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COLLECTING IN CONTEXT: A STUDY OF THE MILWAUKEE PUBLIC MUSEUM'S FRENCH PALEOLITHIC FAUNAL COLLECTION.

by

Rebecca Fetzer

A Thesis Submitted in

Partial Fulfillment of the

Requirements for the Degree

Master of Science

in Anthropology

at

The University of Wisconsin-Milwaukee

December 2015

ABSTRACT

COLLECTING IN CONTEXT: A STUDY OF THE MILWAUKEE PUBLIC MUSEUM'S FRENCH PALEOLITHIC FAUNAL COLLECTION.

by

Rebecca Fetzer

The University of Wisconsin-Milwaukee, 2015
Under the Supervision of Professor Jean Hudson

This thesis investigates the history of collecting practices of individual collectors and museums of French Paleolithic archaeological material between 1869 and 1945. During this time period, thousands of French archaeological artifacts were dispersed to museums throughout North America, many with scant provenience. National agendas and the social and economic factors of the time greatly affected their dispersal. The individual agendas of the collector also played a role. This in turn had impacts on the overall understanding of these collections as well as the contemporary construction of archaeological knowledge relating to the study of early humans.

A sizable French Paleolithic faunal collection at the Milwaukee Public Museum (MPM) serves as a primary source to investigate this rich history. The faunal remains consist of 245 animal bones, antler fragments, worked bone tools, and conglomerates of bone fragments embedded in a mineralized soil matrix. These materials originate from 11 different Paleolithic sites and/or regions in southern France. The items are identified to taxa and skeletal element, reviewed for evidence of cultural and natural modification, and photographed, with the intent to make the collection available for future researchers.

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Chapter 1: Introduction

1.1 Introduction to the Research Problem

French Paleolithic archaeological material and its acquisition by personal collectors and museums has a significant history, not just in its country of origin, but in North America as well. The primary interest of museums in these collections stemmed from national agendas and social and economic factors of the time (1869- 1945) (White 2002). Thousands of French objects from bones to stones were dispersed to museums throughout the United States and Canada, many with scant archaeological provenience. The story of the individual collectors and the U.S. museums that acquired the material is integral to understanding how these types of collections reflect early human and faunal prehistory in Europe, as well as how they help to define the history of collecting. Studying a collection and its history as a primary source can provide insight into the development of a discipline and the varying perspectives related to past lifeways. The specific collecting practices of a museum or individual are vitally important factors in studying and understanding the past (Godsen and Larson 2007; Maxwell 2013).

A substantial French Paleolithic faunal collection at the Milwaukee Public Museum (MPM) serves as a primary source to investigate this rich history. The faunal remains consist of 245 animal bones, antler fragments, worked bone tools, and conglomerates of bone fragments embedded in a mineralized soil matrix. These materials originate from 11 different Paleolithic sites and/or regions in southern France. The items are identified to taxa and skeletal element, reviewed for evidence of cultural and natural modification, and photographed, with the intent to make the collection available for future researchers.

1.2 The French Paleolithic Collection at the Milwaukee Public Museum

The Milwaukee Public Museum (MPM) represents one of less than two dozen North American museums that are considered integral resources for understanding the history of Paleolithic collecting in the United States. The MPM has a substantial collection representing 40 sites and regions dating from approximately 100,000 to 10,000 years ago. While much of the collection is comprised of lithic tools, the assemblage also contains 245 animal bones, antler fragments, worked bone tools, and conglomerates of bone fragments embedded in a mineralized soil matrix. The majority of the collection was amassed by two individuals, Charles Doerflinger and Charles Peabody, during two distinct time periods

The MPM's first curator and custodian, Charles Doerflinger, traveled in France between 1889 and 1893 and collected 1100 French Paleolithic items. Of these 1100 pieces, only 99 are faunal remains. Many of the artifacts were collected from rock shelters or local farmers. The artifacts came from the valley of the Somme River in northern France and from caves in southern France, including regions in the Gironde, Garonne, Dordogne and Vezere valleys (Figure 1.1). Most of the objects in the collection lack proper provenience by today's systematic archeological fieldwork standards, consisting simply of an association with a particular site or region.

Over half (142) of the MPM faunal remains came from the Upper Paleolithic site of La Quina. In 1922, the MPM's director, Dr. Samuel A. Barrett, joined the advisory board of the American School in France for Prehistoric Studies (ASPR). He donated $100 to fund the 1922-1923 excavations at La Quina in exchange for a representative collection from the site. This material has a rich history which will be relayed in the results section as the origin of this material was not known until recent archival and documentation research was conducted in the MPM archives as part of this thesis.

Figure 1.1: Map showing collecting area the Gironde, Garonne, Dordogne and Vezere valleys. See Chapter 2 for map showing specific sites.

1.3 Brief Description of Project Goals and Methods

The primary goal of this thesis is to examine the history of the French Paleolithic faunal collection at the MPM as a reflection of the early history of archaeology and collecting practices of French Paleolithic material as a whole. The specific documentation relating to the collection within the museum will be provided, including whenever possible the identification of collector, seller, and/or intermediate buyer, background history of those individuals and organizations, year of collection, accession documents, and any associated correspondence or public records. These factors will be examined within the larger social contexts of the time. The examination of the historiography of the material is essential since many natural history museums are filled with materials collected during the first half of the 20th century (Sackett 1981) or earlier (Godsen and Larsen 2007). This project will demonstrate the importance of studying the history of a collection and the ways it can supplement an archaeological analysis.

Another, more practical goal, of this thesis project was to make the collection available for future researchers. The MPM will gain a detailed inventory and photographic record of the faunal material, which will include the identification of materials previously unknown. Identifications will include taxon, element, and evidence for cultural and natural modifications.

The material has special archaeological significance because the time period corresponds to the disappearance of Neanderthals and the rise of early modern humans in Europe, which represents a significant chapter of human prehistory. Faunal remains and their interpretation are a critical part of the continuing debate about the nature of the transition between the Middle and Upper Paleolithic (Chase 1986, 1988; Costamagno et al. 2006; Daujeard and Moncel 2010; Discamps et al. 2011; Gravina et al. 2005; Grayson and Delpech 2003, 2008; Marean and Assefa 1999; Mellars 1996, 2004; Morin 2004, 2012; Shea 1998; Stiner 1991). Hopefully, this study will inspire others to consider researching museum collections that lie dormant in storage areas

across the country. This material is a valuable and underutilized resource that has vast potential, which in addition to little of it being published also does not require new excavation.

I will address the following four questions through research pertaining to the history of French Paleolithic archaeology and collecting practices in France, the United States, and Canada:

1) Why was the French Paleolithic of special interest to U.S. museums?

2) How did national agendas influence the formation of these types of museum collections?

3) What were the relevant social and economic contexts that impacted these collections?

4) In regard to the evolving narrative of such collections, what interpretations have been offered concerning the use of animals during the French Paleolithic in terms of food, tools, and art?

1.4 Benefits and Implications

According to Susan M. Pearce, in her chapter titled "Thinking About Things," collections are the heart of the museum (1994). They are what distinguishes museums from other types of institutions; therefore, it is important to provide not only for the physical care of objects, but also to obtain and keep proper documentation and to provide access to a number of constituents. The end result of this thesis project will expand what is known about the collection and provide a detailed inventory for the museum and anyone interested in the material in the future. Having collections properly documented and identified is considered due diligence in museum work. Recording the results of such an examination is crucial for researchers in the future since new technologies and/or methodologies may evolve for studying this material (Colten and Hill 2006). The in-depth documentation and identification of the material will also add to the larger regional

significance of the collection. Other local museums, including the Logan Museum of Anthropology in Beloit, Wisconsin and the Field Museum in Chicago, Illinois have substantial French Paleolithic collections that may provide a temporal, geographical, or physical comparison. Several other museums across the country also have sizable French Paleolithic collections that come from this era of intensive collecting. Some of these additional museums include the Peabody Museum of Natural History at Yale University, the Wilson Museum, the Museum of Anthropological Archaeology at the University of Michigan, and the Smithsonian Institution. Given the physical dispersal of the materials among many museums, the creation of a photographic record of the items is also a valuable contribution to their future integration into the broader documentation of archaeological research relating to the French Paleolithic. A future goal may be to link the data from collections in various museums around the U.S. that have connections to one another by either site or collector.

Lawrence Guy Straus (2004: ix) says that, "Although it is easy to bemoan the frequent lack of specific provenience information, the biased collection and curation practices of the past, and other acknowledged flaws attendant upon many museum collections, a more constructive approach is to devise methods for extracting information about the prehistoric condition from these otherwise lifeless, often forgotten archaeological resources." This project takes Straus' advice, as the methods are tailored for gathering information from this specific type of collection. Even though there are gaps in the documentation, there is still much to be learned by researching the background of the key players and the archaeological and museological practices of the time.

1.5 Limitations

Limitations in studying the MPM Paleolithic material primarily relate to the lack of provenience for individual artifacts. For example, there is no information about where within

individual sites the objects were found or where they were found in relation to one another. Having small numbers of artifacts from many localities is limiting when trying to draw conclusions about a site or Paleolithic group. For example, the dispersal of the La Quina 1922-1923 excavation material to several museums is a challenging factor in attempting to understand that site. The MPM only received part of this vast collection and the rest was distributed to seven other U.S. museums (MPM correspondence). It is unclear how much of the material from the 1922-1923 excavation the MPM received since the associated documentation is not in the museum's possession.

1.6 Chapter Outline

Chapter Two presents a review of the larger social and historical contexts of this thesis project, which includes the following topics: collecting theory, Paleolithic collecting in museums, history of archaeology as it pertains to the Paleolithic, collector background, and the specific history of the MPM collection. Chapter Three discusses the methods employed in this thesis and the reasoning behind choosing them. Chapter Four details the results of the faunal identifications made as well as quantification and metrics. A discussion of each site will be presented. Chapter 4 also reveals the results of solving the LAQ museum conundrum. Lastly, Chapter Five will provide a synthesis of the research and a summary of conclusions.

Chapter 2: Background

2.1 Introduction

The first section of this chapter focuses on theoretical approaches to museum collecting. I then discuss the history of American collecting of Paleolithic artifacts in France. More specifically, I elaborate on how national agendas and the various social and economic factors of the time affected the mass dispersal of Paleolithic artifacts out of France and into American museums. I then target the history of Paleolithic archaeology and the various perspectives of the field in France. Each has had its own style and perspectives and these have greatly influenced the formation of Paleolithic collections. The next section of the chapter focuses on the specific history of the French Paleolithic faunal collection at the Milwaukee Public Museum. This includes a discussion of the sites and the date of acquisition for each collection, what was collected, collector background, labels, collecting biases, and a brief history of the material since it entered the MPM. Lastly, I provide a review of the role that faunal remains play in this complex history of collecting Paleolithic materials in France and Paleolithic archaeology as a whole.

2.2 Collecting Theory and Motivations

The area of studying motivations for artifact and collections acquisition has significantly increased in museum literature starting in the mid 1980s. Museum collecting has been looked at from various theoretical perspectives: Sociology (Danneter 1980 and Olmsted 1988), Art History (Saisselin 1984), Anthropology (Clifford 1988), archaeology (Godsen and Larson 2007), consumerism (Belk 1988, 1995), and popular culture (Stewart 1984). To support my thesis directive, I will focus here on Susan Pearce's psychological perspective which trys to understand the individual collector's motivations to collect (Pearce 1992).

The definition of a *collection* has been stated in diverse ways by different individuals, just as a collection itself can vary depending who creates it. According to Susan Pearce, "different people will take different things into their hearts and minds, and so objects cross the threshold from the outside to the inwardness of collection" (1994:157). Since collecting is a complex and very human activity, it may be insufficiently summarized by a strict definition. Instead, I will provide three significant attributes of a collection as stated by Susan Pearce (1993, 1994). The first is that objects are selected by collectors for non-utilitarian purposes. If a set of objects is valued for their use or purpose then it is not technically considered a collection. Second, the objects collected must have an intrinsic or internal relationship. The subjective view of the collector is significant in this relationship. Thirdly, the collection should be assembled in a deliberate manner, meaning there is an intellectual rationale for the object choice and acquisition (Pearce 1994: 159).

Creating a collection of objects is one way that we organize the physical world, as well as construct it. Therefore, the study of collections is a form of understanding the human relationship with the world (Pearce 1994: 37). All objects that enter a collection can only be the result of selection or in other words, what is intentionally chosen or rejected. Everything the collector chooses has a metonymic relationship to the material from which it was originally selected (Pearce 1994: 38). This relationship occurs because of the objects integral nature to the whole. Particularly, it becomes a part that represents a whole (Maxwell 2013: 29). Once a selected object is added to a particular collection, it gains a metaphorical relationship to its whole (Pearce 1994: 38). These selected objects do not represent a separate part of the whole, but become an inherent piece of the whole with its own meaning (Ross 2011:29). It is important to take into

account the personal beliefs, intellectual frameworks, and social networks of the collector as they influence and shape museum collections (Maxwell 2013:30)

There are three modes of collecting to which most collections conform. These modes include collections as "souvenirs," as "fetish objects" and as "systematics" (Maxwell 2013; Pearce 1993, 1994). Souvenirs are the "yesterdays of us all" (Pearce 1993: 69). Collection integrity in this case comes directly from the object's relationship to a specific person or group of people. This type of collection can encompass a large variety of objects from children's toys to stuffed and mounted animals (Pearce 1993:69, 1994:194). Fetish collecting is represented by the obsession with the act of collecting itself and also a lack of intellectual reasoning behind the gathering of objects. Collection organization is related to individual ideas of what goes together and what does not. For example, a collector may organize a group of objects by events in his life (Pearce 1993: 78). This type of collection would be heavily influenced by the personality and personal history of the collector as well as certain social and economic factors of the time. Both of these modes are conducive to personal and private collecting as well as the early acquisition of collections at many museums.

The third mode of collecting, systematic, is the most relevant to the study of archaeological material found in museums and to this specific thesis project. Systematic collecting is more intellectual than the other two types and is based on the systematic organization of artifacts by physical characteristics or typologies (Maxwell 2013: 30; Pearce 1993: 84-87; Ross 2011:30). A crucial distinction between the two modes discussed above and systematic collecting is that it allows for an audience. Systematic collections can engage the public and demonstrate relationships and are most frequently the types of collections that exist in museum exhibitions and displays all over the world (Pearce 1994: 202). Understanding the

processes and construction of systematic collections is important because they shape our knowledge of the past through research and use.

Pearce argues that the psychology of the individual collector can influence collections, but we must also take into account other factors such as the production of knowledge in the specific discipline, as well as the political and economic factors of the time. Intellectual trends within the field of archaeology, and more specifically Paleolithic archaeology in France, have influenced the way the past was presented and interpreted in museums (Leckie 2011; Sackett 1989, 1991). It has also been argued that what is collected and/or displayed by individuals and museums are influenced by politics or national agendas and social ideologies (Arnold 1990; Asma 2003; Baekeland 1994; Belk 1994; Belk and Wallendorf 1994; Carbonell 2004; Clifford 1994; Danet and Katriel 1994; Formanek 1994; Godsen and Larson 2007; Hooper-Greenhill 1992; Kaeser 2013; Kaplan 2006; Kopytoff 1986; Levy 2006; Lowenthal 1985; Macdonald 2006; Pearce 1990, 1993, 1994, 1995; Schlereth 1991; Schnapp 1996, 2008; Stewart 1994; Taborsky 1990). These factors are discussed in detail in the following sections.

2.3 The History of French Paleolithic Collecting in Museums

Paleolithic research has been conducted for over 170 years, particularly in Western Europe. France, in particular, has a long history of being an important region in the American view of the Old World (Straus 2004). The relationship between American museums and French prehistorians was complex; at times the French required financial assistance from Americans while Americans used French theoretical approaches to unravel the history of early humans (Straus 2002). The collecting and dispersal of French Paleolithic material out of France began in 1869, when the Smithsonian Institution purchased the first Paleolithic collection in the United States. The practice ended in 1945 in response to the strict antiquities laws that were put in place

(Berleant 2007, Strauss 2004)(Figure: 2.1). Over 150,000 French Paleolithic artifacts found their way into American museums during this time span from 1869 to 1945 (White 2002).

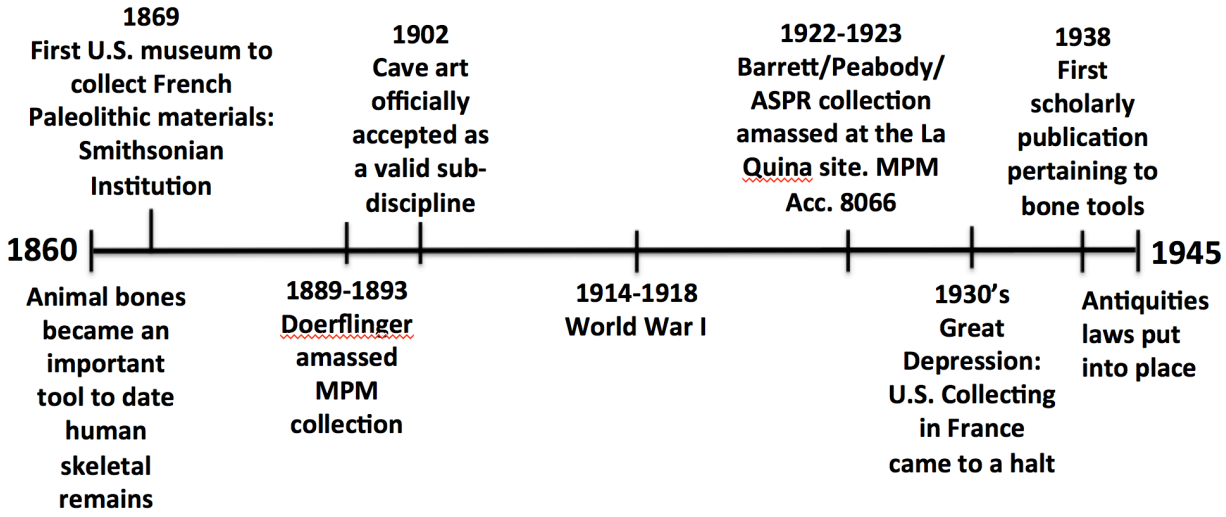


Figure 2.1: Timeline of significant events related to the collecting of French Paleolithic material.

Why were French Paleolithic collections dispersed?

Few American museums collected Paleolithic material before 1912; the Smithsonian Institution, MPM, and Wilson Museum were among the first. This period of collecting was considered an antiquarian phase, in which the educational and socioeconomic backgrounds, as well as, the motivations of those involved were highly variable. This was also a time of paradigm shifts in related disciplines, such as geology and ethnology. Interest in European archaeological materials, such as those from the Paleolithic, stemmed from the need of analogues for North American Archaeology in Museums (Arnold 2013:875-885).

When intensive collecting began in 1912 with World War I on the horizon, North American museums were easily able to obtain Paleolithic collections from French curators and prehistorians causing this vast dispersal for several reasons, some of which follow a historical trajectory. First, archaeology in France was costly and funds for excavation were often lacking.

French archaeologists often had to pay private landowners for access to sites, as well as for the artifacts found. Money was also needed for excavation and for analysis after excavation. Government financial support for prehistoric studies and museums was minimal, and decreased even further after World War I (Berleant 2007; Schnapp 1997; White 2002). This created a financial climate in which French museums and archaeologists could continue some of their own research if they were willing to partition and sell parts of their collections to Americans. This post-war economic constraint in Europe coincided with economic expansion in the United States in the 1920s, which lead to increased charitable support for museums, science and art. In 1921, MacCurdy founded the ASPR, which trained American students in Paleolithic archaeology (Straus 2002: 48). It was this field school that collected a large portion of the MPM material. When the Great Depression began, there was an end to American financial assistance to the French and collecting came to a halt.

Second, there was no legal protection of Paleolithic sites or artifacts. The lack of formal laws coincided the timing of the economic situation just described. In 1908, an attempt was made to pass a law in France that would give the state control over archaeological excavations, as well as require that archaeological projects be formally submitted to authorities before digging was permitted (White 2002:72). This law did not pass and Americans continued to excavate and send collections back to the United States. In the 1920s, some sites were classified as "monuments historiques," which prevented excavation and exporting of objects. French archaeological sites and the artifacts they contain were and still are today, the private property of the landowner. As a result, the only requirement is permission from the owner. Laws for regulating international antiquities trade were not in place until 1941, acted on by the Vichy regime (Berleant 2007). 1941 Law, Art. 1 allowed the French State control of excavation and exportation of objects of

national, historic, artistic, scientific or technical interest (Prott and O'Keefe 1988). Ownership rights were still under the control of the landowner. This law initiated a new collaborative phase between Americans and the French (White 2002:81).

The third reason for the availability of French Paleolithic objects was the scientific paradigm of the time. French prehistorians during the period of 1870 to the 1950s used characteristic type-fossils to distinguish specific industries of particular places and/or times (Berleant 2007). In other words, it was not viewed as vital to have diverse or complete assemblages; a single example of the "type fossil" was sufficient. These "type" objects were the most sought after, which meant that French scholars were willing to sell parts of the collection that they felt were already represented (Strauss 2004, White 2002). These biases were significant in shaping all French Paleolithic collections, regardless of where they were purchased or what country they were exchanged to. Archaeologists did not take details of spatial distributions and frequencies of tools into account until the 1950s (Berleant 2007; Sackett 1991:134). These typical artifacts were deemed important due to the archaeological paradigm at the time, but they may also have been valuable for display purposes in museums. There would also be no need to display redundant items in exhibitions, which most likely contributed to the willingness of French curators to part with them.

In many instances, a French collector or curator would arrange what they felt was a representative collection for the curator of another museum in another country based on their own "redundant" items. There were several well-known suppliers of French Paleolithic artifacts from the Dordogne, including Louis Didon, Denis Peyrony, and Abbé Henri Breuil (Berleant 2007). Some correspondence between these and other suppliers and American Museum collectors still exists in archives, but much was destroyed during both World Wars. Even though

these collections were dispersed and many transactions lost important associated history and documentation, it is fortunate that they ended up in museums around the world, rather than being lost during the conflicts and political upheavals in Europe.

Similar biases also occurred when an archaeologist from another country dug a French site himself. During the late 19th and early 20th centuries, American activity in France consisted of a few individuals conducting minor excavations and collecting trips under the supervision of European prehistorians, such as the case of Thomas Wilson and Édouard Lartet who are discussed in the next section. Many of these Americans were antiquarians and the objects collected lack proper provenience by today's systematic archeological fieldwork standards, consisting simply of an association with a particular site or region**.**

The Start of Paleolithic Collecting in Museums

As previously mentioned, the first American museum to collect Paleolithic artifacts from the Dordogne area in France was the Smithsonian Institution in 1869 (Petraglia and Potts 2004). These objects were supplied by Édouard Lartet who is considered one of the founders of modern paleontology. He was the son of a wealthy landowner and spent the early years of his life managing his family's estate at St. Guiraud. His interest in paleontology began when he was shown a local mastodon tooth, which led to many significant fossil discoveries (Daintith 2008: 442). Lartet devoted much of his adult life to systematically examining French caves and published a seminal piece with his partner Henry Christy called the *Reliquiae Aquitanicae* (Laurent 1993). In the late 19th century, the motivation behind collecting practices at the Smithsonian Institution was to obtain objects that represented human inventions and daily life. These objects also had to be suitable for exhibition purposes and to create comparisons between cultures on different continents (Petraglia and Potts 2004:5). The inaugural Paleolithic collection

was exhibited in display cases next to North American Indian objects to explicitly compare hunting and gathering lifeways. Paleolithic artifacts continued to be amassed in the 1870s by Thomas Wilson, the Curator of Prehistoric Anthropology, at the Smithsonian Institution. Wilson was influenced by the French style of collection organization, which focused on progress. He arranged objects to show the evolution of technology and was careful to keep geographical sites separate (Berleant 2007; Petraglia and Potts 2004). He was also a strong proponent of the "Paleolithic North American Debate", which held that crude American artifacts resembled those found in Europe (Haynes 2002). Other important collectors at the Smithsonian Institution were curators Ales Hrdlicka and James Townsend Russel, who both worked with the ASPR.

The Smithsonian Institution initially focused on the archaeology of North America. Just as the French exchanged their duplicate materials, North American redundancies were also traded (Petraglia and Potts 2004:10). Specifically, common artifacts from the excavations at Piney Branch quarry in Washington D.C., which was a prehistoric site used in Late Archaic through Late Woodland periods that provided abundant resources for tool making, were transferred to France (Holmes 1897). These tools were significant to the French primarily for comparative and display purposes. Since the Smithsonian Institution was research based, they requested collections that were considered representative and ordinary, such as common lithics or animal bone. These ordinary objects contrasted with those in other collections in the United States that consisted of rare Paleolithic artifacts and exceptional art pieces, such as those at Beloit College in Wisconsin (Figures 2.2 and 2.3) and the Field Museum of Natural History in Chicago (Petraglia and Potts 2004:10).

Figure 2.2: Aurignacian necklace made from mostly mammoth ivory from Abri Blanchard, France at the Logan Museum of Anthropology at Beloit College, Wisconsin. Figure 2.3 Close up of Aurignacian necklace made from mostly mammoth ivory from Abri Blanchard, France at the Logan Museum of Anthropology at Beloit College, Wisconsin (https://www.beloit.edu/logan_online/exhibitions/virtual_exhibitions/before_history/europe/abri_blanchard.php).

Dr. J. Howard Wilson, unrelated to Thomas Wilson, was another early American collector of Paleolithic material. He both purchased and excavated material for his personal collection between 1902 and 1916. In 1921, Dr. Wilson opened a museum in Castine, Maine to allow his collections to be viewed by the public. The museum today is known as the Wilson Museum (Berleant 2007). Like several of his colleagues, Wilson was interested in showing the evolution and innovation of technology. Wilson's doctorate and interests in geology and stratigraphy, respectively, greatly influenced his collecting endeavors.

Dr. Wilson obtained a significant collection from the Somme River Valley from Louis Delambre, who was the curator of Le Musée de Picardie in Amiens. Delambre took Wilson to archaeological sites where he gathered a sampling of French Paleolithic artifacts, but the bulk of the collection was put together for Wilson by Delambre (Berleant 2007). Correspondence, located at the Wilson Museum, consisted of carefully made and precise inventories and lists created by Delambre. This is significant because, at the time, most French suppliers did not

create such detailed artifact documentation. What makes this example especially important is that these collections and inventories are the only existing evidence of Delambre's activities and archaeological research. The collection not only represents material evidence of the French Paleolithic, but also exemplifies a specific French scholar's thoughts, perspectives and ideas about how he defined the Paleolithic at that time.

George Grant MacCurdy of Yale and Henry Fairfield of the American Museum of Natural History collecting trip two years before World War I to southwest France marked the beginning of intensive American involvement in Paleolithic archaeology (Simek 1986: 402; Straus 2002: 48). American archaeologists contributed to the dispersal of French Paleolithic collections during this time period to an alarming degree. Dozens of American museums played a role in the dispersal of over 150,000 objects (White 2002).

Paleolithic Collecting after World War I

After World War I, good economic times for Americans allowed for the increased activity and participation of museum curators and archaeologists in France. Americans gave French prehistorians financial security during these insecure times and profited greatly in terms of thousands of ancient artifacts (White 1992, 2002). The field of French prehistory was dominated by key individuals such as Field, Peyrony, Hauser, MacCurdy, Collie and Pond, discussed below. French museums and excavators almost never received funds to dig, let alone preserve a site. Unless an excavator was wealthy in his own right, this lack of funds contributed to the rationale for the selling and dispersing of collections to finance their work. Much of the money obtained from Americans went into the pockets of the private landowners (Berleant 2007). Lithics, worked objects made from bone and antler, and art still comprised most French collections brought over to America.

It was important during this period for American collectors to have friendly contacts or networks in France in order to acquire French Paleolithic objects or participate in excavations. For example, in the 1920s, due to Breuil's friendship with Henry Field, approximately 30,000 artifacts were exported to the Field Museum of Natural History in Chicago (Field 1955). Field, at the time was in charge of creating a new Hall of Man, for which he was given a large budget to acquire Paleolithic material. Breuil and Field made several trips to southwest France, where they focused on obtaining several private collections that included hundreds of bone and antler artifacts, as well as lithic and art pieces (White 2002:78).

Denis Peyrony was one of the main French prehistorians during this time. He excavated at dozens of Paleolithic sites in France and completed over one hundred publications. Peyrony was born into a farming family in Cussac in the Dordogne. He became a teacher in Les Eyzies, which is a rich archaeological area containing many Paleolithic sites (Groenen 1994; Sackett 1991). As a result, he became interested in prehistory and took courses with Emile Cartailhac. Peyrony is known for excavating at sites from 1869 through the 1930s, at such sites as La Ferrassie, Font de Guame, Le Moustier, and Laugerie-Haute, as well as dozens of others (See Capitan and Peyrony 1928; Peyrony 1930; Peyrony 1934; Peyrony and Peyrony 1938). He was also the first curator at Musée Nationale de Préhistoire des Eyzies, giving him the means to exchange collections with Americans. Although Peyrony was involved in trade with American museums he also actively tried to protect Paleolithic sites and objects as discussed below and elsewhere in this thesis.

American museums and archaeologists greatly benefited from anti-German sentiments after World War I that led to the disapproval of German collecting by the French and an increase in American activity. This attitude is demonstrated by the incident called the "Affaire Hauser" by

the French (Tolmie 2013:202-203). Otto Hauser, a Swiss archaeologist and antiquities dealer, was involved in excavations on a grand scale in the Dordogne, just as many other prehistorians were at the time, but he was directly affiliated with the Germans, which labeled him as a "person of interest" (White 2002:71). He sold many Paleolithic artifacts to German museums and organized visits to sites for German scientists (Simek 1986:403). European prehistorians are well acquainted with the story, which resulted in Hauser's banishment from France and the appropriation of his property (Evans 2010:108). The French defended these actions by accusing Hauser of the destruction of Paleolithic sites and the selling of artifacts (White 2002).

Hauser both purchased and took out leases on many important French sites and even excavated some areas with a remarkable amount of care. Rumors of Hauser conducting his work undercover as a German agent began in 1906, long before World War I began. In 1907, Hauser lost his last friendly connection, Peyrony, who had sold artifacts to him in the past and even defended him against the above-mentioned accusation. Hauser's land and collections became the possessions of Peyrony after he was forced to leave France in 1914 at the start of the First World War (White 2002: 72). Hauser's seized collection was put up for public auction in which several significant Paleolithic objects were sold. Recent research has shown that the charges against Hauser of being a spy were not true (White 2007). This example, however, illustrates one of the ways in which collections were dispersed by national agendas and political factors operating at the time.

During Hauser and Peyrony's falling out, Peyrony tried to pass a law that would restrict the activities of all foreign museums and excavators in France. This law would have given the state control over all future archaeological work. The law did not pass, allowing the "Hauser Affair" to take place, as well as increased American activity on French soil. The only precaution

that Peyrony could take at this point was the classification of sites as "monuments historiques." Peyrony and others, such as Louis Capitan, Henri Breuil, and Louis Didon, were among those responsible for classifying many sites as historic monuments to aid in the prevention of foreign activities (White 2002:72-73). Peyrony also leased as many sites as he possibly could himself to keep them out of German hands, as well as allowing Americans to dig them. For example, Peyrony once convinced George Grant MacCurdy of Yale University to excavate at the Paleolithic cave site of La Combe in order to prevent Hauser's access (MacCurdy 1914). During this time, MacCurdy and Henry Fairfield of the American Museum of Natural History purchased some exceptionally large Gravettian and Aurignacian collections from Abri Labattut and Abri Blanchard (MacCurdy 1914). Hauser was harshly criticized for trying to do the same thing.

The United States was not the only country in North America to participate in the dispersal of French artifacts. Henri-Marc Ami from the National Museum of Canada collected over 50,000 artifacts from a number of sites (White 1988). This case provides another example of a close friendship with Peyrony. Ami excavated for many years at the site of Combe-Capelle-Bas, sending thousands of Mousterian objects back to Canada. According to White, he also sieved through Peyrony's back dirt piles at Laugerie-Haute and La Ferrassie, collecting approximately 15,000 lithic tools (White 2002:79). He obtained material from dozens of other sites (see White 2002 for list). His activities in France only ended with his death in 1931.

Universities and students also participated in the dispersal of Paleolithic artifacts. In 1921, MacCurdy at Yale University founded the field school entitled American School in France for Prehistoric Research (ASPR). The ASPR had many field seasons at several French sites, including the well-known sites of La Quina and Sergeac. Later, the field school shifted focus to other areas such as Palestine and Iraq. A detailed history of the ASPR is provided in Chapter 4.

The ASPR field school exported thousands of objects to museums all over the United States, including the MPM.

MacCurdy was a significant figure in Paleoanthropology during the early 20th century in France, but he was also one of the main interpreters of European research to American anthropologists (Bricker 2002: 265). Interestingly, he was born on a farm and later became a school teacher, following the same career trajectory as Peyrony. MacCurdy eventually attended Harvard to study zoology and geology and earned his doctorate in Philosophy at Yale. His interests in Paleoanthropology grew and he became a professor at Yale as well as the Curator of Anthropological Collections at the Peabody Museum (McCown 1948: 519). MacCurdy's first opportunity to direct an excavation at a Paleolithic site was given to him by Peyrony (Bricker 2002:278).

The Logan Museum of Anthropology at Beloit College in Beloit, Wisconsin acquired a substantial French Paleolithic collection much later in time as compared to many other museums in the United States (Tolmie 2013). Between 1924 and 1927 the Logan Museum received approximately 21,500 artifacts (White 1992: 2). George Collie and his graduate student Alonzo Pond were directly responsible for acquiring the French Paleolithic material for the Logan Museum (Tolmie 2013). Collie was a high school principal in southeastern Wisconsin and later earned his Ph.D. from Harvard in Geology in 1892. He went on to become a professor at Beloit College and the first curator of the Logan Museum (Asp 2005).

Pond had participated in excavations at La Quina under MacCurdy and the ASPR. During his time in France, Pond began networking with French prehistorians, including Henri Martin who is well known for his excavations at La Quina. When Pond returned to Beloit, he joined forces with George Collie to acquire these important collections in the role of assistant curator at

the Logan Museum, using the same networks that MacCurdy had used between 1910 and 1930 (White 1992: 2). A wealthy Chicago grain dealer and philanthropist, Frank Logan, provided funding for Collie and Pond's expeditions. He is also considered the founder of the museum as he donated the founding collection to Beloit College in 1893 (Schuelke 2004). Through Logan's generosity, they were able to acquire extraordinarily large Paleolithic collections and rare pieces, something MacCurdy was unable to do at this time.

In 1924, Pond received, traded for, and purchased many small Paleolithic collections from institutions and individuals such as 1) collections from the University of Oxford, courtesy of Dr. Marett and Balfour; 2) a Mousterian collection from La Quina left for him by Henri Martin; 3) a purchase from Albert Massias of materials from Gorge d'Enfer; 4) ivory bead necklaces from Abri Blanchard purchased from Louis Didon; and 5) limestone plaquettes from Limeuil, considered to be the largest collection of Limeuil engravings outside of France (White 1992: 13). Another purchase by Pond got the Logan Museum of Anthropology caught up in the aftermath of the Hauser Affair. Unknowingly, Pond had purchased material from Jean Leyssales, Hauser's excavator and collaborator, which was met with great disapproval by Peyrony. As a result, he later expressed objection to Collie and Pond's proposed excavations at Abri Cellier, although their relationship appears to have remained on good terms (Tolmie 2013: 204).

Acquisitions continued in 1925, but this time Collie and Pond personally excavated some sites, including Grotte des Mineux. They also purchased a five-year lease for Rocher de la Peine, which included all objects excavated by Jean Esclafer. In 1926 Collie and Pond, accompanied by both their families began to excavate Rocher de la Peine under the supervision of Peyrony. Peyrony also provided Collie and Pond with large collections from La Ferrassie and La Madeleine that were taken directly from the Musée des Eyzies (White 1992). Collie and Pond

later excavated Abri Labattut, at which time Peyrony again tried to deter their attempts, but was not successful. None of these excavations were analyzed or published (White 2002).

In the 1930s during the Great Depression, museums in America deeply felt the effects of the national financial crises, and as a result, collecting in France came to an abrupt halt (White 2002). Much to their dismay, collectors such as Henry Field never excavated or removed artifacts from French soil again. Many museums, such as the Field Museum, simply concluded that further artifacts were no longer needed. As for Pond, he lost his position at the Logan Museum during the Great Depression and Collie, by then in his early 70s, was no longer interested in continuing his European adventures (White 1992).

2.4 History of Paleolithic Archaeology

Human Antiquity in the 18th and 19th Centuries

Many early scientific developments throughout history have contributed to the formation of archaeology, including acceptance of extinction and evolution and advancements in geology. The following is a brief description of these significant discoveries and how they influenced the study of human antiquity.

British and French archaeology are both based on a common European heritage, where ideas of collective identity changed over time (Olivier 1999:176). Beginning in the seventeenth century, a gradual shift in thought began in northwestern Europe, which allowed for the development of an evolutionary view of the past. Scientific revolutions of the time, including technological advancements, such as modern manufacturing, encouraged the idea of cultural progress (Trigger 1989:55-56).

In the 17th and 18th centuries interest in caves and fossils increased (MacCurdy 1924: 20). The initial purpose of early exploration of caves and rock shelters was to collect fossil ivory for

medicinal purposes. During this time, people first began to believe that animals could become extinct. Arguments for extinction were made with fossil invertebrates that had no living equivalent, but this explanation was easily resisted due to the biblical paradigm of the time (Grayson 1983: 45-46). The French zoologist, Georges Cuvier was largely responsible for this postulation and the theory of the most recent extinction or revolution known as the Diluvium. This was ground breaking because it defined a group of time markers constructed of the earth's superficial deposits, from which human antiquity could be judged (Grayson 1983: 46-54, Schnapp 1997: 286). One of the very first published discoveries of human antiquity was made by John Frere in 1797. He described a sequence of flint tools buried directly underneath natural and faunal remains that suggested an exceptionally early date of origin (Grayson 1983:57; MacCurdy 1924; Trigger 1989:88). Unfortunately, Frere did not collect enough faunal or stratigraphic evidence to support the antiquity of the deposit, which coincided with the theological character of the time (Grayson 1983:59). This early discovery shows the significance of faunal remains in this early period as a form of dating, which is discussed the next section.

One of the first individuals to realize the significance of the association of flint tools with fossil faunal remains was Rev. J. MacEnery of Devonshire in Kent's Cavern near Torquay, England during his research from 1825 to 1841 (MacCurdy 1924: 20). This proved the coexistence of man and the extinct animals found. Human skeletal material continued to be found with extinct animal species, such as elephant and rhinoceros in France. In 1847, Jacques Boucher de Crevecouer de Perthes' proposal that recovered stone tools were of the same antiquity as the human remains found in the same deposit on the Somme River in France is said to be the beginning of Paleolithic research in France (Wargo 2009: 26).

