	-	Carandini et al. 2002, 408
TAL 305.2	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 401	Paesaggi D'Etruria	"Farm" site	300 BCE - 200 CE	9600	-	-	-	Carandini et al. 2002, 408
TAL 402	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	2500	-	-	-	Carandini et al. 2002, 408
TAL 405.3	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 417.1	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 408
TAL 418	Paesaggi D'Etruria	Commoner activity	300 BCE - 200 CE	500	-	-	-	Carandini et al. 2002, 408
TAL 419.1	Paesaggi D'Etruria	Commoner activity	1000 - 300 BCE	100	-	-	-	Carandini et al. 2002, 408
TAL 422.1	Paesaggi D'Etruria	Commoner activity	700 - 400 BCE	10000	-	-	-	Carandini et al. 2002, 408
TAL 423	Paesaggi D'Etruria	Commoner activity	300 BCE - 100 CE	100	-	-	-	Carandini et al. 2002, 408
TAL 424.1	Paesaggi D'Etruria	Commoner activity	300 - 50 BCE	1250	-	-	-	Carandini et al. 2002, 408
TAL 425	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	30	-	-	-	Carandini et al. 2002, 408
TAL 426	Paesaggi D'Etruria	Commoner activity	700 - 300 BCE	-	-	-	-	Carandini et al. 2002, 408

Appendix 12 Rieti

Table A34 Site information for Rieti

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1	Rieti	Elite activity	700 BCE - 1700 CE	2	-	Y	Y	Coccoa and Mattingly 1995, 132
3	Rieti	Commoner activity	300 BCE - 200 CE	0.03	-	N	N	Coccoa and Mattingly 1995, 132
4	Rieti	Commoner activity	300 BCE - 200 CE	0.045	-	Y	N	Coccoa and Mattingly 1995, 132
9	Rieti	Commoner activity	700 - 100 BCE	2	-	N	Y	Coccoa and Mattingly 1995, 133
10	Rieti	"Farm" site	300 BCE - 200 CE	0.016	-	Y	Y	Coccoa and Mattingly 1995, 133
14	Rieti	"Farm" site	700 BCE to 400 CE	0.15	-	Y	Y	Coccoa and Mattingly 1995, 133
15	Rieti	"Farm" site	700 BCE to 400 CE	0.85	-	N	Y	Coccoa and Mattingly 1995, 134
16	Rieti	"Farm" site	700 BCE to 200 CE	0.175	-	Y	Y	Coccoa and Mattingly 1995, 134
17	Rieti	"Farm" site	700 to 300 CE	0.04	-	Y	N	Coccoa and Mattingly 1995, 134
18	Rieti	"Farm" site	700 to 100 BCE	0.06	-	N	Y	Coccoa and Mattingly 1995, 134
19	Rieti	Commoner activity	300 BCE - 400 CE	0.24	-	Y	N	Coccoa and Mattingly 1995, 134
20	Rieti	"Farm" site	400 BCE - 100 BC	0.014	-	N	Y	Coccoa and Mattingly 1995, 134
21	Rieti	Commoner activity	400 BCE - 500 CE	0.54	-	N	Y	Coccoa and Mattingly 1995, 134
22	Rieti	Commoner activity	700 BCE - 300 CE	0.056	-	Y	Y	Coccoa and Mattingly 1995, 135
23	Rieti	Commoner activity	700 - 100 BCE	0.005	-	N	N	Coccoa and Mattingly 1995, 135
25	Rieti	Elite activity	700 - 400 CE	0.8	-	N	Y	Coccoa and Mattingly 1995, 135
29	Rieti	Commoner activity	300 BCE - 200 CE	0.64	-	N	Y	Coccoa and Mattingly 1995, 135
30	Rieti	Commoner activity	300 BCE - 200 CE	0.25	-	Y	N	Coccoa and Mattingly 1995, 136
32	Rieti	Commoner activity	300 - 100 BCE	0.06	-	N	Y	Coccoa and Mattingly 1995, 136
33	Rieti	Elite activity	400 BCE - 500 CE	0.305	-	Y	N	Coccoa and Mattingly 1995, 136
34	Rieti	"Farm" site	400 BCE - 300 CE	0.44	-	Y	N	Coccoa and Mattingly 1995, 136
36	Rieti	"Farm" site	400 BCE - 500 CE	0.33	-	Y	Y	Coccoa and Mattingly 1995, 136
37	Rieti	"Farm" site	400 BCE - 500 CE	0.03	-	Y	Y	Coccoa and Mattingly 1995, 137
38	Rieti	Commoner activity	400 BCE - 300 CE	0.1	-	N	Y	Coccoa and Mattingly 1995, 137
39	Rieti	Commoner activity	400 BCE - 300 CE	0.1	-	N	N	Coccoa and Mattingly 1995, 137
40	Rieti	"Farm" site	700 BCE - 500 CE	0.113	-	N	Y	Coccoa and Mattingly 1995, 137

41	Rieti	"Farm" site	400 BCE - 400 CE	0.09	-	Y	Y	Coccoa and Mattingly 1995, 137
44	Rieti	Commoner activity	300 - 100 BCE	0.01	-		N Y	Coccoa and Mattingly 1995, 138
48	Rieti	Elite activity	300 BCE - 500 CE	0.97	-		Y Y	Coccoa and Mattingly 1995, 138
52	Rieti	Commoner activity	300 BCE - 500 CE	0.15	-		N N	Coccoa and Mattingly 1995, 140
62	Rieti	"Farm" site	400 - 100 BCE	0.017	-		N N	Coccoa and Mattingly 1995, 141
83	Rieti	"Farm" site	300 BCE - 500 CE	0.5	-		Y N	Coccoa and Mattingly 1995, 144
84	Rieti	Commoner activity	300 BCE - 500 CE	0.32	-		N Y	Coccoa and Mattingly 1995, 145
85	Rieti	Commoner activity	400 BCE - 500 CE	0.39	-		Y N	Coccoa and Mattingly 1995, 145
87	Rieti	Commoner activity	300 BCE - 400 CE	0.39	-		N N	Coccoa and Mattingly 1995, 145
88	Rieti	"Farm" site	300 BCE - 500 CE	0.231	-		N N	Coccoa and Mattingly 1995, 145
89	Rieti	Commoner activity	300 BCE - 400 CE	0.174	-		Y N	Coccoa and Mattingly 1995, 145
91	Rieti	Commoner activity	300 BCE - 400 CE	0.18	-		N Y	Coccoa and Mattingly 1995, 146
94	Rieti	Commoner activity	300 BCE - 400 CE	.25ish	-		N N	Coccoa and Mattingly 1995, 146
95	Rieti	Commoner activity	700 BCE - 500 CE	0.101	-		N Y	Coccoa and Mattingly 1995, 146
97	Rieti	"Farm" site	400 BCE - 500 CE	.2ish	-		Y Y	Coccoa and Mattingly 1995, 146
99	Rieti	"Farm" site	400 BCE - 500 CE	-	-		N N	Coccoa and Mattingly 1995, 147
100	Rieti	Commoner activity	700 BCE - 500 CE	0.031	-		N N	Coccoa and Mattingly 1995, 147
103	Rieti	Commoner activity	400 BCE - 500 CE	0.25	-		N N	Coccoa and Mattingly 1995, 147
106	Rieti	Commoner activity	400 - 100 BCE	1.073	-		N N	Coccoa and Mattingly 1995, 147
108	Rieti	"Farm" site	300 BCE - 200 CE	0.1	-		N Y	Coccoa and Mattingly 1995, 147
110	Rieti	"Farm" site	300 BCE - 300 CE	0.18	-		N Y	Coccoa and Mattingly 1995, 148
111	Rieti	Commoner activity	300 - 100 BCE	0.092	-		N Y	Coccoa and Mattingly 1995, 148
113	Rieti	"Farm" site	300 BCE - 300 CE	0.204	-		N N	Coccoa and Mattingly 1995, 148
114	Rieti	Commoner activity	300 BCE - 300 CE	0.146	-		Y Y	Coccoa and Mattingly 1995, 148
115	Rieti	Commoner activity	700 BCE - 500 CE	0.1	-		Y N	Coccoa and Mattingly 1995, 148
117	Rieti	Commoner activity	700 BCE - 500 CE	1.265	-		Y N	Coccoa and Mattingly 1995, 149
118	Rieti	Elite activity	400 BCE - 500 CE	0.314	-		Y Y	Coccoa and Mattingly 1995, 149
121	Rieti	Elite activity	300 BCE - 400 CE	0.5	-		N Y	Coccoa and Mattingly 1995, 149
122	Rieti	Commoner activity	400 BCE - 200 CE	0.4	-		Y N	Coccoa and Mattingly 1995, 149
128	Rieti	Commoner activity	400 BCE - 400 CE	0.16	-		N N	Coccoa and Mattingly 1995, 150
130	Rieti	"Farm" site	400 BCE - 200 CE	0.51	-		Y N	Coccoa and Mattingly 1995, 150
131	Rieti	Rural activity	400 BCE - 500 CE	-	-		N N	Coccoa and Mattingly 1995, 150
134	Rieti	"Farm" site	300 BCE - 500 CE	0.04	-		N Y	Coccoa and Mattingly 1995, 150
135	Rieti	Rural activity	400 BCE - 300 CE	0.99	-		Y N	Coccoa and Mattingly 1995, 150
224	Rieti	"Farm" site	400 BCE - 200 CE	-	-		N N	Coccoa and Mattingly 1995, 150
241	Rieti	Elite activity	400 BCE - 500 CE	2.5	-		Y Y	Coccoa and Mattingly 1995, 157
243	Rieti	Rural activity	700 BCE - 500 CE	5+	-		Y Y	Coccoa and Mattingly 1995, 157
246	Rieti	Rural activity	700 BCE - 400 CE	0.3	-		N N	Coccoa and Mattingly 1995, 158

Appendix 13 Corese

Table A35 Site information for Corese

SITE NUMBER	SURVEY	TYPE	SIZE (M2)	AVERAGE SHERD COUNT PER M2	T	F	CITATION
1.1	Ager Sabinensis	"Farm" site	600 BCE - 0	1500 -	Y	Y	Di Giuseppe et al. 2002, 129
1.2	Ager Sabinensis	"Farm" site	600 BCE - 0	5000 -	Y	N	Di Giuseppe et al. 2002, 129
1.3	Ager Sabinensis	"Farm" site	600 BCE - 0	225 -	Y	Y	Di Giuseppe et al. 2002, 130
3.2	Ager Sabinensis	Elite activity	300 BCE - 250 CE	12750 -	Y	Y	Di Giuseppe et al. 2002, 131
3.3	Ager Sabinensis	Rural activity	300 BCE - 100 CE	7500 -	Y	Y	Di Giuseppe et al. 2002, 134
4.1	Ager Sabinensis	"Farm" site	600 BCE - 250 CE	400 -	Y	Y	Di Giuseppe et al. 2002, 134
9	Ager Sabinensis	Commoner activity	300 - 100 BCE	- -	Y	Y	Di Giuseppe et al. 2002, 136
14	Ager Sabinensis	Commoner activity	300 BCE - 250 CE	- -	Y	Y	Di Giuseppe et al. 2002, 137
17.1	Ager Sabinensis	"Farm" site	700 BCE - 0	1650 -	Y	Y	Di Giuseppe et al. 2002, 138
19.1	Ager Sabinensis	"Farm" site	600 BCE - 0	1400 -	Y	Y	Di Giuseppe et al. 2002, 139
21.1	Ager Sabinensis	"Farm" site	300 BCE - 0	300 -	Y	Y	Di Giuseppe et al. 2002, 140
22	Ager Sabinensis	"Farm" site	700 BCE - 250 CE	1200 -	Y	N	Di Giuseppe et al. 2002, 141
23	Ager Sabinensis	Commoner activity	300 BCE - 100 CE	- -	N	N	Di Giuseppe et al. 2002, 141
24	Ager Sabinensis	Commoner activity	300 BCE - 100 CE	- -	Y	Y	Di Giuseppe et al. 2002, 141
25	Ager Sabinensis	Commoner activity	300 - 100 BCE	4000 -	Y	Y	Di Giuseppe et al. 2002, 141
26.1	Ager Sabinensis	"Farm" site	600 BCE - 0	1875 -	Y	Y	Di Giuseppe et al. 2002, 142
29.2	Ager Sabinensis	Elite activity	300 BCE - 400 CE	2000 -	Y	N	Di Giuseppe et al. 2002, 143
31	Ager Sabinensis	Commoner activity	600 BCE - 100 CE	900 -	N	Y	Di Giuseppe et al. 2002, 144
33	Ager Sabinensis	Commoner activity	700 BCE - 100 CE	900 -	Y	Y	Di Giuseppe et al. 2002, 144
34	Ager Sabinensis	Elite activity	600 BCE - 600 CE	1800 -	Y	Y	Di Giuseppe et al. 2002, 145
37	Ager Sabinensis	Elite activity	700 BCE - 250 CE	3750 -	Y	Y	Di Giuseppe et al. 2002, 146
38	Ager Sabinensis	"Farm" site	700 BCE - 250 CE	500 -	Y	Y	Di Giuseppe et al. 2002, 146-7
40	Ager Sabinensis	"Farm" site	300 BCE - 250 CE	1800 -	Y	Y	Di Giuseppe et al. 2002, 147

