Food and Identity: a Case Study of Roman Soldiers and Native Civilians in Roman Britain

Aaron Michael Bobik

Follow this and additional works at: https://egrove.olemiss.edu/etd

Recommended Citation
Bobik, Aaron Michael, "Food and Identity: a Case Study of Roman Soldiers and Native Civilians in Roman Britain" (2011). Electronic Theses and Dissertations. 56.
https://egrove.olemiss.edu/etd/56

This Dissertation is brought to you for free and open access by the Graduate School at eGrove. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.
FOOD AND IDENTITY: A CASE STUDY OF ROMAN SOLDIERS AND NATIVE CIVILIANS IN ROMAN BRITAIN

A Thesis
presented in partial fulfillment of requirements
for the degree of Master of Arts
in the Department of Sociology and Anthropology
The University of Mississippi

by

AARON M. BOBIK

May 2011
ABSTRACT

Food is a universal medium through which identity is expressed. In cultures both past and present, food represents a direct way to communicate many aspects of identity such as ethnicity, nationality, status, age, and gender. In archaeology, while the nutritional and economic roles of food have been a topic of study for decades, the relationship between food and identity is a research area largely in its infancy. In my thesis, I explore general aspects of identity in the past, and in particular, I utilize a case study of four archaeological sites (Segontium (Caernarfon), Portchester Castle, Wavendon Gate, and Dragonby) to analyze the way in which food (meat) is employed in the production, articulation, and negotiation of ethnic identity in Roman Britain. In doing so, I contribute to the development of a methodology that archaeologists can apply in the interpretation and examination of identity in the past through the analysis of faunal remains.
DEDICATION

This thesis is dedicated to my parents. Thank you for your love and support along the way.
ACKNOWLEDGEMENTS

I would like to acknowledge my thesis advisor, Dr. Matthew Leigh Murray. Thank you for your expert guidance and devoted help along the way. I express my deepest appreciation and gratitude for the enthusiasm and support that you consistently display towards all of my academic interests. I would also like to acknowledge my thesis committee of Dr. Jay Johnson, Dr. Nancy L. Wicker, and Dr. Ahmet Yukleyen, and the Department of Sociology and Anthropology at the University of Mississippi.
TABLE OF CONTENTS

-Chapter-                                      -Page-

1) Introduction to Roman Britain and the Archaeology of Identity ..............................................1

2) Literature Review .................................................................7

   Introduction
   Significance
   Historical Background – Britain before the Roman Conquest
   Historical Background – Roman Britain
   The Anthropology and Archaeology of Identity
   The Anthropology and Archaeology of Ethnicity
   The Anthropology and Archaeology of Food
   Roman Military and Native British Identity in Britain
   Summary

3) Ethnic Identity in Roman Britain: Theory and Methodology ......................................................36

   Introduction
   Towards an Understanding of Identity and Ethnicity
   The Challenges of Understanding Eating Practices in the Past
   Summary

4) Data Analysis .................................................................................................49

   Introduction
   Food in Roman Britain
Segontium (Caernarfon)
Portchester Castle
Wavendon Gate
Dragonby

5) Discussion

Introduction
The Evidence for Separate Roman and British Ethnicities
The Evidence for a Hybrid Romano-British Ethnicity
Statistical Significance Tests
Implications for the Study of Identity in Roman Britain and Elsewhere
Summary

6) Conclusions

Interpreting Identity in the Past
Future Research
Identity in the Present

List of References

Vita
LIST OF TABLES

-Number & Title-                -Page-

4.1 Chronological Periods at Segontium ............................................................ 58
4.2 Proportions of Species at Segontium ........................................................... 60
4.3 Total Proportions of Species at Portchester Castle ...................................... 67
4.4 Chronological Periods at Wavendon Gate ..................................................... 73
4.5 Proportions of Species at Wavendon Gate (based on NISP) ............................ 76
4.6 Chronological Periods at Dragonby ............................................................. 83
4.7 Proportions of Species at Dragonby (based on NISP) ..................................... 85
4.8 Proportions of Species at Dragonby (based on MNI) ..................................... 86
5.1 $t$—test Results for Overall Proportions of Cattle, Sheep/Goat, and Swine .... 95
LIST OF FIGURES

-Number & Title- -Page-

1.1 Map of Roman Britain.................................................................2
3.1 Taphonomic History of a Faunal Assemblage.................................41
4.1 Plan of Visible Structures at Segontium (Prior to Excavation)...........56
4.2 Composite Plan of Features of All Periods at Portchester Castle.........63
4.3 Composite Plan of Features of All Periods at Wavendon Gate..............74
4.4 Proportions of Species (based on MNI) at Wavendon Gate..................77
4.5 Map of Excavated Sites 1 and 2 at Dragonby..................................82
CHAPTER 1

INTRODUCTION TO ROMAN BRITAIN AND THE ARCHAEOLOGY OF IDENTITY

In the expansive jigsaw of the Roman Empire, the province of Britain is often cited as one of the most varied and complex pieces (Jones 1996; Millet 1990; Salway 1993; Starr 1982; Todd 1999). Located on the edge of the then-known world, Britain (known to the Romans as Britannia) was a constant thorn in the side of the Roman Empire, beginning with the landing of Julius Caesar in 55 BC and ending sometime between the late fourth early fifth centuries AD. Strategies and methods of Roman governance successful in other territories throughout the Empire often failed in Britain, and as a result, the period of Roman occupation there was one characterized by instability and strife (Jones 1996:256-257).

Britain occupied an important position in the minds of the citizens of Rome. “To a people used to the tideless Mediterranean, and in an age when travel by sea was regarded as exceedingly hazardous,” the English Channel, separating Britain from the European continent, presented “a mental barrier of formidable proportions” (Salway 1993:3). Thus, throughout the history of the Roman Empire, Britain represented a location that was, at once, mysterious and exotic, precarious and inviting. For Roman emperors, exploits in Britain offered the opportunity for prestige. The Emperor Augustus famously used Britain as a propaganda machine to gain popularity at home in Rome, and even after centuries of incorporation into the Empire, Britain continued to serve Roman emperors anxious for status (Salway 1993:3-4).
Due to its complexities and problems, Portchester Castle is an important landmark in the study of Roman Britain. Other notable sites include London, Wavendon Gate, Dragonby, Segontium, and Hadrian’s Wall. Figure 1.1 – Map of Roman Britain (Includes Sites and Landmarks Mentioned in this Thesis)
Roman Britain has been a prevalent topic of study for scholars both past and present. Despite its importance in the historical literature and contemporary scholarship, a number of subject areas within the corpus of Romano-British studies remain largely unexamined. This thesis focuses on one of these areas: the application of zooarchaeology to the understanding of identity in the archaeological record. It is well established in anthropology that food is a symbolic medium through which identity is constructed and expressed (Barth 1969; Brathwaite 1971; Caplan 1997; Counihan and Van Esterik 1997; Crabtree 1990; Dietler 2006 and 2010; Ferguson 1992; Gardner 2007; Hawkes 2000; King 1984; Mattingly 2004; Mintz and Du Bois 2002; Stallibrass 1999; Wells 2001; Wilson 2005; Woolf 1998). Therefore, in my thesis, I explore general aspects of group identity in the past, and in particular, I seek to determine the extent to which food (meat) was utilized in the production, expression, and negotiation of ethnic identity in Roman Britain.

In Chapter 2, “Literature Review,” I begin with a review of the prominent and pertinent research associated with the broad theme of food and identity in Roman Britain. I attempt to provide clarity to this expansive subject by discussing multiple topics such as the history of Britain before and after the Roman invasion, the anthropology and archaeology of identity and ethnicity, the anthropology and archaeology of food, and Roman military and native British identity in Britain.

In Chapter 3, “Ethnic Identity in Roman Britain: Theory and Methodology,” I outline a theory and methodology of the archaeology of identity and ethnicity, as it pertains to my thesis. I also dedicate a section in this chapter to a discussion of taphonomy. A variety of processes create faunal assemblages on archaeological sites, and as a result, I discuss the influence of taphonomy on the interpretation of animal bones by archaeologists. Eating and food refuse are certainly
cultural processes that contribute to the creation of faunal assemblages on archaeological sites, but other cultural processes, such as sacrifice, traction, and the presence of pets, along with post-deposition environmental processes, also play significant roles. As a result, I outline the general taphonomic processes that dictate both the creation of and the way in which archaeologists interpret faunal assemblages.

In Chapter 4, “Data Analysis,” I provide the published faunal data from two Roman military sites, *Segontium* (Caernarfon) and Portchester Castle, and two indigenous British settlements, Wavendon Gate and Dragonby (see Figure 1.1). I begin this chapter by discussing food in Roman Britain in general, and the nuances of Roman military versus native British meat-eating practices, in particular. The primary purpose of this chapter is to present the faunal information that I ultimately use in an attempt to interpret Roman and British ethnicity in the past. I do not discuss *every* aspect of the published data from each of these four sites, but rather I adhere to the areas that are most pertinent to the aims of my thesis. In particular, aside from background, chronological, and taphonomical information on each site, I present data for the proportions of species and butchery patterns. In previous research on the relationship between food and identity in Roman Britain (Alcock 2001; Cool 2006; Davies 1971; Gardner 2007; Hambleton 1999; Hawkes 1999; James 2001; King 1984, 1999a, & 1999b; Maltby 1985; Stallibrass 1999; Sykes 2005) and elsewhere (Crabtree 1990; Dietler 2006 & 2010), these two types of zooarchaeological data are some of the most lucrative in terms of providing information on identity in the past, and that is why I focus on them in my thesis.

In Chapter 5, “Discussion of the Faunal Data,” I analyze the faunal remains data presented in the preceding chapter. Adhering to the thesis statement I posed previously, I test the feasibility of interpreting Roman military and native British ethnicity from the zooarchaeological
information derived from the aforementioned sites. Utilizing the background information and theories presented in Chapters 2 and 3, I discuss the differences and similarities between Roman and British ethnicity as expressed through the medium of meat-eating practices.

It should be noted that the comparative approach I use in the case study for this thesis has potential sources of bias. For instance, the communities occupying Roman Britain were remarkably complex and heterogeneous. In this thesis, however, I group all the Roman soldiers and indigenous British civilians into two homogenous groups: Roman military and native British. While a problematic approach, I believe this sort of basic dichotomy is useful as a heuristic device to begin to interpret identity in the past. Additionally, this thesis is an exercise in examining group identity in the archaeological record, and, hence, I do not discuss the economic or nutritional roles of food for both the Roman military and native British. These are both interesting areas of study and I would enjoy examining them in future research, but, as I indicated, they are outside the aims and emphases of this thesis.

Compared to the breadth of scholarship on Roman Britain, there has been relatively little written on the application of zooarchaeology to the understanding of Roman military and native British identity in Roman Britain. Some scholars have discussed the identity of the Roman military in Britain (Gardner 2007; James 1984 & 2001), while others have analyzed faunal remains from Roman and/or indigenous British sites (Alcock 2001; Cool 2006; King 1984 and 1999b; Davies 1971; Dobney 2001; Brothwell and Brothwell 1998; Hawkes 1999; Maltby 1985; Renfrew 1985; Sykes 2005; Stallibrass 1999; Grant 1989). Comparatively little has been published, however, that utilizes faunal remains as a means with which to interpret and compare ethnic identity in the archaeological record. Consequently, my thesis contributes to the overall
body of scholarship on Roman Britain, and the anthropology and archaeology of identity and ethnicity.
CHAPTER 2
LITERATURE REVIEW

Introduction

The purpose of this chapter is to outline and discuss the pertinent literature associated with the topics of food, identity, and ethnicity in Roman Britain. I begin by providing an outline of the significance of my thesis, along with a historical overview of the Iron Age and the period of Roman occupation in Britain. In the subsequent sections, I discuss the anthropology and archaeology of identity, ethnicity, and food. Finally, I end this chapter with reference to selected topics within the broader subjects of Roman military and native British identity.

Significance

While the end of Roman Britain is a period documented in both primary sources (Bede; Gildas; Ammianus Marcellinus; Nennius) and contemporary historical and archaeological literature (Jones 1996; Legg 1983; Salway 1993, 2001; Starr 1982; Todd 1999), there has been comparatively little research centered on food practices as a representation of Roman versus native British identity. In fact, the potential of food as a medium for the investigation of identity has only begun to be realized in recent decades. For example, Gillian Hawkes (1999) utilized “creolization theory” to establish a unique framework for the study of faunal remains from Roman sites. Creolization, also referred to as hybridization, is the process of intermixing and cultural change that produces a “Creole” (or hybrid) society; a society where
aspects of both native and foreign (in this case Roman) cultures blend together (Hawkes 1999:90). This is a markedly different perspective from acculturation or Romanization, which entails the complete absorption of one culture by another (Hawkes 1999:90-91).

Hawkes (1999:89-95) contends that food practices represented by faunal remains on archaeological sites are a useful way to interpret the past. Specifically, she suggests that the use of material culture in the construction of identity in Roman Britain can be approached through foodways (Hawkes 1999:90). That is to say, “food, and in particular the archaeological remains of food, convey important messages about people in the past,” and, thus, studying foodways and faunal remains can be both a fruitful and promising endeavor (Hawkes 1999:89-95). While Hawkes provides a useful and interesting framework for interpreting faunal remains from archaeological sites with her “creolization theory,” her article is largely theoretical and not grounded in explicit archaeological data.

Sue Stallibrass (1999) provides an interesting case study on cattle, status, and soldiers in northern Roman Britain. Specifically, Stallibrass (1999:64) examines cattle remains at military sites in northern England in an attempt to not only differentiate between Romans and civilians, but also to try to eliminate the archaeological habit of labeling and generalizing sites. She writes, “The premise underlying this study is that the northern part of Roman Britain contained a variety of people and landscapes and that we should move away from stereotyping sites” (Stallibrass 1999:71). She concludes that there is no “one-to-one” ratio for the interpretation of Roman versus British identity from faunal assemblages (Stallibrass 1999:70-71). She concedes, however, that her study is only representative of the northern regions of Roman Britain, and if suitable collections can be recovered, similar analysis
should be carried out in other areas and locales such as in Wales or southern England (Stallibrass 1999:71).

One of the most comprehensive and useful works that pairs food customs and Roman identity is Anthony Gardner’s *An Archaeology of Identity: Soldiers and Society in Late Roman Britain* (2007). Gardner examines faunal remains, along with numismatic, ceramic, and architectural data to understand the fate of Roman soldiers in Britain following the fall of the Empire. Drawing from the structuration theory of Giddens and the practice theory of Bourdieu (see my discussion of the anthropology/sociology of identity below), he begins by shaping an approach focused on the central role of practice in the creation and expression of identity (Gardner 2007:35-50). Adding a distinct hermeneutic element to Giddens’s theory of structuration, Gardner focuses his research on the material, temporal, spatial, and social dimensions of fourth-century military life in Britain.

Gardner primarily focuses on coin deposits and architectural patterning to comment on the fate of the Roman soldiers in Britain, and, thus, he only uses faunal assemblages as a small portion of his overall analysis. Gardner also utilizes data from a variety of sites, including Caernarfon (*Segontium*). As a result, his work, while wide-ranging in terms of locations and material culture covered, is not particularly thorough concerning any one site or assemblage. My thesis, therefore, provides a useful complement to Gardner’s work because it is specifically focused on the faunal data from four sites, and thus it has clear, poignant conclusions that are not only specific and directed, but also broadly applicable. More importantly, my thesis, paired with Gardner’s book, helps to fill a noticeable void in the overall scholarship on Roman Britain and the identity of the Roman military and indigenous populations of Britain in the first few centuries AD.
**Historical Background – Britain before the Roman Conquest**

The history of Britain before the Roman conquest is rich, varied, and far too extensive to cover satisfactorily in my thesis. As a result, I will focus solely on the period known as the “Iron Age” (c. 700 BC-AD 50) in Britain prior to Roman contact and conquest (James and Rigby 1997:8). The Iron Age was a unique and pivotal period in the history of Britain, and understanding the period is important because it provides the foundation upon which the period of Roman conquest and occupation in Britain was built (James and Rigby 1997:2-15).

The Iron Age in Britain is both a prehistoric and protohistoric period (James and Rigby 1994:4-15). In one sense, it is largely prehistoric because there are no written, historical sources from Britain providing information on the figures, events, or cultures of the British Iron Age (Haselgrove 1999:113-114). In another sense, it is protohistoric because there are written sources from other areas of Europe that at least refer to the events, figures, and/or cultures of pre-Roman contact Britain (Jones and Rigby 1997:4-7). For example, in his famous *The Conquest of Gaul*, Julius Caesar made a number of references to Britain and its inhabitants (Julius Caesar, Long, trans., 2005, Bk. 2, Bk. 3 Ch.2, Bk. 4 Ch.2, Bk. 5 Ch.1, Bk. 6 Ch.2, Bk. 7 Ch.4).

I will discuss three particular themes or trends that characterize Iron Age Britain. These themes are the development of iron metallurgy, the rise of regional elites, and the renewed contact with Europe. First, by 500 BC, iron had largely replaced bronze as the metal used to create essential weapons and tools not only in Britain, but also throughout continental Europe (James and Rigby 1997:37). Britain was literally in a unique position for the transition to the Iron Age because workable deposits of iron ore were a hallmark of the
British landscape (James and Rigby 1997:37). Thus, since iron was widely available and could have been locally produced, it supplanted bronze as the new metal in Britain (Bradley 2007:232).

Second, during the Iron Age, various regional elites rose to power throughout Britain, and as a result, the British landscape became increasingly regionalized with each region ruled by one or more elites (Bradley 2007:270). Various lines of evidence support this inference. For example, Iron Age burial practices in Britain became increasingly focused on the individual (Bradley 2007:270). Additionally, large defensive structures known as hill-forts began to appear throughout the British landscape (James and Rigby 1997:37). In some areas of Britain, such as the south, large numbers of these circular, hill-top defensive structures were built beginning in the sixth and fifth centuries BC (Cunliffe 1998:351). After approximately 400 BC, however, many of these structures appear to have been abandoned, with only a few large, regional hill-forts continuing in use and rising to positions of dominance (Cunliffe 1998:351). Cunliffe (1998:351) indicates that the majority of these “developed hill-forts” continued in occupation into the first century BC.

Lastly, renewed contact with Europe characterized the Iron Age in Britain. During the transition from bronze to iron metallurgy and the subsequent regionalization of the land by elites, the British Isles went into a period of isolation (Bradley 2007:261). Between the fourth and second centuries BC, however, the inhabitants of Britain renewed their trade relationships with merchants in Europe and the Mediterranean and began to, once again, import and export objects such as metalwork and drinking vessels (Bradley 2007:261-267). In many ways, these trade relationships that developed during the Iron Age in Britain laid the foundation for the future conquest and occupation of Britain by the Romans (Renfrew 1985:6).
Historical Background – Roman Britain

The beginning of the relationship between Rome and Britain is commonly attributed to the landing of Julius Caesar in 55 BC (Salway 1993:23-26). This is slightly misleading because, as I indicated above, Mediterranean merchants had established Roman influence by sailing across the Channel to trade with the indigenous populations of Britain in the decades before 55 BC (Renfrew 1985:6). The undisputed beginning of the Roman occupation of Britain, however, is marked by the Claudian invasion of AD 43 (Renfrew 1985:6). The Claudian invasion is known as such because it was ordered by and executed under the rule of the Emperor Claudius (10 BC-AD 54), and it refers to the landing of four legions of Roman troops in southeast Britain (Renfrew 1985:6).