The Formative Era (1870-1900)

Paleolithic archaeology was first given its name in 1865 by the English naturalist and banker John Lubbock in his book *Pre-historic Times* (Wargo 2009: 27; Daniel 1976:85). He separated the Stone Age into the Paleolithic and Neolithic, Old Stone and New Stone Ages, respectively. This distinction was based on stone tool typology where the older period consisted of chipped stone tools and a later period with polished tools (Trigger 1989: 94-95). After the official naming of the field, Paleolithic archaeology developed and advanced in France, rather than England, due to the large numbers of preserved cave and river terrace sites providing better evidence. This was a source of great national pride for France (Kohl 1998: 228). Generating a feeling of solidarity and collectivity in France also corresponded with the socialist ideology of the time. There was a glorification of the present by tracing national roots, which demonstrated the progress of humanity (Leckie 2011: 37). This sentiment is demonstrated in a quote by Gabriel de Mortillet, a French ethnologist, about the Musée des Antiquités Nationales in Saint-Germain-en-Laye that states that the purpose of the museum is "to contain the archives of France…from the most remote times, the geological times, up to the Franks, up to and including the Merovingian epoch." (Gindhart 2007: 51). As a result journals, exhibitions, congresses and university chairs were created to support the new research field (Sackett 1991:113). Two of the most important goals of Paleolithic archaeology during this period were to determine human antiquity in France and to chronologically order Paleolithic sites in order to see evolutionary trends (Trigger 1989: 95). These goals were carried out within a framework that was heavily influenced by both geology and paleontology. The social sciences also had a significant impact on the field, concerning the concept of social progress or cultural evolution (Wargo 2009: 27-28).

Following the publication of Charles Darwin's *Origin of Species* in 1859, there was an increase in interest of the study of caves (MacCurdy 1924: 23). One of the first early and leading figures in prehistoric studies in France was Édouard Lartet, who began excavating cave sites in the Dordogne in 1860 with his English partner and financial provider Henry Christy (Wargo 2009: 29, Trigger 1989: 95). Through these excavations, Lartet discovered that the animals and artifacts varied and that they could be grouped into phases. He was the first to realize there was no single phase of human development. Interestingly, Lartet distinguished the phases by the animal remains he found. The phases included the following from most recent to oldest, 1) Aurochs or Bison 2) Reindeer 3) Woolly Rhinoceros/Mammoth and 4) Cave Bear and 5) Hippopotamus (Wargo 2009: 30, Daniel 1976: 100, Sackett 1991: 114, Trigger 1989: 95). Later, Lartet combined the Mammoth and Cave Bear ages. Sites were associated with each age; for example, Laugerie-Basse and La Madeleine were typical of the Reindeer age, while Le Moustier was associated with the Cave Bear and Mammoth ages (Daniel 1976:100). It is intriguing that the animals at these sites had such an importance, so much so that phases were named after them, although faunal remains were mostly discarded in favor of lithic tools only a few decades later.

The emphasis on the animals represented in the different phases of human development in the formative era of Paleolithic archaeology likely would have highlighted the importance of faunal remains. As a result, individuals such as Doerflinger, who was active in France during this particular era, collected the bones of animals. Doerflinger mentioned in correspondence with the MPM Board of Trustees that he wished to study all implements and other specimens in the future (MPM correspondence 1898). Faunal remains would have given the researcher an idea of what animals were contemporaneous with humans during the Paleolithic. It was this coexistence with humans that attracted museums to collect faunal remains (Petraglia and Potts 2004: 62). Faunal

remains were also used to date human skeletons. In other words, mammalian fauna found with human remains could be associated with a certain time period during which that animal was known to exist (MacCurdy 1909: 92). For example, the remains of *Elephas antiquus* and *Rhinoceros etruscus* helped place human skeletal remains in the Lower Quaternary (MacCurdy 1909: 97). Drawings of past Paleolithic displays in the Hall of Man at the MPM support this idea that faunal remains were valuable research tools rather than display pieces, as stone tools comprise most of the exhibition. These drawings are discussed in more detail later in this chapter.

Another important figure in early studies of the French Paleolithic was Gabriel de Mortillet, who was a professor of prehistoric anthropology at the School of Anthropology in Paris in the 1870s (Trigger 1989:95). Although he continued Lartet's work, he believed that the phases in the Paleolithic should be divided according to cultural rather than paleontological principles (Daniel 1976: 103; Straus 1994:191). In other words, he utilized cultural artifacts, such as stone tools, rather than index fossils (Wargo 2009: 31). De Mortillet differentiated phases by using artifact types with characteristic shapes and retouch that were representative of that period found only in an associated layer. These artifacts were called *fossiles directeurs (type fossils or diagnostic artifacts)* (Audouze and Leroi-Gourhan 1981: 171, Trigger 1989: 96). Artifacts were not viewed as functional industrial complexes as they are today, but rather as styles that defined unilinear temporal phases (Sackett 1981: 86). Many of de Mortillet's other strategies were geological in nature. For example, he used stratigraphy to establish chronology and he named epochs after type-sites (Trigger 1989: 96).

De Mortillet is responsible for naming many of the epochs that we still recognize today, such as the Acheulean named after the site of Saint-Acheul and Mousterian after Le Moustier

(Wargo 2009:31). De Mortillet transformed Lartet's phases based on fossils into epochs associated with type-sites. Lartet's reindeer age was divided into two phases, the Solutrean and later Magdalenian. Most of the Cave Bear and Mammoth age became the Mousterian and the Hippopotamus age became the Chellean epoch. De Mortillet was also known for developing both Pre-Chellean and later Neolithic phases (Daniel 1976: 103-105; Trigger 1989: 96). Using these chronological epochs, both Lartet and de Mortillet were able to compare different stages of human development. As the stages became more recent in time, it was found that the making of stone tools became more advanced, as did the variety of tool types found at the sites. Evidence of bone tools paralleled this progression. This unilinear sequence was assumed for all of Western Europe and was considered to be a part of an unbroken continuum (Sackett 1981:86). De Mortillet did not believe that Paleolithic groups were fully human but, instead, represented a prelude to "true" human history in the Neolithic (Sackett 1991: 115).

De Mortillet was also concerned with showing evolutionary sequences rather than ecological and environmental adaptions or daily lives of early humans (Wargo 2009:33). This focus on progress influenced excavation techniques; strata were the main units, thus many features went unrecorded. In fact, most artifacts were discarded unless they had a diagnostic value. Influenced by his time, de Mortillet concluded that all humans went through stages of development or, in other words, progress was a law of nature (Audouze and Leroi-Gourhan 1981: 171; Sackett 1991: 114-116; Trigger 1989: 100). In general, museum collections during De Mortillet's time would have been composed for the purpose of showing this progress. Exhibitions at the time showed technological advancements through time associated with specific epochs. These epochs are also used to describe the Paleolithic material at the MPM as seen in their ledgers dating to the late 19th century. As noted previously, this was why diagnostic

artifacts were desired; meaning collections and displays likely did not contain a representative sample of all objects found at sites.

Towards the end of the formative era in the mid 1880s, Paleolithic research began to stagnate. One of the main causes of the stasis was the rejection of unilinear cultural evolution by ethnologists, which would not allow the reconstruction of Paleolithic phases by ethnographic comparison (Sackett 1991: 116). According to Sackett, this shaped the field and its research for three consecutive generations, strengthening its alliance with geology and breaking its tenuous collaborative partnership with cultural anthropology (1991: 116).

The Traditional Era: "Straight Archaeology" (1900-1950)

The traditional era in France is known for "straight archaeology," which consisted of great strides in excavation, industrial systematics, and artifact classification strategies from a new generation of researchers (Sackett 1981: 87,1991: 117). The paradigm in the traditional era was focused almost entirely on classifying lithic tools and separating assemblages based on tool typologies (Audouze and Leroi-Gourhan 1981: 171). This meant that the focus shifted from establishing human antiquity to defining regional archaeological sequences (Wargo 2009: 35). Industrial traditions were created by studying artifact similarities and then grouping them by their likeness. These traditions or phases were sometimes attributed to cultures or tribes (Sackett 1991: 129).

New professional organizations developed during this era which allowed both local and regional scholars to have a voice (something that was severely lacking in de Mortillet's time) and encouraged collaborative exchanges. One of the most significant of these associations was the Société Préhistorique Française founded in 1904 (Wargo 2009: 35-36). Henri Breuil was one of the scholars associated with this organization who was a vehement opponent of the unilineal

evolution theory as proposed by de Mortillet (Wargo 2009:35). First, Breuil believed that the idea of a linear sequence should be overturned in favor of a view of a diverse group of fully modern humans who were not evolutionarily related to the Neanderthals before them. His theory postulated that technological traditions showed influences by several groups (not just one) and that there was replacement of some groups by others, rather than continuity. Breuil was also known for recognizing technological variability, in contrast to Mortilletian perspectives on technological types. Breuil saw divisions in tool types as plastic rather than a succession that was "set in stone" (Sackett 1991:120; Straus 1994:192). One of Breuil's most significant criticisms of de Mortillet was his neglect of the Auriginacian Paleolithic epoch, which is a large part of what we now consider the Upper Paleolithic (Wargo 2009:37). Interestingly, Breuil himself never participated in any lengthy excavation program, but these new insights by Breuil likely influenced what was collected by others during this time period. Since technological variability was becoming important, lithic collections may have become larger and more diverse and less filtered by index or type fossils.

The more practical research of the time was carried out by fieldworkers or traditional archaeologists, not culture historians such as Breuil. One of the most significant fieldworkers of the era was Denis Peyrony, who according to Sackett, excavated rock shelters in the Perigord with unparalleled skill from the beginning of the 20th century to World War II (1991:121). Peyrony provided much of the evidence that Breuil used to argue in favor of the Aurignacian phase. In fact, his fieldwork at La Ferrassie and Laugerie-Haute provided important technological and stratigraphic evidence for the complexity of this phase, including two separate distinct traditions within the complex (Audouze and Leroi-Gourhan 1981: 171; Sackett 1981: 87). Peyrony was also the first to recognize that certain industries were inter-stratified, and thus

broadly contemporaneous, which was an invaluable contribution to Paleolithic archaeology (Sackett 1981: 87).

Although the significance of technological variability was realized, descriptions of Paleolithic industries were still heavily based on *fossils directeurs,* according to Sackett (1991: 125). As seen in museum contexts, these *fossils directeurs* were the main artifacts that made it back to the laboratory and into permanent museum collections since many French curators were willing to exchange or sell their redundant *fossils directeurs*. These items would have been more appealing to American museums for display purposes as well. This filtering of the archaeological record could have, in itself, influenced how researchers of the time interpreted the evolution of technology. Current researchers studying older museum collections recognize this as a significant issue (Sackett 1981:88).

In sum, Paleolithic archaeology was influenced by a number of disciplines, paradigm shifts and key individuals. As northwestern Europe shifted from a biblical to a scientific paradigm, the belief in evolution and extinction persisted. The seminal goals of Paleolithic archaeology were to determine human antiquity and chronologically order sites to see evolutionary trends. Faunal remains were significant research tools in this endeavor, however, as the discipline developed, stone tools became the focus, especially in the Traditional Era. Today diagnostic tools dominate the museum collections representative of this time period.

Contemporary Paleolithic Archaeology (Late 1940s- present)

Excavation and collecting techniques improved as time progressed. Archaeologists began to record the occupational horizons and individual sedimentological components, as well as holistically seriate site stratigraphies (Sackett 1981:95). These new techniques helped researchers to see that *fossile* types overlapped with one another, rather than were replaced

(Sackett 1991:133). In other words, temporal importance was recognized based on frequencies, instead of mere absence or presence. Another significant aspect of the period was an improvement of collecting practices. All lithic artifacts began to be collected, including debitage, as well as samples of faunal, sedimentological, and palynological material. Since the importance of tool variation began to be appreciated, it was thought that all tool types should be analyzed along with diagnostic tools, but the notion of a perceived value of index tools was never truly abandoned. Documented provenance was also attached to all material (Sackett 1981: 95).

Francois Bordes was one of the first prehistorians to demonstrate the importance of a comprehensive typology, which consisted of an inventory of all tools, even the mundane. Each tool was then designated to a category on a type-list and counted. Analysis was quantitative, rather than qualitative, focusing on debitage types and percentages of artifact types (Audouze and Leroi-Gourhan 1981: 171, Sackett 1991:134). It is important to recognize that the theoretical framework did not change since the traditional era, rather a shift in methods occurred (Sackett 1981:96).

Two of the most important French laboratories for prehistoric archaeological research were the Universite de Bordeaux and the Sorbonne, under the directions of Bordes and Andre Leroi-Gourhan respectively. These two schools would train most of the next generations of French Paleolithic researchers. Each school took a different path; a geological and typological focus evolved at Bordeaux and a technological and paleontological perspective dominated in Paris. In addition, each school worked at different types of sites, one at rock shelters and the other at open air sites. Both called for differing approaches (Straus 2002:50-51).

The contemporary era saw an increased American presence in French Paleolithic archaeology. The late 1940s through mid 1960s were dominated by the work of Hallam Movius

of Harvard University and the ASPR (Strauss 2002b). Movius was the first United States archaeologist to carry out and publish Paleolithic excavations and to train doctoral students in European Paleolithic studies. One of his students was James Sackett, cited in this project, and researched the history of the field extensively (Harrold 2002:28). More American students became engaged in European archaeology in part due to the baby boom, more affordable travel, European countries looking favorably on the U.S. because of the war, and new research questions that related to the conceptual shifts of the New Archaeology in the 1960s (Binford 1962, 1968, 1978).

Many French prehistorians in the past were trying to change the fundamental principles of Paleolithic research; Movius was instead trying to improve the current framework. Like Bordes, Movius focused on the systematic study of lithic tools to draw as much information as possible from them, improving stratigraphic description of Paleolithic excavations, and comparing sequences of different sites. (Harrold 2002:28). Movius first dug at La Colombiere rockshelter and later at the methodically innovative excavation of l'Abri Patuad in the "capital of prehistory", Les Eyzies (Straus 2002:46). He and his students did bring some new perspectives and techniques to the field of Paleolithic research, but they did not fundamentally challenge previous approaches. These included radio carbon dating, paleoecological modeling, site structure analyses focusing on hearths, artifact attribute analysis, and even zooarchaeological analysis pertaining to hunting practices and seasonality (Straus 2002:50).

During this time, differences in archaeological thought emerged in France and America and caused many disagreements (Harold 2002). French prehistorians tended to still follow traditional archaeological methods and interpretations (also known as straight archaeology), where as in America, New Archaeology was emerging as the new paradigm. New Archaeology

was based on the principle that reconstruction of past cultural systems was possible even with the incomplete nature of the archaeological record (Harold 2002:29). For example, French archaeologists saw the various categorizations of culture in the French Paleolithic, such as Mousterian or Magdalenian, as distinct cultures or industries, where as Americans focused on past human adaptions rather than distinct cultures. French archaeologists found Americans to be too trusting in the scientific method and statistics to attempt to reconstruct the incomplete nature of the archaeological record (Harrold 2002: 29).

The famous debate between Lewis Binford and François Bordes in the 1960s and 1970s pertaining to Mousterian facies variability is an example of a disagreement between a French and American archaeologist (See Binford 1972). In particular, the debate questioned if the variability seen could be attributed to either ethnicity or function of a camp. Binford and many other American archaeologists believed that one could not see ethnicity by looking at relative frequencies (Straus 2005: 12). This debate sparked interest in interpretation, rather than classification and description alone, specifically pertaining to topics related to Pleistocene human adaptions (Kozlowski 2002: 36; Straus 2002: 47).

Another divergence between American and European archaeologists was the explanation of cultural change. European scholars believed that cultural change occurred as a result of migration. In other words, each archaeological culture correlated with an ethnic group, which also had led to support of a diffusionist model. Americans, on the other hand, described cultural change by an inner transformation based on adaptions to the environment (Kozlowski 2002: 37). In anthropology today, we now know that a monocausal explanation has great weaknesses, since culture change is most likely due to multiple influences and complex processes.

2.5 History of the Paleolithic Collection at the Milwaukee Public Museum

Collection Background: Sites and Dates

The MPM Paleolithic material was collected under some of the circumstances and early archaeological perspectives discussed in the previous section. As stated previously, there are 245 faunal remains in the collection total from 11 different sites and/or regions. Four collectors contributed to the amassing of these materials. The majority of the collection comes from two separate collectors with a time gap of approximately 30 years. Doerflinger deposited 99 pieces of animal bone, antler, worked bone and bone breccia from eight sites and regions at the MPM around 1899. The date is approximate because at this time the MPM did not have exact accession numbers and dates. This date comes from Doerflinger's correspondence where he discussed the details of the collection. Another 142 items (Accession number 8066) came into the museum in 1923. These are all from the La Quina site collected by Charles Peabody and the ASPR and were transferred to the MPM when Barrett was the director. This part of the collection is discussed in detail in the results chapter of this thesis, as the origins of the materials were unknown and the majority of the information about the collection was uncovered after the project began. A final four items were donated by Dr. Stanley Wisniewski and F.J Perkins.

The MPM's first curator and custodian, Charles Doerflinger, traveled in France between 1889 and 1893 and collected French Paleolithic material that dates from approximately 10,000 to 40,000 years ago. Of the 1100 total Paleolithic objects collected by Doerflinger, most are various types of lithic tools, but the other material includes animal bone, bone tools, bone breccia, shell, "paint dishes," and cinder from hearths (Doerflinger Inventory). Letters to the Milwaukee Public Museum's Board of Trustees from Doerflinger state that the objects came from the valley of the Somme River in Northern France and caves of southern France, including the Gironde, Garonne,

Dordogne and Vezere valleys (see appendix E). He deposited the Paleolithic material at the MPM intending to study it at a later date, however, this additional analysis apparently never occurred. Most of the objects in the collection lack proper provenience by today's systematic archeological fieldwork standards, consisting simply of an association with a particular site or region. This practice was common during the period when Doerflinger was collecting in France. Many of the items were collected from rock shelters or local farmers. Doerflinger's specific networks are unknown. It is likely that he participated in digging French Paleolithic sites as evidenced by his involvement in Swiss Lake-Dwelling excavations during the same trip to Europe (Anrold 2011).

Seven specific sites and four regions are represented in the MPM French Paleolithic faunal material as noted in the documentation, archives, and in some cases directly on the bones themselves in the form of labels. The seven known French sites include Gorge d'Enfer, Laugerie-Haute, Laugerie-Basse, Champs-Blancs, Soucy, Pair-non-Pair and La Quina. More general regions indicated in the documentation consist of the following, 1) Bruniquel, France 2) Southern France, 3) Les Eyzies, France, and 4) Magnac in Commune Creysse. These areas are considered general regions because they do not refer to a known Paleolithic site or the designation is not clear as explained below. These sites and locations are scattered in the southern half of the country (Table 2.1 lists relevant publications per site and Figure 2.4 shows their locations).

Table 2.1: Site list and relevant sources. Non-specific regions are not surveyed in the literature, as they do not correspond to a specific site.

Site/location	Time Span	Relevant citations
Laugerie-Basse	14,000-10,000 BP (Magdalenian)	Binford 1968; Bordes et al. 1973; Bourlon and Breuil 1916; Boyle 1996; Breuil 1934; Cleyey-Merle and Madelaine 1995; Couraud 1984; Delporte 1988; de Mortillet 1913; Hamy 1874; Hauser 1908; Massenat,

		Lalande and Cartaihac 1872; Maury 1914; Mons 1980; Paillet and Man-Estier 2011; Roussot 1974; Saban 1967;
Laugerie-Haute	24,000- 15,000 BP (Gravettian, Solutrean, and Magdalenian)	Bordes 1958, 1959, 1978; Bordes and Sonneville-Bordes 1954; Bosselin and Djindjian 1997; Collins 1973; Delpech 2012; Demars 1995; Giraux 1907; Kuntz and Costamagno 2911; Peyrony and Peyrony 1938; Peyrony 1938;
Pair-non-Pair	30,000 BP (Aurignacian)	Cheynier 1963; Daleau 1881, 1896, 1902; Delluc 1997; Dubourg et al. 1996; Moisan 1994; Renard 1991; Roussot 1972;
Magnac in Commune Creysse	Non-specific region	Not surveyed
Abri de Soucy	14,000-10,000 BP (upper Paleolithic-Magdalenian)	Fitte and Sonneville-Bordes 1962; Tarel 1912; White 1988;
Champs-Blancs	22,000-10,000 BP (Solutrean and Magdalenian)	Cleyet-Merele 1989; Delluc 2001; Hemingway 1980; Lenoir and Dibble 1995; Peyrony and Peyrony 1912, Smith 1966, Texier 1968
Gorge d'Enfer	39,000-28,000 BP (Chatelperrionian, Aurignacian and Gravettian)	Daniel 1970; Giraux and Schleicher 1907; Peyrony 1906; Peyrony 1932;
Bruniquel, France	Non-specific region	
Southern France	Non-specific region	
Les Eyzies	Non-specific region	
La Quina	100,000-28,000 BP (Mousterian and Aurignacian)	Colten and Hill 2007; Debenath et al. 1998; Hardy 2004; Henri-Martin 1910, 1911, 1923; Henri-Martin 1965; Jelinek 2013; Stefan and Trinkaus 1998;

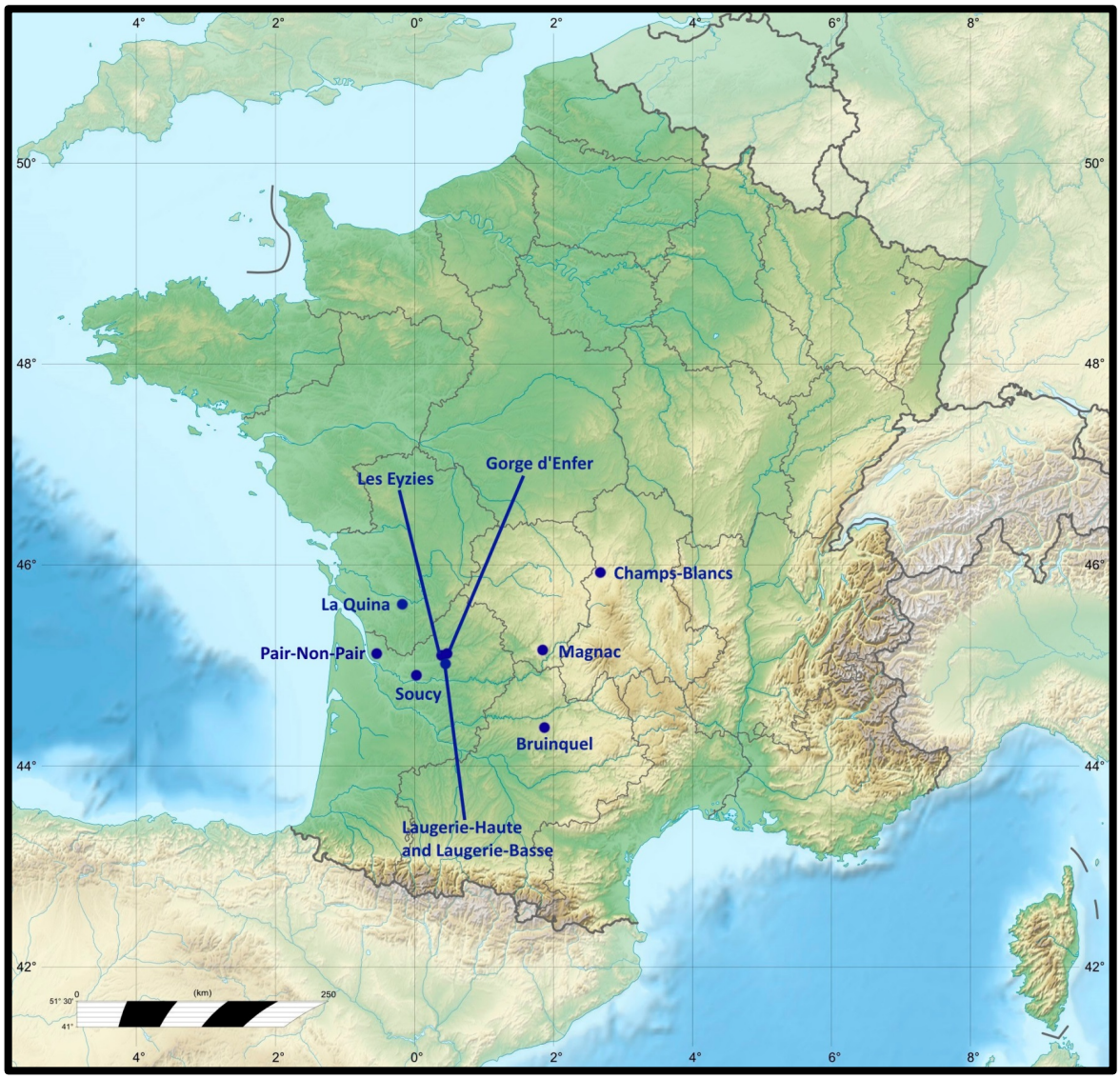


Figure 2.4: Map of French sites and regions represented in the MPM collections.

A few of the less specific regions may be reconciled. First, Bruniquel, France is mentioned as a cave in some publications (Milisauskas 2012:49), but it is also a village. The Upper Paleolithic rockshelter Roc du Courbet, known for its many examples of horse iconography, is located near this village. What was meant by the collector (F.J. Perkins) when he listed Bruniquel as the location is not known. Second, the bones documented as coming from Bourg sur Gironde are listed as having originated from the site of Pair-Non-Pair in Doerflinger's official inventory (see Appendix F). This is likely the case since the site is located near Bourg sur

Gironde. Some of these pieces also have a Pair-Non-Pair label on them. Lastly, the bone breccia that came from Les Eyzies could have originated from any number of sites as this region is rich in Paleolithic sites and is known as the "capital of prehistory" (Straus 2002: 46). Bone breccia appears to have been a popular inclusion in Paleolithic collections during this early time of collecting. Most of the Paleolithic accessions at the Smithsonian Institution included breccia. An annual report from this museum describes the significance of breccia in the collections as the following "breccia…occupies the floor of the caves, consisting of bones and teeth of animals, flint flakes, pebbles, and other objects cemented together in a solid pavement. The composition of these masses apparently indicates the great antiquity of man, since they present the stone implements of his construction embedded in the same materials with the bones of the rhinoceros and other extinct animals" (Petraglia and Potts 2004:63).

Collector Background: Charles Doerflinger

Charles Herman Doerflinger was born in Baden, Germany on February 17th 1843 (Watrous 1909). His father, Karl Doerflinger, was German with an ancestry tracing back to the yeomanry of the Black Forest. His mother belonged to the French families of de la Chapelles of Alsace-Lorraine and the Gullieberts. She once smuggled a means of escape in loaves of bread to her husband who was imprisoned for being involved in the revolutionary movement of 1848. The Doerflinger family made their way to Milwaukee in 1848 after their escape (Men of Progress in 1897).

Doerflinger attended both private and public schools in Milwaukee. Engelmann's German-English Academy is where Doerflinger says he was instilled with his interest of scientific advancement, nature, liberty, and Republican principles (Men of Progress in 1897). Doerflinger left school at the age of fourteen for financial reasons, but he continued his education

during his spare time. He became a newsboy, then a printer's apprentice, and after 1870 he was involved in publishing and the book businesses. Doerflinger was involved in many publications, such as "New Education," "Kindergarten Messenger," "Onkel Karl", among others (Watrous 1909).

In 1862, during the Civil War, Doerflinger enlisted in the 26th Wisconsin Infantry and was promoted several times, ultimately to First Lieutenant. In the famous battle of Chancellorsville, Virginia on May 2nd 1863, he suffered a severe injury that would affect him for the rest of his life. His ankle was shattered by a minie-ball, causing amputation of most of his leg (Watrous 1909). The original operation was not successful, requiring six additional surgeries and causing Doerflinger intense pain for the remainder of his life. His injury did not stop him, however, from traveling and living a very full life (Men of Progress in 1897).

Doerflinger was an avid supporter of education at all levels, especially for children, which he believed was significant for the future of the nation. After the war he was a teacher at the German-English Academy (Men of Progress in 1897). He was also one of the founders of the Kindergarten Society of Milwaukee and was a major proponent of incorporating kindergarten into the mainstream school system (Watrous 1909). An advocate for physical education, he edited the physical exercise curriculum for the Milwaukee schools. Even with his amputated leg, Doerflinger participated in athletics himself, as he took 11th place in an athletic festival in Germany while visiting Europe (Watrous 1909).

Being invested in education and serving as the secretary of the Wisconsin Historical Society, Doerflinger was the first to encourage the creation of a public museum in Milwaukee. Doerflinger became the first custodian of the MPM in 1883, but due to complications with his health, had to resign from the museum in 1886 (Men of Progress in 1897). In 1889, Doerflinger

took a vacation to France and Switzerland, where he collected the French Paleolithic artifacts that he subsequently donated to the Milwaukee Public Museum. He also traveled to Mexico to study the educational and technological systems in the country. Upon returning home, Doerflinger became interested in helping others with artificial limbs. He created and became president of the Doerflinger Artificial Limb Co., which manufactured artificial limbs and trusses. In 1896, he accepted the office of Chief Examiner and Secretary of the City Civil Service Commission. Throughout his life, Doerflinger was an ardent advocate of education and civil liberties (Men of Progress in 1897).

Doerflinger Labels

Much of the Doerflinger collection includes two types of labeling on the bones themselves. These include numbers written in ink and paper labels with words and/or numbers. These labels provide an interesting line of evidence for this thesis. It is possible that both were applied by Doerflinger himself, as many of them are consistent in font and information included (see Figures 2.5-2.11). There are two sets of numbers written in black ink. One is a five digit museum catalog number and the other is a two digit number ranging from 1 to 66 that appear to be associated with Doerflinger as they are consistent across sites (Figures 2.5 and 2.6).

Figures 2.5 and 2.6: Examples of two digit and five digit numbers written directly on the bone (A10986).

The adhered paper labels contain site information, which varies depending on space available on the bone. The most detailed labels come from the Pair-non-Pair site collection, which was authenticated by Dr. François Daleau of Bourg Sur Gironde, who is characterized as "the

discoverer and explorer of Pair-non-Pair" by Doerflinger (Doerflinger's Inventory). Daleau was a landowner and manager who had interests in botany, zoology, geology, chronology, and prehistory, but did not hold any formal diplomas (Mémoire 1990). Although, his education was informal, he was considered a specialist in Prehistory and was a member of the Société Préhistorique Française. This part of the collection could have been prepared by Daleau or authenticated at a later date, but considering the history of Paleolithic collecting, it seems likely Daleau put the collection together for Doerflinger. A large Pair-non-Pair collection compiled by Daleau resides in the Muséum d'Histoire Naturelle de Bordeaux (Mémoire 1990).

Pair-Non-Pair labels include the site name, site location, genus of the particular animal, element name, droit or gauche (right and left in French) and the initials F.D., which appears to stand for François Daleau. These labels have a mix of typed and hand written in French (Figure 2.7). One would need some zoological knowledge to identify species, element and side, which also points to Daleau. A portion of the bones, which are all teeth, from Pair-non-Pair are also labeled with letters ranging from A-O. The handwriting is not similar to the numbers written on the bone (Figure 2.8). The siding of the element appears to be written in different ink and handwriting as seen in Figure 2.7.

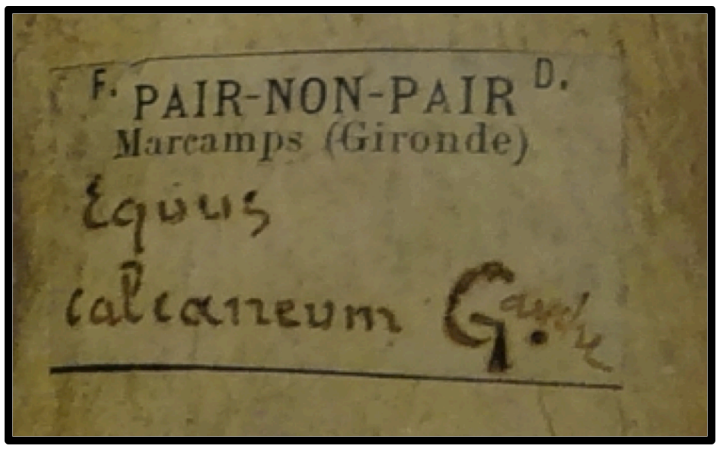


Figure 2.7: Pair-non-Pair detailed label example (A10632).

Figure 2.8: Example of lettering system on Pair-non-Pair specimens. Letter D. (A10635).

Most of the Doerflinger labels are more sparse and do not contain identifications of the animal or element. When there is space on the bone, the labels contain site name and site location (Figure 2.9). Some labels also mention the sites as being caves or rockshelters with the French terms “abri” and “Abri sons Roches.” On smaller fragments and teeth, labels contain only the site name or there is no label at all, but the number system is still in place (Figure 2.10).

Figure 2.9: Example of Doerflinger paper label with site information, collector number, and MPM catalog number. (A10978)

The majority of the Doerflinger labels are typed, but there are some that are handwritten. An example of his handwriting is located on a broken mandible from Magnac, which was compared to his written letters (Figure 2.11). The location is written on the broken piece in black ink and also appears to be of a similar style of handwriting to the numbers 1 through 66 written directly on the bones.

Figure 2.10: Example of short label on small fragment (A10988).

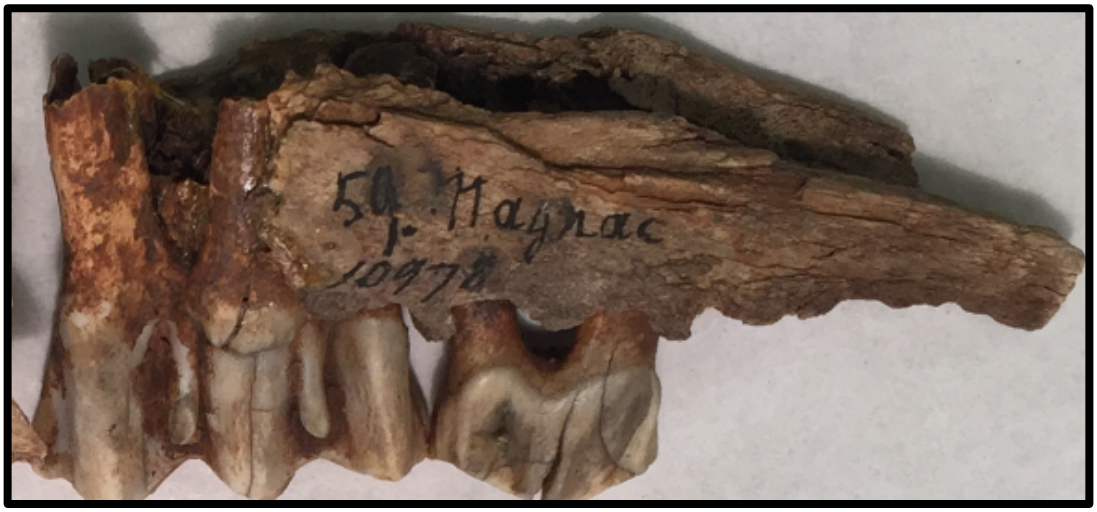


Figure 2.11: Example of Doerflinger handwriting (A10978).

Exhibition, Research and Inventory History

In over 100 years of being at the MPM, the majority of the French Paleolithic faunal material has never been studied or put on exhibit. As noted in a previous sections of this thesis, the appeal of lithic material far outweighed faunal remains in museum collections. This fact is

seen in the MPM's past Hall of Man exhibit, which was on display in the old building before 1964. The exhibit was composed of hundreds of Doerflinger stone implements, but only three faunal items. The three that were on display include the following; two pieces of worked antler bone from Laugerie-Basse (A11109 and A11111) and a piece of breccia with embedded Cervidae bones and lithics from Les Eyzies (A11149) (Figures 2.12-2.14). These were displayed next to lithic material as seen in the exhibit drawings below of the Hall of the Man exhibit (Figures 2.15-2.16). Unfortunately, there are no photographs or label transcriptions of this exhibit (See Appendix G for drawings of the rest of the exhibit).

Figure 2.12: Worked antler from Laugerie-Basse on exhibit in the past MPM Hall of Man.

Figure 2.13: Worked antler from Laugerie-Basse on exhibit in the past MPM Hall of Man.

Figure 2.14: Bone breccia from Les Eyzies on exhibit in the past MPM Hall of Man.

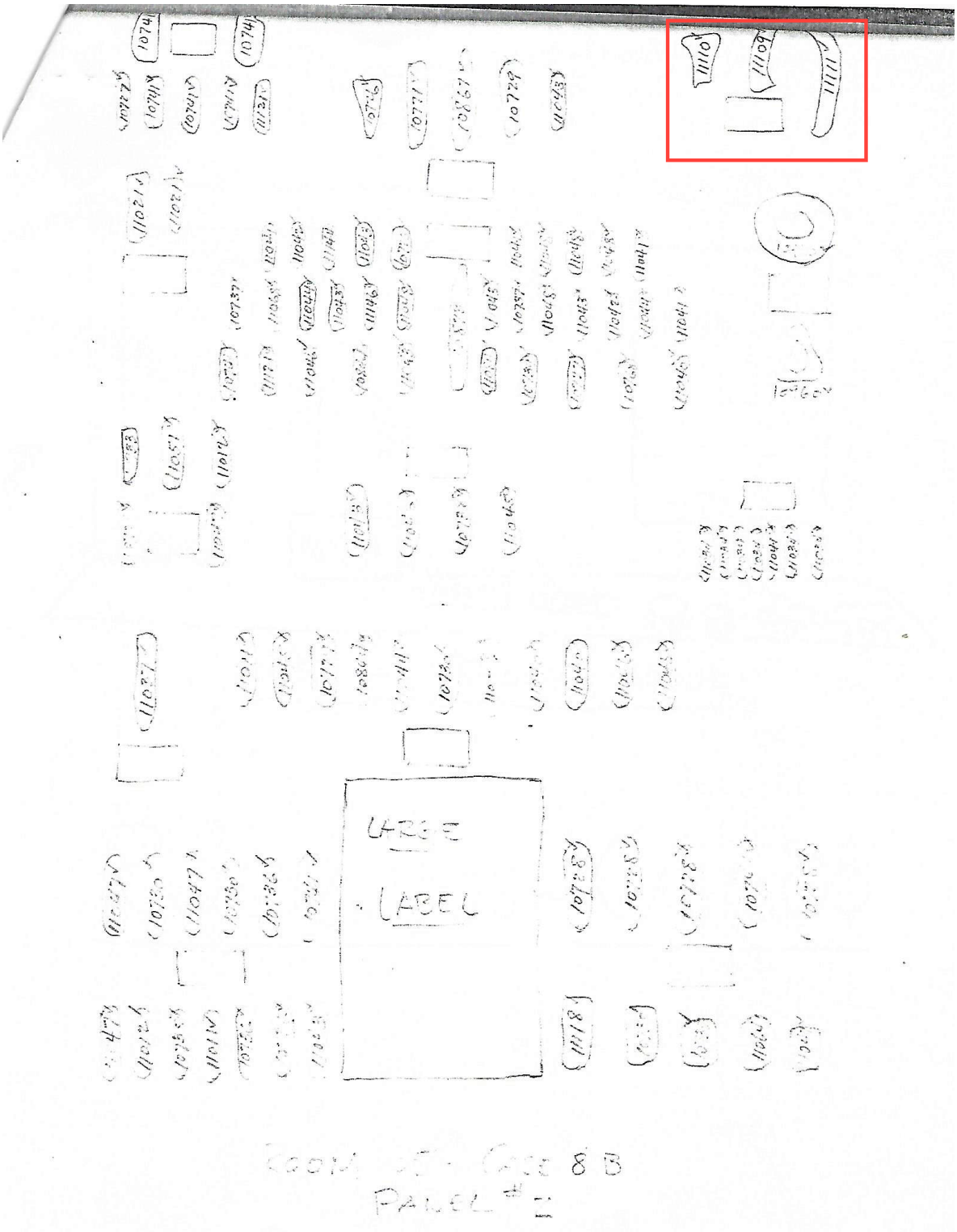


Figure 2.15: MPM Exhibit drawing from Hall of Man displaying Doerflinger lithics, including A11109 and A11111 seen in the upper right corner.