Appendix 14 Civitella Cesi

Table A36 Site information for Civitella Cesi

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M2)	AVERAGE SHERD COUNT PER M2	T	F	CITATION
1	Civitella Cesi	Commoner activity	300 BCE - 300 CE	1875	-	N	Y	Hemphill 2000, 26
8	Civitella Cesi	Elite activity	300 BCE - 600 CE	1278	-	N	Y	Hemphill 2000, 29-30
11	Civitella Cesi	Commoner activity	10000 BCE - 400 BCE	19200	-	N	N	Hemphill 2000, 31
15	Civitella Cesi	Commoner activity	10000 - 300 BCE, 400 - 600	-	-	Y	N	Hemphill 2000, 33
16	Civitella Cesi	Commoner activity	700 BCE - 0	147	-	Y	N	Hemphill 2000, 33
17	Civitella Cesi	Commoner activity	300 BCE - 100	-	-	N	Y	Hemphill 2000, 34
20	Civitella Cesi	Elite activity	300 BCE - 200 CE	-	-	N	N	Hemphill 2000, 34
22	Civitella Cesi	Commoner activity	1000 - 300 BCE	147	-	Y	N	Hemphill 2000, 35
28	Civitella Cesi	Rural activity	700 - 300 BCE	-	-	N	N	Hemphill 2000, 37
30	Civitella Cesi	Commoner activity	300 BCE - 600 CE	7500	-	N	Y	Hemphill 2000, 37
32	Civitella Cesi	"Farm" site	300 BCE - 400 CE	4800	-	N	Y	Hemphill 2000, 38
36	Civitella Cesi	Commoner activity	300 BCE - 100	-	-	N	Y	Hemphill 2000, 38
39	Civitella Cesi	Commoner activity	300 - 100 BCE	243	-	N	N	Hemphill 2000, 39
48	Civitella Cesi	Commoner activity	300 - 100 BCE	1200	-	N	Y	Hemphill 2000, 42
49	Civitella Cesi	Commoner activity	700 BCE- 0, 400 - 500 CE	288	-	N	Y	Hemphill 2000, 42
53	Civitella Cesi	Commoner activity	300 BCE - 600 CE	1500	-	N	Y	Hemphill 2000, 44
56	Civitella Cesi	Commoner activity	700 BCE - 500 CE	144	-	N	Y	Hemphill 2000, 44
57	Civitella Cesi	Commoner activity	700 - 300 BCE	3675	-	Y	N	Hemphill 2000, 44
66	Civitella Cesi	Elite activity	700 - 300 BCE	-	-	N	Y	Hemphill 2000, 45-6
67	Civitella Cesi	Commoner activity	700 BCE - 200 CE	1200	-	N	Y	Hemphill 2000, 46
71	Civitella Cesi	"Farm" site	300 BCE - 500 CE	126	-	N	Y	Hemphill 2000, 47
77	Civitella Cesi	Commoner activity	300 BCE - 300 CE	7500	-	N	Y	Hemphill 2000, 49
80	Civitella Cesi	Commoner activity	300 BCE - 200 CE	147	-	N	Y	Hemphill 2000, 49-50
87	Civitella Cesi	Elite activity	700 BCE - 600 CE	-	-	N	Y	Hemphill 2000, 54-68
91	Civitella Cesi	Commoner activity	300 BCE - 100 CE	75	-	N	Y	Hemphill 2000, 69
92	Civitella Cesi	Commoner activity	300 BCE - 600 CE	-	-	N	Y	Hemphill 2000, 69
114	Civitella Cesi	Commoner activity	700 - 300 BCE	750	-	N	N	Hemphill 2000, 77

116	Civitella Cesi	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Hemphill 2000, 78
117	Civitella Cesi	Elite activity	1000 - 100 BCE	-	-	N	Y	Hemphill 2000, 79
118	Civitella Cesi	Commoner activity	700 BCE - 200 CE	-	-	N	Y	Hemphill 2000, 79
120	Civitella Cesi	Commoner activity	300 BCE - 100 CE	432	-	N	Y	Hemphill 2000, 80
123	Civitella Cesi	Commoner activity	700 BCE - 0	-	-	N	Y	Hemphill 2000, 80-81
124	Civitella Cesi	Commoner activity	700 - 300 BCE	-	-	N	Y	Hemphill 2000, 81-82
127	Civitella Cesi	Commoner activity	700 BCE - 300 CE	-	-	N	Y	Hemphill 2000, 83
132	Civitella Cesi	Commoner activity	700 BCE - 100 CE	200	-	N	Y	Hemphill 2000, 85
134	Civitella Cesi	Elite activity	400 BCE - 600 CE	7500	-	N	Y	Hemphill 2000, 86-87
137	Civitella Cesi	Commoner activity	600 - 500 BCE	-	-	Y	Y	Hemphill 2000, 87
142	Civitella Cesi	"Farm" site	300 BCE - 500 CE	1200	-	N	Y	Hemphill 2000, 88
148	Civitella Cesi	Rural activity	700 BCE - 300 BCE	-	-	N	N	Hemphill 2000, 91
153	Civitella Cesi	Commoner activity	300 - 100 BCE	75	-	N	Y	Hemphill 2000, 93
156	Civitella Cesi	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Hemphill 2000, 93
157	Civitella Cesi	Commoner activity	700 - 300 BCE	12500	-	N	N	Hemphill 2000, 94
162	Civitella Cesi	Commoner activity	700 - 300 BCE	-	-	N	N	Hemphill 2000, 97
163	Civitella Cesi	Elite activity	300 BCE - 600 CE	-	-	N	Y	Hemphill 2000, 98
179	Civitella Cesi	Commoner activity	300 BCE - 600 CE	-	-	N	N	Hemphill 2000, 104
198	Civitella Cesi	Commoner activity	700 BCE - 0 BCE	-	-	N	N	Hemphill 2000, 108-109
204	Civitella Cesi	Commoner activity	700 - 500 BCE	-	-	N	N	Hemphill 2000, 110
208	Civitella Cesi	Commoner activity	700 BCE - 300 CE	-	-	N	N	Hemphill 2000, 110
212	Civitella Cesi	"Farm" site	300 BCE - 500 CE	-	-	N	N	Hemphill 2000, 113
217	Civitella Cesi	Commoner activity	700 BCE - 300 CE	-	-	N	Y	Hemphill 2000, 118
222	Civitella Cesi	Commoner activity	300 BCE - 100 CE	-	-	N	Y	Hemphill 2000, 119
224	Civitella Cesi	Commoner activity	700 BCE - 500 CE	-	-	N	Y	Hemphill 2000, 119
243	Civitella Cesi	Commoner activity	700 BCE - 0	-	-	N	N	Hemphill 2000, 122
245	Civitella Cesi	Commoner activity	700 BCE - 200 CE	-	-	N	N	Hemphill 2000, 125
255	Civitella Cesi	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Hemphill 2000, 127

Appendix 15 Ager Caeretanus

Table A37 Site information for the Ager Caeretanus

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1	Ager Caeretanus	Elite activity	300 BCE - 600 CE	2000	-	-	-	Enei 2001, 105
2	Ager Caeretanus	Commoner activity	600 - 400 BCE, 300 - 100 BCE, 0-100	6000	-	-	-	Enei 2001, 105
6	Ager Caeretanus	Commoner activity	600 - 100 BCE	600	-	-	-	Enei 2001, 105
11	Ager Caeretanus	Ceramic Scatter	700 - 500 BCE, 300-100 BCE, 100-200	600	-	-	-	Enei 2001, 107
12	Ager Caeretanus	Commoner activity	700 - 500, 300 - 100 BCE	400	-	-	-	Enei 2001, 107
15	Ager Caeretanus	Commoner activity	600 BCE - 100 CE	2000	-	-	-	Enei 2001, 108
27	Ager Caeretanus	Commoner activity	600 - 100 BCE	2500	-	-	-	Enei 2001, 117
30	Ager Caeretanus	Elite activity	700 - 500 BCE, 200 BCE - 400 CE	3000	-	-	-	Enei 2001, 117
32	Ager Caeretanus	Commoner activity	700 - 500 BCE, 300 BCE - 400 CE	6000	-	-	-	Enei 2001, 117
35	Ager Caeretanus	Commoner activity	700 - 500, 300 - 100 BCE	600	-	-	-	Enei 2001, 117
37	Ager Caeretanus	Elite activity	600 - 400 BCE	5000	-	-	-	Enei 2001, 118
39	Ager Caeretanus	Commoner activity	300 - 100 BCE	400	-	-	-	Enei 2001, 118
40	Ager Caeretanus	Commoner activity	600 - 400 BCE	400	-	-	-	Enei 2001, 120
47	Ager Caeretanus	Commoner activity	600 - 500 BCE	500	-	-	-	Enei 2001, 120
51	Ager Caeretanus	Commoner activity	300 BCE - 100 CE	400	-	-	-	Enei 2001, 121
52	Ager Caeretanus	Commoner activity	600 - 400 BCE	200	-	-	-	Enei 2001, 121
53	Ager Caeretanus	Commoner activity	600 - 400 BCE	200	-	-	-	Enei 2001, 121
56	Ager Caeretanus	Elite activity	700 - 400 BCE	5000	-	-	-	Enei 2001, 121
57	Ager Caeretanus	Elite activity	700 - 500 BCE	8000	-	-	-	Enei 2001, 121
58	Ager Caeretanus	Commoner activity	700 - 400 BCE	-	-	-	-	Enei 2001, 121
60	Ager Caeretanus	Elite activity	700 - 500 BCE	-	-	-	-	Enei 2001, 121
65	Ager Caeretanus	Commoner activity	700 - 500 BCE, 300 - 100 BCE, 0 - 100	250	-	-	-	Enei 2001, 125
67	Ager Caeretanus	Commoner activity	300 BCE - 500	600	-	-	-	Enei 2001, 125
68	Ager Caeretanus	Commoner activity	600 BCE - 200	300	-	-	-	Enei 2001, 125
74	Ager Caeretanus	Commoner activity	600 - 500 BCE	200	-	-	-	Enei 2001, 126
76	Ager Caeretanus	Commoner activity	600 BCE - 100 BCE	400	-	-	-	Enei 2001, 126

83	Ager Caeretanus	Commoner activity	600 - 100 BCE	150	-	-	-	Enei 2001, 127
85	Ager Caeretanus	Commoner activity	700 - 200 BCE	600	-	-	-	Enei 2001, 127
95	Ager Caeretanus	Commoner activity	600 - 400 BCE	400	-	-	-	Enei 2001, 127
96	Ager Caeretanus	Commoner activity	600 - 200 BCE	150	-	-	-	Enei 2001, 127
97	Ager Caeretanus	Commoner activity	600 - 500, 200 - 100 BCE	150	-	-	-	Enei 2001, 127
98	Ager Caeretanus	Commoner activity	700 - 500 BCE	28	-	-	-	Enei 2001, 130
99	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	35	-	-	-	Enei 2001, 130
99	Ager Caeretanus	Commoner activity	700 - 500 BCE	35	-	-	-	Enei 2001, 130
100	Ager Caeretanus	Commoner activity	300 BCE - 0	40	-	-	-	Enei 2001, 130
100	Ager Caeretanus	Commoner activity	700 - 500 BCE	40	-	-	-	Enei 2001, 130
103	Ager Caeretanus	Commoner activity	300 BCE - 0	92	-	-	-	Enei 2001, 131
104	Ager Caeretanus	Commoner activity	700 - 500 BCE	44	-	-	-	Enei 2001, 131
106	Ager Caeretanus	Commoner activity	300 BCE - 0	63	-	-	-	Enei 2001, 131
106	Ager Caeretanus	Commoner activity	700 - 500 BCE	63	-	-	-	Enei 2001, 131
107	Ager Caeretanus	Commoner activity	700 - 500 BCE	138	-	-	-	Enei 2001, 131
107	Ager Caeretanus	Commoner activity	300 BCE - 0	138	-	-	-	Enei 2001, 131
108	Ager Caeretanus	Commoner activity	300 BCE - 0	62	-	-	-	Enei 2001, 131
108	Ager Caeretanus	Commoner activity	700 - 500 BCE	62	-	-	-	Enei 2001, 131
118	Ager Caeretanus	Commoner activity	700 - 500 BCE	166	-	-	-	Enei 2001, 131
118	Ager Caeretanus	Commoner activity	300 BCE - 0	166	-	-	-	Enei 2001, 131
120	Ager Caeretanus	Commoner activity	300 BCE - 0	520	-	-	-	Enei 2001, 135
125	Ager Caeretanus	Commoner activity	700 - 500 BCE	77	-	-	-	Enei 2001, 137
127	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	27	-	-	-	Enei 2001, 137
127	Ager Caeretanus	Commoner activity	700 - 500 BCE	27	-	-	-	Enei 2001, 137
128	Ager Caeretanus	Commoner activity	700 - 500 BCE	41	-	-	-	Enei 2001, 137
130	Ager Caeretanus	Commoner activity	700 - 500 BCE	148	-	-	-	Enei 2001, 138
130	Ager Caeretanus	Commoner activity	300 BCE - 0	148	-	-	-	Enei 2001, 138
134	Ager Caeretanus	Commoner activity	700 - 500 BCE	397	-	-	-	Enei 2001, 138
135	Ager Caeretanus	Commoner activity	300 BCE - 0	41	-	-	-	Enei 2001, 138
135	Ager Caeretanus	Commoner activity	700 - 600 BCE	41	-	-	-	Enei 2001, 138
136	Ager Caeretanus	Commoner activity	700 - 500 BCE	57	-	-	-	Enei 2001, 139
137	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	58	-	-	-	Enei 2001, 139
137	Ager Caeretanus	Commoner activity	700 - 500 BCE	58	-	-	-	Enei 2001, 139
141	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	37	-	-	-	Enei 2001, 139
141	Ager Caeretanus	Commoner activity	700 - 500 BCE	37	-	-	-	Enei 2001, 139
142	Ager Caeretanus	Commoner activity	700 - 500 BCE	241	-	-	-	Enei 2001, 139
148	Ager Caeretanus	Commoner activity	700 - 500 BCE	113	-	-	-	Enei 2001, 144
152	Ager Caeretanus	Commoner activity	700 - 500 BCE	53	-	-	-	Enei 2001, 144
153	Ager Caeretanus	Commoner activity	700 - 500 BCE	469	-	-	-	Enei 2001, 145