Following their landing in Britain, Roman troops spread northwards and westwards, areas such as Wales were subdued in AD 78, and a northern frontier line between the Forth and the Clyde was established in AD 81 (Renfrew 1985:6). The progress of Roman invasion and occupation in Britain was not always steady, however. In the winter of AD 60/61, Queen Boudicca, widow of King Pratsutagus of the Iceni, led a notorious revolt against Roman forces, and, in doing so, burned Colchester (Camolodunum), and captured London (Londinium) and St. Albans (Verulamium) before the rebellion was extinguished (Salway 1993:83-89).

In AD 117, the northern frontier (modern-day southwest Scotland) was also plagued by violence and uprisings that resulted in heavy Roman casualties (Salway 1993:132-142). The northern frontier was a constant problem for Romans in Britain, and as a result, the Emperor Hadrian (AD 76-138) ordered an artificial line of defense to be built, which became known as Hadrian’s Wall (see Map of Roman Britain in Chapter 1). Work on the wall began
in AD 122 and was finished nearly a decade later (Renfrew 1985:6). The effectiveness of Hadrian’s Wall was varied, and, as a result, when Antoninus Pius (AD 86-161) became emperor in AD 138, a decision was taken to construct a new military frontier to the north along the Forth-Clyde line, which became known as the Antonine Wall (Renfrew 1985:6).

In AD 192, the Emperor Commodus died, and numerous men, including the Governor of Britain, Clodius Albinus, contended for the newly vacated throne (Salway 1993:167-172). In an effort to take the throne, Clodius Albinus gathered an army from the Roman garrisons in Britain, crossed the Channel and moved across Gaul to Lyon where he met and was defeated by Septimus Severus (Renfrew 1985:7). Not only did this decision leave Britain unstable and vulnerable, but it also began a trend of poor decisions by greedy leaders that would eventually lead to the downfall of Britain (Salway 1993:170).

In late AD 193, Septimus Severus (AD 145-211) became emperor of the Roman Empire, and Britain quickly became a focus of his emperorship. One of his first major decisions as emperor was to send a series of governors to Britain to re-establish law and order, particularly in the north (Renfrew 1985:7). Severus even traveled to Britain himself, with his two sons and considerable reinforcements of troops, but three-plus years of military campaigns proved largely unsuccessful, and Severus eventually died in York in AD 211 (Renfrew 1985:7). He was succeeded by his son Caracalla (AD 188-217), who, through peace treaties in the north, brought on a period of peace and prosperity in Roman Britain (Renfrew 1985:7).

While there are no definitive dates for the fall of Roman Britain, contemporary scholars generally ascribe it to circa AD 350-410 (Salway 1993:567). The date of AD 350 is approximate because it is impossible to isolate a single year as indicative of the beginning of
the decline of Roman Britain. Scholars such as Salway (1993 and 2001) and Jones (1996) reference the barbarian invasions of the fourth century as the event marking the beginning of the fall. In 367 AD, these invasions culminated in the coordinated and pre-mediated attacks by groups of Saxons, Picts, and Scotii, among others, known as the Barbarian Conspiracy. Jones (1996:180) characterizes the conspiracy as a turning point in the fall of Roman Britain, and this seems to be an argument supported by the historical literary evidence (Ammianus Marcellinus, Hamilton, trans., 1986, Bk. 27, Ch. 8; Nennius, Morris, trans., 1980, Bk. 1).

The date of 410 AD for the end of the fall of Roman Britain is generally accepted. Following the Barbarian Conspiracy of 367 AD, Theodosius, the leading Roman military official in Britain, stabilized and reestablished Britain as a functioning Roman colony with a series of civil and military reforms (Jones 1996:245-246). In 383 AD, however, rebellion materialized in Britain as the usurper Magnus Maximus took portions of the British garrison to continental Europe to vie for the emperorship of Rome (Jones 1996:245; Salway 1993:568). From 383 AD onward, Britain ceased to be a top priority for the Roman Empire (Jones 1996:246). In December AD 406, barbarians crossed the frozen Rhine and invaded Gaul, and in AD 410, the Goths, led by Alaric, sacked the city of Rome (Jones 1996:246-252; Salway 1993:332). These two events, along with the revolt of Britain from the rule of Emperor Constantine III in AD 409, effectively ended Roman rule in Britain (Salway 1993:330-332). The historical literary evidence, again, seems to support this argument (Bede, Colgrave, trans., 1999, Bk. 1, Chs. 11-12; Nennius, Morris, trans., 1980, Bk. 1).
**The Anthropology and Archaeology of Identity**

**Anthropology of Identity**

Many of the seminal examinations of identity are actually found under the umbrella of sociology. For example, in *The Rules of the Sociological Method* (1982 [1895]), Emile Durkheim contributes two important concepts to the anthropology of identity: social solidarity and social facts. Social solidarity is the level of cohesion of a particular society as a result of communal interactions and shared experiences by the individuals within that society (Durkheim 1982:50-51 [1895]). Social solidarity is primarily the result of a force arising from participation in a shared system of beliefs, values, principles, and standards (Durkheim 1982:51 [1895]). This shared system, as Durkheim (1982:59 [1895]) contends, controls and molds individual behavior within a society.

Durkheim (1982:51-59 [1895]) proposes that the appropriate units of analysis for social solidarity are social facts. He defines social facts as “any way of acting, whether fixed or not, capable of exerting over the individual an external constraint” (Durkhiem 1982:59 [1895]). In other words, social facts are the social and behavioral rules and principles that an individual learns and observes as a member of a society. Social facts, according to Durkheim (1982:53 [1895]), are coercive, and, while recognized by individuals, they exist largely outside of the individual. Durkheim (1982:53-54 [1895]) argues that individuals observe social facts because, if they do not, they risk shame and rejection by the society.

In *Outline of a Theory of Practice* (1977), Pierre Bourdieu enhances the notions of social solidarity and social facts with his practice theory and *habitus*. While difficult to succinctly define, *habitus* encompasses the structuring principles that allow individuals to
reproduce the conditions of their existence (Bourdieu 1977:78). It refers to the common daily practices, customs, and beliefs of an individual as a member of a social group that form the basic assumptions about the nature of social life and the world (Bourdieu 1977:78-79).

Bourdieu (1977:78-79) emphasizes the unconscious, latent aspect of *habitus*. The elements of *habitus* are so basic to the existence of individuals that they, for the most part, cannot be consciously recognized (Bourdieu 1977:79-80). Bourdieu (1977:79) suggests that due to the unconscious nature of *habitus*, the actions of individuals are more meaningful than individuals are able to comprehend. This idea is a direct extension of Durkheim’s (1982:53) characterization of social facts as existing primarily outside of the individual. Bourdieu (1977:81) also discusses the physical aspect of *habitus*. He contends that it is expressed in the bodies of individuals and the ways in which these bodies are negotiated in social interaction.

Ultimately, according to Bourdieu (1977:79-81), *habitus* dictates and reinforces practice. Bourdieu (1977:79-81) defines *practice* as, more or less, social action. The implication of *habitus* and practice is that through our unconscious actions and dispositions, we create our social identity (Bourdieu 1977:79). In other words, according to Bourdieu (1977:82), *habitus*, and thereby practice, produce the individual and that individual’s understanding of his/her world as a member of a social group.

In *The Constitution of Society* (1986), Anthony Giddens extends Bourdieu’s theory of practice. Specifically, he proposes the idea of structuration, which is a theory that combines the notions of agency, practice, and structure in an attempt to account for social change (Giddens 1986:2). According to Giddens (1986:5-14), agency refers to human action.
irrespective of intent or motivation. He contends that while motivation is important, much of our daily conduct as agents is carried out without direct motivation (Giddens 1986:6).

Central to structuration theory is the recursive relationship between agency and structure. Through practice (specifically social practice), agents continually recreate and negotiate social systems, of which structure is a part (Giddens 1986:25). Giddens (1986:25) defines structure as “recursively organized sets of rules and resources” within time and space. Social systems are continually reproduced relations between agents (individuals or groups) across time and space, which result in organized and regular social practices (Giddens 1986:25). Agents do not recreate social structures haphazardly, however; they are bound by pre-existing social conditions or norms (Giddens 1986:24-25). The conditions governing the transmutation and continual reproduction of social systems and structures are known as structuration (Giddens 1986:25).

In cultural anthropology, interest in identity largely grew out of the work of Margaret Mead and Ruth Benedict (Barnard and Spencer 1996:292). Founders of the culture and personality school of thought in the 1930s, Mead and Benedict were interested in the notions of selfhood and personhood. For example, in Coming of Age in Samoa (1928), Mead examines the characteristics and qualities of what it means to be an adolescent female on the island of Samoa. Overall, the interest of both Mead and Benedict in selfhood – the quality that constitutes a person’s individuality – is a direct and pivotal antecedent to current anthropological interests in identity (Barnard and Spencer 1996:292).

In recent decades, due to the rise of the postmodern movement in the social sciences, identity has become an increasingly popular term in anthropology. Despite its prevalence, a succinct definition of identity is nonexistent. In their Encyclopedia of Social and Cultural
Anthropology (1996), Alan Barnard and Jonathan Spencer argue that this is due to the fact that anthropological uses of “identity” are ambiguous. Specifically, anthropologists often do not distinguish between individual and group identity when using the term, even though the meanings associated with the two phrases are different (Barnard and Spencer 1996:292). For example, the term “identity” may describe “properties of uniqueness and individuality” (hence, self-identity), the essential characteristics distinguishing one individual from another (Barnard and Spencer 1996:292). In another instance, the term may refer to qualities and properties of sameness, in the sense that individuals may associate themselves, or be associated by others, with particular groups or categories (hence, group identity) based on some significant common feature (Barnard and Spencer 1996:292).

Archaeology of Identity

Building directly on the anthropological and sociological theories of identity, archaeologists have also focused on understanding identity in the past (Diaz-Andreu et al. 2005; Dietler 2006 and 2010; Giles 2008; Fowler 2005; Gardner 2007; Graves-Brown et al. 1996; Jones 1997; Shennan 1994; see “Archaeology of Ethnicity” section for discussion of Shennan). One of the first thorough examinations of the archaeology of identity was in Cultural Identity and Archaeology: The Construction of European Communities (1996), edited by Paul Graves-Brown, Siân Jones, and CS. Gamble. In the introduction to the book, Jones and Brown (1996:7-8) contend that identity is multi-dimensional and dynamic. They assert that the expression of identity is both transient and repeated, and, therefore, in different contexts and at different scales, it is likely to result in multiple, overlapping distributions of material culture assemblages within the archaeological record (Jones and Graves-Brown 1996:7).
In *The Archaeology of Identity* (2005), Margarita Diaz-Andreu, Sam Lucy, Stasa Babic, and David N. Edwards examine aspects of identity such as gender, age, status, ethnicity, and religion. In the introduction, Diaz-Andreu and Lucy (2005:1) enhance Durkheim’s notions of social solidarity and social facts by contending identity is inseparably linked to a sense of belonging. In other words, through identity, we perceive ourselves – and others see us as well – as belonging to a certain group or groups and not others (Diaz-Andreu and Lucy 2005:1-2). Identity is established and renegotiated through a continual process of active engagement and interaction with other individuals or groups (Diaz-Andreu and Lucy 2005:2-3). We acquire and maintain our identities through choice and agency, and through agency, we define ourselves as individuals. We choose certain groups and not others, although, as Bourdieu (1977:79-80) and Giddens (1982:24-25) suggest, our choices are influenced by structures beyond our control. The active role of the individual results in the creation and maintenance of fluid, dynamic, and continually changing identities (Diaz-Andreu and Lucy 2005:2).

Diaz-Andreu and Lucy (2005:6-12) propose that archaeologists should interpret identity in the past by examining the way in which individuals and groups use material culture to express gender, ethnicity, age, status, and/or religion. Utilizing Bourdieu’s practice theory, the authors argue that individuals and groups establish and maintain identity as part of a social process through which the material conditions of their lives are reproduced (Diaz-Andreu and Lucy 2005:5-6). Therefore, by examining material culture such as dress or food customs and their associated contexts, archaeologists are able to interpret identity in the past (Diaz-Andreu and Lucy 2005:9).
Peter Wells provides an elegant application of the process of studying identity in his book *Beyond Celts, Germans, and Scythians* (2001). Wells (2001:29) examines identity in Iron Age Europe, and in doing so, demonstrates the reflexive nature between material culture and identity. He utilizes material culture, such as grave goods, drinking vessels, weapons, and jewelry, to express the way in which the people of Iron Age Europe constructed and negotiated both individual and group identities (Wells 2001:54-73). Wells (2001:129) believes that despite being a complex and intricate period of European prehistory, much of the archaeological patterning of the Iron Age can be understood in terms of identity.

In a later work, Wells (2008) adds a distinct visual aspect to the archaeology of identity. He focuses on the idea of visuality, which he defines as the visual quality of manufactured objects and created landscapes (Wells 2008:10). Similar to Bourdieu’s (1977:81) contention that *habitus* is physically expressed through the body of the individual, Wells (2008:56-63) suggests that in prehistoric Europe, individuals and groups produced and articulated identity through the visual aspect of material culture and the landscape (Wells 2008:56-63). Individuals, for example, wore belt plates or brooches to visually signify an aspect of identity such as status or gender, and groups used pottery to represent communal interactions such as feasting (Wells 2008:64-66, 86-89). The implication of visuality for archaeologists, according to Wells (2008:143), is that by understanding the complexities associated with the visual aspects of material culture, we gain a new way to interpret and consider objects in the past.

In *The Archaeology of Personhood* (2005), Chris Fowler adds a specific focus on the individual to the archaeology of identity. Fowler (2005:4-5) argues that by understanding personhood and individual identity, archaeologists are better equipped to understand past
societies. He defines personhood as “the condition or state of being a person, as it is understood in any specific context” (Fowler 2005:6). Fowler (2005:156) views personhood as the condition of being as defined by a community or society. He demonstrates that personhood and individual identity are dynamic and mutable, and transform throughout an individual’s life through the small interactions with others such as ritual activities, sharing, eating, and cooking (Fowler 2005:155). Fowler’s ideas on individual identity represent an excellent example of the application of Mead’s (1928) anthropological discussion of selfhood among adolescent girls in Samoa to contemporary archaeology.

Lastly, in the recent work *Archaeologies of Colonialism* (2010), Michael Dietler examines the role of food in shaping both native and foreign identities in zones of colonial interaction. Using the particular case study of ancient Mediterranean France, Dietler (2010:184-256) contends that food is intimately connected to identity and serves as a symbolic medium through which identities are formed and expressed. He discusses the concept of consumption, and, more specifically, the notion that food and drink serve not only a biological and nutritional purpose when consumed, but they also function as “culturally patterned techniques of bodily comportment…that are expressive of identity and difference in a fundamental way” (Dietler 2010:185).

Dietler (2010:185) poses two important questions in discussing the role of food in shaping colonial identities. First, he writes, “…given the close links between food and identity, why do people sometimes change their food habits in situations of colonial contact - in particular, why do they adopt alien foods and food practices?” (Dietler 2010:185). Dietler (2010:187) believes that the adoption of foreign foods by cultures “has much more to do with relational politics” than it does with “ethnic” consciousness. In other words, social and
political processes and motivations fuel the adoption of alien foods, and identity and ethnicity are factors that gain significance later (Dietler 2010:187-188). For example, upper classes may adopt exotic foods to distinguish themselves, but this process must continually shift and change as these foods become incorporated into the lower classes, which reduces their “diacritical symbolic value” (Dietler 2010:188).

The second question Dietler (2010:185) poses is: when alien foods are adopted into cultures, “what consequences does this entail, and what implications does it have for understanding colonialism?” He contends that alien foods are often used by colonial powers as a vector of control, but consumption of these foods carries unintended consequences for both native and external cultures (Dietler 2010:189). Despite the beliefs and desires of many agents of colonialism, when foods cross cultural frontiers, they rarely arrive with the same meanings and practices associated with them in their context of origin (Dietler 2010:190). In fact, “imported foods or food practices may even become salient symbolic markers of the boundaries of identity between consumers and the society of origin because of subtle but symbolically important perceived differences in preparation or styles or contexts of consumption” (Dietler 2010:190). To bolster this point, Dietler (2010:190) uses the examples of the English adoption of tea drinking from the Chinese, the Italian adoption of coffee from Muslim North Africa, and the Etruscan and Roman adaptations of the Greek symposium.
The Anthropology and Archaeology of Ethnicity

Anthropology of Ethnicity

As a distinct aspect of identity, ethnicity suffers many of the same problems as its parent term; namely, there is currently no single, universally accepted definition of “ethnicity” (Barnard and Spencer 1996:190). In fact, agreeing upon a definition for ethnicity has been a perplexing problem in anthropology for decades. One main problem is that the definition of ethnicity in societies is an ongoing and dynamic process that involves the negotiation, maintenance, and even transformation of traditions and identities through time (Crabtree 1990:177). Ethnic diversity is a hallmark of complex societies, both past and present, and thus, the definition and identification of ethnicity in the archaeological record is often an ambiguous and frustrating enterprise (Crabtree 1990:177).

Past attempts to define ethnicity have typically fallen into one of two categories: objectivist and subjectivist (Jones 1997:56-57). Jones (1997:56-57) contends that this distinction is primarily the result of “the classic anthropological debate concerning the prioritization of etic or emic perspectives.” Objectivists tend to formulate an etic or external perspective whereby ethnic groups are regarded as social and cultural entities with distinct boundaries. Conversely, subjectivists adhere to an emic or internal perspective whereby ethnic groups are viewed as culturally constructed categorizations that define and dictate social interaction and behavior. They generally define ethnic groups on the basis of the subjective self-categorizations of the people being studied (Jones 1997:57).

The main problem with this simplistic distinction between objective and subjective definitions of ethnicity is that it pre-supposes an unbiased objective viewpoint held by the analyst.
versus a subjective culturally dictated perception of the people or group(s) being studied. As the
postmodern critique in anthropology and archaeology has revealed, the ideal of objectivity is
impossible to achieve and, frankly, does not exist (Abu-Lughod 2008:552-553, 560; Geertz
1973:10; Rosaldo 2008:537-538). In fact, it is now accepted in many theoretical frameworks that
the anthropologist and the people being studied are equally subjective (Jones 1997:57).