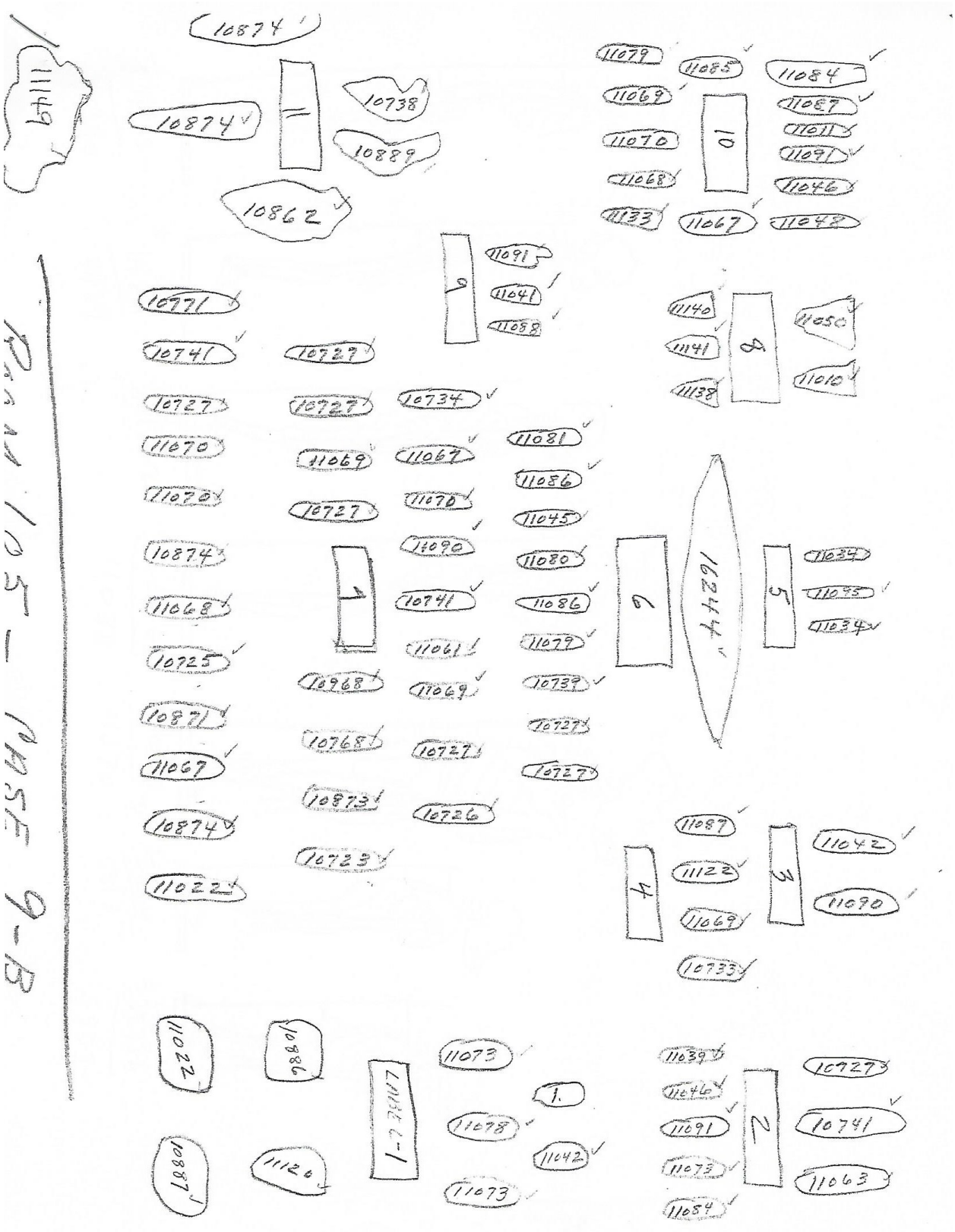


Figure 2.16: MPM Exhibit drawing from Hall of Man including A11149 in top left corner.

The lithic material from the Doerflinger collection was examined in a previous Master's thesis, which served as an example of a possible approach to analyze material with little museum documentation (Dybowski 2011). Select lithic items are currently on display at the MPM in the "Sense of Wonder" exhibit in a "cabinet of curiosities" thematic display, thus the accompanying information available is minimal to be consistent with the time period in natural museum history when items were displayed with little accompanying information. In the summer of 2000, the European archaeological material was preliminarily inventoried by Anna Loncsar, an Anthropology intern. This inventory included the cleaning and lining of the French Archaeology drawers, recording of basic information for drawer lists, correcting of catalog number discrepancies, and creating new drawer labels.

2.6 The Role of Faunal Remains in the History of French Paleolithic Collecting and Archaeology

Upon reading the detailed history of French Paleolithic collecting and archaeology, one may wonder how faunal remains fit into the larger picture. Paleolithic human skeletal material, art and lithic materials have always taken precedence over animal bones in this history, but they were still frequently included in these museum collections, but to a lesser degree. This section presents a brief overview of the role that animals have played as time markers, art, tools, and food to the present time.

In the 17th and 18th centuries, people first began to believe that animals could become extinct. As the interest in fossils increased, there were reports of flint tools being found in association with extinct faunal remains, which in turn confirmed the coexistence of man with the extinct animals found (MacCurdy 1924: 20). In the 1860s Lartet and Christy called attention to the idea that animals and artifacts varied in time and space. Lartet was the first to realize this and

create phases of human development based on the faunal remains found. As noted earlier these phases including the following, from most recent to oldest; 1) Aurochs or Bison 2) Reindeer 3) Woolly Rhinoceros/Mammoth and 4) Cave Bear and 5) Hippopotamus (Wargo 2009: 30; Daniel 1976: 100; Sackett 1991: 114; Trigger 1989: 95). As a result, individuals such as Doerflinger, who was in France during this significant era, collected the bones of animals. In other words, animal bones were not used as an aesthetic or example of human evolution in exhibitions as many of the lithic and art artifacts were, but as time markers. Faunal remains were valuable research tools that could be used to date a human skeleton, a stone tool collection, or even an entire site. Mammalian fauna found with human remains could be referred to a certain time period when that animal was known to exist (MacCurdy 1909: 92). For example, the remains of *Elephas antiquus* and *Rhinoceros etruscus* helped place human skeletal remains in the Lower Quaternary (MacCurdy 1909: 97)

In the early 20th century, the use of faunal remains changed as interests shifted from human antiquity to defining regional archaeological sequences, as seen in the work of de Mortillet (Wargo 2009: 35). Phases were no longer divided by faunal remains found, but by cultural principles, such as lithic tools with characteristic shapes found associated in stratigraphic layers. These phases, including the Acheulean and Mousterian, are still recognized today (Wargo 2009:31). Paleolithic archaeology from 1900 to 1950 was focused on classifying lithic tools and separating assemblages based on tool typologies (Audouze and Leroi-Gourhan 1981: 171; Sackett 1981: 87,1991: 117). Most faunal remains were summarized in a qualitative manner and then discarded (White and Breitborde 1992).

Animals as portable and cave art have received a significant amount of attention in the late 19th and early 20th centuries, as the majority of known cave art is located in France and the

Iberian Peninsula (Clottes and Lewis-Williams 1998: 37). The first real attention began to be paid to Ice Age art in the 1860s as many portable art objects were found in caves in southwest France, including objects such as decorated spear throwers and animals figures engraved in antler and bone (Bahn 2007: 13). Although the MPM collection does not include originals of such items, their perceived value is witnessed by the MPM's purchase of replicas (Figure 2.17).

Figure 2.17: Cast of mammoth handle of poniard on reindeer antler from Bruniquel, France at the MPM. Original at British Museum.

These finds were determined to be ancient, due to their association with lithic and bone tools and the nearby presence of Ice Age animal bones (Bahn and Vertut 1997: 14-15). Portable art objects are known from several sites represented in the MPM collection such as Gorge d'Enfer, Laugerie-Haute, Champs-Blancs and Laugerie-Basse.

The MPM has several French Paleolithic casts of worked bone and antler that depict animals purchased from Ward's Natural Science Estate (Accession number 5599). Now known as Ward's Natural Science Establishment, the institution still exists and provides resources for teaching purposes. The date of purchase is unknown, but is assumed to be early as they are

featured in the early 20th century MPM Hall of Man Exhibit. The casts were likely to have arrived in the museum between 1899 and the early 1920s since they are displayed with Doerflinger material, rather than La Quina items arriving in 1923. Three of the casts are from the Laugerie-Basse site (Figures 2.18 and 2.19). Unfortunately, the whereabouts of the third cast from Laugerie-Basse is unknown, which consists of a bison engraving on reindeer antler. Others were found from La Madelaine and the Cavern of Bruniquel.

Figure 2.18: Man hunting bison on reindeer antler from Laugerie-Bass. MPM cast from Ward's Natural Science Estate (A16252/5599).

Figure 2.19: Ibex engraving on reindeer antler from Laugerie-Basse. MPM cast from Ward' Natural Science Estate (A16254/5599).

The first recorded instance of cave art came from local landowner, Marcelino Sanz de Sautuola in 1880 at the Spanish cave of Altamira (Bahn 2007: 13; White 2003: 45). Since no

comparable art had ever been reported and Sanz de Sautuola was not a reputable scholar, his claims reguarding ancient art were met with skepticism and rejection that lasted 20 years (Bahn and Vertut 1997: 18). In 1895, a discovery that would help to change the mind of scholars occurred in the French cave of La Mouthe. Through dirt removal, an unknown gallery was exposed, which included a bison figure. The presence of Ice Age tools in the dirt covering the gallery made the ancient nature of the art irrefutable. After several more findings and a published "mea cupla" from Émile Cartailhac concerning the paintings in Altimira, cave art was officially accepted by the archaeological field as a valid sub-discipline of study in 1902 (Bahn and Vertut 1997: 20-22; Clottes and Lewis-Williams 1998: 38; Bahn 2007:14; Rosengren 2012: 43). (Figure 2.20).

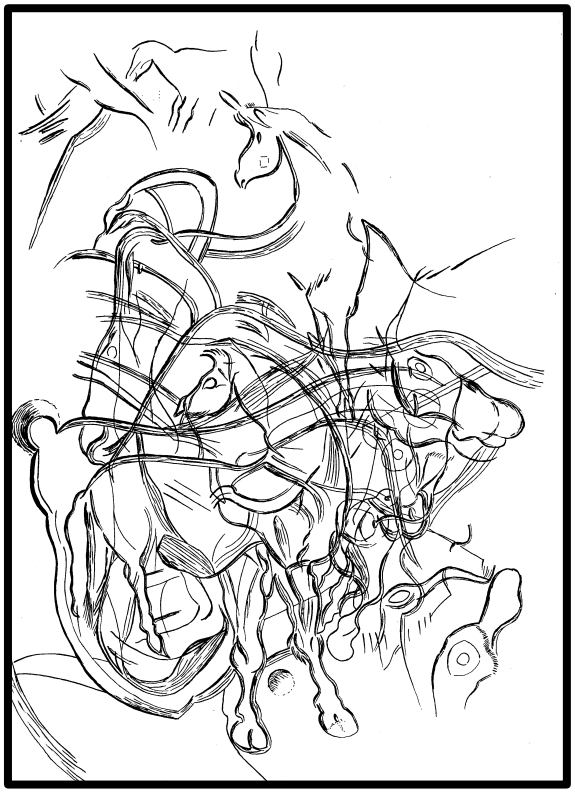


Figure 2.20: Abbé Breuil tracing of a panel from Pair-non-Pair (Breuil 1952: 320).

The story of the French cave site Pair-non-Pair, which is relevant to this thesis because the Doerflinger collection contains faunal material from the site, was especially important in the

scholarly acceptance of cave art. In 1881, François Daleau began digging in the cave, finding the bones of Ice Age animals and engravings on the walls he exposed. Little thought was given by Daleau to the graphic art until the discoveries at La Mouthe thirteen years later convinced him to clean the walls with water (Bahn and Vertut 1997: 20). Daleau began to study the animal figures in the caves, drew sketches of them and eventually published the data (Daleau 1898). De Mortillet, who was a significant figure in Paleolithic archaeology, was only convinced of the antiquity of cave art by the reports from Pair-Non-Pair since much of the art was covered by archaeological layers (Bahn and Vertut 1997: 21).

Most of the animals found in cave art are large herbivores (Clottes and Lewis-Williams 1998: 41). Reindeer, horse, bovid, ibex, red deer, and mammoth make up over 93% of animals depicted, as well as faunal remains found (Rice 1985: 94). Interestingly, it has been found that faunal remains found at sites generally do not correspond to the animals drawn on cave walls in terms of their relative quantities (Clottes and Lewis-Williams 1998: 69). For example, at Pair-non-Pair, the ibex exceeds all other animal figures in number in the cave art, but is absent in its faunal record (Bahn and Vertut 1997: 177).

The study of the use of animal bone to create tools was not popular until the 1950s, but these implements were included in small quantities in Paleolithic collections. According to Petraglia and Potts (2004), worked animal bones were considered rare objects in the Smithsonian Institution collections. This appears to be consistent with the MPM faunal collection as only a small percentage is made up of worked bone or bone tools (20 out of 245). Sites and/or regions in the MPM collection that contain utilized bone include Laugerie-Haute, Laugerie-Basse, Soucy, Magnac and La Quina. The exclusion of these materials is surprising since southwestern France is best known for the representation of Upper Paleolithic bone use, especially during the

Aurignacian, Gravettian and Magdalenian periods (Knecht 1994; Walker 1999:14). Worked bone is rare in Paleolithic collections likely because of the focus on lithics during the time period and the fact that bones do not preserve as well as stones. It is also possible that collectors at the time did not realize the significance of utilized bones or their interests in lithic materials for exhibition and typological purposes greatly outweighed the need for examples of bone tools.

A debate in the *Bulletin de la Société Préhistorique de France* in 1909 of the existence of bone working in the Mousterian is an example of the way utilized bone was viewed during this time period (translated by Dr. Jean Hudson). Dr. Henri Martin begins the discussion with a new insight that worked bone played an important role in the manufacture of lithic tools. At the La Quina site, Martin found humeri and phalanges of bison, horse and large cervids with human modifications present. He suggested that these were used as either hammers or anvils during the manufacture of stone tools (*Société Préhistorique de France* 1909: 155-162). It is noted by other prehistorians, such as de Mortillet, that these observations had escaped the notice of previous researchers. This suggests that faunal remains were understudied and neglected at the time, which also corresponds to the focus on lithics by prehistorians. Baudouin's comments support this notion, as he claims that bones have been neglected by researchers of the past who lacked knowledge of zoology and comparative anatomy (*Société Préhistorique de France* 1909: 155-162).

Chauvet argues against Martin, stating that the bones were not used as hammers and anvils, but instead the marks were a result of butchery. He cites his experimentation with a modern cow as evidence (*Société Préhistorique de France* 1909: 189). De Mortillet argues against Chauvet's butchery theory by discussing the location, overlap, and intensity of the marks, as well as the hardness and sharpness of the objects that could have produced such a mark. These

marks could only have been produced as a result of actions involving repeated, localized blows, such as that of a hammer or anvil (*Société Préhistorique de France* 1909:189). The discussion concludes with another reply from Baudouin who notes that the marks found by Martin could not be the result of disarticulation, even by the least skilled person working with stone tools. His evidence comes from the fact that he was a former surgeon and attended many anatomical dissections of people and animals (*Société Préhistorique de France* 1909:189).

As evidenced in this debate, scholars were just beginning to notice the evidence of worked bone. The history of the study of bone tools follows a similar trajectory of French Paleolithic archaeology in that it begins with a focus on descriptive and typological work. The first scholarly publication pertaining to a bone tool industry was not until 1938 by Henri Breuil and O.G.S. Crawford, who hypothesized that early humans would have used the materials around them as weapons when materials such as stone were not available (Plug 2012).

As we move forward in time, more representative samples of faunal remains from specific localities are collected, as seen with the La Quina material requested by Barrett and collected by Peabody in 1922-1923. Prehistoric diet and local environmental conditions became a focus of study. Archaeologists begin to describe faunal remains in greater detail, paying attention to taxa and element types present focusing on climatic interpretations (Boyle 1990: 14). In the later part of the 20th century, the interpretive utility of quantifying zooarchaeological assemblages and estimating relative taxonomic abundance was recognized (Reitz and Wing 2008). Details regarding the numbers of individuals present, element frequencies, age of animals at death, and skeletal part transportation began to be recorded (Boyle 1990). During the last several decades, topics in zooarchaeological research have expanded and scholars examined social implications as well as subsistence and settlement patterns. There are many debates

surrounding issues of diet that are still ongoing today, including seasonality and climate, opportunistic versus specialized hunting strategies, the Middle to Upper Paleolithic transition, and the Broad Spectrum Revolution. I will provide a brief overview of these debates in the following paragraphs.

The issue of seasonality and resource exploitation became a significant topic, especially in the 1990s. Boyle (1990) used statistical analyses to study Upper Paleolithic herbivore faunal assemblages from southwest France. These analyses exhibited a correlation between species and climate, where reindeer dominated assemblages during cold periods and red deer, roe deer, boar, and bovid in warmer climates. Many studies that measure seasonality utilize faunal teeth using methods such as dental/cementum annuli analysis in which yearly growth cycles are marked (Burke 1992; Burke 1993; Pike-Tay 1991; Pike-Tay and Bricker 1993). Eruption and wear sequences are also a significant factor in predicting seasonality (Enloe and David 1997; Enloe 2006). Many of these studies note that there were differences in prey choice and/or availability depending on the season and across time depending on the general climate.

Many authors have studied the subsistence strategies and patterns in the Middle and Upper Paleolithic of France using a variety of methods. One prominent argument in the literature focuses on opportunistic versus specialized hunting strategies. Several authors argue for flexible opportunistic strategies on a small scale (Boyle 2000; Brugal 1999; Fairzy and David 1992; Guadzinski 2006; Kuntz and Costamagno 2011; Levine 1983; Niven et al. 2012; Niven 2013). These small-scale hunts were typically a response to what was available in the environment at the time and were practiced by groups that were highly mobile (Boyle 2000; Niven et al. 2012). There are sites that show evidence that communal or collective hunting existed. This hunting style indicated a high degree of reasoning and abstract thought since it required planning and

logistical organization (Enloe 2010; Rendu et al. 2012; Valensi 2000). It is important to note that the homogeneity of an assemblage may not necessarily represent a specialized subsistence system, but instead may show flexibility in each particular environment, as species types vary by location (Gaudzinski 2006). It has also been argued that Upper Paleolithic groups controlled herds, as one horse example appeared to show evidence for the use of a harness (Bahn 1984). Randall White (1989) has argued in favor of migration hunting as there has been no expansive evidence for animal husbandry, on the basis that one harness example is not enough.

The transition between the Middle and Upper Paleolithic is another highly debated topic in archaeology. This transition corresponds to Neanderthals and the arrival of early modern humans in Europe. This time in particular, is significant in early human history because it is argued that humans had a more specialized and selective form of subsistence. Mellars (1996, 2004) states that this shift was marked by a change from a generalized to a specialized subsistence system. It is debated whether Neanderthals possessed the capacity to participate in complex strategies (Chase 1986, 1988; Marean and Assefa 1999; Shea 1998; Stiner 1991). By analyzing the faunal record, several scholars have shown that Middle Paleolithic Neanderthals were capable of organized hunting (Costamagno et al. 2006; Daujeard and Moncel 2010). The transition was most likely a process rather than an event, as differences between occupations of the earlier Châtelperronian and later Aurignacian associated with early modern humans show little difference in diet strategies. Differences in taxonomic abundance were specifically related to changes in climate, rather than the abrupt arrival of early modern humans (Discamps et al. 2011; Grayson and Delpech 2003, 2008; Morin 2004, 2012). In fact, radiocarbon dates of faunal material suggest interaction between the Châtelperronian and Aurignacian occupations (Gravina et al. 2005).

Another significant debate within zooarchaeology is the "Broad Spectrum Revolution." There is a known shift or broadening of the diet in the Dordogne region of southwestern France at the end of the Pleistocene, also known as the "Broad Spectrum Revolution" (Stiner 2001). This means that diets were no longer dependent on large ungulates alone, but on smaller prey as well. There are two ongoing hypotheses for why this dietary change was occurring; 1) climate change had a negative impact on large mammal populations causing humans to add smaller animals to their diets and 2) humans had a negative impact on large mammal populations, causing humans to eat a more diverse diet based on small animals (Jones 2004).

The role of animals in Paleolithic archaeology has changed greatly from the late 19th century to the present time. Animals have been viewed as time markers, art, tools and food. The study of the history of faunal remains is integral to understanding the composition of collections, such as those housed at the MPM, because it has affected what was collected and provides evidence of the history of the construction of archaeological knowledge.

Chapter 3: Methods

3.1 Introduction

As noted earlier, this thesis had two major objectives. One was concerned with understanding the history of the presence of French Paleolithic material in museums in the United States. The other has focused on documenting the MPM collection in greater depth, both for the museum's records and in ways that might prove useful to archaeologists seeking to integrate data from these faunal remains with those housed elsewhere. Each of these motives has distinct methods of data collection. Section 3.2 describes the methods and sources of documentation used to study the French Paleolithic faunal collection at the MPM. Section 3.3 discusses the particular zooarchaeological methods used, including NISP, presence/absence of taxon, and metric data.

3.2 Examining the History of the French Paleolithic Collection at the MPM

The availability of MPM's French Paleolithic faunal material for study was brought to my attention by Dawn Scher Thomae, the MPM Curator of Anthropology Collections, as the collection had not been studied and lacked identification. Preliminary research was conducted to designate what part of the collection was to be included in the project and what research questions could be asked, which took place in February 2015. The goals were to determine the viability and scope of the project, including determining the quantity of specimens, identifying sites and/or regions the material originated from, and evaluating the condition of the bones, such as fragmentation. Due to the lack of specific site documentation, it was agreed by Ms. Scher Thomae and Dr. Jean Hudson that the best approach for this thesis was a two tiered approach to examine the larger context from a museological perspective, specifically that of collection history. The second approach, it was decided, was that all faunal material, consisting of bone fragments, worked bone, and bone breccia, would be analyzed and included in the project. These

materials, as a group, would be evaluated in terms of how they represented what might have been significant to a museum-based collector creating a representative Paleolithic collection in the late 19th and early 20th centuries.

After my preliminary review of the collection, I began to examine the documentation associated with each object, most of which was located in the Anthropology Department ledgers at the MPM. I recorded all information that was associated with each piece, including collector, catalog number, accession number, site, and artifact type. It should be noted that the Doerflinger material was an early addition to the museum and predates the adaption of MPM accession numbers. Adhered labels on the Doerflinger material were also compared to what was in the ledgers. Having this information allowed me to calculate sample size for each site and/or region (Table 3.1).

Table 3.1: Collector and sample size by site and/or region.

Collector	Date Acquired	Site/region name	Count
Doerflinger	1899	Gorge D'Enfer	1
Doerflinger	1899	Laugerie-Haute	3
F.J. Perkins	1885	Bruinquel, France	3
Dr. Stanley Wisniewski	1992	Southern France	1
Doerflinger	1899	Champs-Blancs	6
Doerflinger	1899	Les Eyzies. France	1
Doerflinger	1899	Laugerie-Basse	17

Doerflinger	1899	Soucy	17
Doerflinger	1899	Magnac	16
Doerflinger/Daleau	1899	Pair-Non-Pair	38
Peabody/ASPR/Barrett	1923	La Quina + unnumbered bone found with LAQ	142
			Total: 245

In addition to museum documentation, primary literary sources, such as official letters from Doerflinger sent to the Board of Trustees, Doerflinger's official collection inventory, Peabody and Barrett's correspondence and ASPR advertisements and official field reports, were especially significant in determining when and where the material was collected. Letters to the MPM Board of Directors from Doerflinger were examined from the MPM archives. This information provided details on when and where the material was collected and the stipulations upon which it was donated to the museum (Figure 3.1).

To the Board of Trustees

of the

Milwaukee Public Museum.

Gentlemen:-

During my sojourn in Europe 1889 to 1893 I took occasion to visit the region explored by the illustrious Boucher des Perthes-- the valley of the Somme River in northern France-- and some of the most interesting haunts of the cave-dwellers of southern France in the valleys of the Gironde, the Garonne and her tributaries, the Dordogne and Vezère. On these excursions I was able to collect,partly by purchase directly from farmers and others, partly by exchange, etc., a considerable number of the cave-dwellers' relics of early prehistoric times, estimated to date back from 10,000 to 40,000 years and representing four different glacial periods.

The collection embraces finds of about a dozen different localities, communes or ateliers, and I labeled every specimen,so that the "industry," as the French savants term it, of the different localities can be studied if arranged accordingly.

Figure 3.1: Doerflinger letter to MPM Board of Trustees. November 2nd 1898.

From Dr. Bettina Arnold at the University of Wisconsin-Milwaukee, I also received Doerflinger's official inventory of the material brought back from his trips to France and Switzerland, which was organized by site (See Appendix F). This document is kept in the Doerflinger collection file at the MPM in the Anthropology Department. The physical collection was compared against this list to further confirm an association with Doerflinger. Museum-quality photographs were taken of each catalog number from each side. The photo record also documents the paper labels adhering to the bones, which appear to date to the time of collection, as well as any labeling hand-inked on the bones. The labeling provides a special line of evidence as an illustration of what was deemed important to record; this varies, but can include site name, collector's name, taxon of the animal represented, body part and side, as well as handwriting style.

In addition to the labeled Doerflinger material, the MPM collection included several unnumbered pieces simply labeled "LAQ". This presented an interesting museum conundrum. The Curator of Anthropology Collections did not know of the origins of this material at the time it was brought to my attention. The collection was inferred to be of Paleolithic origin on the basis that the materials were stored with European archaeological materials from France. As an agreed upon requirement for the use of the collection for my thesis, it was my task to find out how the museum obtained the collection and where it originated. I began by conducting Internet searches for the LAQ letter combination, which did not yield relevant information. Next, I searched for other museums with similar French Paleolithic faunal material in the United States. I gathered as much data as possible from the museum websites and online databases, if available, about their collections, such as who the material was collected by, what sites it came from, and size of the collection (Table 3.2).

Table 3.2: U.S. museums with prominent French Paleolithic faunal collections.

Museum	Collected By	Sites	Counts
Logan Museum of Anthropology at Beloit College (Beloit, WI)	Many separate acquisitions in the early 20th century: George Collie, Alonzo Pond	La Quina Grotte de Minuex Abri Blachard Leo Belanger Armand Vire Rocher de la Peine,Count Begouen La Ferrassie, La Madeleine, Jean Esclafer Abri Cellier Predmosti Les Battuts	Over 21,500 objects
University of Pennsylvania Museum of Archaeology and Anthropology (Philadelphia, PA)	Henri Martin, Maurice Feaux, Charles Peabody/ASPR	Charente, Dordogne La Madeleine, Laugerie-Basse, Les Ezyies La Quina	3534 objects
Museum of Anthropological Archaeology (Ann Arbor, MI)	George MacCurdy	La Quina	47 catalog records
Wilson Museum (Castine, ME)	Purchased from A. de Marat and Louis Didon	Cave du Placard Abri Blanchard Abri Labatut	121 Objects
Peabody Museum of Natural History (New Haven, CT)	George MacCurdy	La Quina Laugerie-Haute	Over 150 Catalog records
Field Museum (Chicago, IL)	Henry Field	Abri Ihla Ariege Catenoy Charente Charente-Inferieure, Indre Laugerie-Basse Izaut de l'hotel Lot-el-Garonne Montespan Paray le Monial, Polignon Quarry of Gourdan Pyrenees, Roquecorbere, Rossigny Saône-et-Loire	Over 1100
Smithsonian Institution	Thomas Wilson, Ales Hrdlicka, Henri	Dordogne Haute-Garonne	Over 500 catalog

(Washington D.C)	Martin, James T. Russel Jr.	Aples-Maritimes Charente St. Vallier Aude Laugerie-Basse Laugerie-Haute Saone-Et-Loire La Quina	records
Harvard Peabody Museum (Cambridge, MA.)	Charles Peabody	La Quina	Over 500 objects
American Museum of Natural History (New York, NY)	H. Martin, N. Nelson, and J. McGregor.	La Quina	136 objects
University of Nebraska Museum (Lincoln, NE)	Dr. E.L. MacQuiddy and Ward's Natural Science Establishment (casts)	Caves of Dordogne	20 objects; mostly casts
Burke Museum of Natural History and Culture (Seattle, WA)	Private donors	La Glasiere Grand Pressigny Abbeville and St. Genevieve-on-Bray Laugrie Haute Montieres Pres Amiens Etape	33 catalog records
Robert S. Peabody Museum of Archaeology (Andover, MA)	Charles Peabody/ASPR	La Quina	338 objects
Denver Museum of Nature and Science (Denver, CO)	Colorado College who received collection from Renaud at University of Denver	La Quina	23 objects
Putnam Museum (Davenport, IA)	Charles Peabody/ASPR	La Quina	294 catalog records

To obtain further information about these collections and to inquire about the LAQ designation, Ms. Scher Thomae put me in contact with curatorial and registration staff at several museums including the following: 1) Peabody Museum of Natural History at Yale University; 2)

The Field Museum in Chicago; 3) the University of Pennsylvania Museum of Archaeology and Anthropology; and 4) the Museum of Anthropological Archaeology at the University of Michigan. I also utilized ASPR bulletins and MPM archival records from 1920-1925. The results of this LAQ conundrum are detailed in Chapter 4.

3.3 Faunal Analyses

My zooarchaeological analyses of the MPM materials focused on element identification and determination of each specimen to the most specific taxonomic level possible. Several resources were used to aid in identifying the French Paleolithic faunal collection, including manuals and comparatives from the MPM Zoology department and the Zooarchaeology laboratory at the University of Wisconsin-Milwaukee. Faunal identification manuals used included *Mammal Bones and Teeth: An Introductory Guide to the Method of Identification* by Simon Hillson (1992), *Atlas of Animal Bones for Prehistorians, Archaeologists, and Quaternary Geologists* by Elizabeth Schmid (1972) and *A Key to Postcranial Skeletal Remains of Cattle/Bison, Elk, and Horse* by Christopher L Brown and Carl E. Gustafson (1979). The first two guides focus on European mammals, the latter on large herbivores. MPM policies do not allow its museum collections to leave the building for thesis projects, which limited my ability to access more complete comparative collections housed at other institutions. The MPM Zoology Department was able to provide access to several modern comparative skeletons and separate bones, including complete skeletons of rabbit, red fox, grey fox, mallard, and articulated non-specific cat and dog skeletons. Separate pieces included cow and fallow deer mandibles, and cow femur and metacarpus. The University of Wisconsin-Milwaukee allowed me to bring limb bones from modern cow and horse skeletons to aid with Bovidae and Equidae identifications, and a North American Cervid, the white-tailed deer, *Odocoileus virginianus,* to the museum for

comparison. I did not have access to Pleistocene animals or modern examples of certain key species, such as *Rangifer tarandus* (reindeer) or *Cervus elaphus (red deer)*. Many of the limb shaft fragments could be further identified with access to these comparatives.

Modification was also recorded. Cultural modifications noted were finished tools and evidence of working and cut marks. Natural modifications recorded in the collection included, carnivore gnawing, weathering, root etching, burning, and discoloration based on criteria from Lee Lyman's (1994) taphonomy manual and a PowerPoint guide prepared by Dr. Jean Hudson. The size range was recorded for each specimen using the following groupings: 1) **Small**, consisting of birds, amphibians, red fox, and other canids; 2) **Medium**, including pig, reindeer, red deer and roe deer; 3) **Large**, including cow and horse, in order to evaluate what sizes were appealing to collectors.

Number of Identified Specimens (NISP) was calculated for each site and in total in order to quantify the types of animals present in the collection. NISP is defined by Lee R. Lyman as the "number of identified specimens per taxon" (1994: 38). While NISP is typically used to evaluate relative taxonomic abundance and interpret dietary emphasis (Reitz and Wing 2008), these are not relevant applications for the MPM Paleolithic collections, given their collection background. I used NISP in this thesis simply as a measure of sample size and to allow the frequencies in these collections to be compared with those of other collections elsewhere. The presence/absence of each taxon was also tabulated for each site and in total, with reference to an expected fauna list. Using Kurten (2009) I created an expected fauna list, which shows all of the mammals that could have lived in Europe during the Late Pleistocene (see Appendix C).

I collected metric data on individual items that could be measured, following the standards established by Von den Driesch (1976); these may aid future archaeological research

on taxonomic identification and variation (see Appendix D). Due to the fragmentary nature of the collection, only 26 specimens were suitable for measurement. These included the following elements; astragalus, phalanx, teeth, proximal radius, distal metapodial, navicular cuboid, calcaneus, and tibiotarsus of animals consisting of horse, cow, bird, reindeer, and cervidae.

3.4 Database of the French Paleolithic Faunal Material at the MPM

An Excel spreadsheet was created to record the collection inventory. Categories included site/location, collector, catalog number, count, element, part, comments, taxonomic class, taxonomic family, taxonomic species, evidence of working, labeling on bone, size range, preservation, photo number and drawer number. This information was divided into two separate databases for placement into appendices separated by collection/collector information (Appendix A) and faunal data (Appendix B). Associated photographs are included in Appendix L.

Chapter 4: Results

4.1 Introduction

In the first section of this chapter I present an overall summary of the data of the French Paleolithic faunal collection at the MPM. This summary includes a brief overview of the collection, followed by a description of the various taxa present, modifications, and elements represented by taxon found at each site. Sections 4.3 through 4.9 discuss each Paleolithic site in terms of what was distinctive about the MPM material from that site. See Appendix K for the research history of each site (based mostly on English puplications). Section 4.10 presents the objects and results from areas and regions that are not correlated to a specific site. Lastly, Section 4.11 provides a detailed review of the results of the LAQ museum conundrum. Although the LAQ materials are included in the discussion in early parts of this chapter, the details of how it became recognized as representing the site of La Quina are given at the end.

4.2 Summary of the MPM Paleolithic Faunal Collection

The MPM French Paleolithic faunal material comes from 11 different sites and/or regions in southern and southwestern France. Seven out of this number are known Paleolithic sites, while the rest are associated with towns and areas in France. The specific location, collector, time period, site labels, and specimens are discussed below by site or region (see Figures 4.1 and 4.2 for an overview of time period and collectors). In total, the MPM material includes 245 bones and bone fragments, worked bone and antler tools, and breccia. Most of this faunal material was collected during two separate expeditions, one in 1889-1893 by Doerflinger and one in 1922-1923 by Peabody. This represents a time gap of approximately 30 years between the two expeditions, with relevant historical events occurring in between, as well as, changes in public and archaeological perspectives on the French Paleolithic and its place in museum collections.

Figure 4.1: MPM sites by Paleolithic time period.

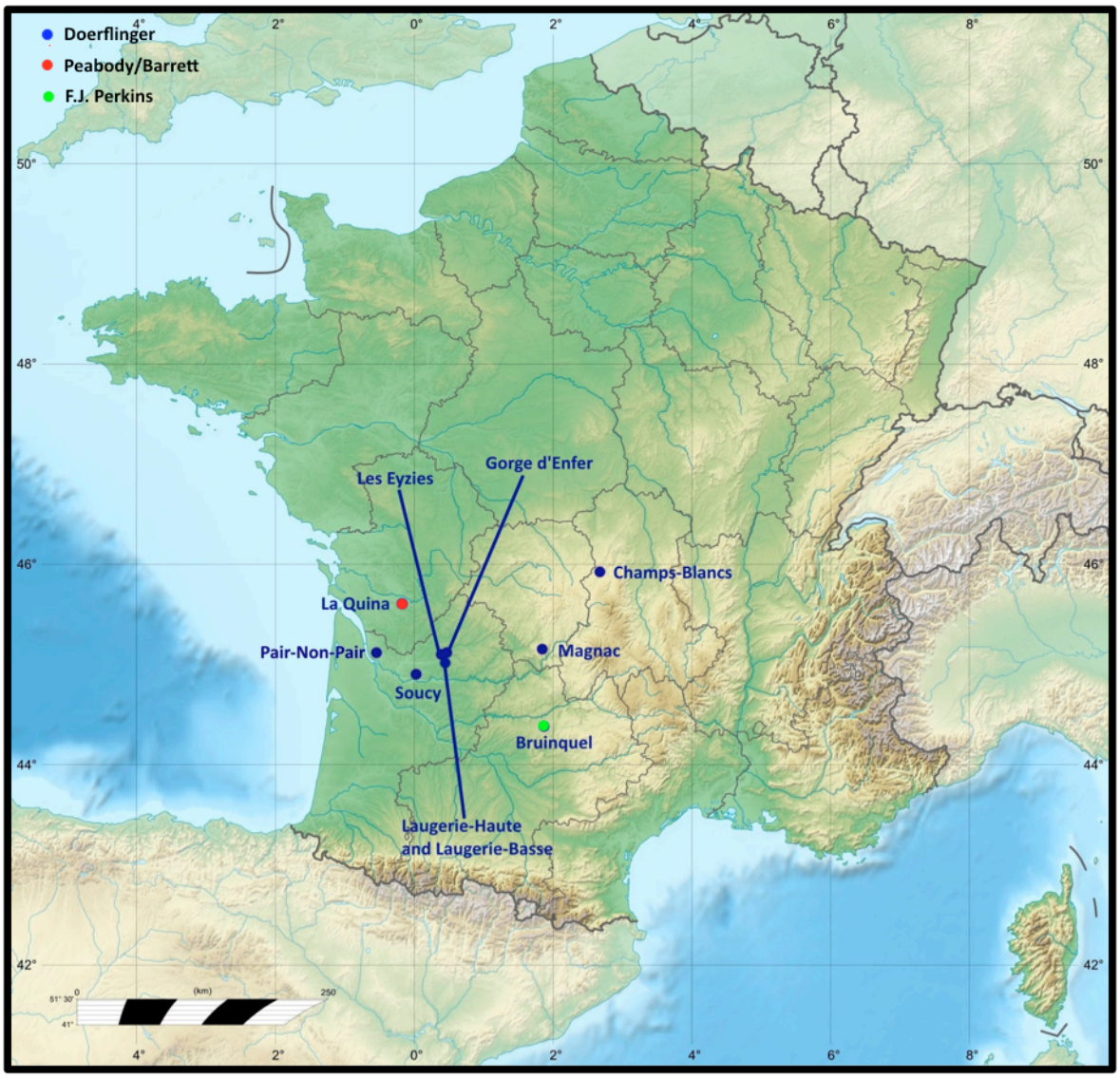


Figure 4.2: Map of sites color-coded by collector.

Ninety-nine pieces, or roughly 40 percent, of the bones and bone breccia were collected by Charles Doerflinger between the years of 1889 and 1893. Doerflinger's intentions were to collect "cave-dwellers' relics of early prehistoric times" for the MPM because the museum had few, if any, examples of "primitive cave dwellers' implements." He also wanted to use this material to create an exhibition using horizontal cases within about 60 square feet of museum exhibit space (MPM Correspondence Charles Doerflinger, letter to the Board of Trustees

November 2nd 1898). Doerflinger's collection was diverse in terms of the large number and broad geographic spread of the sites he collected from, which was unusual for the time.