159	Ager Caerretanus	Commoner activity	700 - 600 BCE	839	-	-	-	Enei 2001, 155
166	Ager Caerretanus	Commoner activity	700 - 500 BCE	648	-	-	-	Enei 2001, 156
167	Ager Caerretanus	Commoner activity	700 - 500 BCE	876	-	-	-	Enei 2001, 156
169	Ager Caerretanus	Commoner activity	Imperial Period	60	-	-	-	Enei 2001, 157
169	Ager Caerretanus	Commoner activity	700 - 600 BCE	60	-	-	-	Enei 2001, 157
170	Ager Caerretanus	Commoner activity	300 BCE - 0	98	-	-	-	Enei 2001, 157
171	Ager Caerretanus	Commoner activity	700 - 500 BCE	62	-	-	-	Enei 2001, 157
175	Ager Caerretanus	Commoner activity	700 - 500 BCE	78	-	-	-	Enei 2001, 157
179	Ager Caerretanus	Commoner activity	700 - 500 BCE	42	-	-	-	Enei 2001, 158
180	Ager Caerretanus	Commoner activity	700 - 500 BCE	66	-	-	-	Enei 2001, 158
181	Ager Caerretanus	Commoner activity	700 - 500 BCE	61	-	-	-	Enei 2001, 158
184	Ager Caerretanus	Commoner activity	700 - 500 BCE	132	-	-	-	Enei 2001, 159
185	Ager Caerretanus	Commoner activity	700 - 500 BCE	58	-	-	-	Enei 2001, 159
186	Ager Caerretanus	Commoner activity	700 - 500 BCE	34	-	-	-	Enei 2001, 159
187	Ager Caerretanus	Commoner activity	700 - 500 BCE	48	-	-	-	Enei 2001, 159
188	Ager Caerretanus	Commoner activity	700 - 500 BCE	254	-	-	-	Enei 2001, 159
195	Ager Caerretanus	Commoner activity	700 - 500 BCE	67	-	-	-	Enei 2001, 166
198	Ager Caerretanus	Commoner activity	700 - 500 BCE	24	-	-	-	Enei 2001, 186
200	Ager Caerretanus	Commoner activity	700 - 500 BCE	93	-	-	-	Enei 2001, 186
204	Ager Caerretanus	Commoner activity	700 - 500 BCE	35	-	-	-	Enei 2001, 187
209	Ager Caerretanus	Commoner activity	700 - 600 BCE	92	-	-	-	Enei 2001, 191
211	Ager Caerretanus	Commoner activity	700 - 500 BCE	55	-	-	-	Enei 2001, 192
212	Ager Caerretanus	Commoner activity	700 - 500 BCE	80	-	-	-	Enei 2001, 192
216	Ager Caerretanus	Commoner activity	700 - 500 BCE	43	-	-	-	Enei 2001, 193
217	Ager Caerretanus	Commoner activity	700 - 500 BCE	54	-	-	-	Enei 2001, 193
219	Ager Caerretanus	Commoner activity	700 - 500 BCE	323	-	-	-	Enei 2001, 195
219	Ager Caerretanus	Commoner activity	300 BCE - 0	323	-	-	-	Enei 2001, 195
221	Ager Caerretanus	Commoner activity	700 - 500 BCE	72	-	-	-	Enei 2001, 196
223	Ager Caerretanus	Commoner activity	700 - 500 BCE	79	-	-	-	Enei 2001, 196
224	Ager Caerretanus	Commoner activity	700 - 500 BCE	56	-	-	-	Enei 2001, 196
225	Ager Caerretanus	Commoner activity	700 - 500 BCE	56	-	-	-	Enei 2001, 196
226	Ager Caerretanus	Commoner activity	700 - 600 BCE	136	-	-	-	Enei 2001, 196
226	Ager Caerretanus	Commoner activity	300 BCE - 0	136	-	-	-	Enei 2001, 196
231	Ager Caerretanus	Commoner activity	300 BCE - 0	50	-	-	-	Enei 2001, 197
231	Ager Caerretanus	Commoner activity	700 - 600 BCE	50	-	-	-	Enei 2001, 197
232	Ager Caerretanus	Commoner activity	300 BCE - 0	193	-	-	-	Enei 2001, 197
233	Ager Caerretanus	Commoner activity	300 BCE - 0	72	-	-	-	Enei 2001, 197
233	Ager Caerretanus	Commoner activity	700 - 500 BCE	72	-	-	-	Enei 2001, 197
234	Ager Caerretanus	Commoner activity	700 - 500 BCE	63	-	-	-	Enei 2001, 197
235	Ager Caerretanus	Commoner activity	700 - 500 BCE	55	-	-	-	Enei 2001, 197

236	Ager Caeretanus	Commoner activity	700 - 500 BCE	115	-	-	-	Enei 2001, 197
238	Ager Caeretanus	Commoner activity	700 - 500 BCE	76	-	-	-	Enei 2001, 197
239	Ager Caeretanus	Commoner activity	300 BCE - 0	77	-	-	-	Enei 2001, 197
239	Ager Caeretanus	Commoner activity	700 - 600 BCE	77	-	-	-	Enei 2001, 197
242	Ager Caeretanus	Commoner activity	700 - 500 BCE	79	-	-	-	Enei 2001, 198
243	Ager Caeretanus	Commoner activity	700 - 600 BCE	147	-	-	-	Enei 2001, 198
243	Ager Caeretanus	Commoner activity	300 BCE - 0	147	-	-	-	Enei 2001, 198
244	Ager Caeretanus	Commoner activity	700 - 500 BCE	67	-	-	-	Enei 2001, 198
247	Ager Caeretanus	Commoner activity	300 BCE - 0	64	-	-	-	Enei 2001, 198
247	Ager Caeretanus	Commoner activity	700 - 600 BCE	64	-	-	-	Enei 2001, 198
249	Ager Caeretanus	Commoner activity	700 - 500 BCE	62	-	-	-	Enei 2001, 198
252	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	61	-	-	-	Enei 2001, 198
252	Ager Caeretanus	Commoner activity	700 - 500 BCE	61	-	-	-	Enei 2001, 198
254	Ager Caeretanus	Commoner activity	700 - 500 BCE	85	-	-	-	Enei 2001, 199
255	Ager Caeretanus	Commoner activity	300 BCE - 0	58	-	-	-	Enei 2001, 199
255	Ager Caeretanus	Commoner activity	700 - 500 BCE	58	-	-	-	Enei 2001, 199
257	Ager Caeretanus	Commoner activity	700 - 500 BCE	44	-	-	-	Enei 2001, 200
258	Ager Caeretanus	Commoner activity	700 - 500 BCE	69	-	-	-	Enei 2001, 200
259	Ager Caeretanus	Commoner activity	300 BCE - 0	69	-	-	-	Enei 2001, 200
259	Ager Caeretanus	Commoner activity	700 - 500 BCE	69	-	-	-	Enei 2001, 200
260	Ager Caeretanus	Commoner activity	700 - 500 BCE	65	-	-	-	Enei 2001, 200
262	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	47	-	-	-	Enei 2001, 200
262	Ager Caeretanus	Commoner activity	700 - 500 BCE	47	-	-	-	Enei 2001, 200
263	Ager Caeretanus	Commoner activity	700 - 500 BCE	47	-	-	-	Enei 2001, 200
268	Ager Caeretanus	Commoner activity	300 BCE - 0	99	-	-	-	Enei 2001, 200
268	Ager Caeretanus	Commoner activity	700 - 500 BCE	99	-	-	-	Enei 2001, 200
269	Ager Caeretanus	Commoner activity	700 - 500 BCE	54	-	-	-	Enei 2001, 201
274	Ager Caeretanus	Commoner activity	700 - 500 BCE	1031	-	-	-	Enei 2001, 202
277	Ager Caeretanus	Commoner activity	300 BCE - 0	60	-	-	-	Enei 2001, 202
277	Ager Caeretanus	Commoner activity	700 - 600 BCE	60	-	-	-	Enei 2001, 202
278	Ager Caeretanus	Commoner activity	700 - 500 BCE	56	-	-	-	Enei 2001, 202
279	Ager Caeretanus	Commoner activity	700 - 500 BCE	43	-	-	-	Enei 2001, 202
280	Ager Caeretanus	Commoner activity	700 - 600 BCE	133	-	-	-	Enei 2001, 202
280	Ager Caeretanus	Commoner activity	700 - 600 BCE	133	-	-	-	Enei 2001, 202
282	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	67	-	-	-	Enei 2001, 202
283	Ager Caeretanus	Commoner activity	700 - 500 BCE	322	-	-	-	Enei 2001, 202
283	Ager Caeretanus	Commoner activity	300 BCE - 0	322	-	-	-	Enei 2001, 202
285	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	66	-	-	-	Enei 2001, 203
286	Ager Caeretanus	Commoner activity	300 BCE - 0	60	-	-	-	Enei 2001, 203
286	Ager Caeretanus	Commoner activity	700 - 500 BCE	60	-	-	-	Enei 2001, 203

288	Ager Caeretanus	Commoner activity	700 - 500 BCE	88	-	-	-	Enei 2001, 203
292	Ager Caeretanus	Commoner activity	300 BCE - 0	65	-	-	-	Enei 2001, 203
292	Ager Caeretanus	Commoner activity	700 - 500 BCE	65	-	-	-	Enei 2001, 203
293	Ager Caeretanus	Commoner activity	700 - 500 BCE	69	-	-	-	Enei 2001, 203
296	Ager Caeretanus	Commoner activity	700 - 500 BCE	50	-	-	-	Enei 2001, 204
298	Ager Caeretanus	Commoner activity	700 - 500 BCE	1409	-	-	-	Enei 2001, 204
299	Ager Caeretanus	Commoner activity	700 - 500 BCE	56	-	-	-	Enei 2001, 207
301	Ager Caeretanus	Commoner activity	700 - 500 BCE	88	-	-	-	Enei 2001, 207
303	Ager Caeretanus	Commoner activity	700 - 500 BCE	108	-	-	-	Enei 2001, 207
304	Ager Caeretanus	Commoner activity	700 - 500 BCE	105	-	-	-	Enei 2001, 207
305	Ager Caeretanus	Commoner activity	700 - 500 BCE	78	-	-	-	Enei 2001, 207
309	Ager Caeretanus	Commoner activity	300 BCE - 0	61	-	-	-	Enei 2001, 208
309	Ager Caeretanus	Commoner activity	700 - 500 BCE	61	-	-	-	Enei 2001, 208
310	Ager Caeretanus	Commoner activity	700 - 500 BCE	59	-	-	-	Enei 2001, 208
311	Ager Caeretanus	Commoner activity	700 - 500 BCE	57	-	-	-	Enei 2001, 208
312	Ager Caeretanus	Commoner activity	700 - 500 BCE	52	-	-	-	Enei 2001, 208
313	Ager Caeretanus	Commoner activity	700 - 500 BCE	59	-	-	-	Enei 2001, 208
317	Ager Caeretanus	Commoner activity	300 BCE - 0	69	-	-	-	Enei 2001, 209
317	Ager Caeretanus	Commoner activity	700 - 500 BCE	69	-	-	-	Enei 2001, 209
318	Ager Caeretanus	Commoner activity	300 BCE - 0	81	-	-	-	Enei 2001, 209
318	Ager Caeretanus	Commoner activity	700 - 500 BCE	81	-	-	-	Enei 2001, 209
320	Ager Caeretanus	Commoner activity	700 - 500 BCE	68	-	-	-	Enei 2001, 209
326	Ager Caeretanus	Commoner activity	300 BCE - 0	80	-	-	-	Enei 2001, 210
326	Ager Caeretanus	Commoner activity	700 - 500 BCE	80	-	-	-	Enei 2001, 210
328	Ager Caeretanus	Commoner activity	700 - 500 BCE	51	-	-	-	Enei 2001, 210
330	Ager Caeretanus	Commoner activity	700 - 500 BCE	48	-	-	-	Enei 2001, 210
332	Ager Caeretanus	Commoner activity	700 - 500 BCE	226	-	-	-	Enei 2001, 210
339	Ager Caeretanus	Commoner activity	700 - 500 BCE	71	-	-	-	Enei 2001, 212
340	Ager Caeretanus	Commoner activity	700 - 500 BCE	78	-	-	-	Enei 2001, 212
342	Ager Caeretanus	Commoner activity	300 BCE - 0	54	-	-	-	Enei 2001, 212
342	Ager Caeretanus	Commoner activity	700 - 600 BCE	54	-	-	-	Enei 2001, 212
343	Ager Caeretanus	Commoner activity	300 BCE - 0	81	-	-	-	Enei 2001, 213
343	Ager Caeretanus	Commoner activity	700 - 600 BCE	81	-	-	-	Enei 2001, 213
344	Ager Caeretanus	Commoner activity	700 - 500 BCE	49	-	-	-	Enei 2001, 213
345	Ager Caeretanus	Commoner activity	700 - 500 BCE	57	-	-	-	Enei 2001, 213
346	Ager Caeretanus	Commoner activity	700 - 500 BCE	40	-	-	-	Enei 2001, 213
347	Ager Caeretanus	Commoner activity	700 - 500 BCE	49	-	-	-	Enei 2001, 213
348	Ager Caeretanus	Commoner activity	700 - 500 BCE	96	-	-	-	Enei 2001, 213
349	Ager Caeretanus	Commoner activity	700 - 500 BCE	122	-	-	-	Enei 2001, 213
350	Ager Caeretanus	Commoner activity	700 - 500 BCE	68	-	-	-	Enei 2001, 213

351	Ager Caeretanus	Commoner activity	700 - 500 BCE	54	-	-	-	Enei 2001, 213
353	Ager Caeretanus	Commoner activity	300 BCE - 0	34	-	-	-	Enei 2001, 214
353	Ager Caeretanus	Commoner activity	700 - 500 BCE	34	-	-	-	Enei 2001, 214
355	Ager Caeretanus	Commoner activity	700 - 500 BCE	88	-	-	-	Enei 2001, 214
356	Ager Caeretanus	Commoner activity	700 - 600 BCE	259	-	-	-	Enei 2001, 214
356	Ager Caeretanus	Commoner activity	300 BCE - 0	259	-	-	-	Enei 2001, 214
360	Ager Caeretanus	Commoner activity	700 - 500 BCE	85	-	-	-	Enei 2001, 214
361	Ager Caeretanus	Commoner activity	300 BCE - 0	68	-	-	-	Enei 2001, 215
361	Ager Caeretanus	Commoner activity	700 - 600 BCE	68	-	-	-	Enei 2001, 215
363	Ager Caeretanus	Commoner activity	700 - 500 BCE	73	-	-	-	Enei 2001, 215
366	Ager Caeretanus	Commoner activity	300 BCE - 0	2130	-	-	-	Enei 2001, 215
368	Ager Caeretanus	Commoner activity	300 BCE - 0	73	-	-	-	Enei 2001, 215
368	Ager Caeretanus	Commoner activity	700 - 600 BCE	73	-	-	-	Enei 2001, 215
369	Ager Caeretanus	Commoner activity	700 - 500 BCE	46	-	-	-	Enei 2001, 217
370	Ager Caeretanus	Commoner activity	700 - 500 BCE	46	-	-	-	Enei 2001, 217
371	Ager Caeretanus	Commoner activity	700 - 500 BCE	76	-	-	-	Enei 2001, 217
373	Ager Caeretanus	Commoner activity	700 - 500 BCE	64	-	-	-	Enei 2001, 217
374	Ager Caeretanus	Commoner activity	700 - 500 BCE	45	-	-	-	Enei 2001, 217
376	Ager Caeretanus	Commoner activity	700 - 500 BCE	600	-	-	-	Enei 2001, 217
376	Ager Caeretanus	Elite Activity	300 BCE - 0	600	-	-	-	Enei 2001, 217
377	Ager Caeretanus	Commoner activity	700 - 500 BCE	76	-	-	-	Enei 2001, 218
378	Ager Caeretanus	Commoner activity	700 - 500 BCE	73	-	-	-	Enei 2001, 218
379	Ager Caeretanus	Commoner activity	700 - 500 BCE	57	-	-	-	Enei 2001, 218
382	Ager Caeretanus	Commoner activity	700 - 500 BCE	59	-	-	-	Enei 2001, 218
384	Ager Caeretanus	Commoner activity	700 - 500 BCE	60	-	-	-	Enei 2001, 218
386	Ager Caeretanus	Commoner activity	700 - 500 BCE	73	-	-	-	Enei 2001, 218
387	Ager Caeretanus	Commoner activity	700 - 500 BCE	103	-	-	-	Enei 2001, 219
388	Ager Caeretanus	Commoner activity	300 BCE - 0	69	-	-	-	Enei 2001, 219
388	Ager Caeretanus	Commoner activity	700 - 500 BCE	69	-	-	-	Enei 2001, 219
389	Ager Caeretanus	Commoner activity	700 - 500 BCE	87	-	-	-	Enei 2001, 219
391	Ager Caeretanus	Commoner activity	700 - 500 BCE	54	-	-	-	Enei 2001, 219
396	Ager Caeretanus	Commoner activity	700 - 500 BCE	91	-	-	-	Enei 2001, 219
397	Ager Caeretanus	Commoner activity	700 - 500 BCE	95	-	-	-	Enei 2001, 219
398	Ager Caeretanus	Commoner activity	700 - 500 BCE	98	-	-	-	Enei 2001, 219
400	Ager Caeretanus	Commoner activity	700 - 500 BCE	118	-	-	-	Enei 2001, 220
402	Ager Caeretanus	Commoner activity	700 - 600 BCE	43	-	-	-	Enei 2001, 220
403	Ager Caeretanus	Commoner activity	700 - 600 BCE	75	-	-	-	Enei 2001, 220
404	Ager Caeretanus	Commoner activity	700 - 600 BCE	75	-	-	-	Enei 2001, 220
405	Ager Caeretanus	Commoner activity	700 - 600 BCE	79	-	-	-	Enei 2001, 220
406	Ager Caeretanus	Commoner activity	300 BCE - 0	142	-	-	-	Enei 2001, 220