In the past few decades, anthropological considerations of ethnicity have
progressively and markedly increased. For example, in the seminal work, Ethnic Groups and
Boundaries (1969), Frederik Barth discusses the concepts of ethnicity and ethnic groups. To
begin, Barth (1969:10-11) establishes four characteristics of ethnic groups: 1) they are “largely
biologically self-perpetuating,” 2) they share “fundamental cultural values, realized in overt
unity in cultural forms,” 3) they comprise “a field of communication and interaction,” and 4)
they possess a membership that is identified both internally and externally as “constituting a
category distinguishable from other categories of the same order.” For Barth (1969:10-11), these
are the four universal characteristics or traits that define all ethnic groups.

Barth (1969:12) believes that ethnic groups are distinguished from one another in two
areas: culture and boundaries. Using the phrase “culture-bearing units,” he contends that
various ethnic groups are partially defined by cultural markers including dress, food,
language, morality, and social norms (Barth 1969:10-11). Barth (1969:14) refers to dress,
language, and food as diacritical markers, and morality and social norms as value
orientations.

Barth (1969:14-15) also states that ethnic groups are distinguished and defined by
boundaries. These boundaries exist despite a free and continuous flow of people and
information across them. More importantly, Barth (1969:14-15) argues that ethnic groups
cannot exist in isolation but only in contrast to other ethnic groups. Thus, boundaries do not confine ethnic groups; rather, they distinguish between two or more of them (Barth 1969:15).

In his treatment of ethnicity, Barth (1969:15-16) places primary emphasis on these “ethnic boundaries” at the expense of, in my opinion, the cultural characteristics that define ethnicity. For example, Barth (1969:15) writes, “The critical focus of this investigation from this point of view becomes the ethnic boundary that defines the group, not the cultural stuff that it encloses.” To a certain extent, I agree with the idea that it is the boundaries that define and separate ethnic groups, not the “stuff” they enclose. While ethnic boundaries are important, however, I believe that the cultural materials and characteristics enclosed by those boundaries are equally vital to understanding ethnicity.

Archaeology of Ethnicity
Since its inception, archaeology, as a discipline, has focused on the identification of “peoples” in the past. In the late 19th century, “peoples” began to be identified as “cultures,” and archaeologists such as Gustaf Kossina developed the idea that archaeology was capable of isolating “cultural areas,” which could be identified with specific ethnic units and traced back into prehistory (Lucy 2005:87). Kossina organized his archaeological data into “mosaics of cultures” (Trigger 2006:236-240). Assuming material culture continuity corresponded with ethnic continuity, he assumed that “sharply delineated archaeological culture areas coincide with clearly recognizable peoples or tribes” (Jones 1997:16). Kossina’s approach aided in establishing what Wolf (1982:6) refers to as the “billiard ball” school of anthropology: the notion that the past was populated by distinct bounded entities, characterized by language and culture, whose histories could be traced through the centuries, spinning off each other in a global pool hall.
The “billiard ball” concept of history was cemented and expanded by V. Gordon Childe. Childe identified and defined past cultures by the distribution and organization of material culture “with the geographical spread of characteristic artifacts being seen as marking the territory of a particular group” (Lucy 2005:86). More specifically, he dedicated the major part of his research to delineating past cultures or culture groups based on reoccurring sets of associated artifacts or traits (Trigger 2006:242). Childe (1929:v-vi) famously defined archaeological cultures as “certain types of remains – pots, implements, ornaments, burial rites, house forms – constantly recurring together.” For example, Childe (1929:213) described the “Beaker Folk” by writing, “Beaker folk can be recognized not only by their economic activities, but also by the distinctive armament, ornaments and above all pottery, associated together everywhere in their graves.” While Childe was describing the defining traits of past cultures or peoples, in reality, he was developing an early and elementary definition of ethnicity based on the complex material expression of a “people” or a “culture” (Lucy 2005:88).

From the 1950s through to the post-modern movement of the 1980s, the study of ethnicity largely fell out of favor in both European and American archaeology. Due to the rise of positivist and scientific approaches to the past, archaeologists became increasingly interested in cultural adaptations to the environment, settlement patterns, socio-economic patterns, and cultural evolution, all salient markers of the New Archaeology and processual movements. As a result, questions regarding ethnicity in past cultures fell by the wayside (Lucy 2005:91). With the rise of post-modernism in the 1980s, however, archaeologists began to reconsider and readdress the topic of ethnicity, albeit now through a markedly different lens.

Recent decades have provided numerous examples of the use of ethnicity in archaeological research. For instance, in the introduction to the edited volume *Archaeological
Approaches to Cultural Identity (1994:16), Stephen Shennan identifies ethnicity as a “self-conscious identification with a particular social group at least partly based on specific locality or origin.” He suggests, however, that ethnicity is not defined in the archaeological record simply by an arbitrary collection of associated traits within material culture (Shennan 1994:16). Conversely, ethnicity is contextual, and it is dependent upon historical situations and circumstances (Shennan 1994:16-17).

Colin Renfrew (1996) adds to Shennan’s work by contending that ethnicity is based upon a number of factors working together. An extension of Barth’s (1969:10-15) discussion of ethnic boundaries, these factors include shared territory or land, common descent, shared language, community of customs, community of beliefs, and/or shared names or ethnonyms, all used to express the identity of the group (Renfrew 1996:130). Echoing Shennan, Renfrew (1996:130) writes, “…ethnicity is what the people in question believe it to be.” That is to say, ethnicity is based upon a shared self-awareness or self-identity (Renfrew 1996:130-131).

Siân Jones expands the study of ethnicity in the archaeological record in the seminal work, The Archaeology of Ethnicity (1997). Jones (1997:1-14) distinguishes between ethnic identity, ethnic groups, and ethnicity. Ethnic identity, according to Jones (1997:84-85), is “an aspect of a person’s self-conceptualization which results from identification with a broader group in opposition to others on the basis of perceived cultural differentiation and/or common descent.” An ethnic group is a culturally ascribed identity group, characterized by the expression of real or assumed culture and common descent (Jones 1997:84). Ethnicity, therefore, refers to the social and psychological aspects associated with ethnic identity and ethnic groups (Jones 1997:84). Drawing from Barth (1969:10-15), Jones (1997:84) proposes
that ethnicity is most aptly understood in terms of “us versus them” or “we versus they,” where ethnic groups are largely defined in opposition to other groups.

Jones argues that defining ethnic identity on the basis of ethnic groups in the archaeological record is difficult (Jones 1997:106). Ethnic groups, according to Jones (1997:106-107), are both dynamic and mutable. Therefore, it is problematic when archaeologists attempt to create homogenized, bounded, and static entities that directly correlate with past ethnic groups (Jones 1997:106). Nevertheless, Jones (1997:1-2) suggests that ethnicity is a central and fundamental concept in archaeology and, thus, archaeologists should continue to interpret ethnicity within the material culture remains of the past.

The Anthropology and Archaeology of Food

The study of food has a long history in anthropology, dating back to the nineteenth century (e.g. Morgan 1985 [1877]). Typically, studies of food in anthropology have fallen into one of three distinct areas: food insecurity, food and ritual, and food and identity (Brathwaite 1971; Caplan 1997; Counihan 1999; Counihan and Van Esterik 1997; Dietler 2010; Garnsey 1999; Goody 1982; Mintz and Du Bois 2002; Wilson 2005). Anthropologists have argued that food is essential to human existence in a number of ways (Mintz and Du Bois 2002:99). Not only is food vital for nutrition and survival, but it is also a vehicle for expressing meaning (Caplan 1997:1-3; Dietler 2010:184; Mintz and Du Bois 2002:109; Wilson 2005:9). In fact, numerous anthropologists have characterized food as an organized system or language that, through its components, conveys meaning and contributes to the organization of the natural or social world (Counihan 1999:19; Caplan 1997:1-3; Dietler 2010:184). For instance,
Dietler (2010:184) characterizes food as a “highly charged symbolic medium” that is closely linked to the production and articulation of identity.

Anthropologists often cite food as integral to the production, expression, and negotiation of ethnic identity. As Barth (1969:10-16) indicates, ethnicity is born of perceived differences and works through contrast. Food, specifically ethnic food or cuisine, is often associated with a geographically and/or historically defined eating community (Mintz and Dubois 2002:109; Caplan 1997:13). Food serves to solidify ethnic group membership and to set groups apart (Mintz and Dubois 2002:109). As Wilson (2005:9-10) suggests, ethnic groups often define themselves through food by indicating what they eat versus what another group does not eat (Wilson 2005:9-10). In a way, the consumption and utilization of particular foods by ethnic groups represents an example of Durkheim’s discussion of the relationship between social solidarity and social facts. Specifically, members of ethnic groups consume certain types of foods to maintain solidarity and cohesion.

In “Zooarchaeology and Complex Societies” (1990), Pam J. Crabtree provides an excellent demonstration of the archaeology of food and ethnicity. While primarily focused on the economics of complex societies, Crabtree’s essay is, nonetheless, particularly important to my thesis because she discusses the interpretation of ethnicity from faunal remains. She contends that animal remains can be as distinctive a marker of ethnicity as any other type of material culture (Crabtree 1990:178). Foodways, according to Crabtree (1990:178), are resilient and conservative elements in human cultures, and, therefore, animal bone remains provide a useful vehicle for the identification of ethnic identity in the archaeological record.

Crabtree (1990:178) identifies two faunal variables central to the identification of ethnicity in the zooarchaeological record: the range and relative importance of species and
butchery patterns. She proposes that butchery patterns may be particularly useful markers of ethnicity because they often reflect culturally specific technologies and practices such as the use of a cleaver rather than a knife to remove meat (Crabtree 1990:178). She points out that changes in butchering patterns may be difficult to interpret in a primarily prehistoric situation where the move from a cleaver to an axe or a knife, for instance, might simply be seen as a technological innovation rather than a change in the ethnic affiliation of the butcher (Crabtree 1990:181). In situations with adequate documentation of changes in food technology, utilization, and consumption, such as the Roman occupation of Britain, the use of faunal remains to identify ethnicity becomes much more feasible (Crabtree 1990:180-181).

**Roman Military and Native British Identity in Britain**

In recent decades, there has been a distinct area of research focusing on the topics of Roman military identity and, to a far lesser extent, indigenous identity in areas of Roman imperialism or colonization (Dietler 2006 and 2010; Gardner 2007; Haynes 1999; Hines 1996; Holder 1982; James 1984, 2001, and 2002; MacMullen 1963 and 1984; Mattingly 2004; Millett 1990; Slofstra 1983; Southern 2004; Watson 1969; Woolf 1998). While the overall body of scholarship is varied, there are some noticeable and discrete strands of research.

**Roman Military as a Community**

One area of research examines the Roman military as a distinct community within Britain, along with other areas of expansion and colonization (Dietler 2010; Gardner 2007; Haynes
Haynes (1999:7) argues that while the character and ethos of the Roman military were primarily determined by its status as a fighting machine, in order to fully understand the army we must appreciate and consider it as a community. MacMullen (1984:440) supports this idea, although he proposes that the fighting and communal aspects of the army are related.

Reminiscent of Durkheim’s notion of social solidarity and the ideas of Wells (2008) on visuality, Haynes (1999:10) suggests that the Roman army expressed its communal identity in a variety of ways, including through the display of material culture. Roman soldiers, for instance, wore specific types of equipment, most notably the sword and sword-belt (Haynes 1999:10). As Haynes (1999:10) writes, “So long as a man wore both, he was identifiably a soldier; if deprived of those items, he was temporarily deprived of his status and rendered useless to his warrior community.” Gardner (2007) enhances this notion by adding that Roman soldiers also expressed group identity through architecture and even coin assemblages.

Both Haynes (1999) and MacMullen (1983) warn that it is a fallacy to view the Roman army as an isolated community. The Roman army, while a distinct military entity, was very much involved with local communities in Britain. Therefore, we should view the Roman army as a dynamic community dually capable of initiating and succumbing to social change (Haynes 1999:8). The Roman army was not isolated and, in fact, was affected by and influential towards the local native communities of Britain (MacMullen 1983:441).
Romanization

Romanization is an area of research that is focused on the relationship between native or indigenous identity and Roman military identity in Britain, and other areas of the Empire (Hill 2001; Hingley 1997; James 2001; MacMullen 1963; Millet 1990; Woolf 1998). This framework typically focuses on the nature of Roman imperialism throughout the Empire in terms of historical processes and material changes in native cultures (Millet 1990:1). While each specific aspect of Romanization is beyond the scope of this thesis, research on Romanization has typically focused on economy, religion, landscape, urbanization, agriculture, and/or warfare.

Millet (1990:2-3) contends that the process of Romanization began with the expansion of the city of Rome from a local center to a regional power within central Italy. Over the next few centuries, Rome came to dominate all of Italy, most of North Africa, the Aegean, and with Caesar’s conquest of Gaul in the first century BC, Gaul and other areas of Western Europe (Millet 1990:2-3). Britain came under Roman occupation in 44 BC, and also during the same period, Rome expanded into Eastern Europe and areas of Asia Minor (Millett 1990:2-3).

The effect of Roman imperialism in the Empire was slow but dramatic. With Roman expansion, cities were built where none existed before, newly conquered provinces were exploited for resources, taxes were enacted, and native cultures were dominated by the Roman colonial machine (Woolf 1998:2-3). Romanization was not a uniform process characterized by the same results across the Empire. In fact, as Mattingly (2004:6) demonstrates, the various provinces of the Roman Empire were strikingly diverse, and thus, we cannot expect the same effects on native cultures in any two locations. Woolf (1998:174-
181) echoes this sentiment by pointing out that different trade networks and levels of familiarity between the various provinces and Rome existed prior to Roman colonization. Thus, in some areas, the processes of Romanization and incorporation into the Empire were relatively smooth, while in other locations such as Britain, colonization was met with steadfast and consistent resistance (Woolf 1998:174-181).

It is also misleading to characterize Romanization as a one-way process of acculturation from Romans to natives (Mattingly 2004:6). While natives were surely influenced by Romans, Romans were also just as influenced by the natives in various provinces. As Jan Slofstra (1983:74-75) demonstrates, Romanization is a dynamic two-way integration process. Stated differently, Romanization is more aptly understood as a process of interaction between two cultures with information, ideas, traits, and materials passing between them (Slofstra 1983:74-77). Britain provides an excellent example of this point because as previously shown with the Roman military diet, Roman soldiers were utilizing both imported goods such as wine and olive oil and local products such as beef, beer, and emmer.

In the past decade or so, Richard Hingley (1997) has championed a theoretical framework focused on resistance and domination in Roman Britain, and other areas of the Empire, that has challenged past notions of Romanization. Hingley (1997:96) suggests that the ideas, practices, and cultural nuances of Roman Italy were not transferred wholesale to Britain and accepted by its inhabitants without modification. Rather, the transfer of culture from the European continent to Britain by the Romans was dictated by a pattern of domination and resistance (Hingley 1997:87-96).
Roman contact and conquest introduced an array of new ideas and material culture to the indigenous inhabitants of Britain (Hingley 1997:87). Control of these new ideas allowed Romans, at least in theory, to dominate and command the native British. As Hingley (1997:89) suggests, however, the British did not accept all of these new ideas flowing into Britain from the continent. That is to say, they resisted aspects of Roman contact and conquest. For instance, Hingley (1997:93-95) discusses the transition from the Iron Age roundhouse to the rectangular house during the period of Roman occupation. The classic Romanization framework (e.g. Millett 1990) explains this transition by purporting that “the elites of Britain saw the value of using a rectangular house and adopted the form as a symbol of their power and authority, thereby associating themselves with the dominant power of Rome” (Hingley 1997:93). According to Hingley (1997:94-95), however, this framework does not explain why roundhouses were being built well into the fourth century AD in certain areas of southern, western, and northern Britain. Ultimately, Hingley (1997:95) proposes that the continued construction of roundhouses represents a subtle form of resistance to the Roman conquest of Britain.

**Summary**

In this chapter, I discussed sociological, anthropological, and archaeological approaches to the broad topics of identity and ethnicity. In particular, I examined various theories that attempt to explain the production, expression, and negotiation of identity and ethnicity in the past and present. Throughout that discussion, I also referenced anthropological and archaeological ideas on the creation and articulation of ethnic identity through the symbolic
medium of food. It is important to comprehend the basic tenets of the approaches I highlighted in this chapter, as I will reference them throughout my thesis.
CHAPTER 3
IDENTITY IN ROMAN BRITAIN: THEORY AND METHODOLOGY

Introduction

The purpose of this chapter is twofold. First, I discuss the concepts of identity and ethnicity as they relate to the aims of my thesis. In the previous chapter, I referenced past and contemporary notions of identity and ethnicity, and in this chapter, I present the definitions of these terms that I use in my examination of the relationship between food and Roman military versus native British identity in Roman Britain. In addition, I provide an overview and discussion of the taphonomic processes that affect the way in which archaeologists interpret faunal assemblages.

Towards an Understanding of Identity and Ethnicity

Identity

When I use the term “identity,” I refer to the sense of “being” or “existence” (outside of biological existence) and its determining characteristics. In other words, I use the term “identity” to refer to the features and traits by which individuals or groups are recognized (Diaz-Andreu and Lucy 2005:1). These traits are, in effect, categories such as ethnicity, age, status, gender, religion, and nationality. These categories are further defined by their own traits and characteristics, but when considered together as whole, they determine identity, or this sense of being. The focus of my thesis is group identity as opposed to individual identity, and therefore, I
am working with the notion that “identity” refers to the commonalities associated with groups or categories – in this case, Roman soldiers and native British civilians (Barnard and Spencer 1996:292). Thus, I am concerned with the notion of “sameness,” and when I employ the term “identity,” I refer to the properties of sameness that characterize and help to define the groups labeled “Roman soldiers” and “native British.”

In a linguistic sense, I am creating a category or “type.” In the same way that some linguists (e.g. Romaine 1994) purport that words are cognitive categories composed of defining features and characteristics, I am developing a “Roman soldier category” and a “native British category,” which will be composed of defining characteristics based on eating practices. In theory, these categories or groups provide a source from which the members of each (Roman or British) derive a sense of knowing or belonging based on what Barnard and Spencer (1996:292) refer to as “evaluative or emotional characteristics.”

Ethnicity

I propose that ethnicity refers to the self-conscious identification or association with a particular social and/or cultural group based on shared sets of customs, characteristics, traditions, and practices (Shennan 1994:6). To borrow from Barth (1969:14) and Cohen (1979:386-387), I suggest that these customs and practices are aptly characterized as sets of “sociocultural diacritics” that “define a shared identity for members and nonmembers” of ethnic groups, “a series of nesting dichotomizations of inclusiveness and exclusiveness.” In other words, these diacritic markers establish criteria for membership in one group versus another, and they may include characteristics such as language, physical appearance, name, history, religion, and nationality.
For the purposes of my thesis, I attempt to understand Roman military and native British ethnic affiliation based on the diacritic marker of eating practices, and more specifically, meat-eating practices. In other words, I define ethnicity as the self-conscious identification with a particular social and/or cultural group based on shared sets of practices and characteristics (see above), and in my thesis, I am attempting to interpret the shared sets of eating practices (via faunal remains) that aid in the construction and expression of Roman military and native British ethnicity in the past.