There are also minor donations by F.J. Perkins in 1885 and Dr. Stanley Wisniewski in 1992. The former consists of three antler fragments from Bruniquel, France and the latter, a boar tusk from Southern France. F.J. Perkins collected dozens of Paleolithic lithic tools from miscellaneous sources. The Wisniewski accession also included other archaeological artifacts, such as lithics and copper, as well as minerals and meteorites (not from France) since he was an advocational geologist (Catalog # 58487-58529). It is likely that these individuals did not collect the materials they donated first hand, but received them through trade.

The other 142 objects, representing roughly 58 percent of the total, were collected by Peabody and the ASPR in a 1922-1923 field school at the La Quina site. The Director of the MPM, Barrett, specifically requested material from one definite locality rather than from several. He wanted a representative cross-section and stratigraphic out look of a particular site. This request is significant because previous collectors, such as Doerflinger, were interested in amassing a broad sample of several sites, rather than details of a location within a site.

The following reviews the taxa that are present at each site**.** Table 4.1 provides the NISP of all sites and/or regions and shows the relationship with taxonomic family. There were 10 mammalian families represented: Bovidae, Equidae, Cervidae, Canidae, Suidae, Elephantidae, Rhinocerotidae, Hyaenidae, Ursidae, and Leporidae, as well as one bird family, Anatidae, and members of the classes Reptilia and Amphibia (see expected fauna list in Appendix C for Paleolithic species associated with each mammalian family). Reptilia and Amphibia bones were represented, but identification to element or family was not possible given the degree of fragmentation. Cervidae were found at eight sites. They were the most ubiquitous type of fauna,

being represented at more sites than any other taxonomic family; likely Cervidae species include reindeer, red deer, and roe deer. Cervidae remains were found at all sites except Champs-Blancs. At Champs-Blancs Bovidae and Canidae were present. Bovidae were found at four out of the 11 sites and/or regions. The results show that large herbivores, such as deer, reindeer, bison and horse were the most commonly represented taxa in the collection and across sites. This general trend is consistent with the pattern seen in other Paleolithic faunal analyses and museum collection studies (Boyle 1990; Costamagno 2013; Enloe 2006; Colten and Hill 2007; Niven 2013; Pike-Tay 1990).

Table 4.1: Presence/absence of taxonomic family per site. Green collected by Doerflinger, orange by Peabody, purple by Dr. Stanley Wisniewski and blue by F.J Perkins. X= one bag of multiple fragments.

Site (NISP)	Elephantidae	Rhinocerotidae	Bovidae	Equidae	Cervidae	Ursidae	Suidae	Hyaenidae	Canidae	Anatidae	Leporidae	Reptilia/Amphibia	Total Taxa
Gorge d'Enfer (1)					1								1
Laugerie-Haute (3)					3								1
Bruinquel, France (3)					3								1
Southern France (1)							1						1
Champs-Blancs (6)			1						1				2
Les Eyzies, France (1)					1								1
Laugerie-Basse (17)					17								1

Soucy (17)				1	5		8		2		1		5
Magnac (16)			4		10								2
Pair-non-Pair (38)	2	1	11	17	5			1					6
La Quina (141)			23	9	36	1			6	4		X	7
Total NISP: 245													

In the present case, the dominance of large animals could be attributed to several different factors. First, these species may have been the most prevalent at each site and may represent important dietary contributions for early humans. Second, these large bones could have been more appealing to the collectors either for exhibit or for teaching students. Thirdly, they could have been what the French prehistorians were willing to part with to send to their American colleagues. Lastly, these large bones may have been added to the collection for taphonomic reasons. They could have been better preserved due to their density and size. It is likely that there are multiple causes.

Over half of the taxonomic families in the collection are represented at one particular site, La Quina. The MPM La Quina assemblage has the largest sample size and represents the more recent excavation, two factors that may have contributed to its greater diversity. The taxonomic families include Bovidae, Equidae, Cervidae, Ursidae and Anatidae. Reptilia and Amphibia are also represented. This is an interesting set of fauna, including small game such as birds, reptiles, and amphibians, as well as large mammals, such as, cow, horse, deer, and bear.

Pair-non-Pair also has a large sample size and greater diversity of taxa, but it contains only examples of large mammals, whereas La Quina includes small animals. The collection at Pair-non-Pair also has the only examples of Elephantidae and Rhinocerotidae. These exceptionally large mammals are distinctive to the climate and environment of the time period. As noted in Chapter 2, these locally extinct taxa were used to date human remains. These "type" fossils may have had special value for museum collectors in the late 1800s.

To what extent were these faunal remains chosen to represent tool industries or taphonomic histories rather than diet? Table 4.2 shows the presence or absence of natural or cultural modifications at each site. Weathering and canine damage were the most common modifications found in the collection as a whole. In terms of cultural modifications, cutmarks were the most common occurrence across sites. La Quina and Laugerie-Basse have the most diverse range of modifications. Diversity of modification does not appear to be related to NISP at each site, as Pair-non-Pair has one of the lowest degrees of modification and the second largest NISP. In fact, there is no evidence for cultural transforms at Pair-non-Pair. The lack of bone modification may have been the decision of Daleau, who originally collected and studied the material from the site and later passed it on to Doerflinger.

Worked tools were recovered at three sites, including Laugerie-Haute, Laugerie-Basse and Soucy. Bones with evidence of working were also collected at Magnac and La Quina. It is striking that 8%, or 20 objects, out of 245 have shown evidence of worked bone with only five of the sites containing these pieces. This is a very low percentage since the Upper Paleolithic is known for an increase in usage of bone as a material for tool making. These materials may not have been of interest to the collectors because of the focus at the time on creating chronologies and culture histories, which corresponds with the history of Paleolithic archaeology. The study of

bone tools did not become popular until the 1950s (Plug 2012: 87-88; Walker 1999:5). The small quantity of worked bone and tools may also be associated with the fact that they are not as frequent as lithic artifacts at archaeological sites. Knapping stone tools produces hundreds of cores and flakes that are readily available at sites. The organic nature of bone could have also been a factor at the sites where worked bone is not present, an occurrence that does not affect stone or fired clay.

Root etching, burning and discoloration of bone were the least common modifications found within the collection. Root etching occurs when bone is deposited near plants and comes in contact with their roots for a long period of time. It occurred at four sites, including Champs-Blancs, Laugerie-Basse, Soucy and La Quina. This may indicate disposal of faunal material in areas with plant life. Burned bone was collected only at La Quina and its numbers were few. At the time of collection, burned materials may not have been attractive to the collectors, as their potential use for study was not realized at the time. Discolored bones were represented at four localities, including Champs-Blancs, Laugerie-Basse, Magnac, and La Quina; this can occur due to a number of taphonomic factors.

In terms of the contrast between the faunal material found in the Doerflinger and Peabody collections, the types of modifications found in each were very different. The Doerflinger material contained all of the bone tools, including points and other unidentifiable implements. Of the 20 pieces of worked material, only two bones had evidence of working and these came from the Peabody collection. This striking difference shows the primary purpose behind the Doerflinger collection since it was to be placed into an exhibit that would display the material produced by cave dwellers. Bone tools would likely be appealing to the public, whereas Peabody did not have to concern himself with the presentation of the collection, but with the future

research potential for professionals and students alike. The 30 year gap also reflects changes in what French archaeologists were willing to let Americans remove from the country.

In the Doerflinger collection 42% of the objects have modifications, compared to 65% in the Peabody collection. These percentages are rather large in both cases, but the types of modifications found greatly differ between the collections. The Doerflinger faunal material is represented primarily by weathered and worked material, whereas the Peabody bones were dominated by cutmarks (29%) and canine gnaw marks (19%). In fact, nearly half of the collection contained either cutmarks or gnaw marks. The presence of both human and canine activity is consistent with recent findings at the La Quina site, where humans were the primary agents in the accumulation of the assemblage, as seen through butchering marks, but carnivore action also took place, although not to the extent that the space was identifiable as a carnivore den (Chase et al. 1986).

The contrast between the two collectors is significant because each had different motivations for collecting material. The Doerflinger faunal collection consisted of specimens that were easily identifiable by element and taxon, where as the Peabody and the ASPR materials contained a large quantity of unidentified limb shaft fragments with modifications. These limb shaft fragments would have been considered excellent examples for training students in what to look for in terms of various types of modification, but less ideal for exhibition purposes. In fact, many of the fragments within the La Quina collection have pencil marks applied directly to the bone to indicate a modification. These marks may have been made by the students in the ASPR or by Peabody, as he held the collection for study for a short period of time before it was sent to the MPM.

Table 4.2: Presence/absence of modifications per site.

Site (NISP)	Worked Tool or Point	Worked	Cut marks	Burned	Canine gnawing and pitting	Weathering	Root etching	Discoloration	Total Modifications
Gorge d'Enfer (1)			X						1
Laugerie-Haute (3)	X					X			2
Bruinquel, France (3)			X			X			2
Southern France (1)									0
Champs-Blancs (6)						X	X	X	3
Les Eyzies, France (1)									0
Laugerie-Basse (17)	X	X			X	X	X	X	6
Soucy (17)	X				X	X	X		4
Magnac (16)		X	X		X	X		X	5
Pair-non-Pair (38)					X	X			2
La Quina (141)		X	X	X	X	X	X	X	7

How complete is body part representation per taxon? Table 4.3 shows how many elements are represented in the collection per taxonomic family. Cervidae show the most complete skeletal representation in the collection, followed by Bovidae. These data match that of Table 6 in that these two large herbivores dominate the collections both by element and site. In terms of smaller animals, Canidae had the highest diversity of elements, surpassing Equidae. The most common element across taxa was teeth. The selection of teeth in the collection can be attributed to taphonomic bias as they tend to be better preserved over long periods of time as compared to other bones. Teeth may have also been attractive to the collector because of their utility in identifying taxon. Foot bones, such as the calcaneus and astragalus, which are very dense and have a high likelihood of surviving in the record, are also common in the collection across several taxa. Teeth and foot bones, too, are the most complete bones in the collection, that is, they are less fragmented, making them easier to identify. Other elements in the collection are less well represented across taxon.

Table 4.3: Presence/absence of element by species.

Element	Bovidae	Equidae	Cervidae	Canidae	Suidae	Anatidae	Elephantidae	Rhinocerotidae	Hyaenidae	Ursidae	Leporidae	Total Taxa
Skull			X									1
Antler			X									1
Mandible	X		X	X							X	4
Teeth	X	X	X	X	X			X		X		7
Tusk					X		X					2
Scapula			X									1
Humerus	X					X						2
Ulna						X						1
Radius			X									1
Metapodial	X		X	X								3
Rib	X		X	X								3
Vertebrae			X									1
Femur			X									1
Tibia	X	X										2

Tibiotarsus						X						1
Astragalus	X	X	X									3
Calcaneus	X	X	X									3
Navicular cuboid	X		X									2
Phalanx			X	X								2
Limb shaft fragment			X									1

4.3 Gorge d'Enfer

Gorge d'Enfer is located in the Commune of Les Eyzies-de-Tayac (Dordogne) several meters from Laugerie-Haute. The Gorge is a small west-east facing valley that contains a number of Paleolithic sites, including the Abri du Poisson, Grand Abri, Abri Lartet, Abri Pasquet, and Oreille d'Enfer (Knecht 1991: 119). The site material represents the Châtelperronian, Aurignacian, and Gravettian cultures (Peyrony 1932). Unfortunately, Doerflinger does not specify which of the five sites he visited. Abri du Poisson was excavated first by P. Girod in 1892, who called the site Gorge d'Enfer (Knecht: 1991: 121). It is likely that the MPM material came from Abri du Poisson as it was called Gorge d'Enfer during the time he was in France.

Gorge d'Enfer is represented in the MPM collection by a single shaft fragment of a metapodial belonging to a member of the Cervidae family (Figure 4.4).

Figure 4.3: Cervidae metapodial fragment from Gorge d' Enfer.

The bone exhibits cutmarks, which were likely made when the animal was processed for subsistence purposes. It was collected by Doerflinger between the years of 1889-1893. The label on the bone consists of an adhered paper label that clearly indicates the site name "Gorge d'Enfer" (Figure 4.3).

Figure 4.4: Cervidae metapodial fragment from Gorge d'Enfer

4.4 Laugerie-Haute

Figure 4.5: Overall photo of MPM Laugerie-Haute faunal collection.

Laugerie-Haute is located on the right bank of the Vézère River and is approximately two kilometers upstream from Les Eyzies (Knecht 1991). Excavations by D. and E. Peyrony revealed Aurignacian, Solutrean and Magdalenian levels, which confirmed that the site had been occupied continuously for about 20,000 years (Peyrony and Peyrony 1938).

Laugerie-Haute is represented in the MPM collection by three pieces collected by Doerflinger between the years of 1889-1893.There are two fragments of worked Cervidae antler, which appear to have been made into points, awls or flakers. The criteria used to identify these items were the smoothed and pointed nature of the shape, as well as evident tool marks. Interestingly, unlike most of the Doerflinger collection, they do not have paper labels placed directly on the bone. This may be due to their small size (Figure 4.6). The third item is a mandible of a *Cervus elaphus* (red deer) with a molar and two premolars retained (M1, P3, and P2). The mandible does have a label affixed with the site name and the number 28. All three pieces are weathered and the mandible still has soil attached.

Figure 4.6: Antler points, awls or flakers from Laugerie-Haute.

4.5 Champs-Blancs

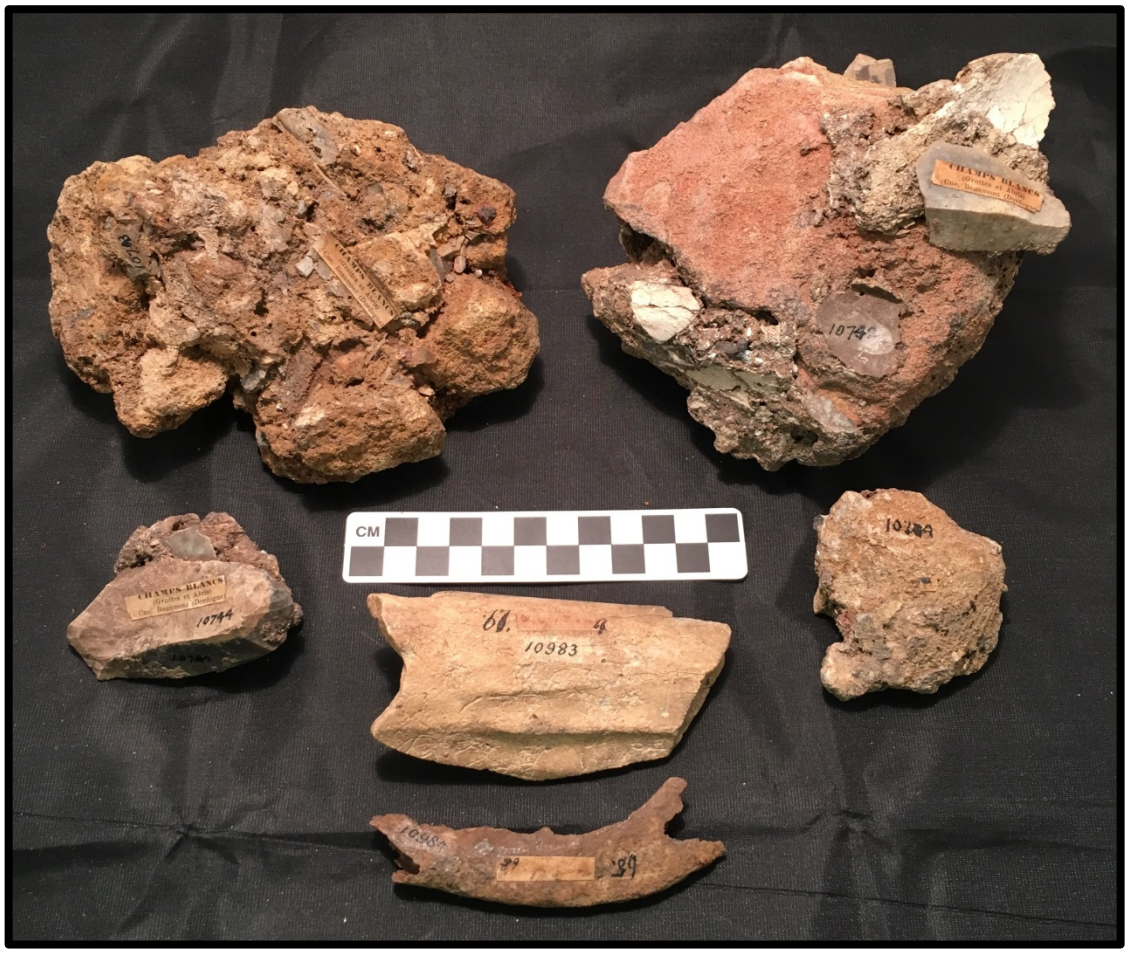


Figure 4.7: Overall photo of MPM Champs-Blancs faunal collection.

Champs-Blancs (also known as Jamblancs and Jean-Blancs) is located in Commune Burinquel on the right bank of the Couze River (Breuil 1952: 304). The site contains artifacts from both the upper Solutrean and Magdalenian cultures (Cretin 1996).

The MPM collection includes six objects from Champs-Blancs collected by Doerflinger between 1889 and 1893. The first four are bone breccia that is bone embedded within a hard soil matrix. In these particular examples, the bone is unidentifiable due to its fragmented nature. The breccia also contains examples of lithic material (Figure 4.8) that are identified by affixed paper labels providing the site name, followed by "Grottes et Abris Cne. Beaumont (Dordogne)." The other bones found at Champs-Blancs include a tibia shaft fragment from a large mammal in the

family Bovidae and a mandible fragment coming from *Vulpes vulpes* (red fox). Both bones have small faded adhered labels that are not legible under a high powered magnifying glass, but are assumed to contain the site name as the MPM ledger states that they are from Champs-Blancs. They were given the numbers 19 and 68 respectively. Both exhibit natural modifications; the tibia exhibits evidence of root etching and the mandible is severely weathered and discolored.

Figure 4.8: Breccia from Champs-Blancs.

4.6 Laugerie-Basse

Figure 4.9: Overall Photo of MPM Laugerie-Basse faunal collection.

Laugerie-Basse is located in the French commune of Les Eyzies-de-Tayac-Sireuil on the right bank of the Vézère River (Maury 1925). The site is comprised of two rock shelters, including the Abri Classique and Abri des Marseilles. The site is known to have produced archaeological material from the Magdalenien culture (Cleyet-Merle and Madelaine 1995: 255).

The Laugerie-Basse material in the MPM collection is one of the most intriguing and unique group of objects within the Doerflinger collection for several reasons. First, all of the

items are from the taxonomic family Cervidae. There are 11 pieces of worked antler out of the 17 total items (Table 4.4). These include finished tools, points, awls or flakers, and pieces that show evidence of working but are too fragmented to discern tool shape (Figure 4.10) The majority of worked material in the collection as a whole comes from this site, particularly known for its intricate antler carvings (Maury 1914).

The other five bones include two shaft fragments of metapodial from a *Capreolus capreolus* (roe deer). The two bones were labeled, numbered and bagged separately, but were found to refit during the inventory, [catalog number 1112 (20) and catalog number 1116 (26)]. There is also a worked limb shaft fragment, an unworked piece of antler, and a mandible with teeth from a juvenile cervid. It appears that worked bone and antler was a focus of collection at Laugerie-Basse, while other more common unmodified bones were left behind. The natural modifications present were weathering, root etching, canine gnawing and discoloration as seen in Table 4.4.

Figure 4.10: Worked points and *Capreolus capreolus* metapodial fragment in upper left.

The labels on the items from Laugerie-Basse are small affixed paper labels that indicate the site name. These labels are different from many of the other label types because they are handwritten, rather than typed. The handwriting on these labels does not match Doerflinger's

(Figure 4.11). The numbering system used appears to have been placed on the label at a different point in time, as the ink and handwriting for "20" do not match that used for site name. It is possible that these were duplicate items in an already existing French collection that Doerflinger may have purchased from another collector. These types of exchanges were common in the late 19th century during Doerflinger's expedition in France.

Figure 4.11: Example of Laugerie-Basse handwritten label. (Catalog number 11112).

Table 4.4: Laugerie-Basse Collection at the MPM

Catalog Number/count	Count	Element	Labeling on Bone	Cultural Modification	Natural Modification
11109	1	Antler	13	Worked	Weathering
11107	1	Mandible	16; faded Laugerie Basse		Canine gnawing
11108	1	Antler	12		Weathering
11112	1	Metapodial	20; Laugerie Basse	Worked	Root etching, discoloration
11112	1	Antler	17; Laugerie Basse	Worked tool	Weathering
11112	1	Antler	18; Laugerie Basse	Worked tool	Weathering
11112	1	Antler	19; most of tag removed	Worked	Weathering
11113	2	Antler	27; Laugerie Basse	Worked tool	Weathering
11111	1	Antler	15	Worked	Weathering
11116	1	Metapodial	26; Laugerie Basse	Worked	Root etching
11116	1	Antler	21; Laugerie Basse	Worked awl or point	
11116	1	Antler	22; Laugerie Basse	Worked flake	
11116	1	Limb shaft fragment	23; Laugerie Basse	Worked	
11116	1	Antler	24; Laugerie Basse	Worked	

11116	1	Antler	25; Laugerie Basse	Worked awl or point	
11116	1	Antler	27; Laugerie Basse	Worked	Weathering

4.7 Soucy

Figure 4.12: Overall photo of the MPM Soucy faunal collection.

Today, the site of Soucy is merely a rock cliff approximately ten meters high. The former rock shelter is located on the right bank of the Dordogne River about sixty meters from Commune Lalinde (White 1988). Levels belonging to the Upper Magdalenian have been found at the site (Daniel 1972: 492).

A total of 17 objects in Doerflinger's collection come from the site of Soucy, consisting of mostly teeth and mandibles. Eight of the teeth are from the taxonomic family Suidae, which is

the only example of pig represented in the Doerflinger collection. The other tooth is a lower premolar from the family Equidae. A first phalanx and astragalus from *Rangifer tarandus* (reindeer), as well as a mandible and poorly formed phalanx from a young animal from the family Cervidae are also part of the collection. There are two mandible fragments from very small animals, one from the family Leporidae (rabbit), which is not represented at any other site, and a small canid. Lastly, Soucy is one of three sites within the Doerflinger collection that have worked antler, the others being Laugerie-Haute and Laugerie-Basse. There is one worked point, awl, or flaker created from Cervidae antler. Natural modifications include weathering, canine gnawing and root etching (Table 4.5). The collection as a whole does not contain a large amount of objects exhibiting cultural or natural modification as seen at the other Magdalenian site of Laugerie-Basse.

Table 4.5: Soucy collection at the MPM.

Catalog number	Count	Taxon	Element	Labeling on bone	Cultural modification	Natural modification
10981	1	*Rangifer tarandus*	Astragalus	46 crossed out; Soucy (Grotte) Cne. Lalinde (Dordogne)		Weathering
10981	1	*Rangnifer tarandus*	First phalanx	47; Soucy (Grotte) Cne. Lalinde (Dordogne)		
10981	1	Cervidae	Phalanx	48; Soucy		Weathering
10982	1	Equidae	Lower premolar (p3)	34; Soucy (Grotte) Cne. Lalinde (Dordogne)		
10985	1	Leporidae	Mandible	32; Soucy (Grotte)		
10985	1	Canidae	Metapodial	6; Soucy		
10985	1	Canidae	Mandible	33; Soucy (Grotte)		

				Soucy (Grotte) Cne. Lalinde (Dordogne)		
10986	1	Capreolus capreolus	Mandible	31; Soucy (Grotte) Cne. Lalinde (Dordogne)		Canine gnawing and root etching
10993	2	Suidae	Canine tooth	35; Soucy (Grotte) "Ancient?"		
10993	1	Suidae	Molar	36; Soucy		
10993	1	Suidae	Molar	37; Soucy		
10993	1	Suidae	Lower incisor	38; Soucy (Grotte)		
10993	1	Suidae	Premolar	40; Soucy		
10993	1	Suidae	Incisor	41; Soucy		
10993	1	Suidae	Premolar	43; Soucy		
10993	1	Cervidae	Antler	44; Soucy	Worked point/awl/flaker	

The Soucy collection has adhered paper labels, similar to the rest of the Doerflinger collection, indicating the site name as well as the commune, if the size of the bone allows (Figure 4.13). One of the labels has the site name hand written in cursive. The handwriting is similar to the labels on the Laugerie-Basse material, suggesting that the same person wrote them. It is likely that this similarity is evidence of Doerflinger's purchase of both collections from the same French prehistorian and/or museum, since the handwriting does not belong to him.

Figure 4.13: Label example from the Soucy Collection

4.8 Pair-non-Pair

Figure 4.14: Overall photo of the MPM Pair-non-Pair faunal collection.

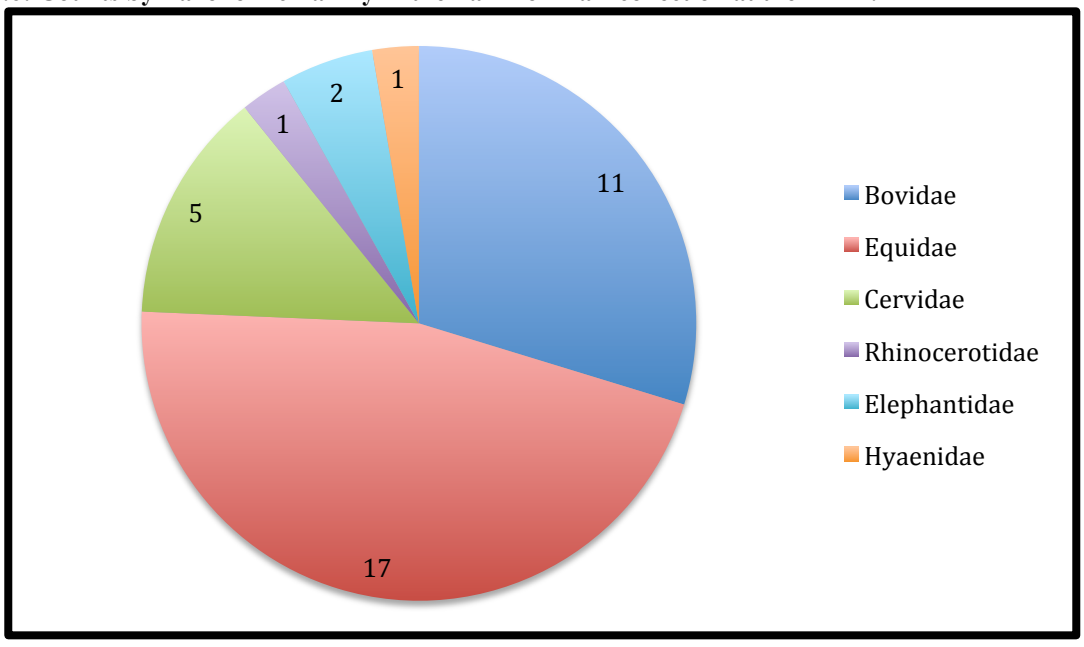
The Grotte de Pair-non-Pair is located in the commune of Prignac-et-Marcamps. It was discovered in March of 1881 by vineyard owner and prehistory enthusiast, François Daleau, who collected and authenticated the MPM Pair-non-Pair collection (Moisan 1994: 39). Pair-non-Pair contained two main periods of occupation spanning over 60,000 years. During the first occupation, Neanderthals inhabited the space at approximately 80,000 B.P, which corresponds with the Mousterian assemblages found at the site (Breuil 1952). Around 40,000 B.P. the entrance collapsed, greatly reducing the size of the cave (Delluc and Delluc 1997: 42). After the collapse, early modern humans of the Aurignacian culture began to use the cave (Breuil 1952).

As stated in the Doerflinger inventory, the MPM material from Pair-non-Pair was collected and authenticated by its discoverer, Daleau, before it came into Doerflinger's

possession. Daleau and his family were vineyard owners in Bourg. He had no formal diplomas, but was trained by several prehistorians, such as Gabriel de Mortillet and Jean-Baptisete Gassies. He became a recognized prehistorian as a result of this training as well as his passion for subjects such as zoology and geology (Mémoire 1990). The majority of the 38 objects were labeled by genus, such a Bos or Equus. Foot bones were also sided right or left. These identifications will remain with the specimens as they are noted in the label section of the Excel database, but since an expansive comparative collection was not available to confirm Daleau's findings, I have identified each piece in terms of taxonomic family.

The collection from Pair-non-Pair stands out from the rest of the collection for several reasons. First, as seen in Table 4.6, counts by taxonomic family are very distinct when compared to other sites. Pair-non-Pair is the only site where Equidae dominates the group by almost half. Bovidae also had a strong presence. Unlike many of the other sites in the collection analyzed so far, Pair-non-Pair is not largely represented by Cervidae.

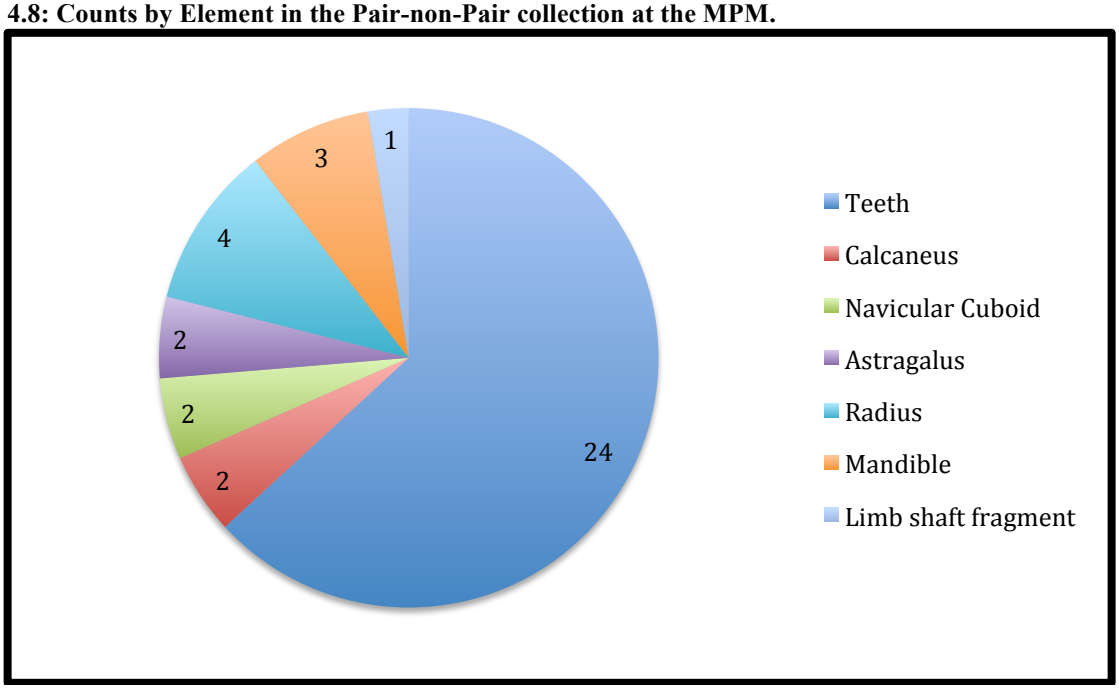
Table 4.6: Counts by Taxonomic Family in the Pair-non-Pair collection at the MPM.



These data contrast with other sources that have said faunal remains consist mostly of reindeer (Bahn and Vertut 1997: 21). The discrepancy could be due to the goals of the original collector, Daleau, a keen zoologist. In other words, his goal may have been to illustrate the range of taxa well. There are five pieces of Cervidae bone and three are part of the same radius. The site also contains three distinctive taxa, including Rhinocerotidae, Elephantidae, and Hyaenidae. Exceptionally large animals, such as species of rhinoceros or mammoth are significant for the time period in which the Pair-non-Pair material was amassed. Distinctive and extinct species were collected for the purposes of dating human remains, as well as archaeological sites and/or collections (MacCurdy 1909: 92).

Table 4.8 shows the counts by element present at Pair-non-Pair. The majority (71%) of the faunal material is composed of teeth, including molars, premolars, incisors, and tusks from Equidae and Bovidae. Cervidae is the only family not represented by teeth. The large number of teeth is consistent with the overall data for all sites in the MPM collection.

Table 4.8: Counts by Element in the Pair-non-Pair collection at the MPM.



Foot bones were also common at Pair-non-Pair, including the navicular cuboid, astragalus, and calcaneus. In terms of collecting intentions, all bones with the exception of the limb shaft fragment were whole and easily identifiable, which would make them excellent candidates for the exhibit Doerflinger wanted to create. The nature and preservation of the bones would also categorize them as good study examples.

I will use the Pair-non-Pair data to provide a comparison of faunal data from a contemporaneous site in the Dordogne area, Grotte XVI (Grayson and Delpech 2003) (Table 4.7). This site has both Mousterian and Aurignacian assemblages, as does Pair-Non-Pair. Doerflinger's Pair-non-Pair collection has a significantly smaller sample size than that of the modern data from Grotte XVI. In each case, the top three taxa are Bovidae, Equidae and Cervidae, but the counts of each vary between sites. The Pair-non-Pair collection contains significantly more Equidae when compared to Grotte XVI, which is dominated by Cervidae (Grayson and Delpech 2003). Pair-non-Pair also contains three taxonomic families that are not present at Grotte XVI, including Rhinocerotidae, Elephantiedae and Hyaenidae. Since the context and collecting methods of the MPM materials are unknown, it is not possible to state whether the collection is different from Grotte XIV due to taphonomic factors or collector bias. It is likely a combination of both, along with the small sample size. Daleau may have collected the larger and more rare elements in order to provide specific extinct species for dating purposes, which could account for the three species not represented at Grotte XVI.

Table 4.7: NISP of MPM Pair-non-Pair collection compared with NISPs at the Mousterian and Aurignacian levels of Grotte XVI (Grayson and Delpech 2003: 1636). Note: Taxonomic families are used.

Taxon	MPM Pair-non-Pair NISP	Grotte XVI Mousterian	Grotte XVI Aurignacian
Bovidae	11	90	41
Equidae	17	37	25

Cervidae	5	402	372
Suidae	0	11	11
Rhinocerotidae	1	0	0
Elephantiedae	2	0	0
Hyaenidae	1	0	0

In the 1903 (Volumes 21-25) MPM Annual Report of the Board of Trustees it states that the Elephantidae tusk fragments from Daleau are from a wooly mammoth (*Elephas primigenius*) (1903:52) (Note that a reworking of the nomenclature has since occurred; the current term for this species is now *Mammuthus primigenius*). Since a comparative was not available, MPM taxidermist Wendy Christensen was consulted and confirmed that the tusk was from the taxonomic family Elephantidae, but in taking a conservative approach further identification is not possible to confirm species. It is possible that Daleau's identification is correct, as a large number of mammoth teeth and ivory have been found at Pair-non-Pair (see Moisan 1994: 41-43 for detailed account of these finds).

Pair-non-Pair labels include the site name, site location, genus of the particular animal, element name, droit or gauche (right and left in French) and the initials F.D., which appears to stand for François Daleau. These labels are both typed and hand written (see Figure 4.15). Handwriting is consistent on all Pair-non-Pair labels, suggesting they were created by the same individual, but differs from the rest of the Doerflinger collection. One would have to have some zoological knowledge to identify species, element and side, which also points

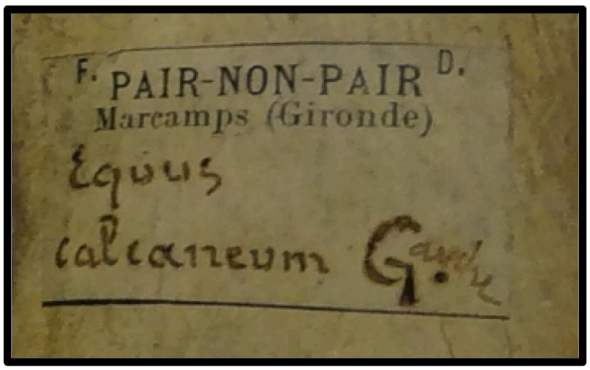


Figure 4.15: Pair-non-Pair detailed label example (A10632).

to Daleau. A portion of the bones from Pair-non-Pair are also labeled with letters ranging from A-O. The handwriting is not similar to the numbers written on the bone.

4.9 La Quina

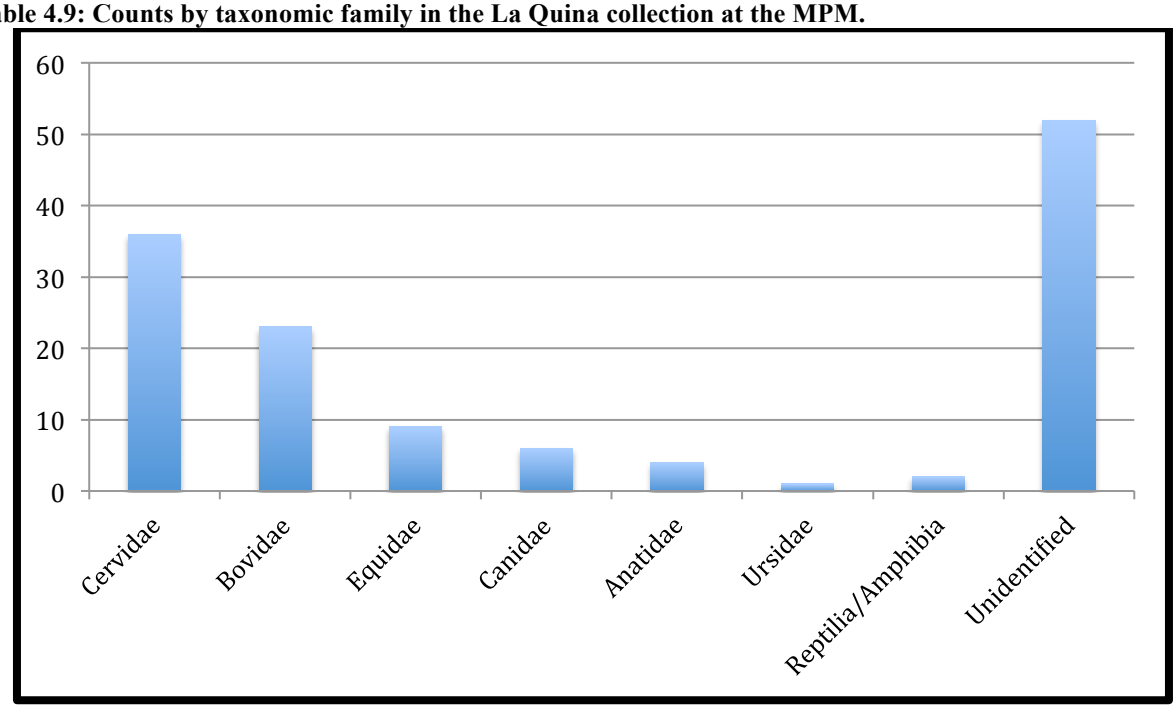
Figure 4.16: Overall photo of MPM La Quina faunal Collection.

Figure 4.17: Overall photo of unnumbered MPM La Quina fragments.