408	Ager Caeretanus	Commoner activity	700 - 600 BCE	474	-	-	-	Enei 2001, 220
408	Ager Caeretanus	Commoner activity	300 BCE - 0	474	-	-	-	Enei 2001, 220
415	Ager Caeretanus	Commoner activity	700 - 600 BCE	89	-	-	-	Enei 2001, 224
417	Ager Caeretanus	Commoner activity	700 - 600 BCE	83	-	-	-	Enei 2001, 224
432	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	69	-	-	-	Enei 2001, 226
433	Ager Caeretanus	Commoner activity	300 BCE - 0	50	-	-	-	Enei 2001, 226
433	Ager Caeretanus	Commoner activity	700 - 600 BCE	50	-	-	-	Enei 2001, 226
437	Ager Caeretanus	Commoner activity	700 - 600 BCE	144	-	-	-	Enei 2001, 226
437	Ager Caeretanus	Commoner activity	300 BCE - 0	144	-	-	-	Enei 2001, 226
441	Ager Caeretanus	Commoner activity	700 - 500 BCE	52	-	-	-	Enei 2001, 227
443	Ager Caeretanus	Commoner activity	700 - 500 BCE	104	-	-	-	Enei 2001, 227
444	Ager Caeretanus	Commoner activity	700 - 500 BCE	54	-	-	-	Enei 2001, 227
445	Ager Caeretanus	Commoner activity	700 - 600 BCE	549	-	-	-	Enei 2001, 228
445	Ager Caeretanus	Commoner activity	300 BCE - 0	549	-	-	-	Enei 2001, 228
447	Ager Caeretanus	Commoner activity	700 - 500 BCE	953	-	-	-	Enei 2001, 228
448	Ager Caeretanus	Commoner activity	700 - 500 BCE	43	-	-	-	Enei 2001, 228
450	Ager Caeretanus	Commoner activity	700 - 500 BCE	84	-	-	-	Enei 2001, 229
455	Ager Caeretanus	Commoner activity	700 - 500 BCE	86	-	-	-	Enei 2001, 229
456	Ager Caeretanus	Commoner activity	700 - 500 BCE	67	-	-	-	Enei 2001, 229
459	Ager Caeretanus	Commoner activity	700 - 600 BCE	567	-	-	-	Enei 2001, 230
464	Ager Caeretanus	Commoner activity	300 BCE - 0	70	-	-	-	Enei 2001, 233
464	Ager Caeretanus	Commoner activity	700 - 600 BCE	70	-	-	-	Enei 2001, 233
466	Ager Caeretanus	Commoner activity	700 - 600 BCE	55	-	-	-	Enei 2001, 234
469	Ager Caeretanus	Commoner activity	700 - 600 BCE	48	-	-	-	Enei 2001, 234
472	Ager Caeretanus	Commoner activity	700 - 600 BCE	65	-	-	-	Enei 2001, 234
473	Ager Caeretanus	Commoner activity	700 - 600 BCE	81	-	-	-	Enei 2001, 234
475	Ager Caeretanus	Commoner activity	700 - 600 BCE	92	-	-	-	Enei 2001, 234
486	Ager Caeretanus	Commoner activity	300 BCE - 0	72	-	-	-	Enei 2001, 236
486	Ager Caeretanus	Commoner activity	700 - 600 BCE	72	-	-	-	Enei 2001, 236
491	Ager Caeretanus	Commoner activity	700 - 600 BCE	121	-	-	-	Enei 2001, 236
494	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	58	-	-	-	Enei 2001, 236
494	Ager Caeretanus	Commoner activity	700 - 600 BCE	58	-	-	-	Enei 2001, 236
503	Ager Caeretanus	Commoner activity	700 - 600 BCE	63	-	-	-	Enei 2001, 237
511	Ager Caeretanus	Commoner activity	700 - 600 BCE	226	-	-	-	Enei 2001, 238
513	Ager Caeretanus	Commoner activity	700 - 600 BCE	61	-	-	-	Enei 2001, 239
515	Ager Caeretanus	Commoner activity	700 - 600 BCE	91	-	-	-	Enei 2001, 239
517	Ager Caeretanus	Commoner activity	700 - 600 BCE	313	-	-	-	Enei 2001, 239
522	Ager Caeretanus	Commoner activity	700 - 600 BCE	111	-	-	-	Enei 2001, 240
523	Ager Caeretanus	Commoner activity	700 - 600 BCE	106	-	-	-	Enei 2001, 240
524	Ager Caeretanus	Commoner activity	700 - 600 BCE	96	-	-	-	Enei 2001, 240

529	Ager Caeretanus	Commoner activity	700 - 600 BCE	62	-	-	-	Enei 2001, 240
530	Ager Caeretanus	Commoner activity	700 - 600 BCE	84	-	-	-	Enei 2001, 240
531	Ager Caeretanus	Commoner activity	700 - 600 BCE	77	-	-	-	Enei 2001, 240
532	Ager Caeretanus	Commoner activity	300 BCE - 0	93	-	-	-	Enei 2001, 240
532	Ager Caeretanus	Commoner activity	700 - 600 BCE	93	-	-	-	Enei 2001, 240
533	Ager Caeretanus	Commoner activity	700 - 600 BCE	112	-	-	-	Enei 2001, 240
538	Ager Caeretanus	Commoner activity	700 - 600 BCE	64	-	-	-	Enei 2001, 242
540	Ager Caeretanus	Commoner activity	700 - 600 BCE	87	-	-	-	Enei 2001, 242
543	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	58	-	-	-	Enei 2001, 242
546	Ager Caeretanus	Commoner activity	700 - 600 BCE	63	-	-	-	Enei 2001, 242
547	Ager Caeretanus	Commoner activity	300 BCE - 0	35	-	-	-	Enei 2001, 243
547	Ager Caeretanus	Commoner activity	700 - 600 BCE	35	-	-	-	Enei 2001, 243
548	Ager Caeretanus	Commoner activity	700 - 600 BCE	115	-	-	-	Enei 2001, 243
551	Ager Caeretanus	Commoner activity	700 - 600 BCE	249	-	-	-	Enei 2001, 243
552	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	51	-	-	-	Enei 2001, 243
552	Ager Caeretanus	Commoner activity	700 - 600 BCE	51	-	-	-	Enei 2001, 243
553	Ager Caeretanus	Commoner activity	700 - 600 BCE	214	-	-	-	Enei 2001, 243
557	Ager Caeretanus	Commoner activity	700 - 600 BCE	81	-	-	-	Enei 2001, 244
560	Ager Caeretanus	Commoner activity	700 - 600 BCE	46	-	-	-	Enei 2001, 245
565	Ager Caeretanus	Commoner activity	700 - 600 BCE	156	-	-	-	Enei 2001, 245
566	Ager Caeretanus	Commoner activity	700 - 600 BCE	55	-	-	-	Enei 2001, 245
567	Ager Caeretanus	Commoner activity	300 BCE - 0	77	-	-	-	Enei 2001, 246
567	Ager Caeretanus	Commoner activity	700 - 600 BCE	77	-	-	-	Enei 2001, 246
571	Ager Caeretanus	Commoner activity	300 BCE - 0	154	-	-	-	Enei 2001, 247
574	Ager Caeretanus	Commoner activity	700 - 600 BCE	29	-	-	-	Enei 2001, 248
575	Ager Caeretanus	Commoner activity	700 - 600 BCE	48	-	-	-	Enei 2001, 248
576	Ager Caeretanus	Commoner activity	700 - 600 BCE	45	-	-	-	Enei 2001, 248
578	Ager Caeretanus	Commoner activity	300 BCE - 0	107	-	-	-	Enei 2001, 248
578	Ager Caeretanus	Commoner activity	700 - 600 BCE	107	-	-	-	Enei 2001, 248
579	Ager Caeretanus	Commoner activity	700 - 600 BCE	82	-	-	-	Enei 2001, 248
580	Ager Caeretanus	Commoner activity	700 - 600 BCE	68	-	-	-	Enei 2001, 248
581	Ager Caeretanus	Commoner activity	300 BCE - 300 CE	47	-	-	-	Enei 2001, 248
581	Ager Caeretanus	Commoner activity	700 - 600 BCE	47	-	-	-	Enei 2001, 248
583	Ager Caeretanus	Commoner activity	700 - 600 BCE	426	-	-	-	Enei 2001, 248
585	Ager Caeretanus	Commoner activity	700 - 600 BCE	47	-	-	-	Enei 2001, 249
587	Ager Caeretanus	Commoner activity	300 BCE - 0	69	-	-	-	Enei 2001, 249
587	Ager Caeretanus	Commoner activity	700 - 600 BCE	69	-	-	-	Enei 2001, 249
588	Ager Caeretanus	Commoner activity	700 - 600 BCE	155	-	-	-	Enei 2001, 249
588	Ager Caeretanus	Commoner activity	300 BCE - 0	155	-	-	-	Enei 2001, 249
591	Ager Caeretanus	Commoner activity	700 - 600 BCE	39	-	-	-	Enei 2001, 249

592	Ager Caeretanus	Commoner activity	700 - 600 BCE	54	-	-	-	Enei 2001, 249
593	Ager Caeretanus	Commoner activity	300 BCE - 0	614	-	-	-	Enei 2001, 249
594	Ager Caeretanus	Commoner activity	300 BCE - 0	33	-	-	-	Enei 2001, 249
594	Ager Caeretanus	Commoner activity	700 - 600 BCE	33	-	-	-	Enei 2001, 249
596	Ager Caeretanus	Commoner activity	700 - 600 BCE	35	-	-	-	Enei 2001, 250
600	Ager Caeretanus	Commoner activity	700 - 600 BCE	41	-	-	-	Enei 2001, 250
601	Ager Caeretanus	Commoner activity	700 - 600 BCE	70	-	-	-	Enei 2001, 250
602	Ager Caeretanus	Commoner activity	700 - 600 BCE	48	-	-	-	Enei 2001, 251
604	Ager Caeretanus	Commoner activity	700 - 600 BCE	91	-	-	-	Enei 2001, 251
606	Ager Caeretanus	Commoner activity	700 - 600 BCE	62	-	-	-	Enei 2001, 251
607	Ager Caeretanus	Commoner activity	300 BCE - 0	712	-	-	-	Enei 2001, 251
608	Ager Caeretanus	Commoner activity	300 BCE - 0	205	-	-	-	Enei 2001, 251
609	Ager Caeretanus	Commoner activity	700 - 600 BCE	80	-	-	-	Enei 2001, 251
614	Ager Caeretanus	Commoner activity	700 - 600 BCE	116	-	-	-	Enei 2001, 252
618	Ager Caeretanus	Commoner activity	700 - 600 BCE	92	-	-	-	Enei 2001, 253
619	Ager Caeretanus	Commoner activity	700 - 600 BCE	92	-	-	-	Enei 2001, 253
620	Ager Caeretanus	Commoner activity	700 - 600 BCE	92	-	-	-	Enei 2001, 253
626	Ager Caeretanus	Commoner activity	300 BCE - 0	67	-	-	-	Enei 2001, 253
631	Ager Caeretanus	Commoner activity	700 - 600 BCE	125	-	-	-	Enei 2001, 254
633	Ager Caeretanus	Commoner activity	700 - 600 BCE	54	-	-	-	Enei 2001, 254
681	Ager Caeretanus	Commoner activity	300 BCE - 0	96	-	-	-	Enei 2001, 257
682	Ager Caeretanus	Commoner activity	300 BCE - 0	151	-	-	-	Enei 2001, 258
726	Ager Caeretanus	Commoner activity	300 BCE - 0	106	-	-	-	Enei 2001, 261
807	Ager Caeretanus	Commoner activity	300 BCE - 0	256	-	-	-	Enei 2001, 281
851	Ager Caeretanus	Commoner activity	700 - 600 BCE	124	-	-	-	Enei 2001, 288
853	Ager Caeretanus	Commoner activity	700 - 600 BCE	131	-	-	-	Enei 2001, 288
855	Ager Caeretanus	Commoner activity	300 BCE - 0	167	-	-	-	Enei 2001, 288
856	Ager Caeretanus	Commoner activity	300 BCE - 0	101	-	-	-	Enei 2001, 288
856	Ager Caeretanus	Commoner activity	700 - 600 BCE	101	-	-	-	Enei 2001, 288
895	Ager Caeretanus	Commoner activity	700 - 600 BCE	98	-	-	-	Enei 2001, 293

Appendix 16 Torrimpietra

Table A38 Site information for Torrimpietra

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
1	FI Torrimpietra	Commoner activity	600 BCE - 0	5600	-	N	N	Tartara 1999, 47
6	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	3000	-	N	Y	Tartara 1999, 49
8	FI Torrimpietra	Commoner activity	600 - 500 BCE	7200	-	Y	N	Tartara 1999, 49
13	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	Y	N	Tartara 1999, 51
16	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	Y	N	Tartara 1999, 52
22	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	2400	-	Y	N	Tartara 1999, 55
23	FI Torrimpietra	Commoner activity	600 - 200 BCE, 0 - 200 CE	15000	-	N	N	Tartara 1999, 56
37	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	100	-	Y	N	Tartara 1999, 65
45	FI Torrimpietra	Commoner activity	600 - 200 BCE, 0 - 200 CE	2800	-	Y	N	Tartara 1999, 67
46	FI Torrimpietra	Commoner activity	600 BCE - 0	9900	-	Y	N	Tartara 1999, 67
47	FI Torrimpietra	Commoner activity	600 BCE - 400 CE	10000	-	N	Y	Tartara 1999, 68
50	FI Torrimpietra	Commoner activity	600 - 100 BCE	6000	-	Y	Y	Tartara 1999, 69
54	FI Torrimpietra	Commoner activity	600 - 300, 100 - 0 BCE, 0 - 400 CE	4800	-	Y	N	Tartara 1999, 70
57	FI Torrimpietra	Commoner activity	600 BCE - 400 CE	6300	-	N	Y	Tartara 1999, 72
63	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	13000	-	N	N	Tartara 1999, 73-4
70	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	600	-	Y	N	Tartara 1999, 79
71	FI Torrimpietra	Commoner activity	600 - 100 BCE	3000	-	Y	N	Tartara 1999, 79-80
75	FI Torrimpietra	Commoner activity	300 BCE - 0	1800	-	N	Y	Tartara 1999, 80