The Hybridization of Ethnicity

The issue of hybridization is an interesting and important issue in anthropological and archaeological studies of identity and ethnicity. Furthermore, it is an issue and topic to which I pay particular attention in the examination of faunal data from the archaeological sites of Segontium, Portchester Castle, Wavendon Gate, and Dragonby in Chapter 4. I previously mentioned that one of the prevalent strands of research focused on Roman and native identity and ethnicity (in Britain, and other areas of the Empire) is known as Romanization (Hill 2001; James 2001; MacMullen 1963; Millett 1990; Woolf 1998). A central crux of the Romanization framework is that in a colonial setting, the transfer of cultural ideas, customs, and practices moves in a primarily one-way direction from Romans to the various native populations (Hawkes 1999:90-91).

A product of colonial (Brathwaite 1971; Ferguson 1992; Hawkes 1999; Joyner 1984) and post-colonial research (Bhabha 1993; Goldberg 2000; Loomba 1998; Spivak 1999) in anthropology and other disciplines, hybridization, also known as Creolization, is the process of intermixing and cultural change that occurs within zones of colonial interaction and results in a
hybrid culture and/or society. As Brathwaite (1971:11) writes, “It is not a product but a process incorporating aspects of both acculturation and interculturization, the former referring to the process of absorption of one culture by another; the latter to a more reciprocal activity, a process of intermixture and enrichment each to each.” Obviously, the concept of hybridization stands in stark contrast to the Romanization framework as it entails the creation of an identity or ethnicity composed of the characteristics of two (or more) cultures in a colonial setting (Hawkes 1999:89). To use an analogy, Romanization is similar to a one-way street where cultural influence and change flow from Romans to native populations, solely in one direction. Hybridization, conversely, is a two-way street with a roundabout or rotary, where cultural transformation flows in both directions and intermixes somewhere in the middle.

In the colonial zone of Roman Britain, I explore potential patterns indicating the hybridization of Roman military and native British ethnicities within the faunal data. That is to say, I search for the emergence of a shared Romano-British ethnicity based on the animal remains at the four archaeological sites in question. This hybrid or shared ethnicity, theoretically, contains the characteristics and aspects of both Roman military and native British ethnicities. In other words, it is an ethnic amalgam or fusion, “neither wholly Roman nor wholly native” (Hawkes 1999:93).

**The Challenges of Understanding Eating Practices in the Past**

**An Overview of Taphonomy**

The main sources of information about food and past eating patterns are animal bones, plant remains, human remains, and, if available, historical or written evidence (Brothwell and Brothwell 1998:193-204). It is the animal bones with which I am concerned. Unfortunately, there
is not necessarily a one-to-one ratio of finding animal bones archaeologically and interpreting eating practices in the past (see Figure 3.2). In fact, every class or type of artifact deposited in the archaeological record and subsequently uncovered and analyzed by archaeologists has, at one point or another, succumbed to any number of disturbances or environmental effects. Referred to as “formation processes” (or taphonomic processes) by Schiffer (1987:1-24), this refers to the notion that the condition or context in which archaeologists find artifacts is not necessarily the same as the condition in which they were deposited.

There are a number of factors that influence the condition in which archaeologists uncover artifacts (see Figure 3.1). Generally, these factors can be divided into two categories: cultural and environmental (Schiffer 1987:27-262). Cultural formation processes include reuse, recycling, secondary use, discard, abandonment, and ritual deposition, while environmental processes include disturbance, deterioration, decay, and erosion. The effect of these formation processes on artifacts and the archaeological is complex and varied. For example, certain types of artifacts will erode and deteriorate at a slower rate than others, which ultimately results in a bias in the archaeological record (Schiffer 1987:99-140).
Taphonomic history of a faunal assemblage. The decreasing size of the circles (top to bottom) represents the loss of information down the line.

**Figure 3.1**
Source: (Hambleton 1999:12)
There are a number of specific formation processes that affect animal bone assemblages in the archaeological record. In general, these forces can be divided into two broad categories: first-order changes and second-order changes. First-order changes occur from the time animal remains are discarded or buried until the time excavations begin (Reitz and Wing 1999:114). One such type of change is known as biotic disturbance, which refers to the idea that “biological organisms, both plants and animals, disturb faunal remains from the early stage in the formation of the deposit when refuse is first discarded, potentially continuing as long as the deposit is in the ground” (Reitz and Wing 1999:115). The effect of biotic disturbance is varied, but in general this type of first-order change causes damage to the animal remains and disturbs or alters their stratigraphic position (Reitz and Wing 1999:115-116).

Another type of first-order change, abiotic disturbance, is caused by environmental forces such as wind, rain, floods, earthquakes, and other phenomena (Reitz and Wing 1999:116). As a naturally produced material, bone is remarkable because it is strong and resilient, and capable of self-repair. As Schiffer writes (1987:183), “Once separated from an animal, however, the strengths of bone become its weaknesses; its diverse components [primarily protein and mineral] invite a number of different kinds of environmental attack.” Stated simply, bone rapidly deteriorates with exposure to wind, water, sun, or to alternate freezing and thawing conditions (Reitz and Wing 1999:116). Thus, abiotic disturbance is one of the most prevalent and uncontrollable processes affecting animal remains in the archaeological record.

A final and important first-order change involves soil pH levels. pH is a measure of acidity or alkalinity, and animal bone survival is highly contingent on the soil conditions (pH level) in which the remains were deposited (Cool 2006:8). The ideal pH for the preservation of bone is 7.8/7.9, and for every degree below this range, bone decays and deteriorates at an
increasingly rapid rate (Reitz and Wing 1999:117). The tissue elements of animal bones are
destroyed differentially, but as a general rule for the rest of the bone, the least calcified elements,
such as those of infant and juvenile animals, are the first to deteriorate. As one might expect, the
enamel crowns of adult teeth are the most resistant to deterioration (Reitz and Wing 1999:117).

Second-order changes are those that occur during the excavation and analysis stages of
archaeological research (Reitz and Wing 1999:118). The first example of a second-order change
is sieving strategy. Simply stated, major losses of animal remains occur with inadequate
screening of the deposit and decisions about what to save versus discard (Reitz and Wing
1999:119). Using a fine-gauge screen, while worthwhile, is extremely time and effort intensive,
and thus, it is often not a popular choice. Additionally, very small organisms and finds such as
seeds, insects, and parasites require special methods of recovery; typically, they are extracted
from soil samples (Reitz and Wing 1999:119-120). Thus, the gauge of screen used, the number
of soil and flotation samples gathered, and the types/amounts of bone remains kept versus
discarded all factor into the biases inherent in archaeological faunal data.

Another second-order change centers on sample sizes. As the laws of probability and
percentages demonstrate, a large sample size yields a potentially more accurate and
representative picture of the overall faunal assemblage at an archaeological site. Conversely, a
small sample size results in a less accurate portrait of the entire corpus of faunal remains (Reitz
and Wing 1999:122). Archaeological deposits are finite and often too small to afford a sufficient
sample, and, also, many sites are plagued by poor preservation, which inherently results in small
sample sizes (Reitz and Wing 1999:122). Furthermore, certain sites may yield large quantities of
certain animal species and not others, which results in a data sample that may not be
representative of the entire region or even the overall site. That is to say, high frequencies of
particular species in an archaeological sample does not necessarily represent the actual richness or diversity in the region, but, rather, only the animals incorporated intentionally by the occupants of the site or incidentally due to myriad other factors (Reitz and Wing 1999:122).

NISP vs. MNI

Related to sample sizes, a final second-order change or bias involves the quantification of animal bones and understanding how many animals are represented at a given site (Davis 1987:35). Zooarchaeologists typically employ two main types of statistics to estimate the relative frequencies of taxa in faunal assemblages: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) (Reitz and Wing 1999:202). Number of identified specimens (NISP) is the most fundamental unit by which faunal remains are tallied (Lyman 2008:27). Defined, NISP is the specimen count from a faunal assemblage, and, in theory, it is an assessment of the relative importance of each species (Davis 1987:35). In other words, it is a tally of the number of skeletal elements and fragments (hence, specimens) identified by the taxon they represent (Lyman 2008:27). NISP is calculated by counting the number of identifiable fragments of bones of each species and expressing it as a percentage of the total number of bone-fragments in that level, area, or site (Reitz and Wing 1999:167; Davis 1987:35-36).

As with all statistical measures, applying NISP to estimates of relative frequencies or importance of taxa within faunal assemblages is problematic (Reitz and Wing 1999:203). There are three specific potential sources of bias that may affect NISP (Davis 1987:36). The first source involves the unequal recovery of identifiable fragments of bone of each species (Davis 1987:36; Reitz and Wing 1999:203). Some species, and, more specifically, fragments or elements of species are more likely to survive in the archaeological record than others (Reitz and Wing
1999:203). In addition, particular cultural practices related to transportation, butchering, distribution of meat, cooking, and disposal influence NISP as these activities damage or disperse material (Reitz and Wing 1999:203).

The second source of bias centers on the fact that not all animals possess the same number of diagnostic bones (Davis 1987:36; Lyman 2008:36-37). In other words, some animals yield more potentially identifiable bones (or bone fragments) than others, and as a result, the frequency of certain species may be overestimated in a faunal assemblage. Davis (1987:36) uses the example of a horse, bull, and hog: a horse limb has one metapodial and one set of phalanges, while a bull limb has one “cannon bone” and two sets of phalanges, and a hog limb has four separate metapodials and four sets of phalanges. Obviously, the varying number of identifiable bones in each example may result in a bias for NISP measurements. This bias may be rectified, however, by performing arithmetic manipulation in order to standardize bone counts across the species spectrum (Davis 1987:36).

A final bias with NISP derives from the differential fragmentation of bones (Davis 1987:36; Lyman 2008:36-38). Due to fragmentation, what was once a single bone may be counted as several different fragments. In an estimate of relative frequencies (such as NISP), animals whose bones were subjected to greater fragmentation would appear to be more common (Davis 1987:36). This bias is particularly common with very large animal skeletons (Davis 1987:36). Both Watson (1979) and Davis (1987:36) developed the concept of “diagnostic zones” to overcome this bias. In short, each zone represents an area of the skull, limb, or feet bones (Davis 1987:36). The benefits of the diagnostic zones are that each zone is small and unlikely to be fragmented but still large enough to be identified to species, and they are designed so that it
should not be possible to count the same bone more than once within any one zone (Davis 1987:36).

As with NISP, minimum number of individuals (MNI) is related to the number and identifiability of fragments of bone of each species in a given faunal assemblage (Reitz and Wing 1999:206). Unlike NISP, however, MNI does not describe the actual number of specimens in faunal samples; rather, MNI is based on the presence/absence of skeletal elements, and it estimates how many animals are represented at a given archaeological site (Davis 1987:36; Reitz and Wing 1999:206). In other words, MNI estimates “the minimum number of individuals necessary to account for the identified elements of a particular taxon” (Reitz and Wing 1999:210). For example, vertebrates have two humeri, one left and one right, and if 18 left and 23 right sheep humeri are found, they must have come from a minimum of 23 sheep (hence, a MNI estimate of 23) (Davis 1987:36; Lyman 2008:38-39). To estimate MNI, it is necessary to consider not only bone fragments present in a sample, but also age, sex, size, and archaeological context (Reitz and Wing 1999:206). Thus, MNI is a much more complex statistical measure than NISP (Reitz and Wing 1999:206).

There are a number of methods used to calculate MNI. First, since vertebrates, as well as many crustaceans and mollusks, are symmetrical, fragments from either side are distinctive and can be used to estimate MNI (Reitz and Wing 1999:206). For example, an analyst can separate the most abundant element of the species found into right and left components and use the higher number as the unit of calculation (Reitz and Wing 1999:206). It should be noted that it is a very difficult and virtually impossible process to pair random left and right elements from the same biological individual. Thus, specimens are typically paired on the basis of symmetry rather than matched pairs of elements from the same biological individual (Reitz and Wing 1999:206).
Another method used to calculate MNI uses the concept of skeletal symmetry but also considers evidence for age, sex, and size (Reitz and Wing 1999:206). Rather than simply separating and subsequently pairing left and right elements, the analyst further groups fragments based on age, sex, and size (Reitz and Wing 1999:206-207). While MNI is usually calculated with some consideration of these areas of evidence, publication restraints often limit such endeavors (Reitz and Wing 1999:207).

As with NISP, there are many problems and potential biases associated with MNI (Lyman 2008:45-66; Reitz and Wing 1999:208-210). For example, MNI correlates with the sample size, and, as a result, the larger the sample size is for a particular taxa, the higher the MNI estimate (Lyman 2008:46; Reitz and Wing 1999:208). Additionally, for species that lack a large number of symmetrical bones or elements, the MNI estimates will always be lower than seems reasonable given the number of identified specimens (Reitz and Wing 1999:207208). For example, there are no symmetrical elements in various species of snakes, and, consequently, these species will inherently yield a low MNI estimate (Reitz and Wing 1999:207-208). MNI is related to the number of identifiable elements in each animal, and consequently, high MNI estimates correlate with high numbers of symmetrical elements (Lyman 2008:45-46; Reitz and Wing 1999:207). Conversely, animals composed primarily of nonsymmetrical elements will typically have lower MNI estimates (Lyman 2008:46; Reitz and Wing 1999:207).

Additionally, MNI is a derived statistic, and, therefore, it can be calculated using different methods, which reduces comparability (Lyman 2008:45-46). As Lyman (2008:46) points out, “This problem is akin to the one that different analysts will produce different NISP values for the same collection of remains given their varied expertise at identification.” Of course, there is no real way to control this problem, and thus analysts should explicitly state the
methods used to derive MNI values in order to limit potential confusion and ambiguity (Lyman 2008:46).

**Summary**

In this chapter, I developed working definitions for the terms “identity” and “ethnicity.” Additionally, I provided an overview of the taphonomy associated with faunal remains and assemblages, along with the virtues and problems of the NISP and MNI statistics. In the next chapter, I examine the published faunal data from *Segontium*, Portchester Castle, Wavendon Gate, and Dragonby, and, in doing so, I move one step closer to interpreting Roman military and native British ethnicity in Roman Britain.
CHAPTER 4
DATA ANALYSIS

Introduction

In the previous chapter, I defined ethnicity as the self-conscious identification with a particular social and/or cultural group in opposition to others based on shared sets of customs, characteristics, and practices. In this chapter, I illustrate these “shared sets of customs, characteristics, and practices” by examining the published faunal data from the two Roman military sites of Segontium (Caernarfon) and Portchester Castle, and the two native British sites of Wavendon Gate, and Dragonby. Geographically, all of these sites are located within the southern half of mainland Britain (see Map of Roman Britain in Chapter 1). Temporally, the two native British sites, Wavendon Gate and Dragonby, are contemporary, and while the chronologies of the two Roman military sites overlap, Segontium was occupied for a greater period of time than Portchester Castle (see below). The central tenet of my thesis is to understand the relationship between food and identity, and, therefore, by analyzing the faunal evidence from these four sites, I will be able to explore the way in which Roman soldiers and British civilians utilize food (meat) in the production and expression of their respective ethnicities.

I begin this chapter with a section on food in Roman Britain. In particular, I provide a general overview of the types of foods consumed by the native British communities and Roman military. Since the subject of food in Roman Britain is wide-ranging and complex, I focus, predominantly, on the consumption and utilization of several sources of meat. I have deliberately
understated and over-simplified the role of food in Roman Britain, which I believe is problematic but ultimately necessary given the aims, emphases, and restraints of my thesis.

Following my section on food in Roman Britain, I display the published faunal data from the four archaeological sites in question. Prior to presenting the faunal data, I provide brief historical, archaeological, and taphonomic overviews for each site. In my analyses, I do not recreate every table and figure from the original archaeological reports. Rather, I organize the data into summary tables relevant to my thesis. Please refer to the original reports for the complete corpus of tables and figures.

*Food in Roman Britain*

**Food and the Native British**

While the invasion of Britain by Rome brought about changes in the availability of food products, farming techniques, and animal husbandry, it is not as if the native British did not eat well prior to Roman occupation (Alcock 2001:14). The indigenous inhabitants of Britain enjoyed numerous grains and cereals including spelt (*Triticum spelta*), emmer (*Triticum diococcum*), bread wheat (*Triticum aestivum*), and barley (*Hordeum vulgare*) (Cool 2006:69-79). Also, dairy products available included milk, butter, and cheese produced from cows, sheep, and goats (Cool 2006:93-97).

The three main food animals (in order of importance) for the native British were sheep/goat (*Ovis aries/Capra hircus*, respectively), cattle (*Bos taurus*), and swine (*Sus domestica*). On the majority of indigenous sites in Roman Britain, sheep and goat are the most prevalent animal remains (Davis 1987:181). The British butchered, utilized, and/or consumed
sheep/goat at all stages of development from juvenile to mature, although there was an emphasis on butchering the animals prior to full maturity at many indigenous sites (Cool 2006:87; Maltby 1981:175). It should be noted that in most archaeological bone reports, what is counted as sheep are “actually bones that could come from sheep or goats, as it is difficult in faunal analysis to distinguish between the bones of the two” (Cool 2006:87). It is typically assumed that Ovis aries were the most prevalent ingredient in the indigenous British meat diet, as goats were rarely exploited for meat. Goats were generally used for leather and milk, although there is evidence that juvenile goat meat may have occasionally been preferred (Cool 2006:87).

While not found as frequently as sheep/goat remains, cattle were important animals for the indigenous populations of Britain. The two species of cattle native to Britain are Bos taurus, a short-horned variety, and Bos longifrons, a long-horned variety (Alcock 2001:33). Bones of large, wild cattle known as aurochs (Bos primigenius) are also occasionally found on sites (Alcock 2001:33). Cattle were generally slaughtered at a mature age (>48 months), which is logical considering they would have been “beasts of burden” prior to consumption (Stallibrass 1999:67; Dobney 2001:37).

Swine (Sus domestica) were also an element of the indigenous diet in Britain from the Iron Age through the period of Roman occupation (Cool 2006:83). On some late Iron-Age sites in the southeast of Britain, for example, the bones of swine approached nearly 50 percent of the bones of the three main food species (swine, cattle, and sheep/goat) (Alcock 2001:35). Swine were butchered in all stages of development, although very few actually lived to full maturity. This is due, in part, to the fact that, outside of providing meat and lard, a hog is not an exceptionally useful animal (Cool 2006:84). Additionally, the native populations of Britain particularly enjoyed juvenile or suckling pigs (butchered before 12 months old), which aids in
explaining the lack of mature hogs in the faunal assemblages from indigenous sites (Alcock 2001:35).