The collapsed rock shelter of La Quina is located in the Charente region of France on the left bank of a tributary of the Dordogne, the Voultron River (Colten and Hill 2007: 158; Knecht

1991: 156). The shelter is divided into two stations; the first is upstream and contains material from the Mousterian industry and the second downstream station has Châtelperronian and Aurignacian archaeological material (Knecht 1991: 156). Radiocarbon analysis suggests a date range from 35,250±530 to 43,130 ±700 B.P. These dates are consistent with Neanderthals and the Mousterian lithic industries found at the site (Colten and Hill 2007: 158).

Table 4.9: Counts by taxonomic family in the La Quina collection at the MPM.



The La Quina material at the MPM collection consists of 142 animal bones and fragments. Table 4.9 shows the diversity of taxonomic families present, including Cervidae, Bovidae, Equidae, Canidae, Anatidae, Ursidae, Reptilia and Amphibia. As seen in several other Paleolithic sites in the MPM collection, Cervidae is the most common family. There are four taxa that are only present in the La Quina materials. The first is Anatidae, which are the only bones from the class Aves, or birds, in the entire MPM collection. These are duck sized bones, including an ulna, tibiotarsus, humerus, and limb shaft fragment (Figure 4.18). An *Anas platyrhynchos* (mallard duck) skeleton was used to identify the size and taxonomic family.

Ursidae or bear is represented by one incisor and Reptilia/Amphibia by a bag of fragments and one separate fragment. As noted in Chapter 2, Dr. Barrett requested a representative sample from one locality from the ASPR. These specimens may have been included in the collection to represent the La Quina site.

Figure 4.18: Bird humerus from La Quina.

As noted in previous sections of this thesis, the La Quina collection includes many large mammal limb shaft fragments that are not identified to taxon or element because of the level of fragmentation. If a future researcher is able to identify any of the 52 such fragments, the relative importance of the identified large mammals could change. Combining MPM counts with those for rest of the 1922-1923 ASPR material currently residing in seven other museums could also affect the data.

Table 4.10 shows the various elements from the MPM La Quina site collection with a corresponding count for each element. Limb shaft fragments account for a large portion of the material from La Quina (37%), most of which could not be identified to taxon or element. This is a substantial number of fragments when compared to the Doerflinger collection, which has only eight (8%) limb fragments out of 99 bones. Even though these bones could not be identified, it was still possible to determine modifications on the specimens. These modifications are significant, and may have served as a means to teach students, as evidenced by the pencil lines

made directly on the bones that indicate the location of various types of manifestations such as cut marks and gnaw marks.

Table 4.10: Counts by element at the La Quina Site.

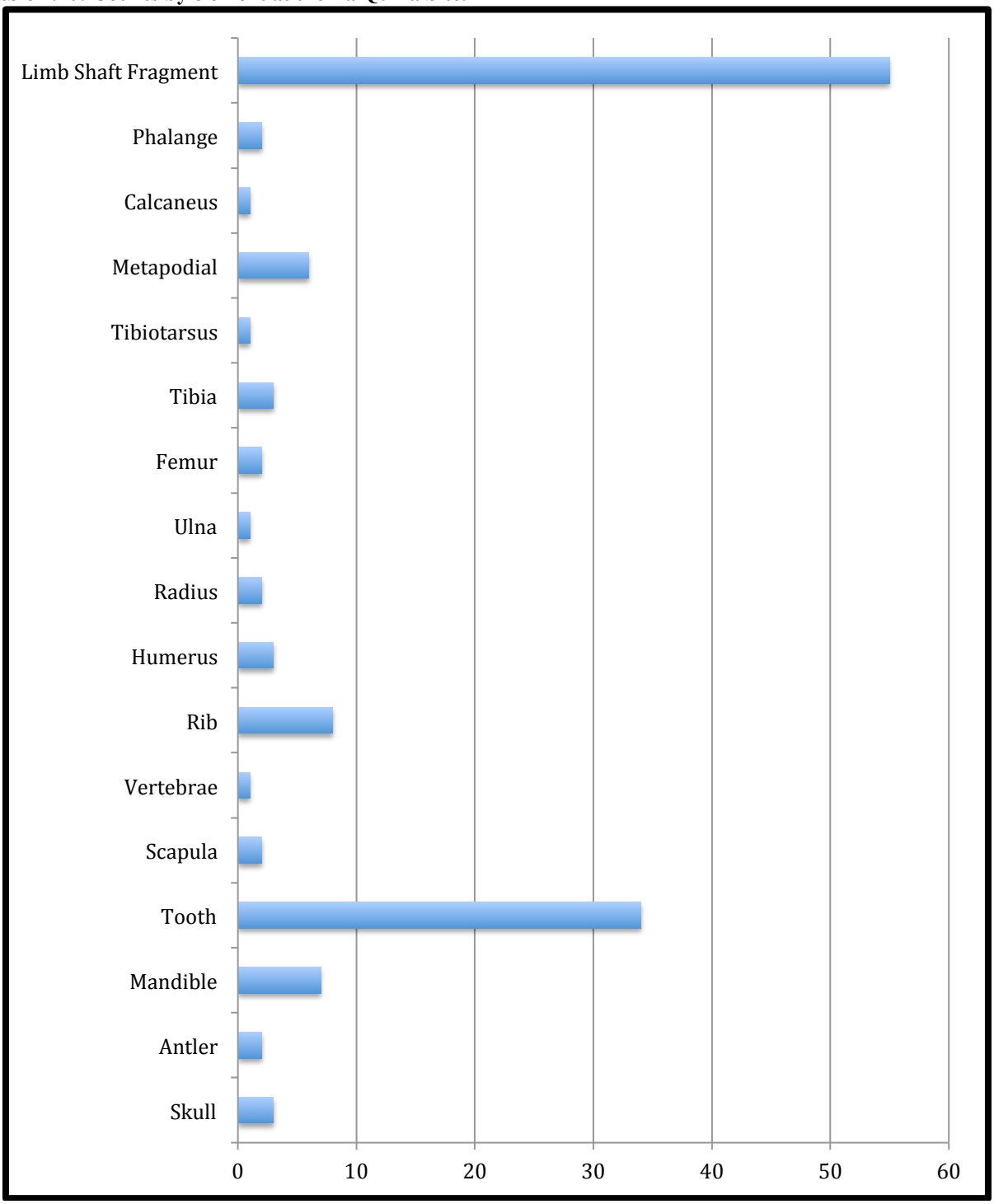
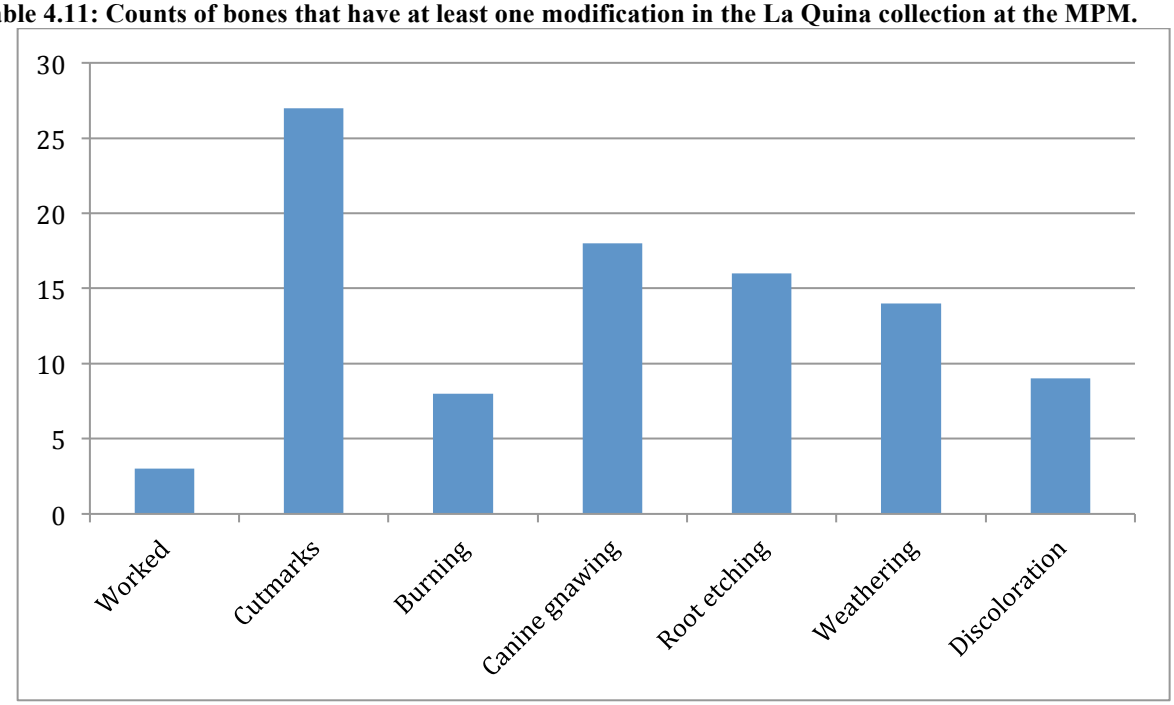


Table 4.11: Counts of bones that have at least one modification in the La Quina collection at the MPM.



Most of the La Quina bones had some type of surface modification; some had two or three (Table 4.11). Nearly half of the collection contained either cut marks or gnaw marks, which is consistent with early characterizations of the site describing a large amount of flint-marked animal bones (MacCurdy 1925: 363). The presence of both human and canine activity is consistent with recent findings, where humans were the primary agents in the accumulation of the assemblage, as seen through butchering marks, but also confirming that carnivore action took place, although not to the extent of identifying the space as a carnivore den (see Chase et al. 1994). This likely means that canid species scavenged the refuse at the La Quina site and lived close by; canid remains are found in the collection. The large amount of root etching at this site is interesting, as it suggests that plants grew in the part of the site where the bone lay discarded. This means that the bone would have been in at least partial contact with roots without disturbance for part of its taphonomic history (Lyman 1994: 376). Contact with roots could have also occurred at a later date after the site was abandoned. The La Quina assemblage was the only

one in the MPM collection where burned or charred bones were present. Burned bone could serve as evidence for heating or possible preparation and/or cooking methods of Paleolithic people. It is also possible that the bones were in a natural brush fire. The color of a burned bone is not always a reliable clue to the temperature to which it was heated, but it is suggested that black colored bones were burned at approximately 360 to 525 degrees Celsius. The burned bones from the La Quina site are presumed to have contained flesh when heated, as several areas of the bone retained an unburned color. This type of burning occurs when a joint of meat is roasted (Lyman 1994 :386-389). Given the fragmented nature of the bone, it is difficult to indicate the presence human intentions.

In an article published by Colten and Hill (2007), faunal material from the 1922 La Quina excavations housed at the Yale Peabody Museum of Natural History (YPM) were analyzed. The sample size is much larger than the MPM La Quina collection (520 versus 142). The YPM and MPM collections are both taxonomically dominated by Cervidae, Bovidae and Equidae, but the relative amounts of each are markedly different (Table 4.11). Cervidae is the most represented taxon in the MPM, whereas the YPM contains more Bovidae. There is also a larger amount of horse material in the YPM collection. This may signify a difference in what was chosen to be sent to the YPM versus the MPM in 1922 or the large amount of unidentifiable limb shaft fragments in the MPM collection.

Table 4.12: Comparison of large mammal NISP from the YPM and MPM La Quina collection. Note: Taxonomic families are used for this project, Colten and Hill (2007)'s canis and vulpes have been combined to Canidae.

Taxon	YPM NISP	MPM NISP	YPM % NISP	MPM %NISP
Bovidae	221	23	42.5	16.2
Canidae	5	6	1.0	4.2
Hyaenidae	5	0	1.0	0
Equidae	75	9	14.4	6

Cervidae	63	36	12.1	25.3
Ursidae	2	1	<1.0	1.4
Unidentified	149	52	28.9	37.0

It appears that much of the faunal collection from the YPM comes from M1 and M3 of Trench M. YPM has very few (14) bones from M2 (Colten and Hill 2007: 161). Many of the LAQ letter combinations on the MPM bones contain M2 in the name. It is possible that the majority of the MPM materials came from this level, where as the YPM material came from M1 and M3, which could explain the difference in taxon dominance. A significant similarity between these two La Quina collections is the type of element found. Both the YPM (265/51%) and MPM (44/31%) collections contain an extraordinarily high amount of cranial elements, including teeth (Colten and Hill 2007: 160).

4.10 Other regions/localities

Bruniquel, France

Figure 4.19: Overall photo of the MPM Bruniquel faunal collection.

MPM documentation states that three pieces of animal bone were obtained from an ancient rock shelter in Bruniquel, France. It is not specified what Bruniquel is referring to as it is both a French commune located in the department of Tarn-et-Garonne and a cave. There are also other Paleolithic caves in the area, such as Champs-Blancs and the cave of Mayrieres Superièure. The museum purchased the bones from the collector F.J. Perkins, along with dozens of Paleolithic lithic tools in July of 1885. Perkins likely received these materials through trade since there is no evidence that he visited Europe. MPM correspondence states that Perkins collected the archaeological material from miscellaneous sources. The three items are pieces of weathered antler from a Cervid that appears to have cut marks. Interestingly, the bones do have a paper label attached, but it is not similar to Doerflinger labels (Figure 4.20). The label contains the location, as well as "Renne" and "ossement scié" which mean reindeer and sawed bone, respectively, in French. Doerflinger was custodian of the MPM at the time the items were purchased; it is possible this type of adhered label inspired his own. Given the large size of the pieces, it is possible they are reindeer antler.

Figure 4.20: Label on antler from Bruniquel, France.

Southern France

Dr. Stanley Wisniewski was a local collector of geologic specimens. He donated a tusk from the taxonomic family Suidae on October 2nd 1992 (Figure 4.21). The documentation states that the tusk comes from a wild boar. The tusk came from a cave near the Dordogne in Southern France, but no specific locality or site is mentioned. It is not confirmed that this tusk originated in France or dates to the Paleolithic.

Figure 4.21: Suidae tusk fragment from southern France.

Les Eyzies, France

Les Eyzies is a commune in the Dordogne department in Southwestern France. It has been called the "Capital of Prehistory" because it contains such a large number of Paleolithic sites in very close proximity, including Lascaux, Abri Pataud, and Font-de-Gaume (Straus 2002: 46). Early literature references a site called "Grotte des Eyzies"; it is possible Doerflinger was referring to this site, but the specific site is unknown (Capitan et al.; Lartet and Christy 1864). One piece of bone breccia in the MPM collection originates from this region (Figures 4.22 and 4.23). This breccia has identifiable bones within it, unlike the other breccia fragments in the Doerflinger collection. These bones are significant because there are pairs of foot bones that appear to be from the same deer-size or larger animal, such as red deer or reindeer. There are two

of each of the following from opposite sides of the animal: calcaneus, astragalus, and navicular cuboid. There is also part of a right femur. These were identified and sided right or left with help of Dr. Hudson and a modern deer skeleton borrowed from the University of Wisconsin-Milwaukee zooarchaeology lab. These finds are striking because they could represent a coherent discard from a single animal.

Figure 4.22: Bone breccia with several cervid foot elements, Les Eyzies, France (front).

Figure 4.23: Bone breccia with several cervid foot elements, Les Eyzies, France (back).

Magnac

Figure 4.24: Overall photo of the MPM Magnac faunal collection.

The labels on the Doerflinger material from this region say "Magnac (Abris sous Roches) Cne. Magnac (Dordogne)." There are several communes in France that contain the name Magnac in them, such as Magnac-Laval, Magnac-Lavalette-Villars, Magnac-Sur-Tourve and Magnac-Bourg, but none of these are located in the Dordogne region where Doerflinger collected from. Dr. Arnold at University of Wisconsin-Milwaukee stated that Magnac was located within commune Creysse (Dybowski 2011). There are no specific Paleolithic sites or caves named Magnac mentioned in the literature, but there are dozens of sites located within commune Creysse, which could be what Doerflinger was referencing. Some examples include Cap Blanc, Les Coutets, Les Rivelles, Usine Henry, and Les Barbas. There are three sites that Doerflinger appears to have visited within this commune, but did not collect faunal material from, which are Troche, Les Bertranoux, and La Nauve (Doerflinger's Inventory).

The material from Magnac contains mostly bones from cervids, including three metapodial fragments, an astragalus, a femur shaft fragment, a limb shaft fragment and four premolars. The other taxon present is Bovidae, consisting of a mandible with teeth from a juvenile animal, a humerus shaft fragment, and two premolars. Lastly, there is one shaft fragment from an unidentified taxon. There is evidence of several forms of modification, including a worked femur fragment. Canine gnaw marks occur on two of the limb shaft fragments. The labels from this location are adhered and typed with site name and commune. These are similar to those labels found at Soucy and Champs-blancs. This grouping was likely created by Doerflinger himself (see Chapter 5 for a discussion of labels as evidence of collection history).

Human Bone Found in Collection

A large portion of the La Quina material was stored in a large bag marked "Miscellaneous Animal Bones." While sorting through this material, a human occipital bone was found (Figure 4.25 and 4.26). Sarah Smith, a biological archaeologist with a Masters degree from the University of Wisconsin-Milwaukee, provided the following insights: 1) the bone exhibits water damage that took place in sandy soil; 2) the piece is atypically thin; and 3) the ridges on the bone are not pronounced. It is unknown if this bone is Neanderthal or early modern human, although it lacks the robusticity usually associated with Neanderthal crania. Future research could shed light on this question.

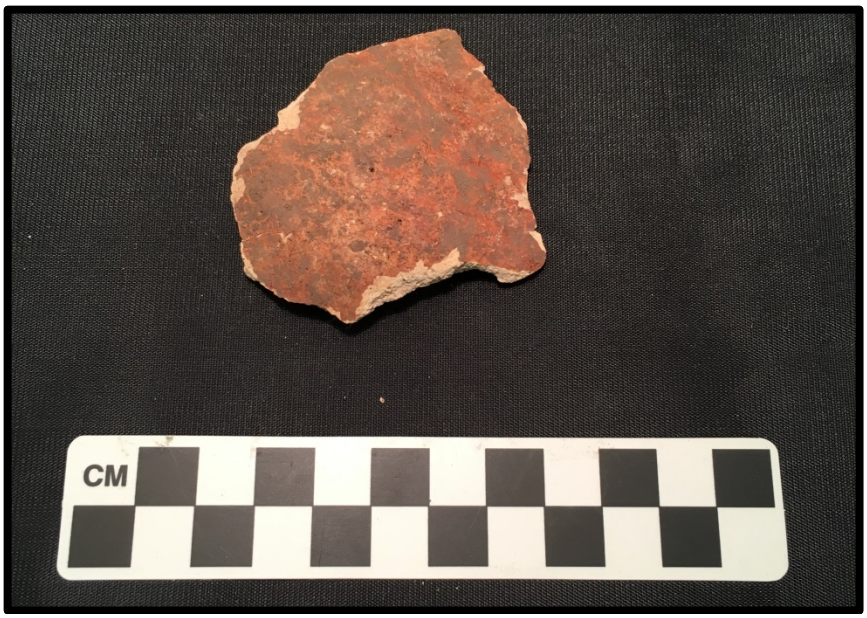


Figure 4.25: Human occipital bone found in Miscellaneous Animal Bone Bag (outside).

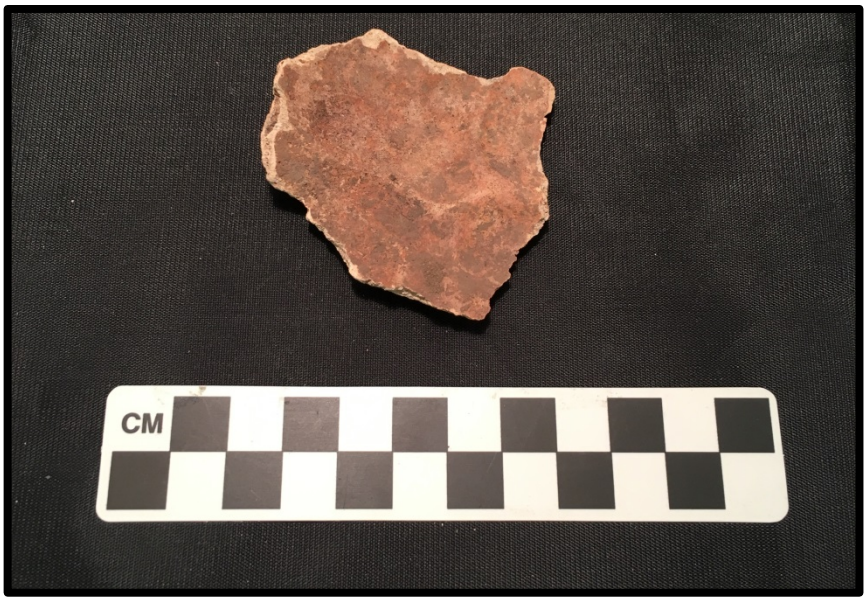


Figure 4.26: Human occipital bone found in Miscellaneous Animal Bone Bag (inside).

4.11 LAQ Mystery: Charles Peabody, Samuel Barrett and the ASPR Field School

When I began this thesis, the origin of the LAQ materials were unknown. The MPM Curator of Anthropology Collections, Ms. Scher Thomae suspected that the material was French Paleolithic due to their location in the French archaeology drawers. The only clues as to where the collection originated were written directly on the bones. These labels include the letters LAQ

followed by a number and letter combination (Figure 4.27). It became part of my thesis project to find out where the collection came from, how the museum obtained the collection and any other relevant information.

Figure 4.27: LAQ bone label example

As noted in the methods chapter, I contacted a number of U.S. museums. Mr. James Moss at the University of Pennsylvania Museum of Archaeology and Anthropology was able to confirm that LAQ stood for the Upper Paleolithic site of La Quina, which was a significant attribution as the material could now be associated with a particular site. Dr. Roger Colten at the Peabody Museum at Yale provided me with additional invaluable information about this collection. In our e-mail correspondence he suggested I send him photographs of some of the bones with visible labels for comparative purposes. Dr. Colten told me that Henri Martin and George MacCurdy worked extensively at the site of La Quina under the American School in France for Prehistoric Studies (ASPR) in the early 20th century (see Colten and Hill 2007). Dr. Colten suggested that since the French material at his museum had been collected by MacCurdy, that the MPM material could have been collected by Henri Martin and the combinations might be his specific trench numbers. The European Collections Manager at the University of

Pennsylvania Museum of Archaeology and Anthropology, Ms. Chrisso Boulis confirmed the following to be Henri Martin's Trench Numbers: A2 / A3, B3 / B4, C2 / C3, E / E1 / E2, G3, H2, M2 /M4, O2, Z. Ms. Boulis discussed my inquiry with Paleolithic expert Harold Dibble, who confirmed that these were Martin's trench numbers. The letter and number combinations in the MPM collection matched those for trenches M and O.

To confirm the affiliation of the LAQ items, I read the bulletins from the ASPR and publications pertaining to La Quina by Martin (1906, 1910, 1912, 1925, 1936), MacCurdy (1922a, 1922b, 1925,1926, 1927, 1930), Peabody (1923; Peabody and Hooton 1914), and Martin's daughter, Germaine Henri-Martin, who also excavated at La Quina, (1958, 1961, 1964, 1965). Through this review I came to the same conclusion; the numbers on the MPM LAQ bones designated trenches from the La Quina site. At this point in time, I still did not know who specifically had collected the material and/or what field school year it might have been collected.

There are also other letter and number combinations such as, LQ instead of LAQ and some that look as though they contain small superscript number twos that resemble the symbol for a square root. Peabody studied the material before it was sent to the MPM. If we had access to his notes or even the "list and explanation" that was in the shipment of specimens, we might be able to decipher the extra number and letter combinations. It is possible that these documents exist in the archives at the Peabody Museum at Harvard. The archival department was contacted to retrieve this documentation, but unfortunately it was closed until 2016 due to ongoing renovations.

In my search for the other museums that received the LAQ material from the 1922-1923 field season of the ASPR, I was sent an inventory of the Putnam Museum's material from this particular season. It appears their documentation of the LAQ letter and number combinations are

still intact and they do correspond to trenches and strata. Some of these matched the combinations from the MPM collection. For example, some of the bones in the MPM collection have LAQM22B written on them, whereas in the Putnam documentation this is written out as "Section M, Strata 2, 2B." It appears this corresponds to the same area of excavation. Therefore, the Putnam inventory would be very useful in deciphering what the LAQ combinations mean and where in the La Quina site they came from (see Appendix J for Putnam Inventory).

There were seven bones that had an associated accession number (8066), some of which had LAQ letter/number combinations crossed off directly on the bone. Ms. Scher Thomae reviewed the accession file of the bones donated by Charles Peabody under the ASPR. Much to her surprise, it was found that only 37 objects (#29447-29483) had been catalogued out of the original 250 specimens received. The seven faunal material cataloged included the following: 1) two rib fragments of Bovidae that are a refit; 2) a limb shaft fragment of Mammalia; 3) a limb shaft fragment of Mammalia; 4) a tibia of Bovidae; 5) a humerus of Anatidae; and 6) a worked limb shaft fragment of Mammalia. The other 30 objects consisted of lithic material. It is possible W.C. McKern, the Curator of Anthropology Collections at the time, felt that this sample of 37 was representative of the collection and wished to trade "redundant items," just as French curators did. Three of these cataloged faunal pieces have the LAQ designation crossed out directly on the bone, possibly by McKern or a volunteer during the cataloging process. It is not clear why this was done. A notation in the accession file stated that the rest of the material was to be held for a future exchange, which never occurred. From this it was concluded that the LAQ material came from the site of La Quina and was purchased by the museum from Charles Peabody and received by the MPM on September 8th 1923.

To find information about the details of this transaction, I investigated the MPM's archival resources from 1920-1925 that were held in the MPM library and were associated with the Anthropology Department and Director of the MPM at the time, Dr. Samuel A. Barrett. In Box #23 the "Charles Peabody" folder contained letters between Barrett and Peabody discussing the election of the former to the advisory council of the ASPR. Apparently a $100 donation from Barrett was made to the ASPR in return for a donation from the ASPR to the MPM of a sample of the La Quina collection materials from the 1922-1923 field season. These documents detail the collection request from Barrett and significant aspects of the field school itself. Box 26 also contained a "Charles Peabody" folder dating from 1925-1926, but its contents, unfortunately, were missing.

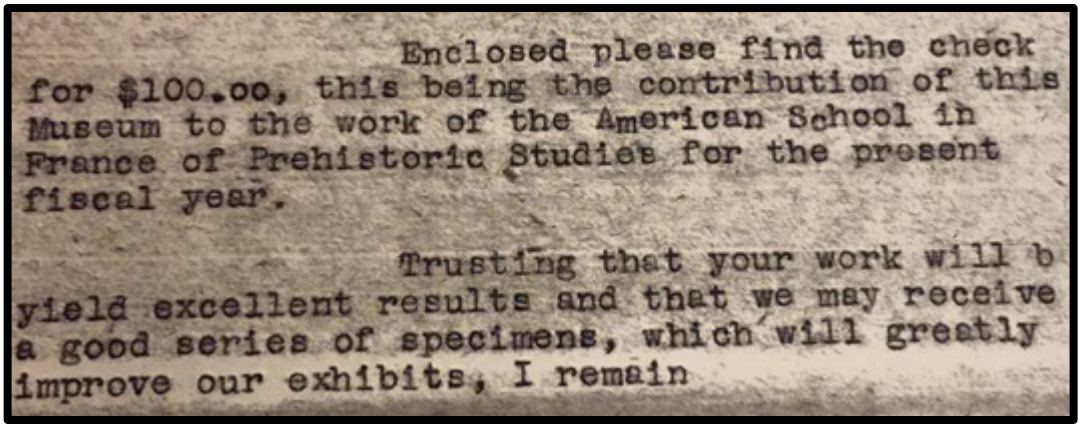
In 1921, the ASPR was founded by the Archaeological Institute of America and the American Anthropological Association (Colten and Hill 2007: 157). Not only did the ASPR train students, but it also enhanced museum collections and aided other investigators in their fieldwork. George Grant MacCurdy of the Peabody Museum of Natural History at Yale University was the first to be appointed director of the ASPR. MacCurdy, along with nine other prominent board members helped raise the funds by subscription (ASPR document on file at MPM). Excavations began in July of 1921.

The first years of the ASPR focused on the site of La Quina, which was diligently excavated for over 15 years by Dr. Henri Martin of Paris, France (ASPR document on file at MPM; see Appendix I). He had an on-site laboratory at La Quina and was very generous in distributing collections to scientific institutions in America (Peabody 1914:258). Martin donated a part of the La Quina site for excavation purposes for an indefinite period of time to the newly established ASPR (ASPR document on file at MPM). After a falling out with Dr. Martin

occurred over excavation and artifact access and ownership, MacCurdy began to excavate at other sites in France and the Near East in 1924. The name of the field school was later changed to the American School of Prehistoric Research from the prior, American School in France for Prehistoric Studies, to better represent this new work (Colten and Hill 2007: 157; Petraglia and Potts 2004: 25-32). Interestingly, the ASPR still exists as a monograph series on Old World archaeology and paleoanthropology published by the Peabody Museum at Harvard University (see https://www.peabody.harvard.edu/aspr).

In 1922, Charles Peabody was promoted from the Chairman of the Board to Director of the ASPR. He conducted excavations at La Quina during the 1922-1923 field season, which is when the LAQ faunal material at the MPM was collected (MacCurdy 1923). According to the field report from the 1922-1923 season, there were seven students working with the director. The team excavated in the mornings and spent their afternoons in Henri Martin's laboratory, which was located on site. Trench M, which was started in 1921 under MacCurdy was extended. Artifacts from this trench were mostly Mousterian, but Acheulean and Aurignacian objects were also found (MacCurdy 1923). Many of the specimens in the MPM collection have the letter M written on them, the designation for this particular trench. Faunal remains listed by Peabody include large quantities of horse, bison, ox and reindeer (MPM correspondence). Peabody also noted that most of the bones were fragmentary and had marks on them displaying use, such as cutmarks (MacCurdy 1923). The fragmentary nature and evidence of modification corresponds to the MPM collection, providing further evidence that it was collected during this particular field school. The preliminary field season report also notes a large quantity of preserved teeth (ASPR 1922, MPM). A small grotto called La Quina O was also excavated, which contained mostly scant Aurignacian materials (MacCurdy 1923).

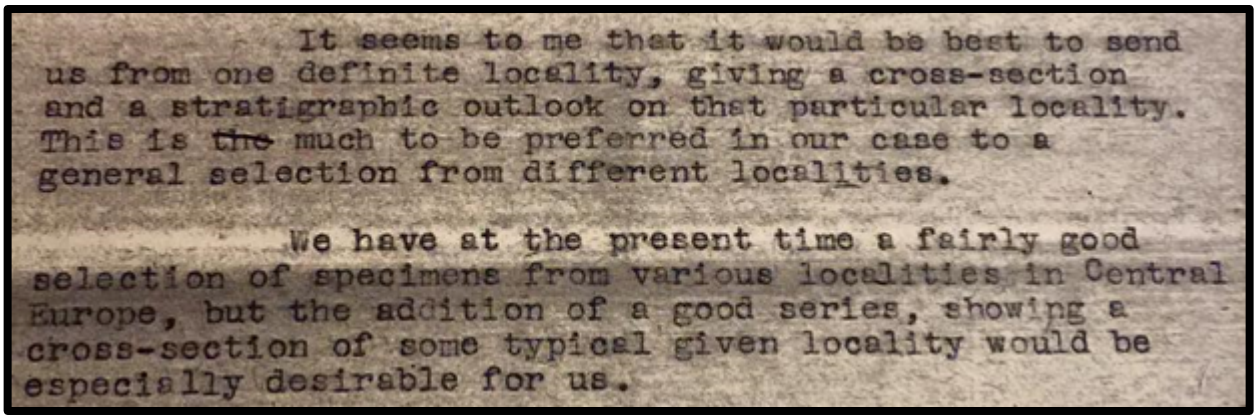
According to the letter sent by Peabody on February 4th 1922, to Barrett, membership was granted on the advisory board of the ASPR in exchange for $100 towards the ASPR's second year budget. In return, he was promised representative specimens from that year's excavation (Figure 4.28).



Enclosed please find the check for $100.oo, this being the contribution of this Museum to the work of the American School in France of Prehistoric Studies for the present fiscal year.

Trusting that your work will b yield excellent results and that we may receive a good series of specimens, which will greatly improve our exhibits, I remain

Figure 4.28: Letter to Charles Peabody from Samuel A. Barrett detailing payment to the ASPR for the 1922-1923 field school in return for a collection of specimens. (Box 23; Peabody Folder).



It seems to me that it would be best to send us from one definite locality, giving a cross-section and a stratigraphic outlook on that particular locality. This is ~~the~~ much to be preferred in our case to a general selection from different localities.

We have at the present time a fairly good selection of specimens from various localities in Central Europe, but the addition of a good series, showing a cross-section of some typical given locality would be especially desirable for us.

Figure 4.29: Letter to Charles Peabody from Samuel A. Barrett discussing what type of collection Barrett wanted from the 1922-1923 ASPR field season. (Box 23; Peabody Folder).

When asked to make his selection, Barrett requested material from one definite locality rather than from many. He wanted a representative cross-section and stratigraphic outlook for this locality (Figure 4.29). This request is significant because previous museum collectors had been interested in general provenience, rather than intra-site details. Peabody did not send the material immediately, as he wanted to study it further, but on August 8th 1923, Barrett received a letter

stating that the specimens were finally shipped to the MPM. Barrett declined to send more money to Peabody and the ASPR for the 1923-1924 season because of a restricted budget at the MPM that year (MPM correspondence; see Appendix H for full Peabody/Barrett correspondence).

In the letters between Peabody and Barrett, it was stated that seven other unnamed museums received part of the collection from the 1922-1923 ASPR excavations. I then contacted several museums that were also listed as being part of the advisory council at the time in the hopes of finding out which museums still have this material so that the locations of more of the dispersed La Quina materials might be identified. The thirteen museums I contacted by e-mail included the Peabody Museum of Archaeology and Ethnology at Harvard, the Peabody Museum of Natural History at Yale University, the American Museum of Natural History, the University of Pennsylvania Museum of Archaeology and Anthropology, the Smithsonian Institution, Mckendree College, the Putnam Museum, the Kelsey Museum of Archaeology, the Museum of Anthropological Archaeology at University of Michigan-Ann Arbor, the Michigan State University Museum, the Field Museum, the Robert S. Peabody Museum of Archaeology at Phillips Academy and the Stanford Archaeology Center.

Through contact with the above mentioned institutions, I was able to confirm six, of the eight museums that received archaeological material from the 1922-1923 ASPR field season at La Quina. This includes the MPM. The other five are the Peabody Museum of Natural History at Yale, the Robert S. Peabody Museum of Archaeology at Phillips Academy, the University of Pennsylvania Museum of Archaeology and Anthropology, the Putnam Museum, and the University of Michigan Museum of Anthropological Archaeology. I believe the Harvard Peabody Museum may have also received part of this collection, but at a later date since Peabody

wished to study the material. They have over 500 objects from La Quina collected by Peabody, but received them during several different times. Unfortunately, this cannot be verified as their archives department is closed due to renovations until 2016. It is possible that the 1922-1923 field season material came to them during the 1928-1929 or 1933 acquisitions. It appears Peabody did not send the La Quina collections to other museums in the same year, as the University of Pennsylvania Museum of Archaeology and Anthropology received their La Quina material in 1924, rather than in 1923 as the MPM did. The following museums have confirmed that they do not have any material associated with the 1922-1923 field school or the La Quina site: 1) the Kelsey Museum of Archaeology, 2) Beneski Museum of Natural History, 3) the Stanford Archeology Center, 4) the Bell Museum of Natural History, 5) the Santa Barbara Museum of Natural History, 6) the Burke Museum, 7) the Pacific Grove Museum of Natural History, 8) the Museum of the North, 9) the Illinois State Museum, 10) the University of Iowa Natural History Museum, 11) the University of Nebraska State Museum, 12) the Central Michigan University Museum of Cultural and Natural History, 13) KU Natural History Museum, 14) the Sternberg Museum, 15) the Charles R. Conner Museum, 16) the New York State Museum, 17) the Santa Cruz Museum, 18) the Humboldt State University Natural History Museum, and 19) the Cantor Arts Center.

In sum, I was able to uncover several significant details about the LAQ collection, which will benefit the MPM since they are now aware of the origin of the material and when and how it came to the museum. The MPM LAQ materials appear to have been collected during the 1922-1923 ASPR field school by Peabody and his students while working with Henri Martin. They appear to have come from Trench M and O. They came to the museum as a result of Barrett's subscription of $100 to the ASPR. Although a total of 250 specimens arrived, only 37 were

actually catalogued. The remainder of the items were apparently set aside for an exchange. The exchange never happened, resulting in the "mystery" of their origin. This knowledge will help the museum in its continuing challenge to accurately attribute this rare collection so that access to the collection in the future will be beneficial for both public and research oriented domains. Six, possibly seven, of the museums that received part of this specific excavation have been confirmed, leaving one yet to be identified. The discovery of the partitioning of the 1922-1923 ASPR field school collection at the La Quina site may also help to virtually bring the collection back together.

Chapter 5: Discussion and Conclusions

5.1 Introduction

The concluding chapter of this thesis is a synthesis of the background research and a comparison of the Doerflinger and Peabody Paleolithic collections at the MPM. Section 5.2 focuses on addressing the four research questions stated in Chapter 1, which include: 1) How did national agendas influence the formation of these types of museum collections? 2) What were the relevant social and economic contexts that impacted the distribution of these ancient collections? 3) Why was the French Paleolithic of special interest to U.S. museums? and 4) In regard to the evolving narrative of such collections, what interpretations have been offered concerning the use of animals during the French Paleolithic in terms of their roles as time marks, art, tools, and food? Section 5.3 focuses on synthesizing the data on the object labels within the MPM Paleolithic faunal collection. Section 5.4 summarizes the faunal results from Chapter 4, with focus on comparing and contrasting the Doerflinger and Peabody collections. Section 5.5 presents possible future research directions.

5.2 Synthesis of background research

National, Social and Economic Contexts of Paleolithic Collecting

Analyzing a collection and its history as a primary source can provide an increased understanding of the evolution of a discipline and various past perspectives within a singular museum and the museum field as a whole. The data we gain from studying collections, however, is dependent on the individual choices of the collector, as well as the social and political contexts of the time (Arnold 2013; Maxwell 2013). Through the study of the collecting practices of French Paleolithic material and the development of Paleolithic archaeology, this project has shown the significance and impact of including collection history as a method for evaluating

museum collections with little provenience. Also see theses by Brett Arnold (2014) and Kathryn Maxwell (2013).

Most of the MPM materials date to two collecting episodes, one in 1889-1893 and one in 1922-1923. The acquisition of French Paleolithic collections by U.S. museums was greatly affected by the changing national agendas and social and economic contexts of the late 19th and early 20th centuries. This history is significant not only in the country of origin of this material, but in North America as well. Thousands of Paleolithic objects were dispersed to American museums. In most cases, archaeological provenience is limited to the site or the region. The background of the individual collectors and the motivations for museums to acquire the material is integral to understanding how these types of collections reflect early human and faunal prehistory in Europe, as well as how they help to define the history of collecting.