76	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	6600	-	N	Y	Tartara 1999, 80-81
78	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	1500	-	Y	N	Tartara 1999, 82
82	FI Torrimpietra	Elite activity	300 BCE - 200 CE	12600	-	N	N	Tartara 1999, 85
87	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	4200	-	Y	Y	Tartara 1999, 89
92	FI Torrimpietra	Elite activity	600 BCE - 300 CE	16000	-	N	Y	Tartara 1999, 91-92
104	FI Torrimpietra	Commoner activity	1000 - 600 BCE	-	-	N	Y	Tartara 1999, 99
109	FI Torrimpietra	Commoner activity	600 - 500 BCE	1400	-	N	N	Tartara 1999, 102
112	FI Torrimpietra	Commoner activity	600 - 500 BCE	1200	-	N	N	Tartara 1999, 102
115	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	5400	-	Y	Y	Tartara 1999, 105-106
118	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	14300	-	N	Y	Tartara 1999, 108
120	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	4200	-	N	Y	Tartara 1999, 111
125	FI Torrimpietra	Commoner activity	1000 - 600 BCE	-	-	N	N	Tartara 1999, 115
140	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	3200	-	N	Y	Tartara 1999, 123
141	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	2800	-	N	Y	Tartara 1999, 123
148	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	1200	-	N	Y	Tartara 1999, 126
157	FI Torrimpietra	Commoner activity	600 - 500 BCE	4400	-	Y	N	Tartara 1999, 128
162	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 129
171	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	1200	-	Y	N	Tartara 1999, 132
179	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	10000	-	N	Y	Tartara 1999, 137
182	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	1200	-	N	N	Tartara 1999, 138
185	FI Torrimpietra	Commoner activity	600 - 300 BCE, 0 - 200 CE	-	-	Y	N	Tartara 1999, 138
191	FI Torrimpietra	Commoner activity	600 - 100 BCE	600	-	N	N	Tartara 1999, 140
198	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	3000	-	Y	N	Tartara 1999, 141
202	FI Torrimpietra	Elite activity	300 BCE - 200 CE	6300	-	Y	Y	Tartara 1999, 142
203	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	6400	-	N	Y	Tartara 1999, 143
204	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	2800	-	N	Y	Tartara 1999, 143
213	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	Y	N	Tartara 1999, 149
215	FI Torrimpietra	Commoner activity	600 - 100 BCE	-	-	N	N	Tartara 1999, 149
233	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	8000	-	Y	Y	Tartara 1999, 154
238	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	4000	-	N	Y	Tartara 1999, 155
241	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	7200	-	Y	Y	Tartara 1999, 156
256	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	1800	-	N	N	Tartara 1999, 160
258	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	4000	-	N	N	Tartara 1999, 161
274	FI Torrimpietra	"Farm" site	300 BCE - 400 CE	21000	-	N	N	Tartara 1999, 164
281	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	10000	-	Y	N	Tartara 1999, 175
284	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 176
285	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	2800	-	Y	N	Tartara 1999, 177
286	FI Torrimpietra	Commoner activity	600 - 500 BCE	750	-	N	N	Tartara 1999, 178
289	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	1500	-	N	Y	Tartara 1999, 180

290	FI Torrimpietra	Commoner activity	600 BCE - 400 CE	1200	-	Y	N	Tartara 1999, 180
295	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	Y	N	Tartara 1999, 181-2
298	FI Torrimpietra	Commoner activity	600 - 100 BCE	1800	-	N	Y	Tartara 1999, 183
305	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	2800	-	Y	Y	Tartara 1999, 184
308	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	1200	-	Y	Y	Tartara 1999, 185
309	FI Torrimpietra	Commoner activity	300 BCE - 0	3500	-	Y	N	Tartara 1999, 185
314	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 186
324	FI Torrimpietra	Commoner activity	600 - 300 BCE	-	-	N	N	Tartara 1999, 189
326	FI Torrimpietra	Commoner activity	500 BCE - 200 CE	3500	-	Y	N	Tartara 1999, 189
327	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 189
329	FI Torrimpietra	Commoner activity	600 - 300 BCE	-	-	N	N	Tartara 1999, 190
342	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	Y	Y	Tartara 1999, 193
348	FI Torrimpietra	Elite activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 195
352	FI Torrimpietra	Commoner activity	500 BCE - 200 CE	2000	-	Y	N	Tartara 1999, 196
355	FI Torrimpietra	Commoner activity	600 BCE - 0	5600	-	N	N	Tartara 1999, 197
356	FI Torrimpietra	Commoner activity	600 - 300 BCE	1200	-	N	N	Tartara 1999, 197
368	FI Torrimpietra	Commoner activity	500 BCE - 200 CE	4200	-	N	Y	Tartara 1999, 199-200
377	FI Torrimpietra	Commoner activity	600 - 500 BCE	300	-	N	N	Tartara 1999, 202
386	FI Torrimpietra	Commoner activity	300 BCE - 0	1500	-	N	N	Tartara 1999, 208
391	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	4900	-	N	Y	Tartara 1999, 210
394	FI Torrimpietra	Commoner activity	600 - 500 BCE	600	-	N	N	Tartara 1999, 212
399	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	2000	-	N	Y	Tartara 1999, 213
398	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 213
405	FI Torrimpietra	Commoner activity	600 - 300 BCE	-	-	N	N	Tartara 1999, 215
410	FI Torrimpietra	Commoner activity	600 - 500 BCE	1000	-	N	N	Tartara 1999, 215
412	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	N	Tartara 1999, 216
435	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	400	-	N	Y	Tartara 1999, 228
443	FI Torrimpietra	Commoner activity	600 - 500 BCE	900	-	Y	N	Tartara 1999, 229
447	FI Torrimpietra	"Farm" site	600 BCE - 200 CE	9000	-	N	Y	Tartara 1999, 230
454	FI Torrimpietra	Commoner activity	600 - 100 BCE	5600	-	N	Y	Tartara 1999, 232
455	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 234
465	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 238
471	FI Torrimpietra	"Farm" site	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 240
472	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	3000	-	N	N	Tartara 1999, 241
473	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	900	-	N	Y	Tartara 1999, 242
474	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	3500	-	Y	Y	Tartara 1999, 242
496	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	1200	-	N	Y	Tartara 1999, 247
523	FI Torrimpietra	Commoner activity	600 - 300 BCE	-	-	Y	Y	Tartara 1999, 253
525	FI Torrimpietra	Commoner activity	600 - 500, 300 - 100 BCE, 0 - 200 CE	200	-	N	Y	Tartara 1999, 253
527	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	1600	-	Y	Y	Tartara 1999, 253

530	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	600	-	Y	Y	Tartara 1999, 254
533	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	800	-	Y	Y	Tartara 1999, 254
537	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	600	-	N	Y	Tartara 1999, 255
539	FI Torrimpietra	Commoner activity	600 - 500 BCE, 300 BCE - 0, 0 - 100 CE	2500	-	N	Y	Tartara 1999, 256
543	FI Torrimpietra	Commoner activity	600 - 500, 100 BCE - 200 CE	-	-	N	N	Tartara 1999, 257
561	FI Torrimpietra	Commoner activity	600 - 500, 100 BCE - 200 CE	2400	-	N	N	Tartara 1999, 261
562	FI Torrimpietra	Commoner activity	600 BCE - 100 CE	600	-	Y	Y	Tartara 1999, 261
564	FI Torrimpietra	"Farm" site	600 BCE - 200 CE	4800	-	N	Y	Tartara 1999, 262
567	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 263
568	FI Torrimpietra	Commoner activity	300 BCE - 0	-	-	N	Y	Tartara 1999, 263
569	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 263
586	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	Y	N	Tartara 1999, 269
591	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	-	-	Y	N	Tartara 1999, 271
592	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	-	-	Y	Y	Tartara 1999, 271
594	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	Y	Y	Tartara 1999, 271
597	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	Y	Y	Tartara 1999, 272
602	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	-	-	Y	Y	Tartara 1999, 273
612	FI Torrimpietra	"Farm" site	300 BCE - 100 CE	7500	-	Y	Y	Tartara 1999, 275
615	FI Torrimpietra	Commoner activity	300 BCE - 100 CE	600	-	Y	Y	Tartara 1999, 275
623	FI Torrimpietra	Commoner activity	600 - 500 BCE, 300 BCE - 0	3000	-	N	Y	Tartara 1999, 277
624	FI Torrimpietra	Commoner activity	600 - 500 BCE	450	-	N	N	Tartara 1999, 277-278
628	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	6000	-	N	Y	Tartara 1999, 278
630	FI Torrimpietra	Elite activity	600 - 500 BCE	-	-	N	Y	Tartara 1999, 281
634	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 283
645	FI Torrimpietra	Commoner activity	600 - 500 BCE, 100 BCE - 200 CE	600	-	N	N	Tartara 1999, 287
646	FI Torrimpietra	Commoner activity	600 BCE - 0	3000	-	N	Y	Tartara 1999, 287
651	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 289
652	FI Torrimpietra	Commoner activity	600 - 500 BCE, 200 - 300 CE	-	-	N	Y	Tartara 1999, 289
655	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	N	Y	Tartara 1999, 290
656	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	Y	N	Tartara 1999, 290
657	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	Y	N	Tartara 1999, 290-291
659	FI Torrimpietra	Commoner activity	300 BCE - 0	-	-	N	Y	Tartara 1999, 291
660	FI Torrimpietra	Commoner activity	300 BCE - 0	-	-	Y	Y	Tartara 1999, 291
661	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 400 CE	-	-	N	Y	Tartara 1999, 292
662	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 400 CE	10500	-	N	Y	Tartara 1999, 292
663	FI Torrimpietra	Commoner activity	600 - 500 BCE, 100 BCE - 200 CE	450	-	N	N	Tartara 1999, 293
667	FI Torrimpietra	Commoner activity	600 - 500 BCE, 500 BCE - 200 CE	3600	-	Y	N	Tartara 1999, 294
668	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 295
669	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	5000	-	N	N	Tartara 1999, 295
670	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 295

672	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	N	Tartara 1999, 296
673	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	-	-	N	Y	Tartara 1999, 296
676	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 297
677	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	800	-	N	Y	Tartara 1999, 297
678	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 298
688	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 300
689	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 301
690	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	6500	-	N	Y	Tartara 1999, 301
693	FI Torrimpietra	Commoner activity	600 - 500 BCE	15000	-	N	N	Tartara 1999, 302
696	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	N	Y	Tartara 1999, 304
698	FI Torrimpietra	Commoner activity	550 - 500, 300 - 100 BCE	1000	-	Y	Y	Tartara 1999, 304
699	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	N	Y	Tartara 1999, 304
700	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 305
701	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	50	-	N	Y	Tartara 1999, 305
703	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 306
706	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 306
710	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	50	-	N	Y	Tartara 1999, 307
711	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	20000	-	Y	N	Tartara 1999, 307-308
712	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	2500	-	Y	N	Tartara 1999, 308
721	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	Y	N	Tartara 1999, 316
726	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	N	Y	Tartara 1999, 318
727	FI Torrimpietra	Commoner activity	1000 BCE - 200 CE	-	-	N	Y	Tartara 1999, 318
730	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	Y	N	Tartara 1999, 319
731	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	N	N	Tartara 1999, 319
733	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	Y	N	Tartara 1999, 320
735	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	Y	Tartara 1999, 320
737	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 321
738	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	N	N	Tartara 1999, 321
741	FI Torrimpietra	Commoner activity	700 - 0 BCE	-	-	N	Y	Tartara 1999, 322
744	FI Torrimpietra	Commoner activity	1000 - 100 BCE	-	-	N	N	Tartara 1999, 323
748	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 0	-	-	N	Y	Tartara 1999, 328
749	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 400 CE	5000	-	N	Y	Tartara 1999, 328
751	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 400 CE	-	-	N	Y	Tartara 1999, 328-329
753	FI Torrimpietra	Elite activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 329
754	FI Torrimpietra	Commoner activity	300 BCE - 400 CE	-	-	N	Y	Tartara 1999, 329
756	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	5000	-	N	Y	Tartara 1999, 330
762	FI Torrimpietra	Commoner activity	700 - 500 BCE	-	-	N	N	Tartara 1999, 331
763	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	6000	-	N	Y	Tartara 1999, 331
766	FI Torrimpietra	Commoner activity	600 - 100 BCE	4800	-	N	Y	Tartara 1999, 333
768	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 333

771	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	1500	-	N	Y	Tartara 1999, 334
772	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 334
774	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	2800	-	N	Y	Tartara 1999, 335
777	FI Torrimpietra	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	N	N	Tartara 1999, 336
779	FI Torrimpietra	Commoner activity	600 - 500 BCE	2800	-	N	N	Tartara 1999, 336
781	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 337
782	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 337
783	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	Y	Tartara 1999, 337
785	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 337
786	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	1200	-	N	Y	Tartara 1999, 338
789	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	7500	-	N	Y	Tartara 1999, 338
792	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 341
793	FI Torrimpietra	Commoner activity	600 - 500 BCE, 100 BCE - 200 CE	-	-	N	N	Tartara 1999, 341
795	FI Torrimpietra	Commoner activity	600 - 500, 300 BCE - 200 CE	10200	-	N	Y	Tartara 1999, 341
800	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 343
801	FI Torrimpietra	Commoner activity	600 - 500 BCE	-	-	N	N	Tartara 1999, 343
805	FI Torrimpietra	Commoner activity	600 - 500 BCE, 100 BCE - 200 CE	100	-	N	N	Tartara 1999, 344
808	FI Torrimpietra	Commoner activity	600 BCE - 0	-	-	N	N	Tartara 1999, 345
811	FI Torrimpietra	Commoner activity	600 BCE - 200 CE	-	-	N	N	Tartara 1999, 346
814	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Tartara 1999, 346
815	FI Torrimpietra	Commoner activity	600 - 500 BCE, 300 - 400 CE	-	-	N	N	Tartara 1999, 346
817	FI Torrimpietra	Commoner activity	300 BCE - 200 CE	12000	-	N	Y	Tartara 1999, 347