The indigenous British also consumed poultry and wild animals. Found regularly on Romano-British sites, chickens (*Gallus gallus*) were valued for their meat and eggs (Cool 2006:102-103). As Alcock (2001:45) writes, “Chickens kept in large numbers, either roaming freely or loosely penned, would have been a common site in any British town.” Geese were also important as they not only provided meat but feathers for bedding, and goslings (juveniles) could be sold as a luxury food item at the market (Alcock 2001:46; Maltby 1985:161). Additionally, examples of wild animals or game hunted by the native tribes of Britain include wild boar (*Sus scrofa*), roe deer (*Capreolus capreolus*), Red deer (*Cervus elaphus*), and hare (*Oryctolagus cuniculus*) (Cool 2006:112-114). Introduced by the Romans, small numbers of fallow deer (*Dama dama*) were also hunted (Alcock 2001:43).

**Food and the Roman Military**

The Roman military in Britain consumed a combination of local and imported foods (Davies 1971:125-126; King 1984:188). In general, the Roman military diet was composed of a mixture of grains, cereals, meat (see below), seafood, cheese, fruits, nuts, wine, and olive oil (Davies 1971:125). There was a high demand within the Roman army for imported wine and olive oil (Alcock 2001:149). As a result, long-distance trade in food became a distinct characteristic of the Roman occupation of Britain. Traders from Italy, Gaul, and other provinces often came to Britain to seek a market for their products. In the first century AD alone, there were four legions in Britain, which translates to roughly 21,000 men. While
some men had a preference for native beer, most soldiers, and even many of the native British, developed an insatiable taste for wine (Alcock 2001:149).

The three main food animals (in order of importance) for the Roman military were cattle (*Bos taurus*), swine (*Sus domesticus*), and sheep/goat (*Ovis aries/Capra hircus*, respectively). On Roman military sites, cattle bones composed the majority of the bones in faunal assemblages, while pig was popular, as well (King 1984:189). For instance, King (1984:189) estimates that assemblages from approximately 42% of Roman military sites in Britain contain at least 70% cattle bones, “a figure which indicates a very high contribution of beef to the meat diet.” Similar to indigenous practices, cattle were typically slaughtered at a mature age (>48 months) because they would have been used for a variety of purposes including producing dairy products, breeding, and traction or labor (Stallibrass 1999:67; Dobney 2001:37).

The Roman military also consumed pork. Swine were important animals for the Roman military not only because of their value as meat, but also as bacon fat or lard, and pigskin (Davies 1971:124). The bacon fat served as an efficient substitute for olive oil, which was difficult to transport (Davies 1971:124). The Roman military generally slaughtered hogs at a mature age, typically >12-18 months, but, similar to the indigenous populations of Britain, the soldiers also held a distinct preference for juvenile or immature pigs (Cool 2006:88; Alcock 2001:35).

Of the three main food animals, sheep and goat were the least important portion of the Roman military meat diet in Britain (King 1999a:142). Although principally slaughtered for their meat, sheep and goat served alternate purposes such as providing milk, cheese, and wool (Maltby 1981:171). These animals were butchered at all stages of development from juvenile to mature,
although the Roman military appeared to have butchered the majority of them between two and three years old (Davies 1971:127; Maltby 1981:175).

The Roman military also consumed poultry and wild animals. Although it is not discussed as often as beef or pork, poultry was eaten as a regular part of the military diet (Davies 1971:180). Roman soldiers kept domestic fowl or chickens (*Gallus gallus domesticus*), either free-roaming or loosely penned, for both meat and eggs (Alcock 2001:45). Soldiers were also partial to both duck and goose, but these are seen less frequently in faunal assemblages than chicken (Cool 2006:98-99). Regarding wild animals, it is clear from artistic and written evidence that the hunting of game was a popular activity for Roman soldiers in Britain (Alcock 2001:42-43). Wild species often recovered from archaeological sites include red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), hare (*Oryctolagus cuniculus*), and wild boar (*Sus scrofa*) (Cool 2006:111-114). As noted above, the Romans introduced the fallow deer (*Dama dama*) to Britain, but numbers were small, and, thus, the bones of red and roe deer are more prevalent in the faunal assemblages (Alcock 2001:43).

Finally, along with the variations in the types and uses of numerous animal species, the Roman military and native British employed differing butchery patterns and practices. In fact, one of the most noticeable changes brought to Britain by the Romans is found within butchery practice (Stallibrass 1999:68). Specifically, the indigenous butchery practice followed the Iron Age tradition of using knives to prepare the carcass. Roman butchers, conversely, used a cleaver (Maltby 1985:20). As Cool (2006:89) writes, “Cleavers allowed very intensive butchery to be carried out on cattle carcasses, maximizing the utilization of the meat.” While primarily a Roman tradition, by the later second century this technique had spread from military sites and urban centers to the rural populous of Britain (Cool 2006:89-
90). Other butchery patterns found almost exclusively on Roman military sites “include systematic treatment of scapulae (shoulder blades), particularly the trimming around the glenoid cavity,” and marks or cuts associated with meat processing such as rectangular holes through the scapulae (made for the insertion of hooks to hang shoulders of meat for drying or smoking) (Stallibrass 1999:68).

**Segontium (Caernarfon)**

**Historical Background**

Located in north Wales, the Roman fort of Segontium was established during the Flavian dynasty in AD 77-83 (see Figure 4.1) (Casey *et al.* 1993:3). The Flavian Dynasty was a period between AD 69 and 96, marked by the reigns of Vespasian (AD 69-79) and his two sons Titus (AD 79-81) and Domitian (AD 81-96) (Salway 1993:571). The creation of the fort is typically ascribed to the arrival of Gnaeus Julius Agricola, Roman Governor of Britain. Upon completion, Segontium became the largest continuously occupied Roman fort in northern Wales. The number of soldiers stationed at Segontium varied throughout its history (Casey *et al.* 1993:10). Around one thousand soldiers occupied the fort during the first and second centuries AD. This number declined during the reign of the Emperor Trajan (AD 98-117) but rose again in the late third and fourth centuries due to the reforms of the Emperor Diocletian, which called for renewed troop strength in forts across Britain. The last phase of definite military occupation at Segontium is dated between AD 390-410 (Casey *et al.* 1993:10-14).
Figure 4.1 Plan of Visible Structures at *Segontium* (Prior to Excavation)

Source: Casey *et al.* (1993:2)
Archaeological Background

*Segontium* was re-discovered in the mid-1800s, and in 1846, R.R. Parry-Mealy began small-scale excavations of three stone buildings within the fort (Casey *et al.* 1993:1). Parry-Mealy noted a variety of discoveries including a Roman well, which contained pottery, a faunal assemblage, and a fragmentary inscription (Casey *et al.* 1993:1). The inscription recorded the restoration of the fort aqueduct in the period AD 198-209 (Casey *et al.* 1993:1). Unfortunately, as was custom in the early history of Romano-British archaeology, the details of the faunal assemblage were not recorded.

R.E.M. Wheeler led the first major excavations at *Segontium* in the early 1920s, and the results of these efforts were published in the seminal *Segontium and the Roman Occupation of Wales* (1924). Wheeler (1924:5-13) excavated portions of the ramparts and interior buildings. He concluded that *Segontium* was originally established *circa* AD 75 as an earth and timber fort (Casey *et al.* 1993:3). The first stone buildings, according to Wheeler, were erected in approximately the early 2nd century AD (Casey *et al.* 1993:3). Wheeler speculated that Roman soldiers, following the revolt of Magnus Maximus, permanently abandoned the fort sometime after AD 383 (Casey *et al.* 1993:6).

In the early 1970s, a team of Welsh archaeologists was contracted by Cadw (Welsh Historic Monuments) to excavate the eastern third of the fort intensively (Casey *et al.* 1993:7). The team of archaeologists concentrated on further revealing the stone buildings discovered in 1846 while also examining the north gate and two bath-houses (Casey 1993:7-9). The results of these excavations were published in *Excavations at Segontium (Caernarfon) Roman Fort, 1975-1979* (1993), edited by P.J. Casey, J.L. Davies, and J. Evans. I utilize the published faunal data from these excavations (as presented by B. Noddle 1993).
Table 4.1 displays the chronological information for Segontium (based on Casey et al. 1993:17), which is followed by Noddle (1993:97) in her analysis of the faunal remains.

<table>
<thead>
<tr>
<th>Period</th>
<th>Name and Date</th>
<th>Historical Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>c. AD 69-96</td>
<td>(Flavian)</td>
</tr>
<tr>
<td>5-6</td>
<td>c. AD 96-150</td>
<td>(Trajanic – early-Antonine)</td>
</tr>
<tr>
<td>7</td>
<td>c. AD 150-Early/Mid Third Century</td>
<td></td>
</tr>
<tr>
<td>8-9</td>
<td>Late Third-Early Fourth Century</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mid-Fourth Century</td>
<td></td>
</tr>
<tr>
<td>10A</td>
<td>Late Fourth Century</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>c. AD 400</td>
<td>(Post-Roman)</td>
</tr>
</tbody>
</table>

Faunal Assemblage from Segontium

Noddle (1993:103) identifies over 13,000 animal bone fragments from chronological layers. She provides very little taphonomic information for the animal bones from Segontium, however, which is certainly problematic. Noddle (1993:97) indicates that, for the most part, the animal bones from Segontium are well preserved and not as fragmented as at many other Romano-British sites. She also points out that several of the faunal deposits on the site are secondary, rather than primary (Noddle 1993:97). Unfortunately, no information is provided regarding first-order changes, such as biotic disturbance, abiotic disturbance, or soil pH.
levels, that may have affected the various faunal deposits (Reitz and Wing 1999:114-116; Schiffer 1987:183). Noddle, also, does not indicate the sieving strategy utilized to collect the animal bones, nor does she discuss any of her decisions during the analysis stage that may have affected her quantification and/or interpretation of the faunal data. Therefore, it is difficult to know whether certain species are overrepresented or underrepresented species.

Proportions of Species
Derived from Noddle (1993:104), Table 4.2 displays the summary data for the proportions of species for the three main food animals (cattle, sheep/goat, and swine) at Segontium. A number of points regarding this table require mentioning. First, the quantity of animal bone is higher in the later periods than the earlier periods, but, as Noddle points out (1993:97), “Segontium is by no means unusual in this respect….” For example, the total MNI for all species in Periods 1-4 (c. AD 69-96) is 78, and this number rises to 445 by Period 10A (late fourth century) (Noddle 1993:104). This is likely due to an increase in the number of Roman soldiers stationed at Segontium over time (Noddle 1993:104).

Second, cattle bones make up the majority of the total animal bone in all periods, except Period 7 (Antonine-early fourth century) (Noddle 1993:104). In Period 7, both cattle and swine constitute 29% of the overall faunal assemblage (based on MNI). As is expected at a Roman military site, the increase of cattle bones is at the expense of sheep/goat bones, with swine remaining relatively consistent through all periods (Noddle 1993:97). For example, in Periods 1-4, cattle compose 35% and sheep/goat 24% of the total remains (based on MNI), and by Periods 8-9 (late third-early fourth century), those percentages change to 41% and 16% respectively.
Butchery Patterns

The sample size of sheep/goat and swine is insufficient, and, consequently, Noddle (1993:97) only analyzes the butchery evidence of the cattle bone-fragments from Segontium. Results of the analysis demonstrate that the (more) edible parts of the carcass, vertebrae, and upper limb bones are less prevalent than the carpals, tarsals, and metapodials (Noddle 1993:97). The former are primarily butcher’s waste, “the metapodial carrying no muscle and the tarsus tending to be left after the carcase has been butchered, if it has been suspended by the Achilles tendon as is normally the case” (Noddle 1993:97-98). Noddle does not indicate where the butcher’s waste was deposited, but zooarchaeological analysis of other faunal
assemblages from Roman military sites in Britain does indicate that food and butchery waste were generally deposited separate from one another (Grant 1975:389-390; Izard 1997:367-369). Therefore, I suggest that it is logical to infer a similar pattern at Segontium.

Summary

Approximately 13,697 animal bone fragments were identified from dated layers at Segontium (Noddle 1993:103). The majority of the animal bone fragments were from the fourth century (Periods 7-10A) (Noddle 1993:103). The proportions of species and the changes over time were consistent with other Roman military sites (Noddle 1993:103). For example, the proportions of cattle increased at the expense of sheep/goat and swine. The overall trend for the sizes of animal remains at Segontium was a steady increase in size over time (Noddle 1993:103). Finally, the presence of small individual cattle, sheep/goat, and hogs seems to indicate the incorporation of native stock into the Roman military diet (Noddle 1993:103).
**Portchester Castle**

**Historical Background**

Located at the head of Portsmouth Harbor on the south coast of England, Portchester Castle was established as a Roman fort in the late third century AD (c. AD 280) (see Figure 4.2) (Cunliffe 1975:8-9). The Portchester promontory was used sporadically during the Mesolithic and Neolithic periods, but the first solid evidence of prolonged occupation dates to the Late Roman period (Cunliffe 1975:6-9). Based on the presence of small amounts of indigenous and early Roman pottery, Cunliffe (1975:9) concludes that the site of the fort was used as a temporary settlement by a small, transient group of people in the early first century AD. It should be noted that in the period c. AD 50-280, there is a total absence of material culture from Portchester (Cunliffe 1975:9).

The overall period of Roman military occupation at Portchester Castle is relatively short, especially compared to other sites such as Segontium. In approximately AD 280, the initial Roman fort at Portchester was established when the promontory was enclosed by a massive masonry wall fronted by a double ditch system (Cunliffe 1975:10). As Cunliffe (1975:10) writes, “Within the enclosure lay a series of metalled [stone] roads, together with timber buildings and probably isolated masonry structures.” Around AD 290, Portchester Castle was abandoned, but it was re-occupied in approximately AD 300 (Cunliffe 1975:425). The period of Roman occupation at Portchester Castle continued until the late fourth century AD, with the most intensive periods of occupation during c. AD 300-345 (Cunliffe 1975:423). By c. AD 400, however, the Roman occupation of Portchester Castle ceased (Cunliffe 1975:425).
Figure 4.2 Composite Plan of Features of All Periods at Portchester Castle

Source: Cunliffe (1975:39)
Archaeological Background

Unlike many of the other archaeological sites in Britain, Portchester Castle was largely untouched by 19th-century antiquarians and treasure hunters (Cunliffe 1975:1). One reason for this is that Portchester was used as a military installation as late as the early 19th century, and, as a result, there was little opportunity for amateur or archaeological exploration (Cunliffe 1975:1-2). In the 1920s and 1930s, massive land clearance operations were carried out at Portchester, but their purpose was not archaeological (Cunliffe 1975:2).

Beginning in 1961, Barry Cunliffe directed the first large-scale excavations at Portchester Castle. Cunliffe’s stated objectives were “to examine the nature of the Roman defenses and to test the possibility of settlement continuity in the south-west quarter of the fort…” (Cunliffe 1975:2). Extensive excavation of the site continued through 1972, and the results were published in *Excavations at Portchester Castle, Volume 1: Roman, Volume 2: Saxon* (1975). I use the published faunal data from Volume 1 (as presented by Annie Grant (1975)).

Faunal Assemblage from Portchester Castle

Grant (1975:378) examines approximately 36,000 animal bone fragments and identifies 28,908. The animal bones are those recovered from the Roman pits, wells, and well-stratified layers against the Roman wall (Grant 1975:378). Due to the long history of post-Roman occupation at Portchester Castle, bones from ambiguous stratigraphic layers (layers that were potentially “contaminated” by later levels) were not included with the Roman material in Grant’s (1975:378) analysis.

Grant (1975:379-385) provides an excellent overview of the potential effects of various taphonomic forces or factors on the faunal remains from Portchester Castle. Regarding first-
order changes, Grant (1975:385) indicates that biotic disturbance in the form of post-depositional
dog gnawing is evident on several of the cattle and pig bones. She also suggests that cattle bones,
particularly cattle long bones (humeri and femora, for example), are overrepresented within the
overall faunal assemblage from Portchester Castle because they are larger and preserve better as
compared to other skeletal elements such as phalanges, carpals, tarsals (Grant 1975:385).

Grant (1975:378) also discusses second-order taphonomic factors such as sieving
strategy. Regarding the practice of screening, Grant (1975:378-379) writes, “excavation at
Portchester was often in the hands of volunteers who were required to work quickly and no
sieving was carried out.” Therefore, the recovery of animal remains at Portchester Castle is
heavily biased against small animals in favor of larger species (Grant 1975:378). The potential
effects of this bias on my interpretations of the faunal remains from Portchester are varied. For
instance, in one sense, I primarily examine the three main food animals (cattle, sheep/goat, and
pig; see below), and several of the bones of these animals are large enough to be noticed and
recovered without a screen or sieve. In another sense, however, many of the small skeletal
elements (phalanges, carpals, tarsals, ribs), particularly from sheep/goats and pigs, are often too
small to be seen without a screen or sieve, and therefore, those elements are certainly
underrepresented in the assemblage.

Finally, regarding chronology, for the analysis of the animal bones from Portchester
Castle, Grant (1975:378) does not establish distinct chronological periods. Instead, she utilizes
locational or contextual groups, which I will not reproduce because they are not important for my
thesis. Therefore, I will refer, primarily, to the overall totals of species recovered from
Portchester Castle. Grouping and mixing temporal periods is certainly problematic, but I think it
is necessary for my thesis. The occupational history of Portchester Castle is relatively short
(approximately late third century-mid/late fourth century AD), and therefore, it is not as if I am combining the faunal data from several chronological groups, each of which spans hundreds of years, into one overall group. Additionally, the groups established by Grant (1975:378) are locational and contextual, and in my thesis, I do not focus on or explore the context or location of the recovered faunal remains from any of the four archaeological sites in my case study. Since I am comparing the published faunal data from four sites, it would be inefficient, irrelevant, and outside of the restraints of my thesis to delve into the specifics of context at each and every site in question.

Proportions of Species

Derived from Grant (1975:379-384), Table 4.3 displays the total proportions of cattle, sheep/goat, and swine at Portchester Castle. Grant (1975:382) employs three methods of analysis for the animal remains: epiphyses-only, total fragments, and MNI. It should be noted that “epiphyses-only” refers to a method of quantification for proportions of species where the analyst counts only the animal bones with part of an epiphysis or fusion surface present (and, for mandibles, at least one tooth present) (Grant 1975:379). In the first two methods, cattle constitute the majority of the animal bones (Grant 1975:379-381). In fact, based on the epiphyses-only method, cattle compose 52% of the total faunal remains, and based on the total fragments, cattle account for 57% of the overall animals recovered at Portchester Castle (Grant 1975:382). The minimum number of individuals (MNI) statistic paints a slightly different picture of the proportions of species at Portchester Castle, however. Based on MNI, the importance of cattle at Portchester Castle is markedly depressed (Grant 1975:382). In fact, the percentages of minimum numbers of individuals for cattle, sheep/goat, and swine are nearly even.
Grant (1975:384) suggests that, regardless of the method used to calculate the proportions of species, cattle seem to have been the most important source of meat at Portchester Castle. While the MNI statistic decreases the importance of cattle, Grant (1975:384) argues that the amount of beef consumed far exceeds the amount of pork and lamb, and thus, cattle are the most important animals at Portchester Castle. Obviously, cattle yield more meat than either sheep or swine, and thus, despite the inconsistencies between the total fragment statistics and MNI statistics, beef appears to constitute the majority of the total meat eaten at Portchester Castle (Grant 1975:383-384).