The collecting and dispersal of French Paleolithic material out of France began in 1869, when the Smithsonian Institution purchased the first Paleolithic collection in the United States. The practice ended in 1945 in response to the strict antiquities laws that were put in place (Berleant 2007; Strauss 2004). Few American museums collected Paleolithic material before 1912; the Smithsonian Institution, the MPM, and the Wilson Museum were among the first. The collecting trip of George Grant MacCurdy of Yale and Henry Fairfield of the American Museum of Natural History two years before World War I to southwest France, marked the beginning of intensive American involvement in Paleolithic archaeology (Simek 1986: 402; Straus 2002: 48). The economic prosperity of the U.S. during this time (1912 to the late 1920s) contributed to the museums and universities ability to purchase material and amass collections. In France, however, government funding for prehistoric excavation and study were mostly nonexistent at that time, especially post-World War I due to insecure French government finances (Berleant 2007; White

2002). Most Paleolithic sites were located on private lands, where the landowner expected a payment for access, as well as for the artifacts found (Berleant 2007). A viable funding source was desperately needed by French prehistorians for future work. These economic factors forced French museums and archaeologists to sell portions of their collections, primarily to American museums.

The artifacts and other materials that were sold often included objects that French Prehistorians thought were already represented in their own collections. In other words, if a characteristic type-fossil or artifact already existed, duplicates were exchanged between institutions as well as individual collectors. Since tool distributions or physical comparative collections were not standard forms of analysis at this time, French curators would arrange their "redundant" items into an assortment that they felt was representative (Straus 2004; White 2002). These exchanges were especially significant in shaping all French Paleolithic collections in the U.S. Coinciding with economic expansion in the U.S. in the 1920s, there was a lack of formal laws regulating the international antiquities trade, which proved to be very beneficial for U.S. museums looking to collect Paleolithic materials for their own research and exhibition. A formal law was not in place until 1941, a decade after dispersal of French collections to other countries had ceased. This law allowed the French state control of excavation and exportation of objects of national historic, artistic, scientific or technical interest (Prott and O'Keefe 1988).

American museums also benefited from the anti-German sentiments during and after the war, when German collecting on French land was greatly restricted by the French, leading to an increase in American activity (White 2002: 71). An example of this was the "Affaire Hauser" discussed in Chapter 2. To encapsulate, due to Hauser's reputation as a German spy, his French Paleolithic collection was seized by the French government and put up for public auction,

causing the dispersal of several significant Paleolithic objects abroad. This example supports how collections were scattered by national agendas and social and political factors operating at the time. Peyrony, too, did his part by leasing as many Paleolithic sites as he could to himself to prevent them from being acquired by German excavators. He allowed and encouraged Americans to excavate at these sites. For example, Peyrony convinced MacCurdy of Yale University to excavate at La Combe to prevent German access (White 2002: 73). In sum, the restriction of German excavators gave rise to more intensive efforts in local archaeology by the French.

In the 1930s U.S. museum collecting expeditions to France came to an abrupt halt due to the Great Depression. Americans were greatly affected by the national financial crisis, which meant the supply for funding French excavations and collection acquisition came to an end (White 2002). This situation dismayed collectors such as Henry Field, while other museums decided to focus their efforts elsewhere, particularly to more domestic excavation and collecting efforts.

The evolving history of Paleolithic archaeology was another factor that shaped the collections. The field of Paleolithic archaeology developed and advanced quite rapidly in France, as a result of the discovery of a great quantity of well-preserved sites (Trigger 1989: 94-95). The development of archaeology and nation building in both countries are unquestionably linked. The evidence of long human occupation allowed countries, such as France to extend their roots in prehistory and show cultural progress both socially and technologically (Kohl 1998:228). This was also the oldest evidence of human occupation in the world at that time, a source of great national pride for France, generating solidarity, which also corresponded with the socialist ideology of the time.

Why were U.S. Museums Interested in Paleolithic Materials?

Collecting of French Paleolithic materials was attractive to U.S. museums for several reasons. In 1859, human remains were discovered in association with extinct Pleistocene mammals in Europe, which led American prehistorians to inquire into the evidence of ancestors on their own continent. A debate lasting over 60 years ensued in American archaeology called the "Paleolithic North American Debate," centered on the idea that "crude" American artifacts were similar to those found in Europe (Berleant 2007; Petraglia and Potts 2004). The debate came to an end in 1927 when a projectile point was found associated with the remains of an extinct bison showing that the antiquity of the human presence in America was as great as that of Late Pleistocene Europe (Haynes 2002). American museums were eager to compare these findings with those in Europe.

The first American museum to collect French Paleolithic artifacts was the Smithsonian Institution. They collected these objects to meet their exhibition objectives to display early human daily life and technological innovation. These collections also served as a comparison for cultures on other continents (Petraglia and Potts 2004:5). In fact, the Smithsonian Institution's Paleolithic collections were exhibited in cases next to North American objects for comparison. These exhibition decisions by Thomas Wilson support the idea that American museums wanted Paleolithic collections for display and comparative purposes. Economic expansion in the United States also allowed museums like the MPM and the Field Museum to seek increased charitable support for museums from donors and emerging local government. Money and congenial connections with a French Prehistorian made it feasible for Americans to obtain these collections. For example, Henry Field brought approximately 30,000 artifacts back to the Field Museum of Natural History in Chicago in the 1920s to create a new Hall of Man for the museum

(Field 1955). This is another example of an American museum desiring Paleolithic material to help to tell the story of human origins.

American museums were attracted to Paleolithic faunal remains for research purposes as well. During the time Doerflinger was collecting in France and other areas of Europe (Johnson 2006; Lillis 2005) faunal remains were being used to date skeletal materials. Mammalian fauna found with human remains could be referred to a certain time period where that animal was known to exist (MacCurdy 1909: 92). In other words, it was this coexistence of animals and humans that attracted museums to collect faunal remains (Petraglia and Potts 2004: 62).

The Role of Faunal Remains in Paleolithic Collecting and Archaeology

Faunal remains were not a popular choice for collectors during the time period covered by this thesis (1869-1945). Human skeletal material, art, and lithic materials were more appealing options, both for research and exhibition purposes. Although collected to a lesser degree, animals played seminal roles in Paleolithic collecting history as time markers, art, tools and food. The study of ancient faunal remains has evolved into the discipline of zooarchaeology, which encompasses several ongoing debates pertaining to the diet of Paleolithic people.

The discovery of both the extinction of animals and variation of animals through time and space inspired prehistorians, such as Lartet in the 1860s, to use faunal remains to create phases of human development based on what animals were found coexisting with human skeletal and lithic materials (Wargo 2009: 30, Daniel 1976: 100, Sackett 1991: 114, Trigger 1989: 95). In particular, faunal remains were used as research tools to date human skeletons, collections and sites (MacCurdy 1909: 92). The significance of the use of animal bones as time markers could have motivated Doerflinger to collect faunal materials, as he stated in a letter to the MPM Board of Trustees that he wished to conduct research on this collection (MPM correspondence

Appendix E). Although when one considers the entire Doerflinger collection as a whole, he intended to broadly represent many sites and span the entirety of human prehistory. With the work of de Mortillet in the early 20th century, the use of faunal remains changed as interests shifted from human antiquity to defining regional archaeological sequences (Wargo 2009: 35). This time period coincides with the collection of the Barrett/Peabody materials, when it becomes significant to be more representative of a single locality. Peabody collected a large quantity from one site, including heavily fragmented bones and the remains of small animals.

Animals as portable and cave art have received a significant amount of attention in the late 19th and early 20th centuries, as 95 percent of cave art is located in France and the Iberian Peninsula (Clottes and Lewis-Williams 1998: 37). Portable art was determined to be ancient due to its associations with tools and animal bones, but the antiquity of cave art was not as readily accepted (Bahn and Vertut 1997: 14-15). It took 20 years and the discovery of Ice Age tools in direct association with an art gallery at La Mouthe in 1895 for the art to be accepted. The site of Pair-non-Pair was also compelling in convincing the scientific community of the antiquity of cave art because it was covered by archaeological layers (Bahn and Vertut 1997: 21). The animals depicted in cave art are especially significant to this thesis because the MPM has a collection of Paleolithic art casts purchased from Ward's Natural Science Estate that were exhibited alongside the Doerlfinger material (5599).

According to Petraglia and Potts (2004), worked animal bones were considered rare objects in the Smithsonian collections. This appears to be consistent with the MPM faunal collection as only a small percentage is made up of worked bone or bone tools (20 out of 245). It appears that collectors during Doerflinger's time overlooked utilized bone as evidenced in the debate discussed in Chapter 2 pertaining to the newly discovered worked bone at La Quina. Two

pieces of worked antler were exhibited in exhibit cases with lithic materials at the MPM Hall of Man exhibit before 1964. This suggests that they were used as visual comparatives for lithic tools in exhibits.

As more representative samples of sites began to be collected, such as the Peabody/Barrett collection in 1922-1923, the role of faunal remains shifted to a focus on subsistence. Archaeologists began to describe faunal remains in greater detail, with attention paid to taxa and element types focusing on climatic interpretations (Boyle 1990: 14). In the later part of the 20th century, the interpretive utility of quantifying zooarchaeological assemblages and estimating relative taxonomic abundance was recognized (Reitz and Wing 2006). Details of numbers of individuals, element frequencies, age of animals at death, and skeletal part transportation began to be recorded (Boyle 1990). There are several debates surrounding questions related to Paleolithic diet, including influences of seasonality and climate, opportunistic versus specialized hunting strategies, Middle to Upper Paleolithic transition and the Broad Spectrum Revolution.

The representation of animals in Paleolithic archaeology has drastically changed since the late 19th century. Understanding these various roles is essential to the interpretation of a faunal collection as they influence a collector's motivations and choices and therefore the construction of archaeological knowledge.

5.3 Understanding Object Labels

The labels both adhered to and written directly on the bones in the MPM faunal collection can be used as clues to identify who collected each set of materials and to determine groupings of objects. There are seven different label types in the entire faunal collection, as well as a numbering system within the Doerflinger materials (1-66). This numbering system appears

to correspond to site names, for the most part. There are a few discrepancies that have no clear pattern, but it is possible that this was due to the illegibility of some of the numbers as a result of fading. These numbers are all written in the same handwriting, likely by Doerflinger, since it is known that some of the paper labels were created by different individuals in the case of Pair-non-Pair and Bruniquel, France. The handwriting also matches Doerflinger's correspondence.

The first type of adhered label contains the site name typed in all capital letters. This font is unique when compared to the rest of the Doerflinger labels and is only used on two objects, one bone from Gorge'd Enfer and the breccia from Les Eyzies, France (Figure 5.1). It is possible that this bone fragment and piece of bone breccia came from the same French collector or museum with the label being adhered prior to its receipt by Doerflinger.

Figure 5.1: Typed label example of site name in capital letters.

The second set is comprised of small adhered labels that are handwritten in cursive containing only the site name and often a number from 1-66 (Figure 5.2). These occur on both the Laugerie-Haute and Laugerie-Basse collections, as well as a pieces from "Bourg," which originate from Pair-non-Pair and one bone from Soucy. They are all in the same handwriting, are very small, and are heavily faded. Upon comparison to Doerflinger correspondence, it was concluded that these labels do not match his handwriting style. It likely that the materials from

these sites are a set of items obtained by Doerflinger from the same collector or museum in France.

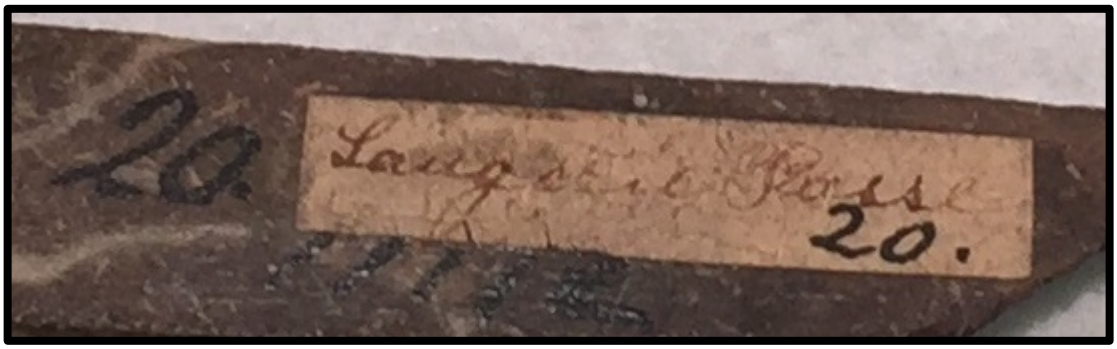


Figure 5.2: Handwritten cursive label example.

The third label type is unique to the collector F.J. Perkins, which is separate from the Doerflinger collection. The antler has an adhered label with the site name along with information pertaining to the bones handwritten in cursive (Figure 5.3).

Figure 5.3: F.J Perkins label example.

The fourth type of label is the most commonly used throughout the Doerflinger collection. These are adhered typed paper labels that contain the site name and French commune where the material was from. The site name is typed in all capital letters. The font is the same across all labels of this type (Figure 5.4) These labels occur for objects from Champs-Blancs,

Soucy, and Magnac. When the bone was too small to accommodate these large labels, the site name was typed in capital letters in the same font (Figure 5.5).

Figure 5.4: Typed Doerflinger label example.

Figure 5.5: Typed Doerflinger label example on small tooth.

The fifth set consists of the most intriguing and unique labels in the entire collection as they contain zoological information as well as personal information of the collector. These labels are typed adhered paper labels with the site name and location, similar to those at Champs-Blancs, Soucy, and Magnac, but in different font, and are restricted to the Pair-non-Pair site (Figure 5.6). It is possible that Doerflinger modeled his labels after these labels as they contain similar style and components. Pair-non-Pair labels contain the initials F.D., which stands for Françoise Daleau, the discoverer of the site, collector and authenticator of this collection. The labels also tell a story about Daleau's extensive zoological knowledge. Many of his specimens are labeled by genus, element type and provide side designations. This information is handwritten by Daleau.

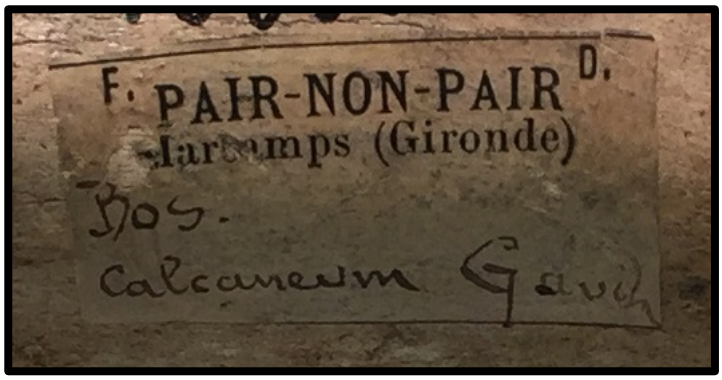


Figure 5.6: Pair-non-Pair/Daleau Label example.

The sixth type of label occurs on one bone from Pair-non-Pair (Figure 5.7). The piece is likely not from the Daleau collection as it does not match his handwriting and does not include any zoological information. The label is not written in cursive as most of the other handwritten labels are. It is likely that Doerflinger acquired it separately.

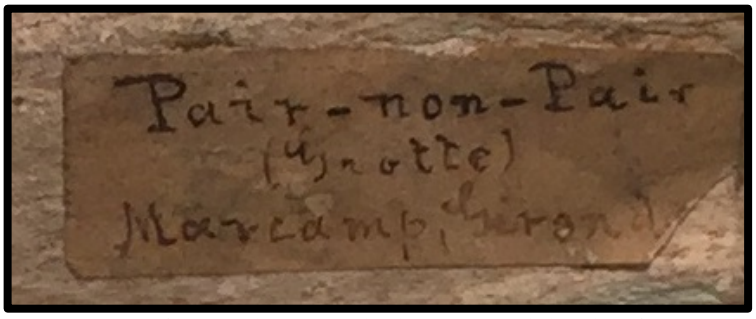


Figure 5.7: Label example from Pair-non-Pair likely not originating from Daleau collection.

The last set of labels are from the Peabody/Barrett collection and are written directly on the bones in black ink (Figure 5.8). The handwriting appears to be similar across most of the bones, possibly written by Peabody or a field school student. There are also pencil marks made directly on the bone designating cultural and natural modifications (Figure 5.9).

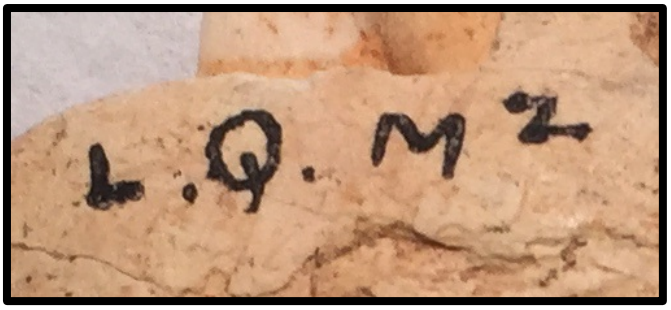


Figure 5.8: Peabody/Barrett collection ink label example.

Figure 5.9: Example of pencil marks made directly on the bones to indicate cultural and/or natural transforms.

5.4 Summary of Faunal Results

The faunal material that Doerflinger collected came from eight different Paleolithic sites and regions in France. He collected 99 pieces of bone, fragments, worked bone, and bone breccia between the years of 1889 and 1893 with the intention of bringing back "cave-dwellers" relics for exhibition purposes. Peabody collected 142 faunal items from La Quina approximately 30 years later during an ASPR field season (1922-1923); Barrett's request to Peabody was for a sample that represented a single locality. Each individual collector had different goals when choosing or requesting the material, which directly affected the composition of each collection. The time gap between each expedition also influenced what was collected and allowed for a comparison of the various collecting motivations and temporal contexts.

Ten mammalian families were represented: Bovidae, Equidae, Cervidae, Canidae, Suidae, Elephantidae, Rhinocerotidae, Hyaenidae, Ursidae, and Leporidae, as well as one bird family, Anatidae, and members of the classes Reptilia and Amphibia. Both collections were composed of mostly large mammals; specifically the taxonomic family Cervidae dominated both collections. Species likely present in this family are reindeer, red deer and roe deer as suggested by Grayson and Delpech (2003). The presence of these large animals cannot be attributed to one

single cause. Possible explanations include the following: 1) large mammals were in fact the primary subsistence resources and thus the most abundant in the sites; 2) large bones may have been appealing to the collectors for dating and exhibition (Doerflinger) or teaching (Peabody) purposes; 3) large bones may have represented "duplicates" from the perspective of the French prehistorians and thus items they were willing to sell; and 4) large mammal bones may have been more abundant due to their size, density, and condition.

Sample size is a critical factor when evaluating the taxonomic diversity of the MPM collections (as detailed in Table 6 in Chapter 4). Doerflinger's collections represent 8 sites, but the samples per site are particularly small (from 1 to 38 specimens) and do not contain many different taxa or elements. I hypothesize that he was trying to create a collection that represented the Paleolithic as whole, rather than more detailed representation of each particular site. Barrett and Peabody, on the other hand, were focused on a single site, La Quina, and were able to collect a larger sample (over 100 specimens), potentially more representative of the site, and a particular excavation area within it, in terms of taxa present.

In regard to the modification of the bone, weathering and canine damage were the most common across the entire collection. In terms of cultural modification, cutmarks were the most frequently encountered, but the types of modifications found in the Doerflinger and Peabody collections were strikingly different. Ninety percent of the bone tools (N=20) were found in the Doerflinger collection. The motivation behind preference for worked bone material may have been for exhibition purposes as these pieces had an intended function and would likely be appealing to the public. Two pieces of worked bone were chosen for exhibition in the old MPM exhibit hall, displayed with many lithic tools, perhaps as a visual comparative of the range of implements Paleolithic cave dwellers could create. The Peabody La Quina collection, on the

other hand, had a much higher percentage of non-tool modified bones. This collection is dominated by cut marks (29%) and canine gnaw marks (19%). Modified bones may have been significant for training students in the study of specimens, as this was a primary goal of the excavation. They were also important to include in the collection as Barrett requested a representative sample from the La Quina site (MPM Correspondence, Official plans for 1922-1923 field school). Most of these bones were limb shaft fragments with pencil marks made directly on the bone designating the modification. This also seems to support the idea that these were used as teaching materials, although it is not clear when the pencil marks were added. The field of archaeology at this time in France was focused on classification and separating assemblages into typologies, which also influenced the elements collected (Audouze and Leroi-Gourhan 1981: 171). The Doerflinger material, on the other hand, contained specimens that were easily identifiable by element and taxon, which corresponds to the use of faunal remains as time markers during the time he collected and reflects his main motivation to create a broad representation of many sites spanning all Paleolithic epochs.

5.5 Future Research

The goals of this project were to research and define the MPM French Paleolithic faunal collection, which had not been examined previously, and to provide a detailed inventory and identification of the material for the museum and anyone interested in working with the material in the future. This preliminary analysis will help the museum expand their knowledge and understanding of this rare collection and may be a critical resource for future researchers since new technologies and/or methodologies may evolve for studying it (Colten and Hill 2006). The larger regional significance of the collection has also been explored since this collection is connected to less than a dozen U.S museums that have substantial French Paleolithic faunal material. The closest geographically to the MPM are the Logan Museum of Anthropology in

Beloit, Wisconsin and the Field Museum in Chicago, Illinois. It is possible that in the future an examination and comparison of these collections may be able to provide a temporal, geographical or historiographical template. The Logan Museum of Anthropology faunal specimens may be of particular interest, as they have already been thoroughly documented by Randall White (White and Breithborde 1992). The collection also features a small La Quina collection donated by Henri Martin.

With access to a full range of relevant faunal comparatives, it may be possible to make further taxonomic and element identifications. This work would be a significant continuation of the project as a large percentage of the collection (60 out of 245) is made up of unidentifiable limb shaft fragments. Knowledge of specific species may provide insight as to what animals individual collectors were interested in obtaining, but also willing to part with. One could compare these to what was kept in French collections as well. Since approximately eight percent of the collection consists of worked bone, it would be interesting to study these further, possibly to make tool identifications and inquire about their use. There may be expedient tools within the collection as well since these tend to get lost among faunal assemblages.

The Peabody collection at the MPM from the 1922-1923 ASPR field school is missing original documentation. Correspondence also shows that Peabody studied the collection for some time before he shipped it to the MPM (Peabody letter to Dr. Barrett 1923). Intriguingly, there is also a folder in the MPM archives labeled “Peabody” from the year 1926 but it is empty. The Harvard Peabody Museum was contacted in order to acquire these original pieces of documentation, but unfortunately, the archive department is closed until January 2016 as a result of ongoing renovations. In the future, interested persons may wish to contact the Harvard

archives department to retrieve this information, which could provide an extensive context for the La Quina collections.

It is known that Peabody distributed the material from the 1922-1923 field season to eight different museums, including the MPM. Six of those museums have been located by this project, while two remain unknown. In the future, it would be beneficial to discover the final two museums that have this material in order to unite the entire collection for study. It could also be possible to virtually reassemble this collection through an online format. With all of the material and documentation present, one may be able to answer more traditional archaeological questions that will add to our knowledge of our early ancestors and the animals with which they shared the French landscape. Comparison of the MPM and YPM La Quina faunal materials in particular would be beneficial since the YPM materials have been identified and studied previously (Colten and Hill 2007). One may also compare the MPM materials to that of French Paleolithic collections in museums in other countries. For example, the Pitt Rivers Museum at Oxford University has a substantial La Quina collection from Henri Martin that appears to be far less fragmented.

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Appendix A: Inventory of French Paleolithic Faunal Material at the Milwaukee Public Museum

Site/location	Collector	Catalog#	Count	Labeling on Bone	Drawer #
Gorge D'Enfer	Doerflinger	10988	1	Gorge D' Enfer	13
Laugerie-Haute	Doerflinger	11114	2	None	13
Laugerie-Haute	Doerflinger	11115	1	28; Laugerie (Haute-faded)	13
Bruniquel,France	Unknown	10071	3	Bruniquel, France (ofsement jeis?*) Renne	13
Southern France	Dr. Stanley Wisniewski	58494	1	none	13
Champs-Blancs	Doerflinger	10983	1	19; unlegible (possibly champs-blancs	13
Champs-Blancs	Doerflinger	10984	1	68; unlegible (possibly champs-blancs	13
Champs-Blancs	Doerflinger	10742	1	Champs Blancs (Grottes et Abris) Cne. Beaumont (Dordogne)	12
Champs-Blancs	Doerflinger	10743	1	Champs Blancs (Grottes et Abris) Cne. Beaumont (Dordogne)	12
Champs-Blancs	Doerflinger	10744	2	Champs Blancs (Grottes et Abris) Cne. Beaumont (Dordogne)	12
Les Eyzies, France	Doerflinger	11149	1	Les Eyzies	12
La Quina	Charles Peabody	29458	2	none	13
La Quina	Charles Peabody	29460	1	LAQMQT crossed out	13

La Quina	Charles Peabody	29461	1	LAQ MQT crossed out	13
La Quina	Charles Peabody	29462	1	none	13
La Quina	Charles Peabody	29463	1	LAQ M?213	13
La Quina	Charles Peabody	29480	1	None	13
Laugerie-Basse	Doerflinger	11107	1	16 and faded label Laugerie Basse	13
Laugerie-Basse	Doerflinger	11108	1	12	13
Laugerie-Basse	Doerflinger	11112	1	20 and label Laugerie Basse	13
Laugerie-Basse	Doerflinger	11112	1	17; Laugerie Basse	5
Laugerie-Basse	Doerflinger	11112	1	18; unlegible	5
Laugerie-Basse	Doerflinger	11112	1	19; most of tag removed	5
Laugerie-Basse	Doerflinger	11113	2	27; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11111	1	15	13
Laugerie-Basse	Doerflinger	11116	1	26; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	21; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	22; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	23; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	24; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	25; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11116	1	27; Laugerie Basse	13
Laugerie-Basse	Doerflinger	11109	1	13;	5

Soucy	Doerflinger	10981	1	46 crossed out; Soucy (Grotte) Cne. Lalinde (Dordogne)	13
Soucy	Doerflinger	10981	1	47; Soucy (Grotte) Cne. Lalinde (Dordogne)	13
Soucy	Doerflinger	10981	1	48; Soucy	13
Soucy	Doerflinger	10982	1	34; Soucy (Grotte) Cne. Lalinde (Dordogne)	13
Soucy	Doerflinger	10985	1	32; Soucy (Grotte)	13
Soucy	Doerflinger	10985	1	6; Soucy	13
Soucy	Doerflinger	10985	1	33; Soucy (Grotte) Lalinde Dord	13
Soucy	Doerflinger	10986	1	31; Soucy (Grotte) Cne. Lalinde (Dordogne)	13
Soucy	Doerflinger	10993	2	35; Soucy (Grotte) "Ancient?" written on object	13
Soucy	Doerflinger	10993	1	36; Soucy	13
Soucy	Doerflinger	10993	1	37; Soucy	13
Soucy	Doerflinger	10993	1	38; Soucy (Grotte)	13
Soucy	Doerflinger	10993	1	40; Soucy	13
Soucy	Doerflinger	10993	1	41; Soucy	13
Soucy	Doerflinger	10993	1	43; Soucy	13
Soucy	Doerflinger	10993	1	44; Soucy	13
Magnac	Doerflinger	10977	1	19; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10977	1	50; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10977	1	51; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13

Magnac	Doerflinger	10977	1	52; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10977	1	56; Magnac	13
Magnac	Doerflinger	10977	1	53; Magnac	13
Magnac	Doerflinger	10977	1	54; Magnac	13
Magnac	Doerflinger	10977	1	55; Magnac	13
Magnac	Doerflinger	10977	1	57; Magnac	13
Magnac	Doerflinger	10977	1	58; Magnac	13
Magnac	Doerflinger	10977	1	60; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10977	1	63; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10977	1	62; Magnac (abris sous roches) Cne. Magnac(Dordogne).	13
Magnac	Doerflinger	10978	1	59; Magnac (abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10979	1	65; Magnac (Abris sous roches) Cne. Magnac (Dordogne)	13
Magnac	Doerflinger	10980	1	66; Magnac (Abris sous roches) Cne. Magnac (Dordogne)	13

Pair-non-Pair	Doerflinger	10629	1	F. D. Pair-non-pair Marcamps (Gironde) Bos Cubo-naviculaire Gauche	13
Pair-non-Pair	Doerflinger	10630	1	F. D. Pair-non-pair Marcamps (Gironde) Bos. Calcaneum Gauch	13
Pair-Non-Pair	Doerflinger	10631	1	F. D. Pair-non-pair Marcamps (Gironde) Bos Cubo-naviculaire Droit (label is ripped)	13
Pair-non-Pair	Doerflinger	10632	1	F. D. Pair-non-pair Marcamps (Gironde) Equus Calcaneum Gauch	13
Pair-non-Pair	Doerflinger	10633	1	F. D. Pair-non-pair Marcamps (Gironde) Bos "gale Eapil" label is ripped)	13
Pair-non-Pair	Doerflinger	10634	1	F.D. Pair-non-pair Marcamps (Girdone) Equus astragale droit	13
Pair-non-Pair	Doerflinger	10635	1	A. Ripped label	13
Pair-non-Pair	Doerflinger	10635	1	B. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	C. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	D. -F.D. Pair-non-pair Marcamps (Gironde) Note on label is not legible	13

Pair-non-Pair	Doerflinger	10635	1	E. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	G - F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	H. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	J. -F.D. Pair-non-pair Marcamps (Gironde) note on label is not legible	13
Pair-non-Pair	Doerflinger	10635	1	K- F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	10635	1	Label and letter worn off completely- Possibly F. or I.	13
Pair-non-Pair	Doerflinger	10636	1	I. -F.D. Pair-non-pair Marcamps (Gironde) Bos	13
Pair-non-Pair	Doerflinger	10636	1	M. -F.D. Pair-non-pair Marcamps (Gironde) Bos, Gauche- rest of label not legible	13
Pair-non-Pair	Doerflinger	10636	1	O. -F.D. Pair-non-pair Marcamps (Gironde) Bos. Dernière Mol. (Last molar) interieure (inner/inside) droit	13

Pair-non-Pair	Doerflinger	10636	1	Letter missing -F.D. Pair-non-pair-Marcamps (Gironde) Bos dernière Mol. (last molar)interieure (inner) Gauche	13
Pair-non-Pair	Doerflinger	10637	1	None	13
Pair-non-Pair	Doerflinger	10638	2	F.D. Pair-non-pair Marcamps(Gironde) Elephas S.S.	13
Pair-non-Pair	Doerflinger	11096	3	Pair-non-pair (Grotte)Marcamps, Gironde	13
Pair-non-Pair	Doerflinger	11097	1	9. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	11098	1	10. -F. D. Pair-non-pair Marcamps (Gironde) Hyena	13
Pair-non-Pair	Doerflinger	11099	1	11	13
Pair-non-Pair	Doerflinger	11100	1	7. -F.D. Pair-non-pair Marcamps (Gironde)	13
Pair-non-Pair	Doerflinger	11101	1	1 small label not legible Bourg?	13
Pair-non-Pair	Doerflinger	11102	1	5. small label not legible	13
Pair-non-Pair	Doerflinger	11103	1	3. small label not legible	13
Pair-non-Pair	Doerflinger	10990	1	29; small label not legible	13
Pair-non-Pair	Doerflinger	10991	1	30; -F.D. Pair-non-Pair Marcamps (Gironde) Tarandus Radius Gauche? Small label not legible	13

Bourg	Doerflinger	11104	1	2; small label not legible	13
Bourg	Doerflinger	11105	1	4; small label not legible	13
Bourg	Doerflinger	11106	1	8; Bourg?	13
La Quina	Charles Peabody	UBFLAQ30	1	None	13
La Quina	Charles Peabody	UBFLAQ31	1	LAQR2	13
La Quina	Charles Peabody	UBFLAQ32	1	LAQO2	13
La Quina	Charles Peabody	UBFLAQ33	1	LAQO2	13
La Quina	Charles Peabody	UBFLAQ34	1	LAQO2	13
La Quina	Charles Peabody	UBFLAQ35	1	LAQO2- possible, looks to be faded	13
La Quina	Charles Peabody	UBFLAQ34	1	Piece of paper in bag stating Reptile and Amphibian bones	14
La Quina	Charles Peabody	LQM2 (1)	2	LQM2	14
La Quina	Charles Peabody	LQM2 (2)	1	LQM2	14
La Quina	Charles Peabody	LQM2 (3)	1	LQM2	14
La Quina	Charles Peabody	LQM2 (4)	1	None- Found in bag	14
La Quina	Charles Peabody	LQM2 (5)	1	None- Found in bag	14
La Quina	Charles Peabody	LAQQ2 (1)	1	LAQQ^2	14
La Quina	Charles Peabody	LAQQ2 (2)	1	LAQQ^2	14
La Quina	Charles Peabody	LAQMB	2	LAQMB- very faded	14
La Quina	Charles Peabody	LAQB4 (8)	1	LAQB4	14
La Quina	Charles Peabody	LAQB4 (9)	1	LAQB4	14
La Quina	Charles Peabody	LAQB4 (10)	1	LAQB4	14

La Quina	Charles Peabody	LAQB4 (11)	1	LAQB4	14
La Quina	Charles Peabody	LAQB4 (12)	1	LAQB4	14
La Quina	Charles Peabody	LAQB4 (13)	1	LAQB4	14
La Quina	Charles Peabody	LAQB4 (14)	1	Possible LAQB4-faded	14
La Quina	Charles Peabody	LAQM2T	1	LAQM2T	14
La Quina	Charles Peabody	LAQM22B(3)	1		14
La Quina	Charles Peabody	LAQM22B(4)	1	LAQM22B	14
La Quina	Charles Peabody	LAQM22B(5)	1	LAQM2	14
La Quina	Charles Peabody	LAQM22B(6)	1	LAQM22B	14
La Quina	Charles Peabody	LAQM22B(7)	1	LAQM22B	14
La Quina	Charles Peabody	LAQM22B(8)	1	LAQM22B	14
La Quina	Charles Peabody	LAQM22B(9)	1	LAQM22B	14
La Quina	Charles Peabody	LAQM3 (1)	1	LAQM3	14
La Quina	Charles Peabody	LAQMGT (1)	1	LAQMGT	14
La Quina	Charles Peabody	LAQMGT (2)	1	LAQMGT	14
La Quina	Charles Peabody	Unmarked, found with LQM2	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQM22	1	Unmarked	14

La Quina	Charles Peabody	Unmarked, found with LAQM22	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQM22	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQB4	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQB4	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQB4	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQB4	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQM22B	1	Unmarked	14
La Quina	Charles Peabody	Unmarked, found with LAQM22B	1	Unmarked	14
La Quina	Charles Peabody	LAQM22(1)	1	LAQM22	14
La Quina	Charles Peabody	LAQM22(2)	1	LAQM22	14
La Quina	Charles Peabody	LAQB4	1	LAQB4	17
La Quina	Charles Peabody	LAQM	1	LAQM	17

La Quina	Charles Peabody	LAQM	1	LAQM	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM2	1	LAQM2	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM22	1	LAQM22	17
La Quina	Charles Peabody	LAQM2LB	1	LAQM2LB	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	AM22A -appears to have been broken, other piece not saved	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17

La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22A	1	LAQM22A	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM22B	1	LAQM22B	17
La Quina	Charles Peabody	LAQM(9 or q?) T	1	LAQM (9 or q) T	17
La Quina	Charles Peabody	LAQM(9 or q?) T	1	LAQM (9 or q) T	17
La Quina	Charles Peabody	LAQM(9 or q?) T	1	LAQM (9 or q) T	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17

La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	LQM2	1	LQM2	17
La Quina	Charles Peabody	UBFLAQ1	1	None	17
La Quina	Charles Peabody	UBFLAQ2	1	None	17
La Quina	Charles Peabody	UBFLAQ3	1	None	17
La Quina	Charles Peabody	UBFLAQ4	1	None	17
La Quina	Charles Peabody	UBFLAQ5	1	None	17
La Quina	Charles Peabody	UBFLAQ6	1	None	17
La Quina	Charles Peabody	UBFLAQ7	1	None	17
La Quina	Charles Peabody	UBFLAQ8	1	None	17
La Quina	Charles Peabody	UBFLAQ9	1	LAQ and some unlegible numbers/letters	17
La Quina	Charles Peabody	UBFLAQ10	1	None	17
La Quina	Charles Peabody	UBFLAQ11	1	None	17
La Quina	Charles Peabody	UBFLAQ12	1	None	17
La Quina	Charles Peabody	UBFLAQ13	1	None	17
La Quina	Charles Peabody	UBFLAQ14	1	None	17
La Quina	Charles Peabody	UBFLAQ15	1	None	17
La Quina	Charles Peabody	UBFLAQ16	1	Faded LAQ	17
La Quina	Charles Peabody	UBFLAQ17	1	None	17
La Quina	Charles Peabody	UBFLAQ18	1	None	17
La Quina	Charles Peabody	UBFLAQ19	2	None	17
La Quina	Charles Peabody	UBFLAQ20	1	None	17

La Quina	Charles Peabody	UBFLAQ21	1	None	17
La Quina	Charles Peabody	UBFLAQ21	1	None	17
La Quina	Charles Peabody	UBFLAQ21	1	None	17
La Quina	Charles Peabody	UBFLAQ22	1	None	17
La Quina	Charles Peabody	UBFLAQ23	1	None	17
La Quina	Charles Peabody	UBFLAQ24	1	None	17
La Quina	Charles Peabody	UBFLAQ25	1	None	17
La Quina	Charles Peabody	UBFLAQ26	1	None	17
La Quina	Charles Peabody	UBFLAQ27	1	None	17
La Quina	Charles Peabody	UBFLAQ28	1	None	17
La Quina	Charles Peabody	UBFLAQ29	3	None	17

Appendix B: Faunal data

Catalog#	Count	Element	Part	Taxonomic Class	Taxonomic Family	Taxonomic Species	Evidence of Working	Preservation of Bone
10988	1	Metapodial	Shaft fragment	Mammalia	Cervidae		Cutmarks	
11114	2	Antler					Worked (Awl or point)	Weathering
11115	1	Teeth attached to mandible	M1, P3, P2	Mammalia	Cervidae	*Cervus elaphus*		Weathering, soil attached
10071	3	Antler		Mammalia	Cervidae		Cutmarks	Weathering, possible foreign substance on one of the pieces
58494	1	Tusk		Mammalia	Suidae			
10983	1	Tibia	Shaft fragment	Mammalia	Bovidae			Root etching
10984	1	Mandible		Mammalia	Canidae	*Vulpes vulpes*		Weathering, discolor-ation
10742	1	Bone Breccia	Unidentifi-able					
10743	1	Bone Breccia	Unidentifi-able					
10744	2	Bone Breccia-	Unidentifi-able					

11149	1	Bone Breccia- 2 Calcaneus, 2 astraglus, 2 navicular cuboid, right femur and unidentifi-able fragments		Mammalia	Cervidae			
29458	2	Rib		Mammalia	Bovidae		Cutmarks	
29460	1	Limb shaft fragment		Mammalia				
29461	1	Limb shaft fragment		Mammalia				Root etching
29462	1	Tibia	Shaft fragment	Mammalia	Bovidae			Weathering
29463	1	Humerus	Shaft fragment	Aves	Anatidae			
29480	1	Limb shaft fragment		Mammalia			Artificial grooves	Weathering
11107	1	Teeth attached to mandible	PM1, PM2, PM3, and M1	Mammalia	Cervidae			Canine gnaw marks
11108	1	Antler		Mammalia	Cervidae	*Cervus elaphus*		Weathering
11112	1	Metapodial	Shaft fragment	Mammalia	Cervidae	*Capreolus capreolus*	Worked	Root etching, discolor-ation
11112	1	Antler		Mammalia	Cervidae		Worked tool	Weathering
11112	1	Antler		Mammalia	Cervidae		Worked tool	Weathering
11112	1	Antler		Mammalia	Cervidae		Worked	Weathering
11113	2	Antler		Mammalia	Cervidae		Worked tool	Weathering
11111	1	Antler		Mammalia	Cervidae		Worked	Weathering
11116	1	Metapodial	Shaft fragment	Mammalia	Cervidae	*Capreolus capreolus*	Worked	Root etching