Appendix 17 Collatia

Table 39 Site information for Collatia

SITE NUMBER	SURVEY	TYPE	SIZE (M2)	AVERAGE SHERD COUNT PER M2	T	F	CITATION
1	FI Collatia	Commoner activity	500 - 400 BCE	-	N	N	Quilici 1974, 61
3	FI Collatia	Elite activity	500 BCE - 500 CE	1330	Y	Y	Quilici 1974, 62
11	FI Collatia	Elite activity	1000 - 800 BCE, 300 BCE - 500 CE	711	Y	N	Quilici 1974, 84
15	FI Collatia	Elite activity	600 - 500 BCE, 0 - 500 CE	758	N	N	Quilici 1974, 88
18	FI Collatia	Commoner activity	500 - 300 BCE	702	Y	Y	Quilici 1974, 88
19	FI Collatia	Commoner activity	300 BCE - 0	-	N	N	Quilici 1974, 88
20	FI Collatia	Commoner activity	300 BCE - 0	-	Y	N	Quilici 1974, 88
25	FI Collatia	Commoner activity	300 BCE - 500 CE	-	N	N	Quilici 1974, 91
26	FI Collatia	Commoner activity	500 BCE - 0	2580	Y	N	Quilici 1974, 91
31	FI Collatia	Commoner activity	300 BCE - 0	-	Y	N	Quilici 1974, 92
33	FI Collatia	Commoner activity	400 - 200 BCE	-	N	N	Quilici 1974, 93
46	FI Collatia	Commoner activity	500 BCE - 500 CE	825	Y	N	Quilici 1974, 138
48	FI Collatia	Commoner activity	500 - 400 BCE	-	Y	N	Quilici 1974, 139
57	FI Collatia	Commoner activity	400 - 200 BCE	-	N	N	Quilici 1974, 168
61	FI Collatia	Commoner activity	600 - 500 BCE	365	Y	N	Quilici 1974, 169
67	FI Collatia	Commoner activity	500 - 400 BCE	591	Y	N	Quilici 1974, 173
68	FI Collatia	Commoner activity	500 - 400 BCE	316	Y	Y	Quilici 1974, 173
69	FI Collatia	Commoner activity	600 - 100 BCE	-	Y	N	Quilici 1974, 173
73	FI Collatia	Commoner activity	600 - 500 BCE	2843	Y	N	Quilici 1974, 178
74	FI Collatia	Commoner activity	700 - 500 BCE	-	N	N	Quilici 1974, 178
75	FI Collatia	Commoner activity	300 BCE - 0	408	Y	N	Quilici 1974, 178
76	FI Collatia	Commoner activity	300 BCE - 0	-	Y	Y	Quilici 1974, 178
77	FI Collatia	Commoner activity	400 - 200 BCE	-	N	N	Quilici 1974, 178
80	FI Collatia	Commoner activity	300 - 100 BCE	-	Y	N	Quilici 1974, 178
82	FI Collatia	Commoner activity	400 - 200 BCE	-	N	N	Quilici 1974, 185
83	FI Collatia	Commoner activity	300 BCE - 0	587	N	Y	Quilici 1974, 185
85	FI Collatia	Commoner activity	300 BCE - 0	-	Y	N	Quilici 1974, 185

86	FI Collatia	Commoner activity	600 - 500 BCE	909	-	Y	N	Quilici 1974, 185
91	FI Collatia	Commoner activity	500 BCE - 500 CE	458	-	Y	N	Quilici 1974, 193
102	FI Collatia	Commoner activity	500 BCE - 500 CE	-	-	Y	N	Quilici 1974, 214
114	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 240
116	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 240
121	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 250
123	FI Collatia	Commoner activity	600 - 500 BCE	1312	-	Y	N	Quilici 1974, 250
124	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 250
125	FI Collatia	Commoner activity	600 - 500 BCE	466	-	Y	N	Quilici 1974, 250
126	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 250
128	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 250
129	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 250
130	FI Collatia	"Farm" Site	300 BCE - 0	-	-	y	Y	Quilici 1974, 250
130	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 251
134	FI Collatia	Commoner activity	500 BCE - 500 CE	-	-	Y	N	Quilici 1974, 252
136	FI Collatia	Elite activity	500 BCE - 500 CE	-	-	Y	Y	Quilici 1974, 253
138	FI Collatia	Commoner activity	300 BCE - 500 CE	-	-	N	N	Quilici 1974, 254
140	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 255
144	FI Collatia	Rural activity	300 BCE - 0	-	-	N	N	Quilici 1974, 256
146	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 257
163	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 258
168	FI Collatia	Rural activity	300 BCE - 0	-	-	N	N	Quilici 1974, 259
171	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	N	Quilici 1974, 260
	FI Collatia			-	-			Quilici 1974, 261
173	FI Collatia	Commoner activity	500 - 300 BCE	-	-	N	N	Quilici 1974, 262
173	FI Collatia	Commoner activity	500 BCE - 300 CE	-	-	N	N	Quilici 1974, 263
176	FI Collatia	Commoner activity	300 - 200 BCE	571	-	Y	N	Quilici 1974, 264
185	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 314
186	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	Y	Quilici 1974, 315
189	FI Collatia	Commoner activity	300 BCE - 0	919	-	Y	N	Quilici 1974, 316
198	FI Collatia	Commoner activity	600 - 500 BCE	1484	-	Y	N	Quilici 1974, 347
203	FI Collatia	Commoner activity	300 - 100 BCE	713	-	Y	N	Quilici 1974, 357
205	FI Collatia	Commoner activity	600 - 500 BCE	473	-	Y	N	Quilici 1974, 357
206	FI Collatia	Commoner activity	600 - 500 BCE	865	-	Y	N	Quilici 1974, 358
208	FI Collatia	Commoner activity	600 - 500 BCE	195	-	Y	N	Quilici 1974, 358
210	FI Collatia	Commoner activity	600 - 500 BCE	441	-	Y	N	Quilici 1974, 358
222	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 359
224	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 360
227	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 361

229	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	874	-	Y	N	Quilici 1974, 385
233	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 386
235	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 387
236	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 388
237	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 389
238	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 390
250	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 391
252	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 392
258	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 393
259	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 394
260	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 395
265	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 396
266	FI Collatia	Commoner activity	500 - 300 BCE	-	-	N	N	Quilici 1974, 397
269	FI Collatia	Elite activity	300 BCE - 0	-	-	N	Y	Quilici 1974, 398
270	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 399
272	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 400
279	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 401
280	FI Collatia	Commoner activity	600 - 500 BCE	504	-	N	N	Quilici 1974, 410
281	FI Collatia	Commoner activity	500 - 300 BCE	-	-	Y	N	Quilici 1974, 411
287	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 412
288	FI Collatia	Commoner activity	500 BCE - 300 CE	1586	-	N	N	Quilici 1974, 414
289	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 415
290	FI Collatia	Commoner activity	500 - 300 BCE	-	-	N	N	Quilici 1974, 416
291	FI Collatia	Commoner activity	600 BCE - 500 CE	-	-	Y	N	Quilici 1974, 417
293	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 418
298	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	Y	N	Quilici 1974, 419
299	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 420
302	FI Collatia	Commoner activity	500 - 300 BCE	786	-	Y	N	Quilici 1974, 418
307	FI Collatia	Commoner activity	300 BCE - 0	919	-	Y	N	Quilici 1974, 421
307	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 422
310	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 423
318	FI Collatia	Commoner activity	500 BCE - 300 CE	353	-	Y	N	Quilici 1974, 428
319	FI Collatia	Commoner activity	600 - 500 BCE	349	-	N	N	Quilici 1974, 428
323	FI Collatia	Commoner activity	500 - 300 BCE	-	-	Y	N	Quilici 1974, 429
326	FI Collatia	Commoner activity	500 - 300 BCE	-	-	Y	N	Quilici 1974, 430
329	FI Collatia	Elite activity	500 BCE - 300 CE	-	-	Y	Y	Quilici 1974, 431
331	FI Collatia	Commoner activity	600 BCE - 100 CE	507	-	N	N	Quilici 1974, 438
335	FI Collatia	Commoner activity	600 BCE - 100 CE	501	-	N	N	Quilici 1974, 445
336	FI Collatia	Commoner activity	400 - 200 BCE	1048	-	N	N	Quilici 1974, 445
337	FI Collatia	Commoner activity	600 BCE - 300 CE	-	-	N	N	Quilici 1974, 446

338	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 447
343	FI Collatia	Commoner activity	600 - 500 BCE	588	-	N	N	Quilici 1974, 451
345	FI Collatia	Commoner activity	300 BCE - 0	289	-	N	N	Quilici 1974, 451
347	FI Collatia	Commoner activity	600 BCE - 0	579	-	N	N	Quilici 1974, 452
348	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	600	-	Y	N	Quilici 1974, 452
350	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	-	-	Y	N	Quilici 1974, 453
352	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 455
353	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 455
354	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 455
357	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	1538	-	N	N	Quilici 1974, 455
359	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 456
360	FI Collatia	Commoner activity	600 - 500 BCE	727	-	N	N	Quilici 1974, 456
361	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 457
362	FI Collatia	Commoner activity	600 - 500 BCE	764	-	Y	N	Quilici 1974, 457
364	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 460
366	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	371	-	N	N	Quilici 1974, 461
367	FI Collatia	Commoner activity	600 - 500 BCE, 100 BCE - 300 CE	340	-	N	N	Quilici 1974, 461
368	FI Collatia	Commoner activity	300 BCE - 200 CE	399	-	Y	N	Quilici 1974, 461
371	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	N	Y	Quilici 1974, 462
372	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	Y	Quilici 1974, 463
376	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	-	-	N	N	Quilici 1974, 464
377	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	1325	-	N	N	Quilici 1974, 464
383	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 465
386	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 475
387	FI Collatia	Commoner activity	600 BCE - 500 CE	-	-	N	N	Quilici 1974, 475
388	FI Collatia	Elite activity	600 BCE - 300 CE	544	-	Y	N	Quilici 1974, 475
390	FI Collatia	Commoner activity	300 BCE - 200 CE	1361	-	Y	N	Quilici 1974, 475
391	FI Collatia	Elite activity	300 - 100 BCE	1505	-	Y	N	Quilici 1974, 475
392	FI Collatia	Commoner activity	300 - 100 BCE	834	-	N	N	Quilici 1974, 476
393	FI Collatia	Commoner activity	600 - 300 BCE, 0 - 200 CE	868	-	Y	N	Quilici 1974, 476
395	FI Collatia	Commoner activity	600 - 500 BCE	315	-	Y	N	Quilici 1974, 478
396	FI Collatia	Commoner activity	500 - 300 BCE	291	-	Y	N	Quilici 1974, 478
397	FI Collatia	Commoner activity	400 - 200 BCE, 0 - 300 CE	1492	-	Y	N	Quilici 1974, 478
401	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 482
401	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	N	Quilici 1974, 483
403	FI Collatia	Commoner activity	500 - 300 BCE	698	-	Y	N	Quilici 1974, 484
406	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 485
419	FI Collatia	Commoner activity	300 - 100 BCE	1321	-	Y	N	Quilici 1974, 515
426	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 522
429	FI Collatia	Commoner activity	300 BCE - 200 CE	1023	-	Y	N	Quilici 1974, 522

430	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 522
431	FI Collatia	Elite activity	600 BCE - 300 CE	910	-	N	N	Quilici 1974, 522
458	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 572
462	FI Collatia	Commoner activity	300 - 100 BCE	594	-	Y	N	Quilici 1974, 572
466	FI Collatia	Commoner activity	500 - 300 BCE	474	-	Y	N	Quilici 1974, 574
475	FI Collatia	Commoner activity	500 - 300 BCE	651	-	Y	N	Quilici 1974, 576
480	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 580
483	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 590
483	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 590
485	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	1246	-	N	N	Quilici 1974, 590
486	FI Collatia	Commoner activity	600 BCE - 300 CE	496	-	N	N	Quilici 1974, 590
487	FI Collatia	Commoner activity	600 - 500 BCE	932	-	N	N	Quilici 1974, 590
495	FI Collatia	Commoner activity	600 BCE - 500 CE	1342	-	N	N	Quilici 1974, 593
501	FI Collatia	Commoner activity	600 - 500 BCE	729	-	N	N	Quilici 1974, 597
502	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 200 CE	1148	-	N	N	Quilici 1974, 597
503	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	N	N	Quilici 1974, 597
504	FI Collatia	Commoner activity	600 BCE - 300 CE	3804	-	N	N	Quilici 1974, 598
506	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 598
508	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 598
512	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 603
515	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 200 CE	809	-	N	N	Quilici 1974, 603
518	FI Collatia	Commoner activity	500 - 300 BCE, 0 - 200 CE	-	-	N	N	Quilici 1974, 604
525	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	N	N	Quilici 1974, 608
520	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	N	Quilici 1974, 607
524	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 608
527	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 200 CE	-	-	N	N	Quilici 1974, 608
529	FI Collatia	Commoner activity	600 - 300 BCE	2419	-	N	N	Quilici 1974, 608
530	FI Collatia	Commoner activity	600 BCE - 0	1746	-	N	N	Quilici 1974, 609
534	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 609
535	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 610
538	FI Collatia	Commoner activity	300 - 100 BCE	-	-	Y	N	Quilici 1974, 610
539	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 611
542	FI Collatia	Commoner activity	500 - 300 BCE, 0 - 200 CE	2260	-	N	N	Quilici 1974, 612
543	FI Collatia	Commoner activity	600 - 500 BCE, 0 - 300 CE	942	-	N	N	Quilici 1974, 612
544	FI Collatia	Commoner activity	300 BCE - 200 CE	896	-	N	N	Quilici 1974, 612
545	FI Collatia	Commoner activity	500 - 300 BCE	2757	-	N	N	Quilici 1974, 612
547	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 613
551	FI Collatia	Commoner activity	600 - 500 BCE	2498	-	N	N	Quilici 1974, 615
553	FI Collatia	Commoner activity	500 - 300 BCE	407	-	N	N	Quilici 1974, 617
566	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	N	Quilici 1974, 624

575	FI Collatia	Commoner activity	300 - 100 BCE	1401	-	N	N	Quilici 1974, 632
576	FI Collatia	Commoner activity	400 - 200 BCE	701	-	N	N	Quilici 1974, 632
578	FI Collatia	Commoner activity	300 BCE - 200 CE	856	-	Y	N	Quilici 1974, 632
580	FI Collatia	Commoner activity	500 BCE - 300 CE	305	-	N	N	Quilici 1974, 633
587	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	Y	N	Quilici 1974, 633
601	FI Collatia	Elite activity	500 BCE - 300 CE	3675	-	N	N	Quilici 1974, 664
611	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 664
613	FI Collatia	Commoner activity	300 - 200 BCE	1147	-	Y	N	Quilici 1974, 682
614	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	N	Quilici 1974, 682
615	FI Collatia	Commoner activity	300 - 100 BCE	-	-	N	N	Quilici 1974, 682
617	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 682
627	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 715
638	FI Collatia	Commoner activity	600 BCE - 0	-	-	N	N	Quilici 1974, 724
640	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	Y	Quilici 1974, 724
652	FI Collatia	Commoner activity	600 - 400 BCE	844	-	N	N	Quilici 1974, 733
653	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 733
654	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	N	Quilici 1974, 733
661	FI Collatia	Commoner activity	600 - 500 BCE	281	-	Y	N	Quilici 1974, 757
662	FI Collatia	Commoner activity	300 BCE - 0	762	-	N	N	Quilici 1974, 757
664	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 757
666	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	Y	Quilici 1974, 757
700	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 800
703	FI Collatia	Rural activity	300 BCE - 0	-	-	N	Y	Quilici 1974, 816
704	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	Y	Quilici 1974, 816
705	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 817
709	FI Collatia	Commoner activity	300 BCE - 0	482	-	Y	N	Quilici 1974, 818
710	FI Collatia	Commoner activity	300 BCE - 0	1274	-	N	N	Quilici 1974, 818
714	FI Collatia	Elite activity	300 BCE	-	-	Y	Y	Quilici 1974, 819
716	FI Collatia	Commoner activity	400 - 200 BCE	-	-	N	N	Quilici 1974, 819
718	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 820
723	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 821
719	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 821
720	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 821
722	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 821
724	FI Collatia	Commoner activity	400 - 200 BCE	-	-	Y	N	Quilici 1974, 822
739	FI Collatia	Elite activity	400 BCE - 200 CE	-	-	Y	Y	Quilici 1974, 828
743	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 829
751	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 830
760	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	Y	Quilici 1974, 850
763	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	Y	N	Quilici 1974, 851