<table>
<thead>
<tr>
<th>Table 4.3 Total Proportions of Species at Portchester Castle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Grant (1975:382)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Epiphyses Only</strong></td>
</tr>
<tr>
<td>Cattle</td>
</tr>
<tr>
<td>Sheep/Goat</td>
</tr>
<tr>
<td>Swine</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Total Fragments</strong></td>
</tr>
<tr>
<td>Cattle</td>
</tr>
<tr>
<td>Sheep/Goat</td>
</tr>
<tr>
<td>Swine</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Minimum Numbers Of Individuals (MNI)</strong></td>
</tr>
<tr>
<td>Cattle</td>
</tr>
<tr>
<td>Sheep/Goat</td>
</tr>
<tr>
<td>Swine</td>
</tr>
</tbody>
</table>

67
Butchery Patterns

Cattle bones display the overwhelming majority of noticeable butchery cuts and patterns, which is logical considering both the larger number of cattle remains recovered, and the smaller size of sheep and swine carcasses (Grant 1975:386). Based on the evidence left on the skulls, cattle appear to have been killed via the “pole-axing” method, in which the animal is hit with a heavy instrument or pole-axe in the center of the frontal bone, just above the eyes (Grant 1975:386).

There are two specific variations of pole-axing, and both seem to have been employed at Portchester Castle (Grant 1975:389). In the first method, the skull is pierced and a rod is introduced to destroy the medulla oblongata and brain (Grant 1975:389). In the second method, the animal is simply stunned by the blow, and is then hung and bled (Grant 1975:389). According to Grant (1975:389), there is no evidence of bleeding at Portchester Castle, but there are nearly complete cattle skulls discovered that had been struck with a blow that merely fractured but did not penetrate the skull. Other cattle skulls display a large area of the frontal bone completely destroyed by the pole-axe blow (Grant 1975:389).

The actual butchery of the cattle appears to have been performed with help of at least three different kinds of tools, a sharp heavy tool, such as an axe or cleaver, a knife, and a saw (Grant 1975:389). Horn cores were typically cut from the skull, although, as Grant (1975:389) indicates, it is unclear whether the horns were cut off for use as raw material (such as glue) or whether they were simply discarded as waste. Additionally, the cattle skulls seem to have been severed from the rest of the body between the occipital condyles and the atlas, and butchery cuts on the skull and jaws seem to be the result of carving out the head and cheek meat (Grant 1975:389).
Ribs generally display butchery marks made from the inside of the cattle, located both near the articulation with the vertebrae and nearer the abdomen (Grant 1975:392). Furthermore, the forelimb appears to have been cut from the carcass at the shoulder joint (Grant 1975:392). Butchery marks on the distal end of the scapula and the head of the humerus are also commonly found on the cattle bones at Portchester Castle (Grant 1975:392).

As Grant (1975:392) indicates, the elbow joint is another very common location for cuts, “although it is not certain that the cuts in this region resulted in the severance of the bones.” In fact, many of the butchery marks on the elbow joints appear to have been made while meat was cut from the bone in the area (Grant 1975:392). The majority of the meat on the forelimb lies above the elbow joint, and, unsurprisingly, many of the cuts are located on the bones of the upper limb (Grant 1975:392).

The hind limbs of the cattle seem to have been severed from the body at the hip joint, but with the femur removed (Grant 1975:392). Detached cattle femur ends with corresponding butchery marks in the border of acetabulum are also frequently recovered at Portchester Castle (Grant 1975:392). Furthermore, cuts on the distal end of many of the recovered cattle femurs and the proximal ends of the tibia are similar to those found at the elbow joints, in the sense that they seem to have resulted from cutting off the meat from the bones rather than severing the leg at that point (Grant 1975:392).

Lastly, after removal from the carcass, the hind limbs appear to have been cut between the metatarsus and tibia (Grant 1975:392). Cuts are rare on the first phalanges and are even more infrequent on the second and third phalanges (Grant 1975:392). When cuts are found on the phalanges they seem to have resulted from either severing the toes from the metapodia or from a knife cutting through the ligaments (Grant 1975:392). Similar knife marks are found at the distal
ends of the metapodia and near other joints throughout the cattle carcass. According to Grant (1975:392), knives seem to have been used predominantly for severing ligaments, and larger tools, such as axes and/or cleavers, were used for cutting up bones.

Cattle bones display the majority of butchery cuts and marks for the animal bones at Portchester Castle (Grant 1975:386). There is a paucity of information available to develop a comprehensive picture of butchery practices and patterns for sheep/goat and swine, although a couple minor points deserve mentioning. Namely, evidence of the splitting of crania through the line of the frontal suture is found for both sheep/goat and swine (Grant 1975:392). In the case of the hog, the mandibles are frequently split apart between the two incisors, and furthermore, the forelimb of some of the hog carcasses had been cut through at the elbow joint (Grant 1975:392).

Summary

Approximately 18,923 bone fragments from a minimum of 668 individual animals were identified and analyzed from Portchester Castle (Grant 1975:382). Grant performed detailed analysis of the three main meat animals (cattle, sheep/goat, and swine). The importance of cattle at Portchester Castle differs depending upon the method of quantitative analysis utilized. If the epiphyses and total fragments methods are employed, then cattle composed over 50% of the total animals at Portchester Castle (Grant 1975:382). If MNI is utilized, however, cattle accounted for 32% (216 individuals) of the total animals.

According to the epiphyseal and total fragment statistics, sheep/goat composed approximately 16% of the animals at Portchester Castle (Grant 1975:382). Based on MNI, they accounted for 23% (151 individuals) of the animals (Grant 1975:382). The horn core evidence
appears to indicate that there were both sheep and goat present at Portchester Castle, although there is no way to know for sure because the other sheep/goat skeletal elements are nearly impossible to assign to one or the other (sheep or goat) (Grant 1975:405). Many of the sheep/goat bones were small and slender, but larger, more robust bones were also discovered (Grant 1975:405). Grant (1975:405) reveals that it is not clear whether the animals were intended primarily for meat, milk, or wool, but she acknowledges that, nevertheless, all three products were certainly used in some capacity.

Lastly, the evidence for swine was relatively straightforward at Porchester Castle. Based on the ephiphyseal and total fragment statistics, swine accounted for approximately 14% of the total animals (Grant 1975:382). According to MNI, hogs composed 27% (180 individuals) of the total animals (Grant 1975:382). Grant (1975:405) points out that the hogs at Portchester Castle were most likely left to forage in or around the fort, and subsequently slaughtered when there was a need for meat.
**Wavendon Gate**

**Historical Background**

Located near London in south-central England, Wavendon Gate was initially settled in the Late Bronze Age/Early Iron Age (see Figure 4.3) (Williams et al. 1995:11). In the Early Iron Age, occupation at Wavendon consisted of a small, seemingly unorganized cluster of roundhouses (Williams et al. 1995:23). By the Late Iron Age, occupation intensified as a regular, organized arrangement of rectangular enclosures replaced the haphazard scatter of roundhouses (Williams et al. 1995:12-23).

By the mid-first to mid-second centuries AD, the settlement expanded and shifted south, and a large ditch enclosure was constructed (Williams et al. 1995:27). Excavations indicate that occupation continued at Wavendon Gate through the end of Roman period and into the Saxon period (Williams et al. 1995:91).

**Archaeological Background**

Wavendon Gate was originally discovered in 1980 as a result of an archaeological survey program carried out by Milton Keynes Archaeological Unit, a cultural resource management firm set up and funded by the Milton Keynes Development Corporation (Williams et al. 1995:3). Due to diminishing funding and pressing excavation commitments elsewhere, excavations did not begin on the site until 1989 (Williams et al. 1995:5). Directed by Bob Williams, the majority of the excavations occurred between April and November 1989, with additional test trenches dug at various points in 1990 (Williams et al. 1995:5). The results of the excavations were published in *Wavendon Gate: A Late Iron Age and Roman Settlement in Milton Keynes* (1995), edited by
RJ. Williams, PJ. Hart, and ATL. Williams. I utilize the published faunal data from these excavations (as presented by Keith Dobney and Deborah Jaques (1995)).

Table 4.4 displays the chronological information for Wavendon Gate established by Williams, Hart, and Williams (1995:99), which is also followed by Dobney and Jaques (1995:203-206) in their analysis of the faunal remains.

<table>
<thead>
<tr>
<th>Period</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Iron Age (Pre-First Century AD)</td>
</tr>
<tr>
<td>2</td>
<td>First-Second Century AD</td>
</tr>
<tr>
<td>3</td>
<td>Second-Third Century AD</td>
</tr>
<tr>
<td>4</td>
<td>Third-Fourth Century AD</td>
</tr>
<tr>
<td>5</td>
<td>Saxon (Fourth Century AD-onwards)</td>
</tr>
</tbody>
</table>
Figure 4.3 Composite Plan of Features of All Periods at Wavendon Gate

Source: Williams et al. (1995:4)
Faunal Assemblage from Wavendon Gate

A total of 5,232 fragments were recovered from closely dated contexts at Wavendon Gate, with 2,807 (approximately 40%) identified to species (Dobney and Jaques 1995:206). The remains derive from an assortment of context types ranging in date from the Late Iron Age to the Early Saxon period (Dobney and Jaques 1995:203). The majority of the assemblage dates to the Roman period (first-fourth centuries AD) (Dobney and Jaques 1995:203).

Dobney and Jaques (1995:203-206) provide an excellent discussion of their recovery techniques and the taphonomic forces that potentially influenced the faunal assemblage from Wavendon Gate. The faunal remains from Wavendon Gate were primarily recovered by hand-collection, although limited wet sieving was systematically utilized throughout the excavations. In particular, a total of 80 contexts were sampled with the wet sieving program, and according to Dobney and Jaques (1995:208), this was done to provide a useful check on the bias of the main hand-collected assemblage. The results of the analysis of the wet-sieving assemblage are fairly consistent with the results of the main hand-collected assemblage (see proportions of species data below) (Dobney and Jaques 1995:208).

Dobney and Jaques (1995:205) also indicate that a number of first-order, taphonomic changes influenced the faunal assemblage from Wavendon Gate. In particular, there is evidence of biotic disturbance in the form of dog and rat gnawing on various animal remains. There is also evidence of abiotic disturbance in the form of random “scratch-like” marks over large proportions of the animal bones. These marks, according to Dobney and Jaques (1995:205), are the result of natural post-depositional abrasion within the soil matrix.
Proportions of Species

Derived from Dobney and Jaques (1995:206), Table 4.5 presents the data for the total numbers of identified and unidentified fragments, along with the data for the three main food animals (cattle, sheep/goat, and swine) from Wavendon Gate. Dobney and Jaques (1995:206) indicate that every effort was made to distinguish between the remains of sheep and goat, but from the entire assemblage only six fragments (all horncores) were positively identified as goat.

Table 4.5 Proportions of Species at Wavendon Gate (based on NISP)

<table>
<thead>
<tr>
<th>Species</th>
<th>Iron Age</th>
<th>1st-2nd C.</th>
<th>2nd-3rd C.</th>
<th>3rd-4th C.</th>
<th>Saxon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>413</td>
<td>611</td>
<td>330</td>
<td>437</td>
<td>41</td>
</tr>
<tr>
<td>Sheep/(Goat)</td>
<td>79</td>
<td>171 (3)</td>
<td>64</td>
<td>104 (3)</td>
<td>15</td>
</tr>
<tr>
<td>Pig</td>
<td>11</td>
<td>35</td>
<td>7</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Total Identified</td>
<td>586</td>
<td>1022</td>
<td>448</td>
<td>675</td>
<td>90</td>
</tr>
<tr>
<td>Total Unidentified</td>
<td>670</td>
<td>682</td>
<td>323</td>
<td>637</td>
<td>113</td>
</tr>
<tr>
<td>Total No. of Fragment</td>
<td>1256</td>
<td>1704</td>
<td>771</td>
<td>1312</td>
<td>203</td>
</tr>
</tbody>
</table>

On the basis of total numbers of identifiable fragments, it is clear that cattle are the most frequently occurring species in all periods (Dobney and Jaques 1995:206). Sheep/goat and pig remain relatively consistent throughout the periods, although the total numbers of fragments for
both increase from the Iron Age to the first-second century, and from the second-third century to the third-fourth century (Dobney and Jaques 1995:206).

A slightly different picture develops if MNI is used to calculate the relative importance of species at Wavendon Gate (see Figure 4.4) (Dobney and Jaques 1995:206). Based on MNI, the importance of cattle appears to decrease progressively over time from its peak in the Iron Age. This decline corresponds with an incremental increase in the importance of sheep/goat, and this is particularly noticeable in the 2<sup>nd</sup>-3<sup>rd</sup> centuries and the Saxon period, when sheep/goat outnumber cattle (Dobney and Jaques 1995:206-207). Swine appears to be important in the Iron Age, less important during the early Roman period (first-second century), and important, again, during the third-fourth centuries and the subsequent Saxon period (Dobney and Jaques 1995:207-208).

![Figure 4.4 Proportions of Species at Wavendon Gate (based on MNI)](image)

Source: Dobney and Jaques (1995:208)
Butchery Patterns

Cattle bones display the most extensive evidence of butchery from all periods at Wavendon Gate (Dobney and Jaques 1995:219). The cattle remains from the Iron Age period frequently show fine knife marks, although these marks are present, albeit to a lesser extent, in the other periods (Dobney and Jaques 1995:219). In Iron Age Britain, the common practice was to fillet the meat from the bone with a knife, and the cattle bones at Wavendon from this period show extensive knife scores on the scapula blade and along the entire length of the radius and the tibia (Dobney and Jaques 1995:219).

From the first to third centuries, many more cattle elements appear to have been chopped, possibly with a cleaver. The butchery marks associated with chopping are particularly evident on the skull and mandible, although filleting and jointing marks are still common on the scapula, distal tibia, and calcaneum (Dobney and Jaques 1995:219-220). There is very little evidence for filleting of the cattle bones from the third and fourth centuries (Dobney and Jaques 1995:220). In general, during the later periods at Wavendon Gate (third century through the Saxon period), there is scarce evidence of fine butchery marks, which likely indicates the presence of commercial butchery practices (Dobney and Jaques 1995:220). This assumption is reinforced by the presence of butchery marks on cattle remains of the late period associated with the wholesale chopping of elements, particularly on the humerus, scapula, pelvis, and mandible (Dobney and Jaques 1995:220).

A limited number of sheep/goat elements display evidence of butchery (Dobney and Jaques 1995:221). Due to the paucity of evidence, very little can be inferred about the changes of butchery practices for the sheep at Wavendon Gate over time (Dobney and Jaques 1995:221). Butchery marks are present in all periods, however, and these consist almost entirely of filleting
and jointing marks, most commonly on the distal humerus, distal tibia, and proximal radius (Dobney and Jaques 1995:221). The sheep/goat mandibles also commonly display knife marks in all periods (Dobney and Jaques 1995:221). It is worth mentioning that very little swine was recovered from Wavendon Gate, and therefore, there are no butchery data.

**Summary**

A total of 5,232 faunal fragments from closely dated contexts were recovered from Wavendon Gate, with 2,807 (approximately 40%) identified to species (Dobney and Jaques 1995:206). Based on the proportions of species and butchery patterns, cattle appears to have been the most important component of the diet of the inhabitants of Wavendon Gate in all periods, although its relative importance seemed to fluctuate during the Roman period (Dobney and Jaques 1995:209). All the recovered cattle skeletal elements are represented in generally similar proportions from the Iron Age through the late Roman period (c. fourth century AD), and there does not appear to be selectivity at any time towards particular joints or prime cuts, as was often the case in higher status or urban assemblages (Dobney and Jaques 1995:219). Consequently, the cattle assemblage from Wavendon most likely represents local domestic refuse from surplus animals raised nearby and probably butchered on the site (Dobney and Jaques 1995:209).

According to Dobney and Jaques (1995:220), sheep/goat occupied a minor role in the local economy of Wavendon Gate. The importance of sheep/goat was always secondary to cattle, but it is interesting that sheep/goat assumed greater importance over time, particularly during the Roman and Saxon periods (Dobney and Jaques 1995:220). The majority of the sheep/goat skeletal elements from Wavendon Gate are represented for all periods, and therefore, similar to
cattle, the animals most likely represent local surplus stock, butchered for local consumption (Dobney and Jaques 1995:220).

Lastly, since very few swine fragments were recovered, a limited number of conclusions can be formulated about its importance at Wavendon Gate, and the change in its exploitation over time (Dobney and Jaques 1995:221). Swine appears to have been present in all periods, with its peak occurring in the Saxon period (Dobney and Jaques 1995:221). Although numbers are small, heads and forelimbs predominate the swine assemblage at Wavendon. Additionally, the swine in all periods appear to have been killed prior to skeletal maturity, which is logical considering juvenile is the optimum stage of meat production for hogs (Dobney and Jaques 1995:222).
**Dragonby**

**Historical Background**

Located in eastern England, the complex settlement site known as Dragonby is characterized by a long history of continuous occupation and use dating back to the Mesolithic and Neolithic periods (May 1996:35-46). Mesolithic and Neolithic activity appears archaeologically in the form of a large circular hollow and numerous pits (May 1996:35-46). Archaeologists have not uncovered any Bronze Age features, but pottery fragments dating to that period were recovered (May 1996:46-47).

The Iron Age and Romano-British settlement at Dragonby is divided into two separate archaeological sites (Site 1 and Site 2) (see Figure 4.5) (May 1996:51, 69). Both Site 1 and Site 2 are characterized by a number of features including multiple ditched enclosures, irregularly patterned streets, ovens, wells, pits, pottery-kilns, and numerous inhumation burials (May 1996:51-129). The Iron Age occupation of each site yielded multiple round houses presumably composed of wood (May 1996:1). These roundhouses gave way to rectangular aisled buildings with stone footings in the Romano-British period (May 1996:1). Based on archaeological evidence, it appears that the inhabitants of Dragonby engaged in agriculture, craft or industrial activities, and trade (May 1996:1).

Overall, occupation at both Site 1 and Site 2 appears to have been continuous through the Iron Age and Romano-British periods, with the peak of occupation occurring between *circa* 100 BC and the late fourth century (May 1996:1). It is likely that occupation continued in the Saxon and early-Medieval periods, although archaeological excavations have not yet been carried out to reinforce this assumption (May 1996:129).
Figure 4.5 Map of Excavated Sites 1 and 2 at Dragonby

Source: May (1996:9)
Archaeological Background

George R. Walshaw led the first major excavations at Dragonby beginning in 1927 (May 1996:5). Walshaw’s excavations revealed one large rectangular building, in addition to numerous pits (May 1996:5-6). Richmond A. Arrand led the next excavations at Dragonby, and, along with further revealing the large building found by Walshaw, he discovered numerous Romano-British buildings, a pottery-kiln, and a sizeable ditch yielding both Iron Age and Romano-British pottery (May 1996:6).