11116	1	Antler		Mammalia	Cervidae		Worked (Awl or point)	
11116	1	Antler		Mammalia	Cervidae		Worked (Flake)	
11116	1	Limb shaft fragment		Mammalia	Cervidae		Worked	
11116	1	Antler		Mammalia	Cervidae		Worked	
11116	1	Antler		Mammalia	Cervidae		Worked (Awl or point)	
11116	1	Antler		Mammalia	Cervidae		Worked	Weathering
11109	1	Antler		Mammalia	Cervidae		Worked	Weathering
10981	1	Astragalus		Mammalia	Cervidae	*Rangifer tarandus*		Weathering
10981	1	First Phalanx		Mammalia	Cervidae	*Rangifer tarandus*		
10981	1	Phalanx		Mammalia	Cervidae			Weathering
10982	1	Lower premolar	P3	Mammalia	Equidae			
10985	1	Mandible	Fragment	Mammalia	Lepori-dae			
10985	1	Metapodial		Mammalia	Canidae			
10985	1	Mandible	Fragment	Mammalia	Canidae	*Felis*		
10986	1	Mandible	Fragment	Mammalia	Cervidae	*Capreolus capreolus*		Canine gnawing, root etching
10993	2	Canine tooth		Mammalia	Suidae			
10993	1	Molar	M2	Mammalia	Suidae			
10993	1	Molar	Dp4	Mammalia	Suidae			
10993	1	Lower incisor		Mammalia	Suidae			
10993	1	Premolar	Deciduous	Mammalia	Suidae			

10993	1	Incisor		Mammalia	Suidae			
10993	1	Premolar	P3	Mammalia	Suidae			
10993	1	Antler		Mammalia	Cervidae		Worked point	
10977	1	Limb shaft fragment		Mammalia				
10977	1	Metpodial	Distal end	Mammalia	Cervidae			Weathering, discolor-ation
10977	1	Metapodial	Distal end	Mammalia	Cervidae		Cutmarks	
10977	1	Astragalus		Mammalia	Cervidae	*Cervus elaphus*		Weathering
10977	1	Premolar		Mammalia	Cervidae			
10977	1	Premolar		Mammalia	Cervidae			
10977	1	Premolar		Mammalia	Bovidae			
10977	1	Premolar		Mammalia	Cervidae			
10977	1	Premolar		Mammalia	Cervidae			
10977	1	Premolar		Mammalia	Bovidae			
10977	1	Femur	Shaft fragment	Mammalia	Cervidae		Worked	
10977	1	Metapodial	Shaft fragment	Mammalia	Cervidae			
10977	1	Limb shaft fragment		Mammalia	Cervidae	*Capreolus capreolus*, cf		Canine gnaw marks

10978	1	Teeth attached to mandible	Broken in two pieces	Mammalia	Bovidae			Weathering, some parts contain glue
10979	1	Limb shaft fragment		Mammalia				Canine drag marks
10980	1	Humerus	Shaft fragment	Mammalia	Bovidae			Canine gnaw marks and pitting, weathering
10629	1	Navicular cuboid		Mammalia	Bovidae			Weathering
10630	1	Calcaneus		Mammalia	Bovidae			Weathering /cracking
10631	1	Navicular cuboid		Mammalia	Bovidae			Weathering
10632	1	Calcaneus		Mammalia	Equidae			Weathering
10633	1	Astragalus		Mammalia	Bovidae			Weathering
10634	1	Astragalus		Mammalia	Equidae			Weathering, cracking
10635	1	Molar	M3;	Mammalia	Equidae			

			Mandibular					
10635	1	Premolar	P2; Mandibular	Mammalia	Equidae			
10635	1	Premolar	P3; Mandibular	Mammalia	Equidae			
10635	1	Tooth	Mandibular	Mammalia	Equidae			
10635	1	Premolar	P4; Mandibular	Mammalia	Equidae			
10635	1	Incisor	i3; incisor	Mammalia	Equidae			
10635	1	Tooth		Mammalia	Equidae			
10635	1	Incisor	i3	Mammalia	Equidae			
10635	1	Incisor	i3	Mammalia	Equidae			
10635	1	Molar	M3; Mandibular	Mammalia	Equidae			
10636	1	Molar teeth attached to mandible		Mammalia	Bovidae			Weathering and cracking
10636	1	Molar		Mammalia	Bovidae			

10636	1	Molar	M3	Mammalia	Bovidae			
10636	1	Molar	M3	Mammalia	Bovidae			
10637	1	Tooth		Mammalia	Rhinocer-tidae			
10638	2	Tusk	Fragment	Mammalia	Elephan-tidae			
11096	3	Radius		Mammalia	Cervidae	*Rangifer tarandus*		
11097	1	Teeth attached to mandible		Mammalia	Cervidae	*Capreolus capreolus*		
11098	1	Molar teeth attached to mandible		Mammalia	Hyae-nidae			
11099	1	Molar		Mammalia		ungulate		
11100	1	Limb shaft fragment		Mammalia				Canine gnaw marks and pitting
11101	1	Molar - M2- maxillary	M2; Maxillary	Mammalia	Equidae			
11102	1	Tooth		Mammalia	Equidae			
11103	1	Molar - M2-	M2; Mandibular	Mammalia	Equidae			

		mandibular						
10990	1	Molar- M1	M1	Mammalia	Bovidae			
10991	1	Radius	Proximal	Mammalia	Cervidae	*Rangifer tarandus*		Canine gnaw marks
11104	1	Tooth		Mammalia	Equidae			
11105	1	Molar		Mammalia	Equidae			
11106	1	Molar		Mammalia	Bovidae			
UBFL AQ30	1	Canine		Mammalia	Ursidae	*Ursus spelaeus*		
UBFL AQ31	1	Phalange		Mammalia	Canidae	*Vulpes vulpes*		
UBFL AQ32	1	Metapodial		Mammalia				
UBFL AQ33	1	Metpodial		Mammalia	Canidae	*Vulpes vulpes*		
UBFL AQ34	1	Metatarsal		Mammalia	Canidae	*Vulpes vulpes*		
UBFL AQ35	1	Rib		Mammalia	Canidae	*Vulpes vulpes*		
UBFL AQ34	1			Reptilia and/or Amphibia				
LQM2 (1)	2	Tooth and mandible	Fragment	Mammalia	Bovidae			Weathering and cracking
LQM2 (2)	1	Inner ear		Mammalia	Cervidae			
LQM2 (3)	1	Inner ear		Mammalia	Cervidae			
LQM2 (4)	1	Tooth	Fragment	Mammalia	Canidae			

LQM2 (5)	1			Reptilia and/or Amphibia				
LAQQ 2 (1)	1	Calcaneus		Mammalia	Cervidae	*Rangifer tarandus*		
LAQQ 2 (2)	1	Limb shaft fragment		Mammalia				
LAQM B	2	Tibia	refit with unnumber-ed bone in box	Mammalia	Equidae			Weathering
LAQB 4 (8)	1	Scapula	Fragment	Mammalia	Cervidae	*Rangifer tarandus*		
LAQB 4 (9)	1	Antler		Mammalia	Cervidae		Worked	
LAQB 4 (10)	1	Rib		Mammalia	Cervidae		Cutmarks	
LAQB 4 (11)	1	Rib		Mammalia				
LAQB 4 (12)	1	Tooth		Mammalia	Equidae			
LAQB 4 (13)	1	Premolar		Mammalia	Cervidae			
LAQB 4 (14)	1	Molar	Deciduous	Mammalia	Cervidae			
LAQM 2T	1	Incisor		Mammalia	Bovidae			
LAQM 22B(3)	1	Small fragment		Mammalia				Burned/cha rred, root etching
LAQM 22B(4)	1	Small fragment		Mammalia				Burned/cha rred
LAQM 22B(5)	1	Small fragment		Mammalia				Burned/cha rred
LAQM 22B(6)	1	Mandible	Fragment	Mammalia	Cervidae		Cutmarks	Cracking
LAQM 22B(7)	1	Mandible	Ramus fragment	Mammalia	Bovidae			Weathering , Root etching
LAQM 22B(8)	1	Scapula	Fragment	Mammalia				Severe weathering
LAQM 22B(9)	1	Antler		Mammalia	Cervidae		Cutmarks	

LAQM 3 (1)	1	Phalange		Mammalia	Equidae			Weathering, discoloration
LAQM GT (1)	1	Premolar		Mammalia	Equidae			Weathering
LAQM GT (2)	1	Molar		Mammalia	Equidae			
Un-marked, found with LQM2	1	Tooth		Mammalia	Cervidae	*Rangifer tarandus*		
Un-marked, found with LAQM 22	1	Mandible	Fragment	Mammalia	Cervidae			Root etching, weathering, cracking
Un-marked, found with LAQM 22	1	Incisor		Mammalia	Equidae			Canine pitting
Un-marked, found with LAQM 22	1	Incisor		Mammalia	Equidae			Canine gnaw marks
Un-marked, found with LAQB 4	1	Limb shaft fragment		Mammalia				Canine gnaw marks, pitting, cracking, root etching
Un-marked, found with LAQB 4	1	Limb shaft fragment		Mammalia				Root etching
Un-marked, found with LAQB 4	1	Limb shaft fragment		Mammalia				Weathering

Un-marked, found with LAQB 4	1	Limb shaft fragment		Mammalia				Brown discolor-ation
Un-marked, found with LAQM 22B	1	Vertebrae	Lumbar Fragment	Mammalia	Cervidae			Weathering
Un-marked, found with LAQM 22B	1	Metapodial	Proximal end	Mammalia	Bovidae			Weathering and cracking
LAQM 22(1)	1	Mandible	Fragment	Mammalia				Weathering and cracking
LAQM 22(2)	1	Incisor		Mammalia	Equidae			
LAQB 4	1	Radius	Fragment	Mammalia	Cervidae		Cutmarks	Weathering, cracking, discolor-ation
LAQM	1	Limb shaft fragment		Mammalia			Cutmarks	Canine gnaw marks, root etching
LAQM	1	Limb shaft fragment		Mammalia	Cervidae		Cutmarks	
LAQM 2	1	Metpodial	Fragment	Mammalia	Cervidae			
LAQM 2	1	Molar		Mammalia	Canidae			
LAQM 2	1	Tooth		Mammalia	Cervidae			
LAQM 2	1	Tooth		Mammalia	Cervidae			
LAQM 2	1	Tooth		Mammalia				
LAQM 2	1	Limb shaft fragment		Mammalia				
LAQM 2	1	Limb shaft fragment		Aves				
LAQM	1	Ulna		Aves	Anatidae			

2								
LAQM 22	1	Molar		Mammalia	Bovidae			
LAQM 22	1	Molar		Mammalia	Bovidae			
LAQM 22	1	Molar		Mammalia	Bovidae			
LAQM 22	1	Limb shaft fragment		Mammalia	Cervidae		Cutmarks	Canine gnaw marks
LAQM 22	1	Limb shaft fragment		Mammalia				Cracking
LAQM 22	1	Humerus		Mammalia	Bovidae			Canine gnaw marks
LAQM 22	1	Limb shaft fragment		Mammalia			Cutmarks	Root etching
LAQM 2LB	1	Limb shaft fragment		Mammalia				Canine gnaw marks, pitting, cracking
LAQM 22A	1	Tooth		Mammalia	Cervidae		Cutmarks	
LAQM 22A	1	Incisor		Mammalia	Cervidae			
LAQM 22A	1	Tibiotarsus	Fragment	Aves	Anatidae		Cutmarks	
LAQM 22A	1	Femur	Trochanter	Mammalia	Cervidae		Cutmarks	Weathering and cracking
LAQM 22A	1	Femur	Shaft fragment	Mammalia				Canine gnaw marks and pitting
LAQM 22A	1	Metapodial		Mammalia	Cervidae			Weathering and discolor-ation
LAQM 22A	1	Limb shaft fragment		Mammalia				Burned/charred
LAQM 22A	1	Limb shaft fragment		Mammalia	Cervidae			Discolor-ation

LAQM 22A	1	Limb shaft fragment		Mammalia	Cervidae			Discolor-ation
LAQM 22A	1	Limb shaft fragment		Mammalia				Weathering and cracking
LAQM 22B	1	Molar		Mammalia	Bovidae			
LAQM 22B	1	Molar		Mammalia	Bovidae			
LAQM 22B	1	Molar		Mammalia	Bovidae			
LAQM 22B	1	Premolar		Mammalia	Bovidae			
LAQM 22B	1	Tooth		Mammalia	Bovidae			
LAQM 22B	1	Premolar	P3; Mandibular	Mammalia	Equidae			
LAQM 22B	1	Limb shaft fragment		Mammalia				Canine gnaw marks
LAQM 22B	1	Limb shaft fragment		Mammalia			Cutmarks	Root etching
LAQM 22B	1	Limb shaft fragment		Mammalia			Cutmarks	Weathering and cracking
LAQM 22B	1	Limb shaft fragment		Mammalia			Cutmarks	
LAQM 22B	1	Limb shaft fragment		Mammalia			Cutmarks	
LAQM 22B	1	Limb shaft fragment		Mammalia				Canine gnaw marks and pitting
LAQM 22B	1	Cranial	Fragment	Mammalia			Cutmarks	
LAQM (9 or q?) T	1	Molar		Mammalia	Bovidae			Discolor-ation
LAQM (9 or q?) T	1	Limb shaft fragment		Mammalia			Cutmarks	Weathering and cracking, discoloration
LAQM (9 or q?) T	1	Limb shaft fragment		Mammalia			Cutmarks	Discoloration
LQM2	1	Molar		Mammalia	Bovidae			

LQM2	1	Rib		Mammalia				
LQM2	1	Limb shaft fragment		Mammalia				Root etching
LQM2	1	Mandible	Fragment	Mammalia				Weathering and cracking
LQM2	1	Limb shaft fragment		Mammalia				
LQM2	1	Limb shaft fragment		Mammalia				Discolor-ation
LQM2	1	Limb shaft fragment		Mammalia				
LQM2	1	Rib		Mammalia				
UBFL AQ1	1	Molar		Mammalia	Bovidae			
UBFL AQ2	1	M3	M3	Mammalia	Bovidae			
UBFL AQ3	1	Molar		Mammalia	Bovidae			
UBFL AQ4	1	Molar		Mammalia	Bovidae			
UBFL AQ5	1	Premolar		Mammalia	Bovidae			Root etching
UBFL AQ6	1	Limb shaft fragment		Mammalia				Root etching
UBFL AQ7	1	Limb shaft fragment		Mammalia				Canine gnaw marks
UBFL AQ8	1	Limb shaft fragment		Mammalia	Cervidae		Cutmarks	Canine gnaw marks and pitting, cracking
UBFL AQ9	1	Limb shaft fragment		Mammalia				
UBFL AQ10	1	Limb shaft fragment		Mammalia				Canine pitting
UBFL AQ11	1	Limb shaft fragment		Mammalia				Root etching
UBFL AQ12	1	Limb shaft fragment		Mammalia			Cutmarks	Cracking
UBFL AQ13	1	Limb shaft fragment		Mammalia			Cutmarks	Cracking, charring

UBFL AQ14	1	Limb shaft fragment		Mammalia			Cutmarks	Canine pitting
UBFL AQ15	1	Radius	Fragment	Mammalia	Cervidae			Canine gnaw marks and pitting
UBFL AQ16	1	Humerus		Mammalia	Bovidae			canine gnaw marks and pitting
UBFL AQ17	1	Limb shaft fragment		Mammalia	Cervidae			
UBFL AQ18	1	Limb shaft fragment		Mammalia			Worked	Canine gnaw marks
UBFL AQ19	2	Limb shaft fragment		Mammalia	Cervidae		Cutmarks	
UBFL AQ20	1	Limb shaft fragment		Mammalia			Cutmarks	
UBFL AQ21	1	Limb shaft fragment		Mammalia	Cervidae		Cutmarks	Charred
UBFL AQ21	1	Limb shaft fragment		Mammalia	Cervidae			Charred, root etching
UBFL AQ21	1	Limb shaft fragment		Mammalia	Cervidae			Charred
UBFL AQ22	1	Rib		Mammalia				Root etching
UBFL AQ23	1	Limb shaft fragment		Mammalia	Cervidae			Root etching
UBFL AQ24	1	Limb shaft fragment		Mammalia	Cervidae			Root etching
UBFL AQ25	1	Limb shaft fragment		Mammalia	Cervidae			Canine gnaw marks
UBFL AQ26	1	Limb shaft fragment		Mammalia			Cutmarks	
UBFL AQ27	1	Limb shaft fragment		Mammalia	Cervidae			
UBFL AQ28	1	Limb shaft fragment		Mammalia				
UBFL AQ29	3	fragments		Mammalia				Possible broken pieces of other bones

Appendix C: Expected Fauna list (European)

Family Name	Scientific Name	Common Name	Recorded
Erinaceidae			
	Erinaceus europaeus	Western hedgehog	
Talpidae			
	Talpa europaea	Mole	
	Desmana pyrenaica	Pyrenean desman	
	Desmana moschata	European desman	
Soricidae			
	Sorex araneus	Common shrew	
	Sorex minutus	Pygmy shrew	
	Sorex alpinus	Alpine shrew	
	Sorex caecutiens	Masked shrew	
	Sorex kennardi	Kennard's shrew	
	Sorex runtonensis	Runton shrew	
	Neomys fodiens	Water shrew	
	Suncus etruscus	Pygmy white-toothed shrew	
	Crocidura russula	Greater white-toothed shrew	
	Crocidura suaveolens	Lesser white-toothed shrew	
	Crocidura leucodon	Bicolored white-toothed shrew	
Rhinolophidae			
	Rhinolophus hipposideros	Lesser horseshoe bat	
	Rhinolophus ferrumequinum	Greater horseshoe bat	
	Rhinolophus euryale	Mediterranean horseshoe bat	
	Rhinolophus mehelyi	Mehely's horseshoe bat	
Vespertilionidae			
	Myotis daubentoni	Water bat	
	Myotis dasycneme	Pond bat	
	Myotis mystacinus	Whiskered bat	
	Myotis nattereri	Natterer's bat	
	Myotis bechsteini	Bechstein's bat	
	Myotis myotis	Great mouse-eared bat	
	Nyctalus noctula	Noctule	
	Nyctalus leisleri	Leisler's bat	
	Eptesicus serotinus	Serotine	
	Vespertilio murinus	Parti-coloured bat	
	Pipistrellus pipistrellus	Common bat	
	Pipistrellus nathusii	Nathusius's pipistrelle	

	Pipistrellus kuhli	Kuhl's pipistrelle	
	Pipistrellus savii	Savi's pipistrelle	
	Plecotus auritus	Common long-eared bat	
	Barbastella barbastellus	Barbastelle	
	Miniopterus schreibersi	Long-winged bat	
Ochotonidae			
	Ochotona pusilla	Steppe pika	
Leporidae			x
	Oryctolagus cuniculus	Rabbit	
	Lepus europaeus	Brown hare	
	Lepus capensis	Cape hare	
	Lepus timidus	Varying hare	
Sciuridae			
	Sciurus vulgaris	Red squirrel	
	Marmota marmota	Alpine marmot	
	Marmota bobak	Bobak marmot	
	Citellus citellus	European souslik	
	Citellus suslicus	Spotted souslik	
	Citellus major	Red-cheeked souslik	
Castoridae			
	Castor fiber	European beaver	
Dipodidae			
	Allactaga jaculus	Great jerboa	
Spalacidae			
	Spalax leucodon	Lesser mole rat	
Gliridae			
	Eliomys quercinus	Garden dormouse	
	Glis glis	Fat dormouse	
	Muscardinus avellanarius	Dormouse	
	Dryomys nitedula	Forest dormouse	
Cricetidae			
	Cricetus major	Giant hamster	
	Cricetulus bursae	Schaub's dwarf hamster	
	Cricetulus migratorius	Migratory hamster	
Microtidae			
	Clethrionomys glareolus	Bank vole	
	Microtus agrestis	Field vole	
	Microtus arvalis	Common vole	
	Microtus nivalis	Snow vole	

	Pitymys subterraneus	Pine vole	
	Arvicola terrestris	Water vole	
	Dicrostonyx torquatus	Arctic lemming	
Muridae			
	Rattus norvegicus	Brown rat	
	Rattus rattus	Black rat	
	Apodemus sylvaticus	Common field mouse	
	Apodemus flavicollis	Yellow-necked mouse	
	Apodemus agrarius	Striped field mouse	
	Micromys minutus	Harvest mouse	
	Mus musculus	House mouse	
Mustelidae			
	Mustela rixosa	Least weasel	
	Mustela praenivalis	Primitive weasel	
	Mustela palermina	Primitive stoat	
	Mustela erminea	Stoat	
	Mustela nivalis	Weasel	
	Mustela lutreola	European mink	
	Mustela putorius	Polecat	
	Mustela eversmanni	Ferret	
	Martes vetus	Primitive marten	
	Martes martes	Pine marten	
	Martes foina	Beech marten	
	Meles meles	Badger	
	Meles thorali	Thoral's badger	
	Aonyx antiqua	Corsican otter	
	Lutra lutra	Otter	
Viverridae			
	Genetta genetta	Genet	
Canidae			x
	Canis lupus	Wolf	
	Cuon alpinus	Dhole	
	Vulpes vulpes	Red fox	x
	Vulpes praecorsac	Primitive corsac	
	Vulpes corsac	Steppe fox	
	Alopex lagopus	Arctic fox	
Hyaenidae			x
	Hyaena hyaena	Striped hyena	
	Crocuta crocuta	Spotted hyena	

Felidae			
	Felis issiodorensis	Issoire lynx	
	Felis pardina	Pardel lynx	
	Felis lynx	Northern lynx	
	Felis leo	Lion	
	Felis pardus	Leopard	
	Felis silvesris	Wild cat	
	Felis manul	Steppe cat	
Ursidae			x
	Ursus spelaeus	Cave bear	
	Ursus arctos	Brown bear	
	Ursus thibetanus	Asiatic black bear	
	Ursus maritimus	Polar bear	
Elephantidae			x
	Palaeoloxodon antiquus	Straight-tusked elephant	
	Mammuthus primigenius	Woolly mammoth	
Rhinocerotidae			x
	Dicerorhinus kirchbergensis	Merck's rhinoceros	
	Dicerorhinus hemitoechus	Steppe rhinoceros	
	Coelodonta antiquitatis	Woolly rhinoceros	
Equidae			x
	Equus bressanus	Caballine horse	
	Equus przewalskii	Przewalski's horse	
	Equus hydruntinus	European wild ass	
	Equus hemionus	Asiatic wild ass	
	Halichoerus grypus	Grey seal	
Suidae			x
	Sus strozzi	Strozzi's pig	
	Sus scrofa	Etruscan wild hog	
Hippopotamidae			
	Hippopotamus amphibius	Hippopotamus	
Cervidae			x
	Megaloceros giganteus	Giant deer	
	Alces alces	Elk or moose	
	Rangifer tarandus	Reindeer	x
	Cervus Elaphus	Red deer	x
	Dama dama	Fallow deer	
	Capreolus capreolus	Roe deer	x

Bovidae			x
	Saiga tatarica	Saiga antelope	
	Rupicapra rupicapra	Chamois	
	Myotragus balearicus	Cave goat	
	Ovis musimon	Mouflon	
	Capra ibex	Ibex	
	Hemitragus bonali	European Tahr	
	Bison priscus	Steppe wisent	
	Bison schoetensacki	Woodland wisent	
	Bison bonasus	Wisent	
	Bos primigenius	Auroch	

Appendix D: MPM French Paleolithic Faunal Metrics (measurements as per Von den Driesch 1976)

Catalog number	Element	Taxonomic Description	Measurement Key	View	Measurement(mm)
10981	Astragalus	Reindeer	Dm	Medial	27.86
			GLm	Dorsal	45.87
			Bd	Dorsal	29.63
			GLl	Dorsal	49.43
			Dl	Lateral	27.25
10981	Phalanx	Reindeer	Bp	Dorsal	19.21
			GL	Dorsal	44.57
			SD	Dorsal	13.59
			Bd	Dorsal	15.91
10982	P3-Mandibular	Equus	L		29.74
			B		17.28
10991	Proximal radius	Reindeer	BFp	Proximal	45.79
			Bp	Proximal	47.76
10977	Distal Metapodial	Cervidae	Bd	Dorsal	40.86
10629	Left navicular cuboid	Bos	GB		65.43
10630	Left calcaneus	Bos	GL	Plantar	129.79
			GB	Plantar	49.55
10631	Right navicular cuboid	Bos	GB		68.48
10632	Left calcaneus	Equus	GL	Plantar	107.06
			GB	Plantar	50.81
10633	Astragalus	Bos	DM	Medial	44.36
			GLm	Dorsal	74.78
			GLl	Dorsal	78.98
			Bd	Dorsal	54.63
			Dl	Lateral	46.74
10634	Astragalus	Equus	GH	Dorsal	61.33
			LmT	Dorsal	62.37
			GB	Dorsal	69.36
			BFd	Distal	57.47
10635 (A)	M3 Mandibular	Equus	B		12.56

			L		32.58
10635 (B)	P2 Mandibular	Equus	B		13.34
			L		33.5
10635 C	P3 Mandibular	Equus	B		17.05
			L		28.47
10635 E	P4 Mandibular	Equus	B		15.7
			L		28.75
10635 F	M3 Mandibular	Equus	B		10.14
			L		29.58
11101	M2 Maxillary	Equus	B		19.56
			L		32.14
11103	M2 Mandibular	Equus	B		14.17
			L		26.37
LAQM22B	M2 Mandibular	Equus	B		15.05
			L		28.09
10636 O	M3	Bos	B		18.48
			L		48.73
10636 Missing letter	M3	Bos	B		17.27
			L		49.59
10991	Radius-proximal end	Reindeer	BFp		43.59
			Bp		48.56
10977	Metapodial-distal end	Cervidae	Bd	Dorsal	40.88
LAQM3	Phalange	Equus	Bp	Proximal	57.35
			Bfp	Proximal	48.56
			Dp	Proximal	34.68
			GL	Dorsal	47.21
			SD	Dorsal	50.92
			Bd	Dorsal	53.94
LAQQ2 1	Calcaneous	Cervidae	GB		88.38
			GL		28.68
LAQM22A	Tibiotarsus-distal	Aves	Bd	Distal	8.77
			Dd	Distal	6.46

Appendix E: Doerflinger Correspondence

F. S. Perkins
Album of Antiquities.

452 EAST WATER STREET.
TELEPHONE MAIN 1461.

CHARLES H. DOERFLINGER,
PUBLISHER.

MILWAUKEE, November 2, 1898.

To the Board of Trustees
of the
Milwaukee Public Museum.

Gentlemen:-

During my sojourn in Europe 1889 to 1893 I took occasion to visit the region explored by the illustrious Boucher des Perthes-- the valley of the Somme River in northern France-- and some of the most interesting haunts of the cave-dwellers of southern France in the valleys of the Gironde, the Garonne and her tributaries, the Dordogne and Vezère. On these excursions I was able to collect, partly by purchase directly from farmers and others, partly by exchange, etc., a considerable number of the cave-dwellers' relics of early prehistoric times, estimated to date back from 10,000 to 40,000 years and representing four different glacial periods.

The collection embraces finds of about a dozen different localities, communes or ateliers, and I labeled every specimen, so that the "industry," as the French savants term it, of the different localities can be studied if arranged accordingly.

I intended to study the collection upon my return to this country, but have had neither time nor proper accommodations to do so.

The Milwaukee Public Museum as yet, I believe, possesses few if any of these antique, primitive cave-dwellers' implements, and if your Honorable Board desires, I would be willing to deposit the said specimens— hundreds in number-- in your ethnological or archaeological

f. S. Perkins
lm of Antiquities.

452 EAST WATER STREET.
TELEPHONE MAIN 1461.

ARLES H. DOERFLINGER,
PUBLISHER.

MILWAUKEE, 1898.

B. of T.-2

department, for an indefinite period of time, i. e. until I shall have occasion to dispose of them.

I would, however, ask the privilege to arrange them in some of your horizontal cases as a separate collection and to be sole custodian of the keys to the same, for the reason that I wish to take up their study at some future time and be sure that neither the arrangement could be disturbed nor any specimens could be removed accidentally without my knowledge. The exhibit may require 60 or more square feet, preferably in horizontal cases.

I also have a number of articles, estimated at least 4,000 years old, brought to light from under about four feet of peat at an excavation in the pile-dwellers' region at Pfaefficon Lake in Switzerland, which excavation was kindly made at my request and expense by the renowned discoverer Dr. Jacob Messikomer in 1892. These I would also place in the Museum as a loan deposit, if acceptable. Among them is one of the exhumed piles perforated by the roots of peat plants. So far as I know, it is the only one of full length in America.

With unabated interest in the Museum, and awaiting your pleasure, I am

Very respectfully yours,

Milwaukee Dec. 7. 1899.

Mr. Carl Thal.
Assistant Custodian:

Dear Sir:

Having been laid up by a lame shoulder and arm I was not able to prepare the material you desired last sunday but have done it at the earliest moment possible with help. Accompanying this you will find

1. (a). G. de Mortillet's Table of Classification.
(b). Drafts for signs
(c). My original drawings with Mortillets table in french.
(d) One key for all locks of my collection.
(e) one book of drawings of specimens from the Cave of Thayingen.
A typewritten list of localities and specimens already in your hands.

2. My drawings (c) will indicate the age of the different forms of implements and other specimens.

3. For many localities the industry of several epochs or even periods are represented, as for instance in the wonderful cave of Paire-non-Paire, Mousterian, Solutrean, Magdalenian and even some Acheulean forms were found in the different glacial epochs.

4. The collection from Thayingen though unassuming in appearance is very valuable because the cave of Thayingen has long been completely exploited.

5. Frequent reference to the annual report of the National Museum Washington D.C. 1896.

(c). My original drawings with Mortillet's table in French.
(d) One key for all locks of my collection.
(e) One book of drawings of specimens from the Cave of Thayingen.
A typewritten list of localities and specimens already in your hands.

2. My drawings (c) will indicate the age of the different forms of implements and other specimens.

3. In many localities the industry of several epochs or even periods are represented, as for instance in the wonderful cave of Paire-non-Paire, Mousterian, Solutrean, Magdalenian and even some Acheulean forms were found in the different glacial epochs.

4. The collection from Thayingen though unassuming in appearance is very valuable because the cave of Thayingen has long been completely exploited.

5. Frequent reference to the annual report of the National Museum Washington D.C. 1896, beginning page 349 will be of much assistance.

6. Also, Salomon Reinach, Antiquités Nationales.

Yours

7. Some of the ruder specimens resemble some of those in the St. Germain Museum and are supposed to be of Tertiary origin. At the great Atelier of Merigarde the impression is as though the out-cropping blocks of flint had been split by fire (or water)

Letter no 7. 20 1899.
C. H. Doerflinger

When you have finished arranging the signs and cts. please return the above mentioned auxiliaries, (a) (b) (c) (d) (e), retaining the typewritten list of specimens and localities. I have implicit confidence in Mr. Charles E. Brown. As I deliver the key to you, you are responsible, but please request Mr. Brown never to leave the cases unlocked if he is called away.

If I can render any further assistance I shall gladly do so.

Yours very truly
Charles H. Doerflinger

Dictated.

Appendix F: Charles Doerflinger Inventory of French Paleolithic collection at the MPM

The original Check List is in the Archives of the Public Museum.

PREHISTORIC IMPLEMENTS

of the

CAVE DWELLERS

of

FRANCE and SWITZERLAND

Estimated to be 10,000 to 70,000 years old.

Collected and Exhibited as a Loan Deposit

in the

Public Museum of Milwaukee

by

Charles H. Doerflinger.

All of Flint, unless otherwise designated.

FRANCE.

COMMUNE	NO. OF PIECES	VARIETY OF IMPLEMENT
1. Bayac	1	scraper
2. Bergerac	1	polished Chalcedony hatchet
	1	polished grey hatchet
	1	large Mousterienne (?) hatchet
	5	medium Mousterienne hatchets
	5	medium Mousterienne dark flint hatchets
	3	small Mousterienne yellow flint hatchets
	2	"honey" Chalcedony hatchet scrapers
	~~11~~ 11	flint oblong hatchets
	1	flat crusher or scraper with cup depression
	2	dark leaf shaped implements
	4	long scrapers (3 to 6 1/2 inches)
	1	long ridged gravers
	3	knives
	1	small nucleus
	2	greenish grey balls (crushers or sinkers)
	1	fossil shell
	2	heavy scrapers
3. Bertranoux	~~8~~ 8	rude flint axes
	11	finished flint axes and hatchets
	~~7~~ 7	somewhat rude hatchets
	~~3~~ 3	flint nuclei
	5	cutting implements

-1-

3. Bertrancux con	12	large scrapers and crushers
	~~13~~ 13	miscellaneous flat implements (3 to 6 in.)
	2	Scrapers, one long, one bunchbak.
	6	knives, broad and long ones
	7	rather large flint gravers
	1	Chalcedony graver
	2	stone borers or drills
	1	quasi polished ax-bit
	2	"paint dishes"
4. Cejac	~~3~~ 2	long flint ax
	1	large Mousterienne hatchet
	1	thick ax
5. Champs Blancs-	3	rough crushers
	~~3~~ 2	small nucleus
	~~14~~ 13	flakes and unfinished or broken implements
	~~11~~ 11	gravers
5 flat scrapers	~~8~~ 7	drills
2 rather scrapers	~~30~~ 32	scrapers
	2	bones
	3	large hatchets
	~~1~~	~~smaller hatchets~~
	~~1~~	~~crushers~~
	4	chunks of bone breccia (2 large and 2 small)
	~~50~~ 40	knives and saws
6. Couze	3	gravers
	2	knives
	1	drill
7. Chaux Brisbe--	1	crusher
8. Creysse	4	crushers (flint)
	1	ball (stone)
	~~7~~	(flint axes ~~cut~~
	~~8~~	(~~large flint~~ hatchets
	1	small flint hatchet
	~~5~~	knives (3- 6 in.)
	1	graver
	5	polished bits of flint axes
	1	polished stone hatchet
	6	Scrapers
9. Cromagnon	~~3~~ 1	flint hatchets
	1	saw-knife
	1	scraper
10. Faux	4	flint rude axes
11. Flagnac	1	flint double scraper
	1	polished Serp. (?) hatchet
12. Gorge d'Enfer-	1	knife
	1	block of lime sinter
	2	bones
13. La Bignac	2	flint (honey) axes
14. La Nauve	1	quasi polished hatchet (red flint)
	1	curved grey flint hatchet?
	3	small leaf shaped flints
	1	javelin point
	2	arrow points
	2	fragments

~~37~~ 39

La Renaudie --	1	fine large flint scrapor
	5	fine larger flint hatchets
	4	well finished flint axes
	5	heavy ruder flint axes
	6	smaller ruder flint axes smaller
	2	good oblong flint axes
	4	gravers
	2	flattish cutting tools
	1	largest flint nucleus
16. La Riberie----	1	flint ax
17. Laugerie Basse	1	hatchet
	~~4~~ 3	knives
	~~2~~ 1	scrapers
	2	gravers
	1	jaw with tooth
	~~11~~ 17	bones
18. Laugerie Haute	1	hatchet
	1	scraper
	1	scraper
	1	knife
	1	bones
	2	tooth in piece of jaw
	1	large block of Bone Breccia
19. Les Eyzies----	1	
20. Cave near Les Eyzies--------	1	stalagmite
	1	block of cinders from a hearth
21. Magnac--------	14	Nuclei (flint) small
	3	small crushers
	19	rough scrapers, arrow points and miscellaneous
3 small hatchets.	~~15~~ 49	knives (40 large and ~~24~~ delicate)
12 larger scrapers	~~28~~ 56	gravers (incl. some "graver-scrapers" -- ~~fine flint scrapers~~
25 single scrapers	~~50~~	double flint scrapor
2 hunchback do.	1	carved shaft scrapers
2 leaf-shaped do.	~~4~~ 6	borers, drills, ~~needles or awls (12~~
	~~20~~ 29	needles ~~strong, 14 fine.~~)
	3	flint saws
	2	flakes and unchipped tools
	~~28~~ 35	jaw with tooth
	1	teeth
	~~4~~ 7	bones
	8	Mollusk found in cave
	1	piece of bone breccie
	1	

Many of the Magnac specimens have breccie cement attached.

22. Malberna------	1	flint nucleus
	1	polished white flint ax
	2	dark flint (Mousterienne) hatchets
	1	large flint scraper
X 23. Ribrigaudo-----	20	large rude flint axes and hatchets
	~~28~~ 21	rude finished or unfinished scrapers, crushers and knives

Page 3

~~27~~
389

24. Monbazillac---	2	polished hatchets ----------
25. Monsac---------	1	large flint ax ----------
26. Montalbanie---	1	large flint ax ----------
27. Mouleydier----	1	large flint ax-shaped implement (or nucleus) ----------
	1	large flint dish ----------
	1	large flint scraper or weapon ----------
	5	large flint axes ----------
	2	medium flint axes ----------
	1	small well finished oblong ax ----------
	1	long ridged flint knife ----------
28. Moulin Mignon (near Abbeville) Valley of the Somme---------	3	hatchets (rare) ----------
	1	chalk ----------
	2	flint nodules from Moulin Mignon ----------
	2	flint nodules from Treport ----------
	13	recent chippings (not prehistoric) experimental
29. Pair-non-Pair- (near Bourg sur Gironde---	1	double flint scraper ----------
	10	scrapers ----------
	7	gravers ----------
	~~22~~ 19.	knives ----------
1 scraper-graver	3	stone crushers ----------
1 perforator	1	flint crusher ----------
6 flakish scrapers.	4	nuclei ----------
	1	delicate flint in bottle ----------
	2	pieces lightening sand-tube ----------
	3	teeth ----------
	~~8~~ 7	teeth marked Bourg sur Gironde ----------
	3	bones marked Bourg sur Gironde ----------
	1	jar of cinders, clay and silex chips from a fireplace of the Mousterienne epoch ----------
	3	fragments of stone.
		All authenticated by Dr. François Daleau, Bourg sur Gironde, the discoverer and explorer of Pair-non-Pair ----------
30. Peycharmant---	2	exquisite large hatchets ----------
	1	small hatchet ----------
	3	leaf shaped flints ----------
	1	large graver ----------
31. Rofregne------	1	ax ----------
	1	flint hatchet scraper ----------
32. Rigoux--------	1	hatchet ----------
33. St. Agne------	1	flint crusher ----------
	1	flint scraper ----------
34. Soucy---------	1	nucleus ----------
	2	hatchets ----------
	2	broken lance points ----------
	1	double scraper ----------
	~~6~~ 5	scraper gravers ----------
	6	scrapers ----------
	1	double graver ----------
	~~37~~ 36	gravers ----------

A. Soucy con.----	~~35~~ 31	Knives (10 large, 12 small, 8 very delicate) ----------
	1	stone (graywacke?) crusher ----------
	1	flint oblong crusher ----------
	~~11~~ 12.	teeth ----------
3 rami	~~4~~ 3	bones ----------
	1	shell ----------
	1	small crusher ----------
	1	quadrangular ----------
	8	borers or needles ----------
	1	travertine plate, hammered ----------
	1	pseudomorph of a large tooth ----------
	3	Borers.
35. 36. Aubin-----	1	Mousterienne flint ax ----------
36. Tiragand------	2	Flint hatchets ----------
	1	scraper (racloir) ----------
	1	knife-flake ----------
	1	graver-flake ----------
37. Troche--------	1	16 inch ax or nucleus ----------
	1	heavy short nucleus ----------
	1	heavy crusher ----------
	2	large thin saw-knives and gravers ----------
	2	long rude scrapers ----------
	1	rude hatchet ----------
	2	scraper-shaped hatchets ----------
	1	large flat ax ----------
	1	Mousterienne large hatchet ----------
~~Total~~		total
	2	large gravers.
	1	flint hatchet-bit.
88		SWITZERLAND.