765	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 852
769	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	Y	N	Quilici 1974, 853
772	FI Collatia	Commoner activity	300 BCE - 0	339	-	Y	N	Quilici 1974, 854
773	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 854
774	FI Collatia	Commoner activity	300 BCE - 200 CE	688	-	N	N	Quilici 1974, 854
776	FI Collatia	Commoner activity	300 BCE - 200 CE	-	-	N	N	Quilici 1974, 855
779	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	Y	Y	Quilici 1974, 856
782	FI Collatia	Commoner activity	600 - 500 BCE	-	-	Y	Y	Quilici 1974, 860
785	FI Collatia	Commoner activity	600 BCE - 300 CE	-	-	N	N	Quilici 1974, 858
787	FI Collatia	Rural activity	300 BCE - 0	-	-	N	N	Quilici 1974, 860
788	FI Collatia	Elite activity	500 - 300 BCE, 0 - 200 CE	-	-	N	N	Quilici 1974, 860
792	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 861
803	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	Y	N	Quilici 1974, 871
804	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 871
806	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 872
856	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	Y	Quilici 1974, 914
807	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 882
809	FI Collatia	Commoner activity	600 - 500 BCE	-	-	N	N	Quilici 1974, 882
812	FI Collatia	Commoner activity	600 - 500 BCE	470	-	N	N	Quilici 1974, 882
813	FI Collatia	Commoner activity	300 BCE - 200 CE	618	-	N	N	Quilici 1974, 883
815	FI Collatia	Commoner activity	300 BCE - 0	-	-	Y	N	Quilici 1974, 884
826	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 898
829	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	N	Quilici 1974, 899
830	FI Collatia	Commoner activity	600 BCE - 0	-	-	N	N	Quilici 1974, 900
836	FI Collatia	Elite activity	300 BCE - 200 CE	-	-	N	N	Quilici 1974, 901
839	FI Collatia	Elite activity	600 - 500 BCE, 0 - 300 CE	1173	-	N	N	Quilici 1974, 902
841	FI Collatia	Commoner activity	500 - 400 BCE, 0 - 300 CE	854	-	Y	N	Quilici 1974, 904
844	FI Collatia	Commoner activity	300 BCE - 0	-	-	N	N	Quilici 1974, 904
846	FI Collatia	Commoner activity	500 - 400 BCE, 0 - 300 CE	215	-	N	N	Quilici 1974, 906
855	FI Collatia	Commoner activity	600 BCE - 300 CE	728	-	N	N	Quilici 1974, 914

Appendix 18 Nettuno

Table A40 Site information for Nettuno

SITE NUMBER	SURVEY	TYPE	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION	
11201	GIA Nettuno	Commoner activity	700 BCE - 600 CE	34	-	N	N	Attema et al 2011, 186
11202	GIA Nettuno	Elite activity	1000 BCE - 600 CE	4	-	N	Y	Attema et al 2011, 186-7
11208	GIA Nettuno	Elite activity	400 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 188-9
11222	GIA Nettuno	"Farm" site	400 BCE - 0	-	-	N	Y	Attema et al 2011, 193
11245	GIA Nettuno	Commoner activity	400 BCE - 0	-	-	N	Y	Attema et al 2011, 199
11254	GIA Nettuno	Elite activity	400 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 201
11277	GIA Nettuno	Commoner activity	600 BCE - 300 CE	3500	-	Y	Y	Attema et al 2011, 204
11280	GIA Nettuno	Commoner activity	600 BCE - 0	-	-	Y	Y	Attema et al 2011, 204-205
11281	GIA Nettuno	Commoner activity	600 BCE - 300 CE	7000	-	Y	Y	Attema et al 2011, 205
11284	GIA Nettuno	Commoner activity	600 BCE - 300 CE	400	-	Y	N	Attema et al 2011, 206
15004	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	Y	N	Attema et al 2011, 208
15005	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 208
15008	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	N	Attema et al 2011, 208-209
15014	GIA Nettuno	Elite activity	600 BCE - 300 CE	1000	-	N	N	Attema et al 2011, 209-10
15017	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 210
15019	GIA Nettuno	Elite activity	300 BCE - 400 CE	-	-	N	Y	Attema et al 2011, 211
15020	GIA Nettuno	Commoner activity	500 BCE - 400 CE	-	-	N	N	Attema et al 2011, 212
15026	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 212-213
15027	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 213
15029	GIA Nettuno	Commoner activity	700 BCE - 300 CE	800	-	N	N	Attema et al 2011, 213
15031	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 213-214
15034	GIA Nettuno	Commoner activity	600 BCE - 0	900	-	Y	Y	Attema et al 2011, 214-215
15035	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	N	Attema et al 2011, 214-215
15036	GIA Nettuno	Commoner activity	700 BCE - 300 CE	8200	-	Y	Y	Attema et al 2011, 215
15038	GIA Nettuno	Commoner activity	500 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 216
15054	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 219
15055	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 219-220

15065	GIA Nettuno	Commoner activity	600 - 300 BCE	-	-	N	N	Attema et al 2011, 220-221
15068	GIA Nettuno	Commoner activity	1000 BCE - 0	1000	-	Y	Y	Attema et al 2011, 222
15072	GIA Nettuno	Commoner activity	700 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 223
15076	GIA Nettuno	Commoner activity	700 - 500 BCE	-	-	N	N	Attema et al 2011, 224
15081	GIA Nettuno	Commoner activity	300 - 100 BCE	-	-	N	Y	Attema et al 2011, 225
15082	GIA Nettuno	Commoner activity	400 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 225
15102	GIA Nettuno	Commoner activity	700 - 600 BCE	-	-	N	N	Attema et al 2011, 226-7
15106	GIA Nettuno	Commoner activity	600 BCE - 300 CE	3500	-	Y	Y	Attema et al 2011, 227
15107	GIA Nettuno	Commoner activity	700 BCE - 300 CE	4000	-	N	Y	Attema et al 2011, 227
15108	GIA Nettuno	Commoner activity	700 BCE - 300 CE	2500	-	N	Y	Attema et al 2011, 228
15111	GIA Nettuno	Elite activity	600 BCE - 300 CE	4500	-	N	N	Attema et al 2011, 229
15112	GIA Nettuno	Commoner activity	600 BCE - 300 CE	2000	-	Y	Y	Attema et al 2011, 229
15125	GIA Nettuno	Commoner activity	600 BCE - 0	-	-	Y	N	Attema et al 2011, 231
15128	GIA Nettuno	Commoner activity	600 BCE - 400 CE	500	-	N	N	Attema et al 2011, 232
15130	GIA Nettuno	Commoner activity	700 - 500 BCE	1200	-	N	N	Attema et al 2011, 232
15134	GIA Nettuno	Commoner activity	700 - 500 BCE	5000	-	N	N	Attema et al 2011, 233
15135	GIA Nettuno	Commoner activity	700 - 500 BCE	400	-	N	N	Attema et al 2011, 233
15136	GIA Nettuno	Commoner activity	600 BCE - 0	-	-	Y	Y	Attema et al 2011, 233
15137	GIA Nettuno	Commoner activity	600 - 500 BCE	-	-	Y	N	Attema et al 2011, 234
15138	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 234
15150	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	Y	Attema et al 2011, 235
15153	GIA Nettuno	Commoner activity	600 BCE - 300 CE	-	-	N	N	Attema et al 2011, 235-236

Appendix 19 Liri Valley

Table A41 Site information for the Liri Valley

SITE NUMBER	SURVEY	TYPE	CHRON	SIZE (M ²)	AVERAGE SHERD COUNT PER M ²	T	F	CITATION
20	Liri Valley	Elite activity	700 BCE - 300 CE	3750		N	Y	Hayes and Martini 1994, 175
22	Liri Valley	Elite activity	500 BCE - 0	5000		N	Y	Hayes and Martini 1994, 176
25	Liri Valley	Commoner activity	300 BCE - 0	75		N	Y	Hayes and Martini 1994, 175
28	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	-		N	Y	Hayes and Martini 1994, 176
1	Liri Valley	Commoner activity	300 BCE - 0	1500		N	N	Hayes and Martini 1994, 174
10	Liri Valley	Commoner activity	300 BCE - 0	675		N	Y	Hayes and Martini 1994, 174
21	Liri Valley	Commoner activity	500 BCE - 100 CE	2700		N	Y	Hayes and Martini 1994, 176
27	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	1000		N	Y	Hayes and Martini 1994, 176
31	Liri Valley	Commoner activity	300 BCE - 0	-		N	N	Hayes and Martini 1994, 176
32	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	1200		N	Y	Hayes and Martini 1994, 176
36	Liri Valley	Commoner activity	300 BCE - 300 CE	625		N	Y	Hayes and Martini 1994, 177
41	Liri Valley	Commoner activity	700 - 150 BCE	-		N	N	Hayes and Martini 1994, 177
42	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	1250		N	Y	Hayes and Martini 1994, 177
50	Liri Valley	Commoner activity	300 BCE - 0	500		N	Y	Hayes and Martini 1994, 178
57	Liri Valley	Commoner activity	300 BCE - 300 CE	-		N	Y	Hayes and Martini 1994, 178
63	Liri Valley	Commoner activity	300 BCE - 600 CE	600		N	Y	Hayes and Martini 1994, 179
69	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	-		N	Y	Hayes and Martini 1994, 179
78	Liri Valley	Commoner activity	300 BCE - 300 CE	3600		N	Y	Hayes and Martini 1994, 180
80	Liri Valley	Elite activity	300 BCE - 600 CE	9375		N	Y	Hayes and Martini 1994, 181
82	Liri Valley	Commoner activity	300 BCE - 600 CE	300		N	N	Hayes and Martini 1994, 181
83	Liri Valley	Commoner activity	300 BCE - 0	100		N	N	Hayes and Martini 1994, 181
84	Liri Valley	Commoner activity	700 - 150 BCE	25		N	Y	Hayes and Martini 1994, 181
85	Liri Valley	"Farm" Commoner activity	700 BCE - 0	200		N	N	Hayes and Martini 1994, 181
86	Liri Valley	Commoner activity	700 BCE - 600 CE	1000		N	Y	Hayes and Martini 1994, 181
87	Liri Valley	Commoner activity	500 BCE - 100 CE	50		N	N	Hayes and Martini 1994, 181
90	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	400		N	Y	Hayes and Martini 1994, 182
91	Liri Valley	Commoner activity	500 BCE - 600 CE	10000		N	N	Hayes and Martini 1994, 182

92	Liri Valley	"Farm" Commoner activity	500 BCE - 100 CE	7500	N	N	Hayes and Martini 1994, 182
94	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	1600	N	Y	Hayes and Martini 1994, 182
95	Liri Valley	Commoner activity	300 BCE - 0	50	N	N	Hayes and Martini 1994, 182
96	Liri Valley	Commoner activity	700 - 300 BCE	100	N	Y	Hayes and Martini 1994, 182
97	Liri Valley	Commoner activity	300 - 150 BCE	400	N	N	Hayes and Martini 1994, 182-183
100	Liri Valley	Commoner activity	700 BCE - 600 CE	2500	Y	N	Hayes and Martini 1994, 183
105	Liri Valley	Commoner activity	700 - 300 BCE	600	N	N	Hayes and Martini 1994, 183
106	Liri Valley	Commoner activity	700 - 150 BCE	25	Y	N	Hayes and Martini 1994, 183
107	Liri Valley	Commoner activity	700 - 150 BCE	-	N	N	Hayes and Martini 1994, 183
108	Liri Valley	Commoner activity	700 BCE - 600 CE	7500	N	N	Hayes and Martini 1994, 184
109	Liri Valley	Commoner activity	700 BCE - 600 CE	250	N	N	Hayes and Martini 1994, 184
110	Liri Valley	Commoner activity	300 BCE - 600 CE	3600	N	N	Hayes and Martini 1994, 184
112	Liri Valley	Commoner activity	500 - 150 BCE	750	N	N	Hayes and Martini 1994, 184
113	Liri Valley	Elite activity	700 BCE - 0	15000	N	Y	Hayes and Martini 1994, 184
114	Liri Valley	Elite activity	700 BCE - 300 CE	7500	N	N	Hayes and Martini 1994, 184
115	Liri Valley	Elite activity	700 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 184
116	Liri Valley	Commoner activity	700 BCE - 300 CE	10000	N	N	Hayes and Martini 1994, 185
117	Liri Valley	Elite activity	300 BCE - 300 CE	10000	N	Y	Hayes and Martini 1994, 185
118	Liri Valley	Elite activity	300 BCE - 300 CE	-	N	N	Hayes and Martini 1994, 185
119	Liri Valley	Elite activity	300 BCE - 300 CE	-	N	Y	Hayes and Martini 1994, 185
121	Liri Valley	Commoner activity	700 - 300 BCE	25	N	N	Hayes and Martini 1994, 185
122	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	1200	N	Y	Hayes and Martini 1994, 186
123	Liri Valley	Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 186
124	Liri Valley	Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 186
126	Liri Valley	Commoner activity	300 BCE - 0	250	N	N	Hayes and Martini 1994, 186
129	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	3000	N	N	Hayes and Martini 1994, 186
130	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	1000	N	N	Hayes and Martini 1994, 186
131	Liri Valley	Elite activity	500 BCE - 600 CE	15000	N	Y	Hayes and Martini 1994, 186-187
132	Liri Valley	Commoner activity	300 BCE - 100 CE	3600	N	N	Hayes and Martini 1994, 187
133	Liri Valley	Commoner activity	300 BCE - 0	255 x 5	N	Y	Hayes and Martini 1994, 187
134	Liri Valley	Commoner activity	700 BCE - 300 CE	-	N	N	Hayes and Martini 1994, 187
135	Liri Valley	Elite activity	500 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 188
137	Liri Valley	Commoner activity	700 - 300 BCE	100	Y	N	Hayes and Martini 1994, 188
138	Liri Valley	Commoner activity	700 - 300 BCE	100	N	N	Hayes and Martini 1994, 188
139	Liri Valley	Commoner activity	700 - 150 BCE	-	Y	N	Hayes and Martini 1994, 188
140	Liri Valley	Commoner activity	700 - 150 BCE	-	Y	N	Hayes and Martini 1994, 188
141	Liri Valley	"Farm" Commoner activity	700 BCE - 0	40000	Y	N	Hayes and Martini 1994, 188
142	Liri Valley	Elite activity	300 BCE - 300 CE	-	N	Y	Hayes and Martini 1994, 189
143	Liri Valley	Elite activity	500 BCE - 100 CE	450	N	Y	Hayes and Martini 1994, 189