From 1964-1973, excavations were carried out at Dragonby (May 1996:7-31). The purpose of the excavations was to understand the nature of the Iron Age and Romano-British habitation of the settlement at Dragonby (May 1996:3-4). The main focus of these excavations was on Site 1 and Site 2, although numerous test trenches were dug outside of those areas (May 1996:131). The results of the excavations were published in Dragonby: Report on Excavations at an Iron Age and Romano-British Settlement in North Lincolnshire (1996), edited by Jeffrey May. I use the published faunal data from these excavations (as presented by Mary Harman [1996]).

<table>
<thead>
<tr>
<th>Table 4.6 Chronological Periods at Dragonby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Harman (1996:143)</td>
</tr>
<tr>
<td>Late Iron Age (Pre-Roman)</td>
</tr>
<tr>
<td>Period</td>
</tr>
<tr>
<td>Year</td>
</tr>
</tbody>
</table>

Table 4.6 (above) displays the chronological periods for Dragonby established by Harman (1996:143). The 15 chronological periods are based on ceramic stages, and it should be
noted that the last two Iron Age ceramic stages (11 and 12), overlap with the first two (I and II) Romano-British ceramic stages (Harman 1996:141-143).

**Faunal Assemblage from Dragonby**

Harman (1996:141) examines over 150,000 animal fragments from Dragonby, with the bulk of the remains made up of domestic animals such as cattle, sheep/goat, swine, horse, and dog. The majority of the animal bones are from the Late-Iron Age and Romano-British contexts (Harman 1996:142-143). Regarding recovery and taphonomy, Harman (1996:141) indicates that the majority of the animal bones from Dragonby were hand collected. As a result, there is a paucity of small bones from large species, such as cattle, sheep/goat, and pig, in the overall assemblage, along with an almost total absence of small mammals, such as squirrels, mice, shrews, and voles, among others (Harman 1996:141). Harman also mentions the evidence of first-order biotic and abiotic taphonomic disturbances affecting the faunal remains from Dragonby. For instance, several remains showed evidence of gnawing from dogs and/or small rodents (biotic disturbance), while others displayed obvious indications of erosion (abiotic) (Harman 1996:141-142).

**Proportions of Species**

Derived from Harman (1996:143-146), Table 4.7 displays the data for total numbers of bone fragments for the three main food animals (cattle, sheep/goat, and swine) from Dragonby. On the basis of total numbers of identifiable fragments, it is clear that the majority of the remains date to the Late Iron Age (Stages 6-10, particularly Stage 9) and early Romano-British period (Stages 11-12 & III-V) (Harman 1996:143-146). It is also evident that sheep form the bulk of the remains (approximately 60% of the total assemblage), with cattle (27%) and swine (12%)
assuming a secondary role (Harman 1996:146). The remaining 1% of the faunal assemblage is composed of horse, dog, and various wild animals such as rabbit, hare, roe deer, and red deer (Harman 1996:143). While sheep certainly constitute the majority of the assemblage, it appears as if by Stage III (middle of the Romano-British period), cattle became much more prevalent relative to sheep (Harman 1995:153).

<table>
<thead>
<tr>
<th>Table 4.7 Proportions of Species at Dragonby (based on NISP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Harman (1996:143)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Late Iron Age (Pre-Roman)</strong></td>
</tr>
<tr>
<td>Cattle</td>
</tr>
<tr>
<td>59 (24%) 5 (38%) 83 (46%) 86 (47%) 115 (28%) 179 (23%) 390 (28%) 541 (29%)</td>
</tr>
<tr>
<td>Sheep</td>
</tr>
<tr>
<td>133 (55%) 7 (54%) 64 (36%) 81 (45%) 233 (57%) 511 (65%) 836 (59%) 1057 (57%)</td>
</tr>
<tr>
<td>Swine</td>
</tr>
<tr>
<td>50 (21%) 1 (8%) 33 (18%) 14 (8%) 61 (15%) 96 (12%) 180 (13%) 257 (14%)</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>242 13 180 181 409 786 1406 1855</td>
</tr>
<tr>
<td>Grand Total: 5072</td>
</tr>
</tbody>
</table>

A similar picture develops if MNI is considered (see Table 4.8). Based on MNI, the majority of the remains appear to date to the Late Iron Age (Stages 6-10) and the early Romano-British period (Stages 11-12 & III-V). More specifically, the bulk of the assemblage dates to the
1st century AD, Stages 7-10. Sheep dominate the overall assemblage (61% of the total assemblage), although cattle (23%) certainly are certainly present and important. Swine forms approximately 16% of the total assemblage based on MNI. Again, by Stage III (middle of the Romano-British period), cattle are more important relative to sheep, although this trend appears slightly less significant based on MNI as compared to NISP.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Late Iron Age (Pre-Roman)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>12</td>
<td>27</td>
<td>34</td>
<td></td>
<td>76</td>
<td>26</td>
<td>12</td>
<td>8</td>
<td>13</td>
<td>5</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(23%)</td>
<td>(43%)</td>
<td>(38%)</td>
<td>(23%)</td>
<td>(18%)</td>
<td>(23%)</td>
<td>(21%)</td>
<td></td>
<td>(23%)</td>
<td>(19%)</td>
<td>(23%)</td>
<td>(28%)</td>
<td>(29%)</td>
<td>(18%)</td>
<td></td>
</tr>
<tr>
<td>Sheep</td>
<td>13</td>
<td>9</td>
<td>12</td>
<td>21</td>
<td>46</td>
<td>78</td>
<td>93</td>
<td></td>
<td>199</td>
<td>96</td>
<td>35</td>
<td>17</td>
<td>25</td>
<td>19</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(59%)</td>
<td>(43%)</td>
<td>(46%)</td>
<td>(54%)</td>
<td>(69%)</td>
<td>(66%)</td>
<td>(57%)</td>
<td></td>
<td>(60%)</td>
<td>(69%)</td>
<td>(68%)</td>
<td>(59%)</td>
<td>(56%)</td>
<td>(68%)</td>
<td></td>
</tr>
<tr>
<td>Swine</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>14</td>
<td>36</td>
<td></td>
<td>56</td>
<td>17</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(18%)</td>
<td>(14%)</td>
<td>(16%)</td>
<td>(23%)</td>
<td>(13%)</td>
<td>(11%)</td>
<td>(22%)</td>
<td></td>
<td>(17%)</td>
<td>(12%)</td>
<td>(9%)</td>
<td>(13%)</td>
<td>(15%)</td>
<td>(14%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td>21</td>
<td>26</td>
<td>39</td>
<td>67</td>
<td>119</td>
<td>163</td>
<td></td>
<td>331</td>
<td>139</td>
<td>52</td>
<td>29</td>
<td>45</td>
<td>28</td>
<td>--</td>
</tr>
</tbody>
</table>

It should be noted that I personally derived the MNI values for cattle, sheep, and swine from Dragonby from a portion of the “raw” faunal data presented by Harman (1995:147-153), and therefore I think it is worthwhile to briefly discuss the methods and potential problems or biases associated with my MNI calculations. To derive the various MNI values, I utilized the most abundant left or right skeletal elements for cattle, sheep, and pig in each chronological
period. In Stage 4, for example, the most frequently occurring skeletal element for sheep was the right tibia (12), and consequently the minimum number of individuals (MNI) for sheep in Stage 4 was 12.

The main area of potential bias stems from the original “raw” data. Specifically, the majority of my MNI calculations, particularly for sheep, were based on mandibles and tibiae. In other words, mandibles and tibiae were the most frequently occurring and abundant skeletal elements in many of the chronological stages at Dragonby. To me, this almost certainly indicates a taphonomic bias in the data that relates to the tendency of those bones to break and fragment into more identifiable pieces than shorter and stouter bones.

Butchery Patterns

Harman (1995:142-161) provides very little information on potential butchery practices and patterns at Dragonby. There was butchery evidence on the feet, ankles, and metapodials of some of the cattle at Dragonby (Harman 1995:146). More specifically, these skeletal elements reveal butchery patterns associated with skin processing. It is unclear whether the feet were removed with the skin and discarded later when the skin was processed, or the feet were cut off and the skin was then removed from the carcass (Harman 1995:146).

Harman (1995:153) also found some butchery patterns associated with the horses at Dragonby. Butchery marks on the end of the femur and the whole tibia indicate either the filleting of horse meat or the skinning of waste off the carcass. Harman (1995:153) believes that there was butchery activity involving the horses at Dragonby, but it was, most likely, connected with the production of hides.
Summary

Harman (1996:141) recovered over 150,000 animal fragments from Dragonby. The majority of the remains were composed of domestic animals, including cattle, sheep/goat, swine, horse, and dog (Harman 1996:141). Based on the data, it is apparent that sheep was the most important animal at Dragonby, with cattle and swine assuming secondary and tertiary roles (Harman 1995:143). The majority of the animal remains at Dragonby date to the first century AD (Stages 7-10) and the early-to-mid-Romano-British period (Stages 11-12 & III-V) (Harman 1995:143). Finally, the domestic animals at Dragonby appear to have been bred and kept on site, as opposed to being imported for slaughter (Harman 1995:158).
CHAPTER 5
DISCUSSION OF THE FAUNAL DATA

Introduction

Interpreting ethnicity from animal remains is an inexact enterprise in which one-to-one, clear-cut interpretations are difficult to produce (Stallibrass 1999:70-71). Nowhere is this notion more apparent than in the faunal assemblages from the four archaeological sites discussed in the preceding chapter. In fact, I see two distinct trends occurring within the faunal data from the sites of Segontium, Portchester Castle, Wavendon Gate, and Dragonby. First, there are aspects of the data that reinforce the separate characteristics of Roman military and native British ethnicity. These include, for instance, the high proportions of cattle and swine at the Roman sites of Segontium and Portchester Castle, and the high proportions of sheep/goat at the native British site of Dragonby.

Second, and more interestingly, other areas of the data appear to indicate the expression of an emerging hybrid Romano-British ethnicity. This mixed ethnicity is the result of the process of Creolization or hybridization. That is to say, this emerging Romano-British ethnicity appears to fuse and encompass various aspects of the meat-eating practices of both the Roman military and native British, and I believe it manifests most notably in the butchery data at the Roman military site of Portchester Castle and in the proportions of species and butchery data at the native British site of Wavendon Gate.
As noted previously, one of the prevalent strands of research that is focused on Roman and native identity (in Britain, and other areas of the Empire) is known as Romanization (Hill 2001; James 2001; MacMullen 1963; Millett 1990; Woolf 1998). A central crux of the Romanization framework is that in a colonial setting, the transfer of cultural ideas, customs, and practices moves in a primarily one-way direction from Romans to the various native populations (Hawkes 1999:90-91). My suggestion for a hybrid Romano-British ethnicity stands in contrast to theories of Romanization as it entails a hybrid ethnic identity composed of native and Roman characteristics.

**The Evidence for Separate Roman and British Ethnicities**

One of the main areas through which the Roman military expressed its collective ethnicity via the medium of meat-eating practices is with high proportions of cattle, and, to a lesser extent, swine, with sheep/goat assuming a tertiary role. Conversely, the native British expressed group ethnicity through high proportions of sheep/goat, with cattle and swine occupying less integral roles. These characteristics are evident within the proportions of species data at the Roman military sites of Segontium and Portchester Castle, and the British site of Dragonby, and they ultimately serve to reinforce the features of Roman military and native British ethnicity.

At Segontium and Portchester Castle, the characteristics of Roman military ethnicity based on the proportions of species data are present in abundance. For example, the faunal assemblages from both sites contain high percentages of cattle remains (39% at Segontium and 32% at Portchester Castle, based on MNI) and low percentages of sheep/goat remains (23% at Segontium and 23% at Portchester Castle, based on MNI). The proportion of swine remains was also higher than sheep/goat at both sites (26% at Segontium and 27% at Portchester Castle, based
on MNI). It should also be noted that the percentages of cattle at Segontium increased steadily over time, which potentially indicates a rise in the importance of cattle as an aspect of Roman military ethnicity.

The native British expressed their group ethnicity via the symbolic medium of meat-eating practices through high proportions of sheep/goat remains, with cattle and swine assuming distinctly secondary and tertiary roles. This trend is present at the British site of Dragonby. For instance, sheep/goat dominate the faunal assemblage (61% based on MNI), while cattle (23% based on MNI) and swine (16% based on MNI) assume distinctly secondary roles. Again, this appears to emphasize the characteristics of native British ethnicity.

**The Evidence for a Hybrid Romano-British Ethnicity**

The most interesting trend present within the faunal data from the four archaeological sites is the emergence of a hybrid Romano-British ethnicity. I propose that this mixed ethnicity is the result of Creolization, which is the process of intermixing and cultural change that occurs within zones of colonial interaction and results in a Creole, or stated differently, hybrid culture (Brathwaite 1971:11; Ferguson 1992:xli; Hawkes 1990:89-90). This shared ethnicity manifests most notably in the butchery patterns at the Roman site of Portchester Castle and in the proportions of species and butchery patterns at the British site of Wavendon Gate.

The most profound and noticeable change in foodways brought to Britain by the Roman military was a shift in butchery patterns (Cool 2006: 89; Maltby 1985:20). Specifically, it involved a move from the British practice of using a knife for butchering animals to the Roman practice of utilizing a cleaver (Maltby 1985:20). The difference in butchery marks left on the animal bones is relatively significant as a knife will leave evidence of filleting or fine cuts, while
a cleaver will produce thick, heavy chopping marks (Cool 2006:89). My suggestion for a hybrid Romano-British ethnicity requires evidence of a combination of butchery marks associated with both knives and cleavers.

At the Roman site of Portchester Castle butchery marks likely caused by both knives and cleavers were noticeable on many of the cattle bones (Grant 1975:389-392). These marks were present on skeletal elements such as horn cores, ribs, elbow joints, fibulae, and tibiae (Grant 1975:389-392). Following the logic that the use of knives represents indigenous British ethnicity and the use of cleavers, Roman ethnicity, then there seems to be the expression of a hybrid Romano-British identity at Portchester Castle, according to the butchery evidence.

A similar pattern appears at the British site of Wavendon Gate. Based on the evidence, the cattle remains appear to have been butchered primarily with a knife in the Late Iron Age (Dobney and Jacques 1995:219). During the first to third centuries (Romano-British period), cleavers were almost certainly introduced at Wavendon Gate, as many of the cattle bones appear to have been chopped (Dobney and Jacques 1995:219-220). On the surface, this trend appears to indicate the Romanization of indigenous butchery practices over time. I do not believe this is an appropriate interpretation, however. While there was a certainly a shift from knife to cleaver, there is evidence that the British practice of using a knife continued into the second and third centuries. For example, filleting and jointing marks consistent with the use of a knife were present on numerous cattle scapulae, distal tibulae, and calcanei (Dobney and Jacques 1995:220). Again, this fact paired with the presence of cleaver marks on many cattle skulls and mandibles seems to imply the expression of a hybrid Romano-British ethnicity.

I think the proportions of species data at Wavendon Gate also points to the expression of a hybrid ethnicity. Considering that Wavendon Gate is an indigenous British archaeological site,
it is logical to assume that it would contain high percentages of sheep/goat remains. In fact, as I previously demonstrated, sheep/goat remains dominated the faunal assemblage from Dragonby, another indigenous British site. Unlike at Dragonby, however, the faunal assemblage from Wavendon Gate contains high percentages of cattle (48%), as well as sheep/goat (38%) (swine comprised 14% of the overall assemblage). Following the logic that high proportions of cattle are indicative of Roman military ethnicity and high frequencies of sheep/goat are indicative of native British ethnicity, it would appear that a hybrid Romano-British ethnicity is present in the proportions of species at Wavendon Gate.

It is important to note that I am not arguing for simple cultural transformation or alteration at the communities in question. It is not as if, based on the faunal remains, the native British are “becoming Roman” at Wavendon Gate, and the Roman soldiers at Portchester Castle are “going native.” Rather, I believe there is the creation of a new hybrid cultural entity, created through the fusion and intermixing of two previously distinct cultures (Roman and British).

**Statistical Significance Tests**

In the previous two sections, I have discussed the implications of the proportions of species data (along with aspects of the butchery data) from the four archaeological sites. In an effort to gain further information with which to examine identity and ethnicity in the past, I performed statistical t-tests on the overall proportions of cattle, sheep/goat, and swine from the two Roman military sites (*Segontium* and Portchester Castle) and the two British sites (Wavendon Gate and Dragonby). For these tests, I considered only the total proportions of species from the Roman chronological period at each site (Wavendon Gate and Dragonby were occupied during the Iron Age, also). The results of the t-tests (see Table 5.1 below) were insignificant at a 0.05 alpha level
for cattle and sheep/goat, and significant for swine. To briefly explain, the results were insignificant for cattle and sheep/goat because the t-values (0.6201 for cattle, and -2.0609 for sheep/goat) were smaller than the critical value of the student t-distribution (2.920). The results were significant for swine because the t-value (6.0377) was larger than the critical value of the student t-distribution (2.920).

What do these statistical tests indicate about Roman military and native British ethnicity in the past? First, regarding cattle and sheep/goat, there are not a multitude of interpretations to be drawn from t-test results that are statistically insignificant, and as a result, I will focus primarily on the results from the proportions of swine. As the results of the t-tests indicate, the overall proportions of swine at the four archaeological sites are statistically significant. That is to say, the higher proportions of swine at the Roman versus British sites are not only noticeable, but they are statistically noteworthy. Hence, I suggest that it is safe to extrapolate the notion that the higher frequencies of swine at the Roman military sites versus the British civilian sites are, in fact, a keen indicator of ethnicity. In other words, I propose that swine were more vital to the construction and expression of Roman military ethnicity than native British ethnicity. It is important to note that my suggestion appears to be supported and reinforced by other sources of scholarship such as Cool (2006:82) and Renfrew (1985:18).

Of course, there are alternate interpretations for the relationship between the results of the t-tests and identity/ethnicity in Roman Britain. For example, as I mentioned earlier in my thesis, taphonomy heavily influences the way in which archaeologists interpret the past (Schiffer 1987:1-24). In this case, there may have been first-order and second-order taphonomic changes (site formation processes) that might have impacted the faunal remains data, and, consequently, my interpretations (Reitz and Wing 1999:118). By first-order processes (or changes), I am
referring to environmental factors, and, more specifically, the notion that the Roman military sites of Segontium and Portchester Castle were more environmentally appropriate for swine herding than the native British sites of Wavendon Gate and Dragonby. This environmental difference, for instance, possibly accounts for the statistically significant $t$-test results for swine at the two Roman sites versus the two British sites.

<p>| Table 5.1 $t$—test Results for Overall Proportions of Cattle, Sheep/Goat, and Swine |
|---------------------------------|------|------|------|------|</p>
<table>
<thead>
<tr>
<th></th>
<th>$\Sigma X$</th>
<th>$\bar{X}$</th>
<th>S</th>
<th>N</th>
<th>$t$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cattle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roman</td>
<td>0.8787</td>
<td>0.4394</td>
<td>0.0632</td>
<td>2</td>
<td>0.6201</td>
</tr>
<tr>
<td>Native</td>
<td>0.7110</td>
<td>0.3555</td>
<td>0.1808</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Sheep/Goat</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roman</td>
<td>0.5071</td>
<td>0.2536</td>
<td>0.0316</td>
<td>2</td>
<td>-2.0609</td>
</tr>
<tr>
<td>Native</td>
<td>0.9948</td>
<td>0.4974</td>
<td>0.1640</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Swine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roman</td>
<td>0.6142</td>
<td>0.3071</td>
<td>0.0316</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Native</td>
<td>0.2942</td>
<td>0.1471</td>
<td>0.0173</td>
<td>2</td>
<td>6.0377</td>
</tr>
</tbody>
</table>

Furthermore, second-order changes may have also affected the $t$-test results for swine at the four sites. Second-order changes (or processes) are those that occur during the excavation and analysis stages of archaeological research (Reitz and Wing 1999:118). In this instance, sampling problems and biases occurring during the excavations of the aforementioned sites may
have affected the number of swine remains recovered. For example, due to sampling, a higher number of swine remains may simply have been recovered from the Roman military sites versus the native British sites, which potentially explains the statistically significant $t$-test results.

**Implications for the Study of Identity in Roman Britain and Elsewhere**

One of the fundamental purposes of performing a case study is to understand the way in which a specific set of data applies and contributes to the larger picture. Hence, I now discuss the implications of my case study for the anthropological investigation of identity, in general, and Roman Britain, in particular. Ultimately, two roles characterized food (meat, specifically) in Roman Britain. First, following Durkheim (1982 [1895]) and Bourdieu (1977), food served to structure and define Roman military and native British social practice and identity. According to Durkheim (1982:50-51 [1895]), social solidarity is the level of cohesion of a particular society or group as a result of shared interactions and communal beliefs. Furthermore, social cohesion is reinforced or structured by social facts (Durkheim 1982:51-59 [1895]). Bourdieu (1977) directly enhanced both of these ideas (social solidarity and social facts) through his discussion of *habitus* and practice.

In Roman Britain, food was a type of social fact that aided in the maintenance of Roman military and native British social and ethnic solidarity. Additionally, food was a distinct aspect of *habitus* for the Romans and the British. According to Bourdieu (1977:78-79), individuals produce and negotiate their respective social identities through *habitus* and practice. That is to say, *habitus* is the structuring principle that when paired with social action (practice), enables individuals to create and reproduce the conditions of their existence (identity). For Roman soldiers and native British civilians, food served as a specific aspect of *habitus* that through the
practice of preparing and consuming food allowed both ethnic groups to codify and structure their respective social identities.

Second, following Giddens (1986), food in Roman Britain was a context for social change in the form of hybridization. In his structuration theory, Giddens (1986:24-25) proposed that through social practice, agents continually recreate and negotiate social systems and structures. When the practice or actions of agents contradicts or defies the organized sets of rules and resources of their current existence (structure), a new social structure or system is produced (Giddens 1986:24-25). For the Roman military and native British, each group initially exploited food to codify their respective social structures in specific and, largely, unique ways. The Roman soldiers, for instance, consumed high proportions of cattle and pork, and comparatively lower proportions of sheep. They also employed distinct butchery practices associated with the use of a cleaver. The native British, conversely, consumed high proportions of sheep, and relatively lower proportions of cattle and pork. Additionally, unlike the Romans, they employed unique butchery practices associated with the use of a knife.

When the Roman soldiers and the native British began adopting aspects of the other group’s food practices, the social structure changed. The British began consuming higher proportions of cattle and utilizing a cleaver along with a knife to butcher their animals. The opposite occurred with Roman soldiers, who began consuming more sheep, and adding a knife to their butchery practices. The result of the choice (agency) by these two ethnic groups to challenge the social structures that they each previously created through their respective uses of food was that a “new” social structure and, therefore, a “new” collective identity was produced.

Since the two ethnic groups operated in a distinct colonial zone, this “new” identity became an amalgam of the characteristics of the previously separate ethnic identities of the
Roman military and native British (Dietler 2010:183-189; Hawkes 1990:89-90; Loomba 1998:180-181). That is to say, over the course of a few centuries, Roman soldiers and indigenous British civilians interacted and exchanged ideas and practices (such as meat-eating practices) in the colonial arena of Roman Britain. Following Dietler (2010:189-192), one of the consequences of these interactions was the emergence and development of a hybrid *Romano-British* ethnic identity. This “new” shared identity was, in many ways, a necessary result of the encounters between the Roman military and native British in Britain (Loomba 1998:180-181).

**Summary**

In this section, I presented my interpretations for the published faunal data from the two Roman military sites of *Segontium* and Portchester Castle and the two native British sites of Wavendon Gate and Dragonby. I suggested that two distinct trends characterize the faunal data from these sites. First, the proportions of species data from the Roman sites of *Segontium* and Portchester Castle, and the British site of Dragonby, served to reinforce the characteristics of the separate ethnic identities of the Roman military and native British. Second, the butchery patterns from the Roman site of Portchester Castle, along with the proportions of species data and butchery patterns from Wavendon Gate, indicated the emergence of shared, hybrid *Romano-British* ethnicity. This case study has broad implications for the anthropological study of identity through the symbolic medium of food, in general, and in Roman Britain, in particular. Ultimately, food not only served to structure and codify Roman military and native British ethnic identity in Roman Britain, but, also, it was a context for social change in the form of hybridization.
CHAPTER 6

CONCLUSION

Interpreting Identity in the Past

Throughout this thesis I have explored the extent to which food (meat) was utilized in the production and expression of ethnic identity in Roman Britain. In a more general sense, however, the core purpose of this thesis is to test the feasibility of measuring and interpreting identity in the archaeological record. Whether viewed through the lens of the past or present, identity is a complex and ambiguous socio-cultural phenomenon. Following the case study of the relationship between food and identity among Roman soldiers and native British civilians in Roman Britain, I propose that it is possible, given particular conditions and requirements, to interpret identity in the past. The pertinent question, therefore, is: What are these conditions or requirements?

The first condition is that one or more aspects of identity (either individual or group) must be isolated for analysis. Identity is a notoriously labile term and concept, difficult to broach both theoretically and methodologically (Barnard and Spencer 1996:292). That is to say, not only is it difficult to succinctly and clearly define, but “seeing” and interpreting identity archaeologically is equally daunting. Therefore, one of the most effective and efficient methods by which to understand identity in the past is to conceptualize it in terms of its component parts (ethnicity, gender, status, age, religion, nationality). While I focused solely on ethnicity in my thesis, all of the other aspects are equally valid, interesting, and important.

Related to the first condition, the second condition is that in order to “see” aspects of identity in the past, one or more of the symbolic media through which identity is ultimately constructed
and expressed must be identified. These media include art, dress, food, religion, architecture, and music, among many others (Diaz-Andreu and Lucy 2005:1-12). In this thesis, I isolated the specific aspect of Roman military and native British identity known as ethnicity, and I utilized the symbolic medium of meat-eating practices as a potential gateway to understanding the characteristics of the ethnicities of each group.

Furthermore, analyzing the expression of identity in the past through one or more symbolic mediums is only as accurate and effective as the preserved material culture remains of the present allow. Hence, the third requirement for studying identity centers on taphonomy. Taphonomic or site formation processes heavily influence the way in which archaeologists interpret and understand the past (Schiffer 1987:1-24). Interpreting identity is an imprecise and subjective venture, and, without adequate preservation of material culture, this venture is problematic (Crabtree 1990:178-181). For example, in this thesis, the well-preserved cattle remains at Portchester Castle and Wavendon Gate allowed me to use butchery evidence in my argument for the emergence of a hybrid Romano-British ethnicity.

**Future Research**

In this thesis, I compared the faunal data from the archaeological sites of Segontium, Porthchester Castle, Wavendon Gate, and Dragonby in an effort to understand the role of meat in the creation and expression of Roman military versus native British ethnic identity. The case study of these four sites, however, is only a single step along the long, winding road to understanding identity in the past. In an ideal world, I would prefer to further develop my research in a number of specific areas. First, I would like to expand my study of food by researching other types of faunal remains (aside from cattle, sheep/goat, swine), along with
grains, cereals, plants, and/or dairy products, and drinks such as wine or beer. Second, I would prefer to include the types of material culture involved in the cooking and consumption of foods and drinks such as amphorae or pottery in any future study of food and identity. This is an area of research completely absent from my thesis, and, thus, it is one I would enjoy examining in the future.

Third, I discussed group identity in my thesis, and in future research I would like to examine the role of food in the production, articulation, and negotiation of individual identity. Until recent decades, individuals have been largely absent from archaeological theory and research (Fowler 2005:1-5). While surely a daunting and difficult task, I believe that it would be interesting and exciting to try to understand the relationship between food and individual identity in the past.

Fourth, I would enjoy adding an ethnoarchaeological component to my future research. In particular, I would prefer to examine the way in which individuals and groups utilize food to produce and express identity in the present, and then apply that knowledge to studies of identity in the past. Identity is a difficult concept to approach archaeologically, and, therefore, I think by viewing its construction and articulation through the lens of the present, I would be able to develop more effective and pertinent interpretations of the past.

Finally, I think it would be worthwhile and highly useful to examine visual representations of animals in any future study of identity. Specifically, it would be interesting and enlightening to analyze the way in which native British communities and the Roman military portrayed animals in art, iconography, and other forms of visual material culture. Paired with evidence afforded by faunal assemblages, this approach would provide insight into how each group viewed the place of animals in their day-to-day lives and existence.
Identity in the Present

While I have focused on the concepts of identity and ethnicity in the past, both of these concepts also hold obvious importance and significance for individuals and groups in the present. As Diaz-Andreu and Lucy (2005:11) aptly state, “Identities clearly matter in the present, as they did in the past. They help define who we are, who we are not, what we can do, where we can go, how we dress, and myriad other things.” As humans, identity is our sense of being, and the amalgam of qualities and characteristics that make all of us, at once, unique, but analogous, foreign, but familiar. Biological and genetic complexities and intricacies may separate one human from another, but identity is one of the fundamental ways in which we define ourselves culturally and socially. Therefore, for anthropologists and archaeologists, studying identity is, at its foundation, a venture into our human core.
LIST OF REFERENCES
Primary Sources

Ammianus Marcellinus

Bede

Gildas

Julius Caesar

Nennius

Secondary Sources

Abu-Lughod, Lila

Alcock, Joan P.
2001 Food in Roman Britain. The History Press Ltd., London.

Barnard, Alan and Jonathan Spencer

Barth, Frederik

Bhabha, Homi
1993 The Location of Culture. Routledge, London.

Bourdieu, Pierre

Bradley, Richard
Brathwaite, Kamau

Brothwell, Don and Patricia Brothwell

Caplan, Pat

Casey, P. J., J. L. Davies, and J. Evans

Childe, V. Gordon

Cohen, Ronald

Cool, H. E. M.

Counihan, Carole and Penny Van Esterik

Counihan, Carole

Crabtree, Pamela J.

Cunliffe, Barry


Davies, R. W.
Davis, Simon J. M.
1987 *The Archaeology of Animals*. Yale University Press, New Haven, CT.

Díaz-Andrieu, Margarita et al.

Díaz-Andrieu, Margarita and Sam Lucy

Dietler, Michael


Dobney, K. M. and S. D. Jaques

Dobney, Keith

Durkheim, Emile

Ferguson, Leland

Fowler, Chris.

Gardner, Andrew.
2007 *An Archaeology of Identity: Soldiers and Society in Late Roman Britain*. Left Coast Press, Walnut Creek, CA.
Garnsey, Peter  

Geertz, Clifford.  

Giddens, Anthony  

Giles, Melanie  

Goldberg, David Theo  

Goody, Jack  

Grant, Annie  


Hambleton, Ellen  

Hanson, W. S.  

Harman, Mary  
Haselgrove, Colin

Hawkes, Gillian

Haynes, Ian
1999 “Introduction.” In The Roman Army as a Community, edited by Adrian Goldsworthy and Ian Haynes, pp. 7-14. Journal of Roman Archaeology L.L.C. (Supplemental Series 34), Portsmouth, RI.

Hill, J. D.

Hines, John

Hingley, Richard

Holder, P. A.

Izard, Karen

James, Simon


James, Simon and Valerie Rigby

Jones, Michael

Jones, Siân and Paul Graves-Brown

Jones, Siân.

Joyner, Charles
1984 *Down by the Riverside: A South Carolina Slave Community*. University of Illinois Press, Urbana, IL.

King, Anthony

1999a “Animals and the Roman Army: The Evidence of Animal Bones.” In *The Roman Army as a Community*, edited by Adrian Goldsworthy and Ian Haynes, pp. 139-149. Journal of Roman Archaeology L.L.C. (Supplemental Series 34), Portsmouth, RI.


Legg, Rodney

Loomba, Ania

Lucy, Sam
Lyman, R. Lee

MacMullen, Ramsay


Maltby, M.

Mattingly, David

May, Jeffrey

Mead, Margaret.

Millett, Martin

Mintz, Sidney W. and Christine M. Du Bois

Morgan, Lewis Henry

Noddle, B.

Reitz, Elizabeth J. and Elizabeth S. Wing

Renfrew, Colin
Renfrew, Jane

Romaine, Suzanne

Rosaldo, Renato

Salway, Peter

Schiffer, Michael B.
1987 Formation Processes of the Archaeological Record. The University of New Mexico Press, Albuquerque.

Shennan, S. J.

Slofstra, Jan

Southern, Pat.

Spivak, Gayatri Chakravorty

Stallibrass, Sue

Starr, Chester G.

Todd, Malcolm

Trigger, Bruce G.
Watson, G. R.

Watson, J. P. N.

Wells, Peter S.


Wheeler R. E. M.

Williams, R. J., P. J. Hart, and A. T. L. Williams
1995 *Wavendon Gate: A Late Iron Age and Roman Settlement in Milton Keynes*. The Buckinghamshire Archaeological Society, Aylesbury, U.K.

Wilson, Thomas M.

Wolf, Eric

Woolf, Greg
VITA

EDUCATION:

Bates College, Lewiston, ME
Bachelor of Arts, History
GPA 3.27/4.0; in major: 3.58/4.0
Thesis: The Historicity of King Arthur
Advisor: Dr. Michael E. Jones
May 2009

Temple University, Rome, Italy
Liberal Arts Study Abroad Program
GPA 3.55/4.0
Fall Semester, 2007

PROFESSIONAL PRESENTATIONS:

Food and Identity in Roman Britain
Graduate Student Council (GSC) Poster Symposium, University of Mississippi
Poster Presentation

Food and Identity: A Case Study of Roman Soldiers and Native Civilians in Roman Britain
Southern Anthropological Society (SAS) meeting in Richmond, VA.
Paper Presentation

Chair, “Food and Archaeology” Panel
Southern Anthropological Society (SAS) meeting in Richmond, VA.

What Do Visitors Know About Archaeology? Insights from the Homol’ovi Ruins State Park, AZ
Society for American Archaeology (SAA) meeting in Atlanta, GA.
Poster Presentation.
- Co-authored poster with Leslie D. Aragon.

Interpreting Visitor Studies at the Homol’ovi Ruins State Park
Homol’ovi Undergraduate Research Opportunities Program
PowerPoint Presentation

Life in the Shetland Islands: 1600-1800
Bates College, Mt. David Summit
Poster Presentation

2009

2008
FIELD EXPERIENCE:

Desert Archaeology, Inc.  
Tucson, AZ.  
Project Director: James M. Vint  
- Participated in an on-going excavation of the Las Capas site (ca. 1250-800 BC)  
- Excavated and recorded a variety of storage pits and other features

Desert Archaeology, Inc.  
Tucson, AZ.  
Project Director: Dr. Helga Wöcherl  
- Participated in a two-week CRM testing project at the Roger Road Waste Facilities Plant  
- Examined testing trenches for Late Archaic period features

Homol’ovi Undergraduate Research Opportunities Program  
Winslow, AZ  
Director: Dr. Lisa C. Young  
- Participated in NSF-REU and University of Michigan sponsored archaeological field school in Homol’ovi Ruins State Park.  
- Excavated Ancestral Puebloan community.  
- Acquired advanced field excavation theories and strategies.  
- Surveyed a potential site for excavation.  
- Retrieved samples for archaeomagnetic dating.  
- Analyzed artifacts including: ceramics, lithics, floral, and faunal.  
- Conducted five-week intensive study of visitors at site, culminating in research paper and PowerPoint presentation: Interpreting Visitor Studies at the Homol’ovi Ruins State Park.

Bates College Short Term Study Abroad  
Shetland Islands, Scotland, U.K.  
Directors: Dr. Gerald F. Bigelow and Dr. Michael E. Jones  
- Excavated 17th century manor house and farmstead.  
- Acquired basic field excavation theories and strategies.

LABORATORY EXPERIENCE:

Archaeology Laboratory  
The University of Mississippi, Oxford, MS  
Fall, 2009
Supervisor: Dr. Jay K. Johnson

- Excavated, analyzed, and processed human burial remains removed from the Carson Mounds site outside of Clarksdale, MS.

**Homol’ovi Research Laboratory**  
Arizona State Museum, Tucson, AZ  
Supervisor: Richard Lange

- Analyzed and processed ceramic and lithic artifacts from several Ancestral Hopi pueblos (villages) within the Homol’ovi Ruins State Park, Winslow, AZ.

**RELATED ACADEMIC EXPERIENCE:**

**Acquiring Intern**  
The University of Arizona Press, Tucson, AZ  
Supervisor: Dr. Allyson Carter, Editor-in-Chief

- Responsibilities included: preparing dockets for proposed manuscripts, corresponding with authors on behalf of the Editor-In-Chief, updating ContactPro database, preparing completed manuscripts for editorial process, attending new manuscript launch meetings, reading and commenting on potential manuscripts.

**SCHOLARSHIPS/AWARDS/FELLOWSHIPS:**

- **Graduate Achievement Award in Sociology and Anthropology**  
The University of Mississippi  
2011

- **Phi Kappa Phi National Honor Society**  
The University of Mississippi Chapter  
2010

- **Teaching Assistantship**, The University of Mississippi  
2009-2011

- **Osher Scholar**, Bates College  
2005-2006

- **Bates General Scholarship**, Bates College  
2005-2009

- **Harold and Shirley Mullen Scholarship**  
2005

- **Ralph Perreault Memorial Scholarship**  
2005