144	Liri Valley	Commoner activity	300 BCE - 600 CE	800	N	N	Hayes and Martini 1994, 189
145	Liri Valley	Commoner activity	300 BCE - 0	1200	N	N	Hayes and Martini 1994, 189
146	Liri Valley	"Farm" Commoner activity	700 BCE - 300 CE	3500	N	Y	Hayes and Martini 1994, 189
151	Liri Valley	Commoner activity	300 BCE - 600 CE	600	N	Y	Hayes and Martini 1994, 190
152	Liri Valley	Commoner activity	300 BCE - 300 CE	200	N	Y	Hayes and Martini 1994, 190
153	Liri Valley	"Farm" Commoner activity	700 BCE - 0	300	N	N	Hayes and Martini 1994, 190
154	Liri Valley	Commoner activity	700 BCE - 0	100	N	Y	Hayes and Martini 1994, 190
155	Liri Valley	Commoner activity	300 BCE - 100 CE	-	N	N	Hayes and Martini 1994, 190
156	Liri Valley	Commoner activity	500 BCE - 100 Ce	1600	N	Y	Hayes and Martini 1994, 190
157	Liri Valley	Commoner activity	1000 - 300 BCE	-	Y	N	Hayes and Martini 1994, 190
158	Liri Valley	Commoner activity	500 BCE - 600 CE	450	Y	N	Hayes and Martini 1994, 190
161	Liri Valley	Commoner activity	700 - 300 BCE	600	N	N	Hayes and Martini 1994, 191
162	Liri Valley	Elite activity	500 BCE - 600 CE	12000	N	N	Hayes and Martini 1994, 191
163	Liri Valley	Commoner activity	700 BCE - 0	1000	N	N	Hayes and Martini 1994, 191
164	Liri Valley	Commoner activity	500 BCE - 300 CE	1500	N	Y	Hayes and Martini 1994, 191
166	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	7500	N	N	Hayes and Martini 1994, 191
167	Liri Valley	Commoner activity	300 - 150 BCE	25	N	Y	Hayes and Martini 1994, 191
168	Liri Valley	Commoner activity	700 BCE - 0	2400	N	N	Hayes and Martini 1994, 191
169	Liri Valley	"Farm" Commoner activity	700 BCE - 600 CE	1200	N	Y	Hayes and Martini 1994, 192
170	Liri Valley	Commoner activity	700 - 300 BCE	600	N	N	Hayes and Martini 1994, 192
175	Liri Valley	Commoner activity	300 - 150 BCE	100	N	N	Hayes and Martini 1994, 192
178	Liri Valley	Commoner activity	300 BCE - 0	50	N	Y	Hayes and Martini 1994, 192
180	Liri Valley	Elite activity	300 BCE - 600 CE	7200	N	Y	Hayes and Martini 1994, 193
182	Liri Valley	Commoner activity	700 - 300 BCE	30000	N	N	Hayes and Martini 1994, 193
186	Liri Valley	Commoner activity	300 BCE - 0	50	N	Y	Hayes and Martini 1994, 194
187	Liri Valley	Commoner activity	700 - 150 BCE	400	N	N	Hayes and Martini 1994, 194
188	Liri Valley	Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 194
189	Liri Valley	Commoner activity	300 BCE - 0	600	N	N	Hayes and Martini 1994, 194
191	Liri Valley	Commoner activity	700 - 300 BCE	4000	N	N	Hayes and Martini 1994, 195
192	Liri Valley	Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 195
193	Liri Valley	Elite activity	300 BCE - 600 CE	18000	N	Y	Hayes and Martini 1994, 195
195	Liri Valley	Commoner activity	700 - 300 BCE	600	N	N	Hayes and Martini 1994, 195
198	Liri Valley	Commoner activity	700 - 300 BCE	1200	N	N	Hayes and Martini 1994, 196
199	Liri Valley	Commoner activity	300 BCE - 0	600	N	Y	Hayes and Martini 1994, 196
200	Liri Valley	Commoner activity	300 BCE - 600 CE	4900	N	Y	Hayes and Martini 1994, 196
203	Liri Valley	Commoner activity	700 - 300 BCE	2000	N	N	Hayes and Martini 1994, 196
204	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	2500	N	N	Hayes and Martini 1994, 196
206	Liri Valley	Commoner activity	500 BCE - 100 CE	2250	N	N	Hayes and Martini 1994, 196
207	Liri Valley	Commoner activity	700 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 197
212	Liri Valley	Commoner activity	500 BCE - 100 CE	600	Y	N	Hayes and Martini 1994, 197

213	Liri Valley	Commoner activity	700 - 300 BCE	100	Y	N	Hayes and Martini 1994, 197
221	Liri Valley	Commoner activity	300 BCE - 0	625	N	Y	Hayes and Martini 1994, 198
223	Liri Valley	Commoner activity	300 BCE - 0	-	N	Y	Hayes and Martini 1994, 198
225	Liri Valley	Commoner activity	500 - 150 BCE	-	N	N	Hayes and Martini 1994, 198
230	Liri Valley	Commoner activity	300 BCE - 600 CE	300	N	Y	Hayes and Martini 1994, 199
233	Liri Valley	Commoner activity	300 BCE - 100 CE	150	N	N	Hayes and Martini 1994, 199
235	Liri Valley	Commoner activity	300 BCE - 100 CE	200	N	Y	Hayes and Martini 1994, 199
237	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	2000	N	Y	Hayes and Martini 1994, 199
242	Liri Valley	Commoner activity	300 BCE - 0	200	N	Y	Hayes and Martini 1994, 200
246	Liri Valley	Commoner activity	300 BCE - 100 CE	9000	N	Y	Hayes and Martini 1994, 201
251	Liri Valley	"Farm" Commoner activity	500 - 150 BCE	4000	N	Y	Hayes and Martini 1994, 201
254	Liri Valley	Commoner activity	700 BCE - 0	4000	N	Y	Hayes and Martini 1994, 201
263	Liri Valley	"Farm" Commoner activity	300 BCE - 100 CE	6000	N	Y	Hayes and Martini 1994, 202
267	Liri Valley	Commoner activity	300 BCE - 300 CE	5625	N	Y	Hayes and Martini 1994, 202-203
269	Liri Valley	Commoner activity	700 - 300 BCE	625	N	N	Hayes and Martini 1994, 203
272	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 203
278	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 204
282	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 204
287	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	30000	N	Y	Hayes and Martini 1994, 204
288	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	4800	N	Y	Hayes and Martini 1994, 204
291	Liri Valley	Commoner activity	300 BCE - 300 CE	1200	N	Y	Hayes and Martini 1994, 205
292	Liri Valley	Commoner activity	300 BCE - 300 CE	2500	N	Y	Hayes and Martini 1994, 205
295	Liri Valley	Commoner activity	300 BCE - 0	150	N	N	Hayes and Martini 1994, 205
296	Liri Valley	Commoner activity	300 BCE - 300 CE	10000	N	Y	Hayes and Martini 1994, 205
297	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	20000	N	Y	Hayes and Martini 1994, 205
300	Liri Valley	Commoner activity	300 BCE - 0	5000	N	Y	Hayes and Martini 1994, 206
301	Liri Valley	Commoner activity	300 BCE - 600 CE	250	N	Y	Hayes and Martini 1994, 206
302	Liri Valley	Commoner activity	300 BCE - 300 CE	1250	N	N	Hayes and Martini 1994, 206
313	Liri Valley	Commoner activity	300 BCE - 600 CE	2500	N	Y	Hayes and Martini 1994, 207
316	Liri Valley	Commoner activity	300 BCE - 300 CE	-	N	N	Hayes and Martini 1994, 207
317	Liri Valley	"Farm" Commoner activity	300 BCE - 100 CE	-	N	N	Hayes and Martini 1994, 207-208
324	Liri Valley	Commoner activity	300 BCE - 100 CE	-	N	Y	Hayes and Martini 1994, 208
335	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 209
337	Liri Valley	Commoner activity	300 BCE - 0	5000	N	N	Hayes and Martini 1994, 209
338	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	1600	N	Y	Hayes and Martini 1994, 210
341	Liri Valley	Commoner activity	300 BCE - 0	-	N	Y	Hayes and Martini 1994, 210
342	Liri Valley	Commoner activity	300 BCE - 300 CE	1200	N	Y	Hayes and Martini 1994, 210
346	Liri Valley	Commoner activity	300 BCE - 100 CE	72	N	N	Hayes and Martini 1994, 211
351	Liri Valley	Commoner activity	700 BCE - 0	-	N	N	Hayes and Martini 1994, 211
359	Liri Valley	Commoner activity	300 BCE - 0	-	N	Y	Hayes and Martini 1994, 212

363	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	750	N	Y	Hayes and Martini 1994, 212
364	Liri Valley	Commoner activity	300 BCE - 600 CE	400	Y	Y	Hayes and Martini 1994, 212
371	Liri Valley	Commoner activity	300 BCE - 300 CE	10000	N	N	Hayes and Martini 1994, 213
373	Liri Valley	Commoner activity	300 BCE - 600 CE	2100	N	Y	Hayes and Martini 1994, 213
376	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	15000	N	Y	Hayes and Martini 1994, 214
377	Liri Valley	Commoner activity	300 BCE - 600 CE	400	N	N	Hayes and Martini 1994, 214
392	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 215
396	Liri Valley	"Farm" Commoner activity	300 BCE - 100 CE	1600	N	Y	Hayes and Martini 1994, 215
404	Liri Valley	"Farm" Commoner activity	300 BCE - 300 CE	5000	N	Y	Hayes and Martini 1994, 216
406	Liri Valley	Commoner activity	300 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 216
411	Liri Valley	Commoner activity	300 BCE - 0	-	N	Y	Hayes and Martini 1994, 217
414	Liri Valley	Commoner activity	300 BCE - 100 CE	625	N	Y	Hayes and Martini 1994, 217
415	Liri Valley	Commoner activity	300 BCE - 0	10000	N	Y	Hayes and Martini 1994, 217
424	Liri Valley	Commoner activity	300 BCE - 0	2400	N	N	Hayes and Martini 1994, 218
425	Liri Valley	Commoner activity	300 BCE - 600 CE	400	N	N	Hayes and Martini 1994, 219
428	Liri Valley	Commoner activity	300 BCE - 100 CE	1200	N	Y	Hayes and Martini 1994, 219
429	Liri Valley	Commoner activity	700 BCE - 100 CE	1225	N	N	Hayes and Martini 1994, 219
433	Liri Valley	Commoner activity	300 BCE - 0	625	N	N	Hayes and Martini 1994, 219
434	Liri Valley	Commoner activity	300 BCE - 100 CE	8000	N	Y	Hayes and Martini 1994, 220
455	Liri Valley	Commoner activity	300 BCE - 600 CE	800	N	Y	Hayes and Martini 1994, 222
474	Liri Valley	Commoner activity	700 BCE - 100 CE	-	N	N	Hayes and Martini 1994, 224
476	Liri Valley	"Farm" Commoner activity	300 BCE - 100 CE	6400	N	Y	Hayes and Martini 1994, 224
477	Liri Valley	Elite activity	300 BCE - 0	-	N	Y	Hayes and Martini 1994, 224
486	Liri Valley	Elite activity	300 BCE - 300 CE	10000	N	N	Hayes and Martini 1994, 225
494	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	5000	N	N	Hayes and Martini 1994, 226
496	Liri Valley	Commoner activity	700 - 300 BCE	400	N	N	Hayes and Martini 1994, 226
497	Liri Valley	Commoner activity	700 - 300 BCE	800	N	N	Hayes and Martini 1994, 226
498	Liri Valley	Commoner activity	700 - 300 BCE	800	Y	N	Hayes and Martini 1994, 226
500	Liri Valley	Commoner activity	300 BCE - 100 CE	600	N	Y	Hayes and Martini 1994, 226
501	Liri Valley	Commoner activity	300 BCE - 100 CE	-	N	N	Hayes and Martini 1994, 226
502	Liri Valley	Commoner activity	700 BCE - 600 CE	2000	N	N	Hayes and Martini 1994, 226
504	Liri Valley	Commoner activity	300 BCE - 300 CE	5000	N	Y	Hayes and Martini 1994, 227
505	Liri Valley	Commoner activity	300 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 227
506	Liri Valley	Commoner activity	500 - 150 BCE	150	N	N	Hayes and Martini 1994, 227
508	Liri Valley	Commoner activity	300 BCE - 300 CE	6000	N	Y	Hayes and Martini 1994, 227
509	Liri Valley	Commoner activity	500 - 300 BCE	4	N	N	Hayes and Martini 1994, 227
510	Liri Valley	Commoner activity	700 BCE - 0	400	N	N	Hayes and Martini 1994, 227
514	Liri Valley	Commoner activity	700 BCE - 0	-	N	N	Hayes and Martini 1994, 228
516	Liri Valley	Commoner activity	700 - 300 BCE	900	N	N	Hayes and Martini 1994, 229
526	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 230

528	Liri Valley	Commoner activity	300 BCE - 100 CE	15000	N	N	Hayes and Martini 1994, 230
529	Liri Valley	Commoner activity	300 BCE - 0	-	N	N	Hayes and Martini 1994, 230
530	Liri Valley	Commoner activity	300 BCE - 0	15	N	N	Hayes and Martini 1994, 230
539	Liri Valley	Commoner activity	300 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 231
540	Liri Valley	Commoner activity	300 BCE - 300 CE	-	N	N	Hayes and Martini 1994, 231
545	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	15000	N	Y	Hayes and Martini 1994, 232
547	Liri Valley	Commoner activity	300 BCE - 300 CE	-	N	N	Hayes and Martini 1994, 232
549	Liri Valley	Commoner activity	500 BCE - 100 CE	900	N	N	Hayes and Martini 1994, 232
559	Liri Valley	"Farm" Commoner activity	300 BCE - 600 CE	1750	N	Y	Hayes and Martini 1994, 233
561	Liri Valley	Commoner activity	300 BCE - 600 CE	-	N	Y	Hayes and Martini 1994, 233
567	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 235
568	Liri Valley	Commoner activity	500 - 150 BCE	-	N	N	Hayes and Martini 1994, 235
569	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	20000	Y	Y	Hayes and Martini 1994, 235
570	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	-	N	N	Hayes and Martini 1994, 235
571	Liri Valley	"Farm" Commoner activity	700 - 300 BCE	6400	N	N	Hayes and Martini 1994, 235
572	Liri Valley	Commoner activity	300 BCE - 0	400	N	N	Hayes and Martini 1994, 235

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