For prehistoric type 107 / 107

38. Thayngen------	4	scrapers ----------
	1	graver ----------
	1	nucleus ----------
	2	borers ----------
	6	flake knives ----------
	32	bones ----------
	5	teeth ----------

Estimated (like #30) to be at least 20,000 years old.

39. Thayngen----- Freudenthal and Schweitzerbild near Schaffhausen--	113	Flints from the said palaeolithic caves, authenticated by Prof. Jacob Heierli of Zurich ----------
40. Niederwenningen, Canton Zurich-	1	piece of the enamel shell of a Mammoth's tusk ----------
	1	piece (cross-section of thin end) of Mammoth's tusk ----------
Strictly prehistoric 165		
165		

Total prehistoric 1438

1138

Total number of paleolithic specimens: 1100.

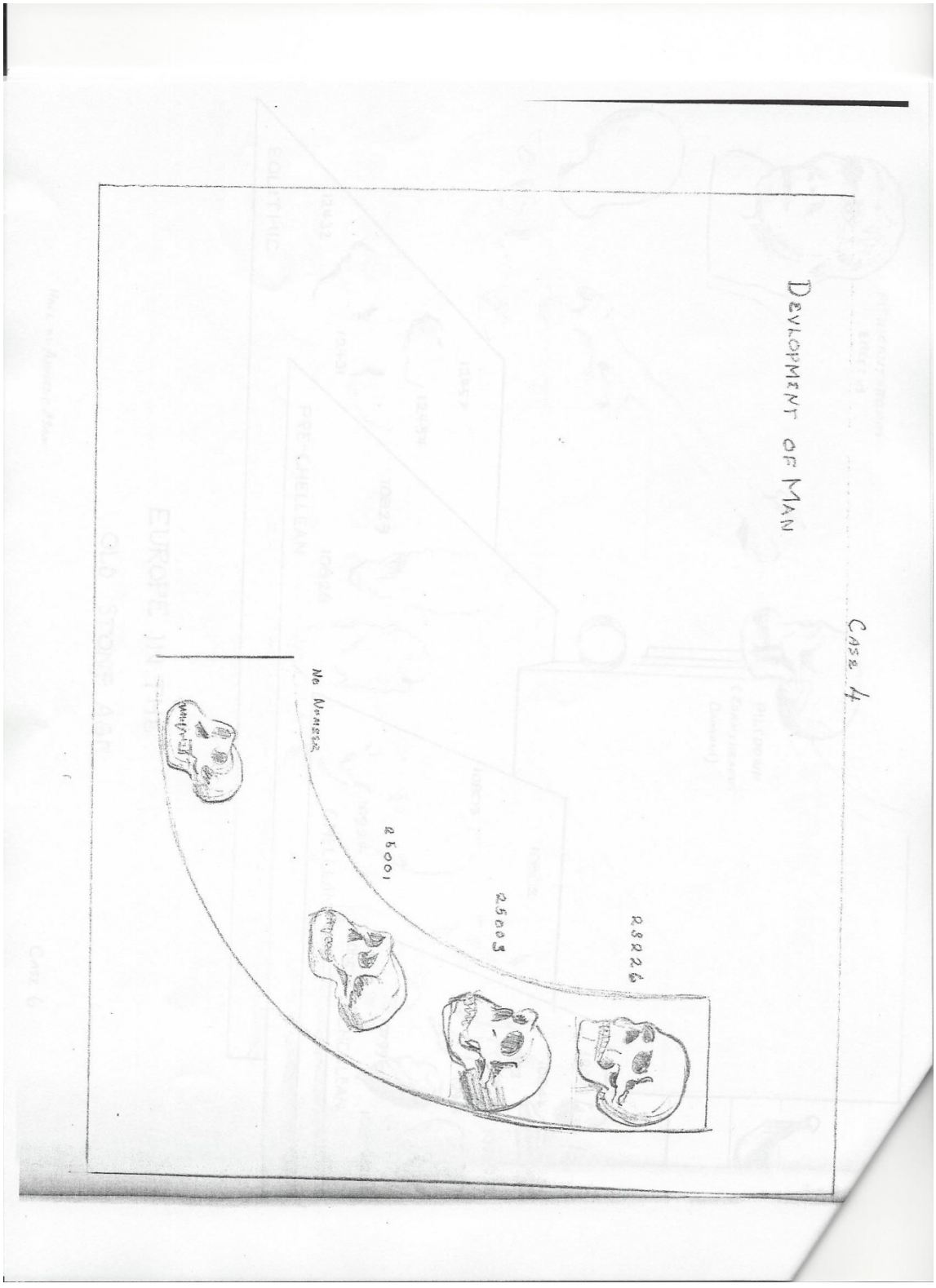
Moulin Guignon is in the Somme Valley, France.

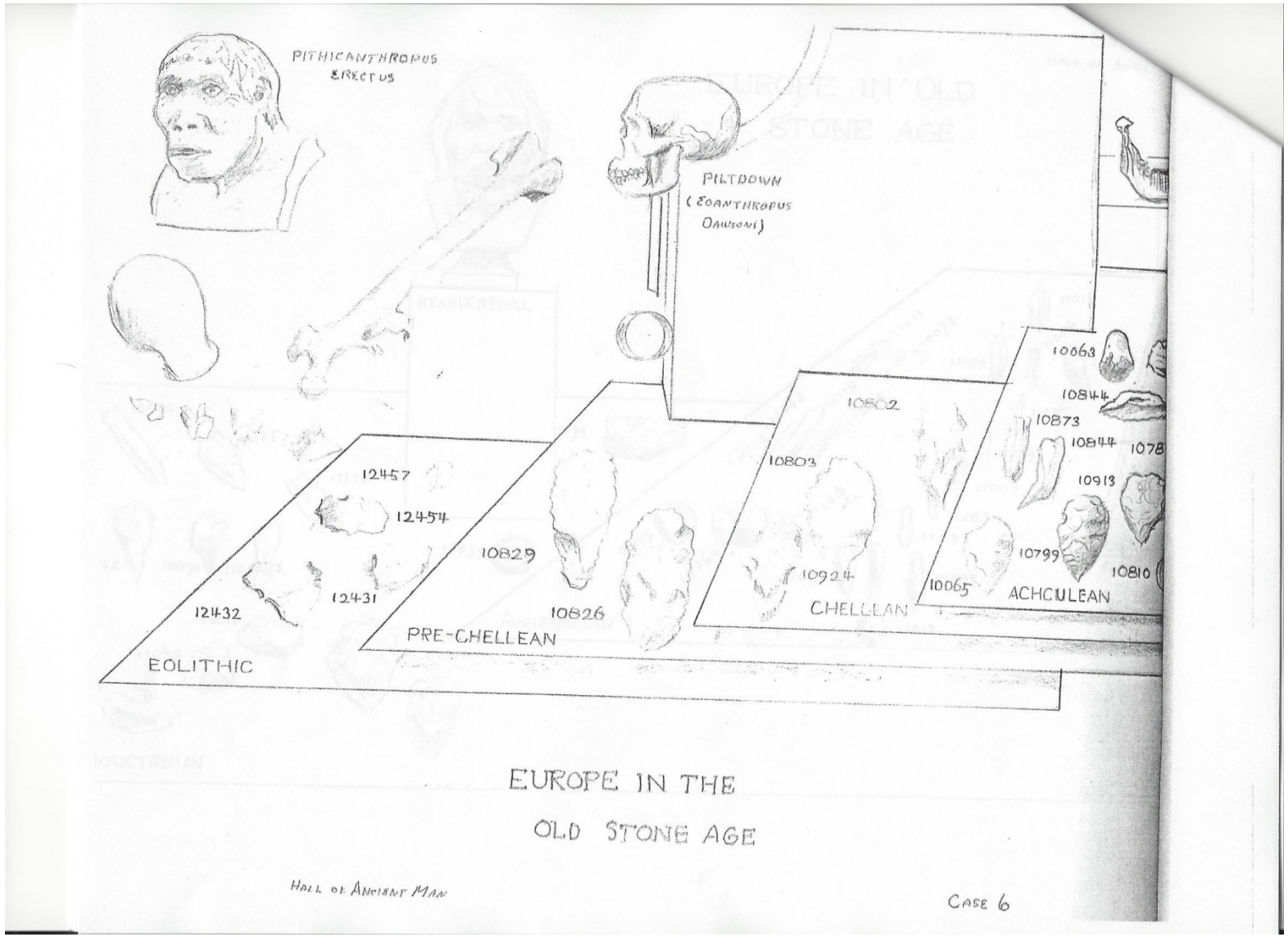
Thayngen, Niederweningen, Schweizerbild and Freudenfeld in Switzerland.

All other localities are in the Valley of the Gironde and Dordogne.

P. S. As an interesting result of experiments there are added 13 flakes and splittings made 1893 by Charles H. Doerflinger in a flint pit some eight feet deep near the former haunts of Boucher de Perthes with stone mauls only, to see how near he could approach the manufacture of implements and weapons in that way.

Appendix G: Hall of Man Exhibit at the MPM




PITHICANTHROPUS
ERECTUS
PILTDOWN
(EOANTHROPUS
DAWSONI)
12457
12454
12432
12431
EOLITHIC
10829
10826
PRE-CHELLEAN
10802
10803
10924
CHELLEAN
10663
10844
10873
10844
10913
10799
10065
ACHEULEAN
10810
EUROPE IN THE
OLD STONE AGE
HALL OF ANCIENT MAN
CASE 6

THE
EUROPE IN OLD
STONE AGE
HALL OF ANCIENT
NEANDERTHAL
AURIGNACIAN
MOUSTERIAN
11014
11086
11083
11090
11095
11089
11089
11093
11089
11083
11017
11080
11042
11128
11062
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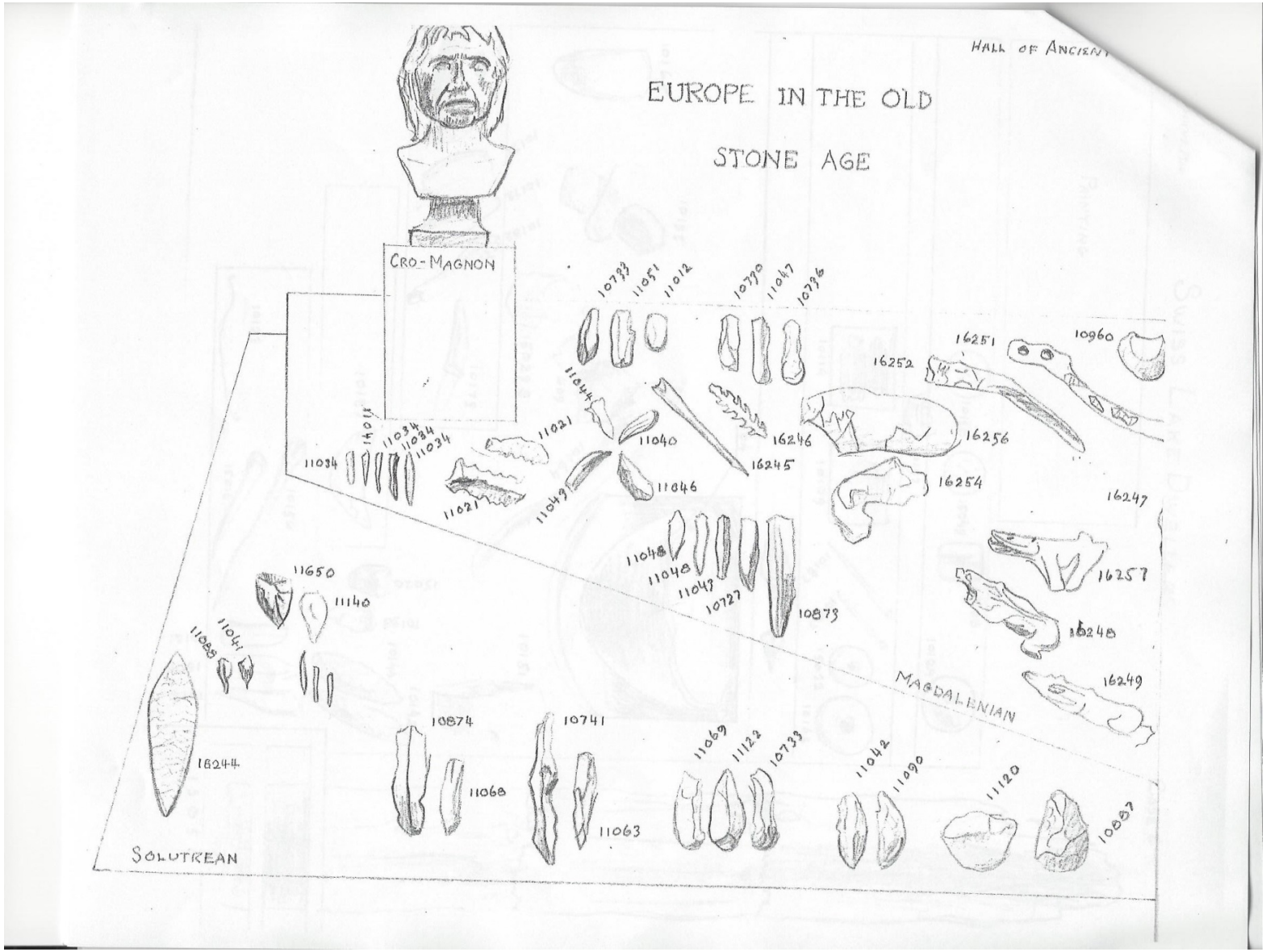
10015
9999
10764


HALL OF ANCIENT
EUROPE IN THE OLD
STONE AGE
CRO-MAGNON
10733
11051
11012
10730
11047
10736
11044
11040
16246
16245
11046
11049
11021
11034
11034
11034
11034
11034
16251
10960
16252
16256
16254
16247
16257
16248
16249
MAGDALENIAN
11048
11048
11043
10727
10873
11650
11140
11041
11055
18244
SOLUTREAN
10874
11068
10741
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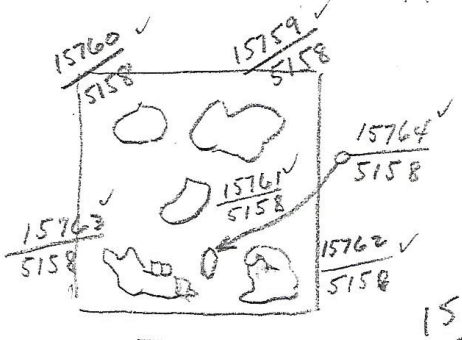
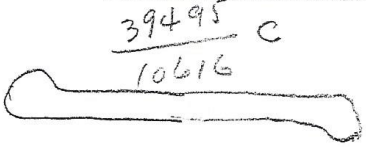
11069
11123
10733
11042
11090
11120
10837

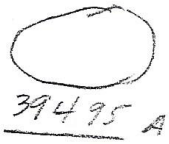
O.K.

Room 105 – Cases 5

ANCIENT MAN

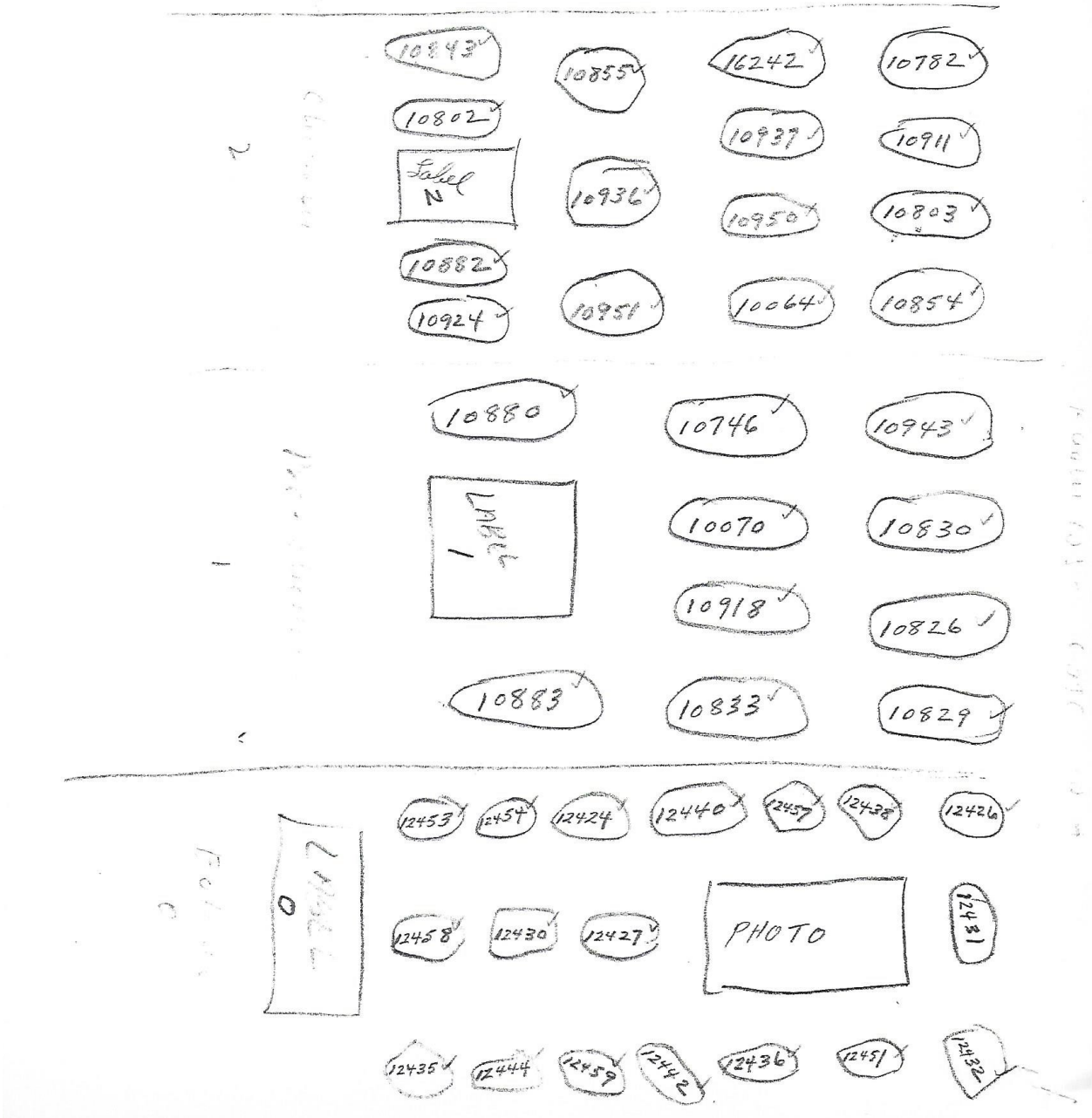






O.K.

Room 108 Case 6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Faisel
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10854
10880
10746
10943
10070
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10883
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10829
12453
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PHOTO
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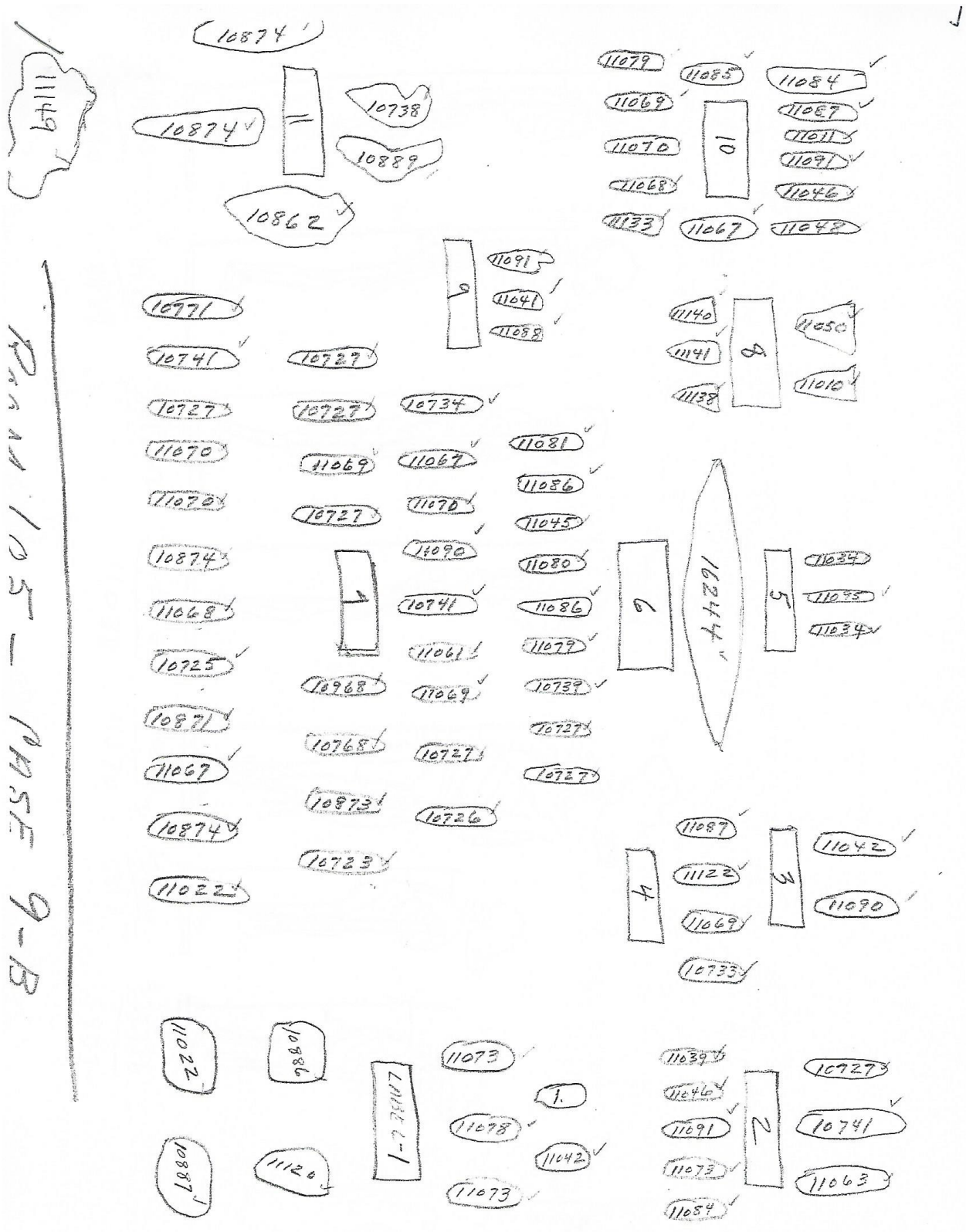
12451
12432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10874
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10738
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11070
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11046
11133
11067
11042
9
11091
11041
11058
10771
10741
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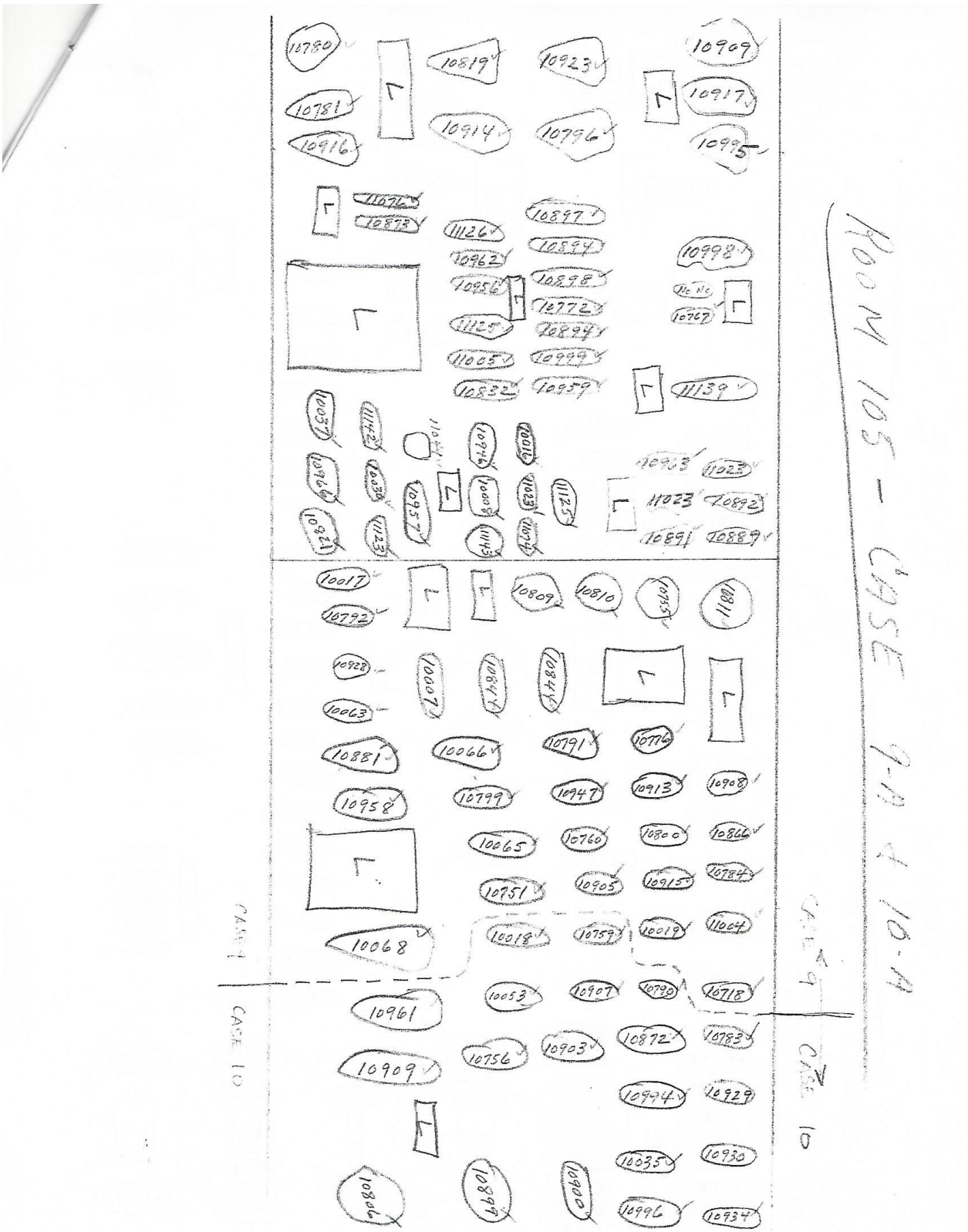
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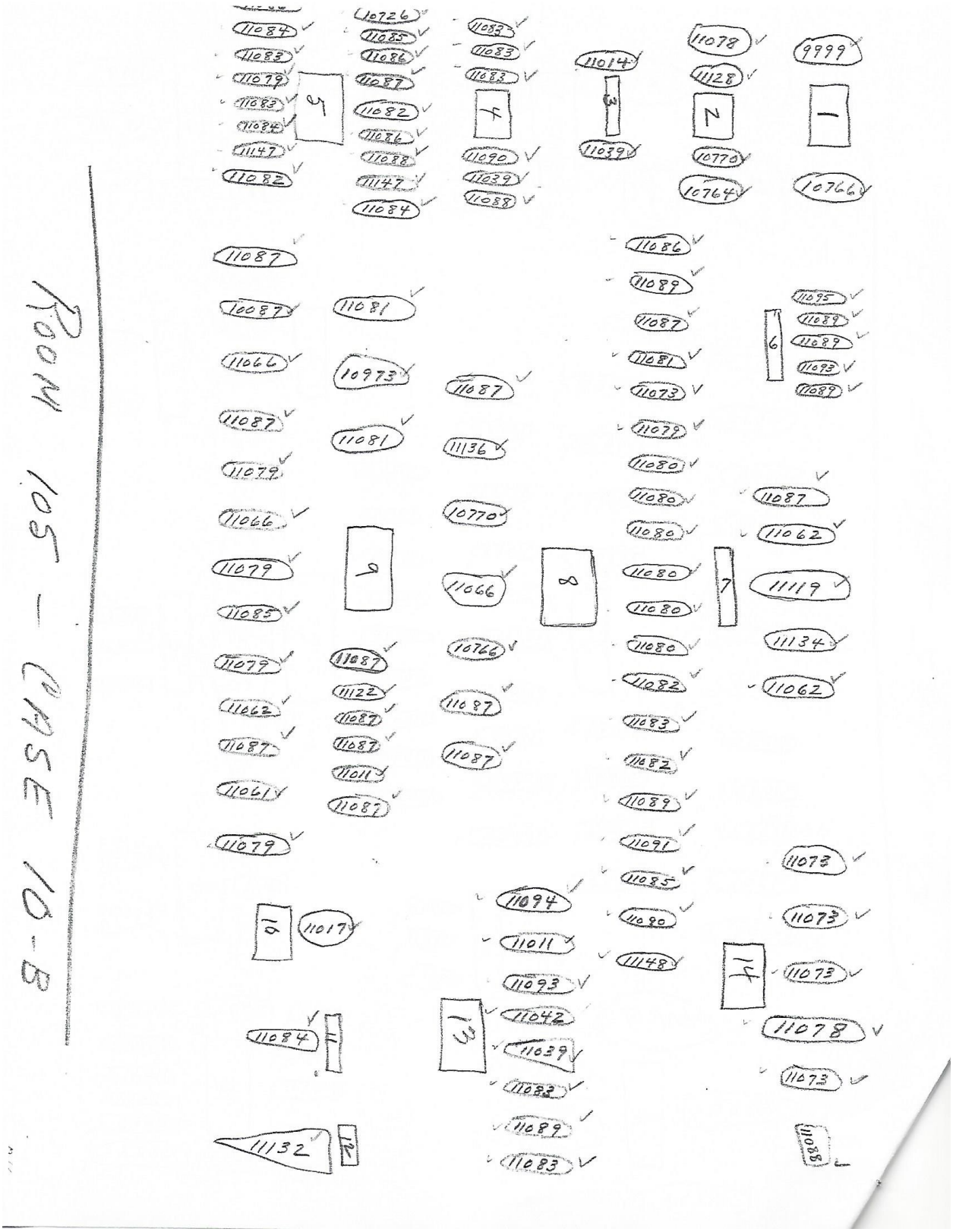
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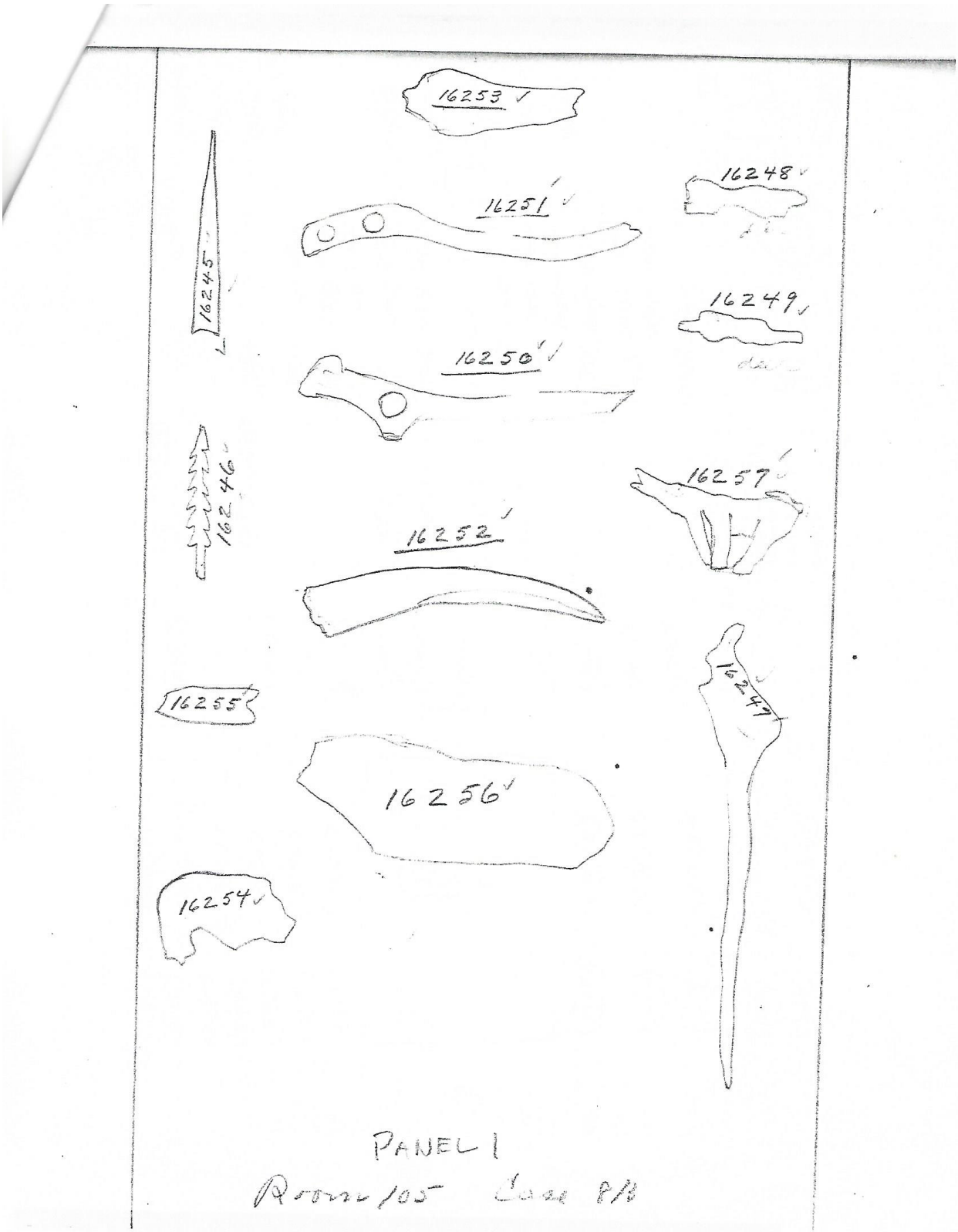


PANEL I

Room 105 Level B/B

Appendix H: Charles Peabody and Samuel A. Barrett Correspondence

PEABODY MUSEUM OF HARVARD UNIVERSITY
CAMBRIDGE, MASS., U.S.A.

ANTHROPOLOGICAL SECTION
UNIVERSITY MUSEUM

January 26th 1921

My dear Dr. Barrett.

You are quite right as to the French law; but it does not forbid the exhibition of antiquities — it puts them under the control of the Director of Fine Arts — & as a matter of fact the year there was no difficulty in sending things away — and with tact & patience there will be none — Then I was-
nous ought to have to write a letter — We have thought quite seriously of all these things,

Faithfully Charles Peabody

ARCHAEOLOGICAL INSTITUTE OF AMERICA
AMERICAN ANTHROPOLOGICAL ASSOCIATION

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

FEB 20 1922

GEORGE GRANT MACCURDY, DIRECTOR
YALE UNIVERSITY MUSEUM
NEW HAVEN, CONNECTICUT

PARIS OFFICE
IN CARE OF HOTTINGUER ET CIE.
38, RUE DE PROVENCE

CHARLES PEABODY, CHAIRMAN OF THE BOARD
PEABODY MUSEUM
CAMBRIDGE, MASSACHUSETTS

February 14th 1922

My dear Dr.Barrett,

May I give myself the pleasure of notifying you that at the meeting of the Governing Board of the American School in France of Prehistoric Studies held in New York on February fourth 1922, you were elected a member of the Advisory Council to represent the Public Museum of Milwaukee.

Your fellow members are:

Chase, Harvard; MacCurdy, Yale; Osborn and Nelson, American Museum; Bates, Pennsylvania; Hrdlicka, Smithsonian; Stearns, McKendrie College; Putnam, Davenport; Peabody, Harvard (Chairman) These are the Governing Board; in addition there are Kelsey, Michigan, Fairclough, Stanford, and yourself.

Very Sincerely Yours

Charles Peabody

Dr. S. Barrett
Public Museum
Milwaukee, Wisconsin

February
Twentieth,
1922

Dr. Charles Peabody,
Peabody Museum,
Cambridge, Mass.

My dear Dr. Peabody:-

I am in receipt of your favor of February 14th, advising me of my election as a member of the Advisory Council of the American School in France of Prehistoric Studies, to represent the Public Museum of Milwaukee.

I shall be very glad to represent the Museum in this capacity and will be pleased to be of any service possible to the American School in France of Prehistoric Studies.

Very truly yours,

S. A. Barrett

S. A. Barrett, Director.

SAB:CPE

HARVARD UNIVERSITY

DIVISION OF ANTHROPOLOGY

Cambridge, Massachusetts

3.13.22

Dear Barrett

I shall arrive in Milwaukee on Sunday noon at 10.50 A.M. from Madison. I shall go directly to the Hotel Wisconsin and await you there. Will you be good enough to engage a room for me as I shall stay the night in Milwaukee, leaving there for Madison at 9.45 A.M. Monday. Trusting you received the data in time! Yours

Sincerely yours

Alfred M. Tozzer

ARCHAEOLOGICAL INSTITUTE OF AMERICA
AMERICAN ANTHROPOLOGICAL ASSOCIATION

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

GEORGE GRANT MacCURDY, DIRECTOR
YALE UNIVERSITY MUSEUM
NEW HAVEN, CONNECTICUT

PARIS OFFICE
IN CARE OF HOTTINGUER ET CIE.
38, RUE DE PROVENCE

CHARLES PEABODY, CHAIRMAN OF THE BOARD
PEABODY MUSEUM
CAMBRIDGE, MASSACHUSETTS

APR 26 1922

April 20th,1922

My dear Dr.Barrett,

The time has come when it becomes my duty to call in the guarantees to the second year's budget of the School of Prehistoric Studies. The Public Museum of Milwaukee, through your kind intervention,was good enough to guarantee one hundred dollars;will you be so good as to send me a cheque for that amount at your convenience? It will be necessary to call in the guarantee this year without rebate.

Hoping thet there will be a good crop of specimens,and awaiting your preferences in the fall as to the distribution,I remain

Very Sincerely Yours
Charles Peabody

Dr.S.A.Barrett
Public Museum
Milwaukee,Wisconsin

April
Twenty-sixth,
1922

Dr. Charles Peabody,
Chairman, American School in France of
Prehistoric Studies,
Peabody Museum,
Cambridge, Mass.

My dear Dr. Peabody:-

Your favor of April 20th is at hand.

Enclosed please find the check for $100.00, this being the contribution of this Museum to the work of the American School in France of Prehistoric Studies for the present fiscal year.

Trusting that your work will b yield excellent results and that we may receive a good series of specimens, which will greatly improve our exhibits, I remain

Very truly yours,

S. A. Barrett, Director.

SAB:GPE
Enc.

ARCHAEOLOGICAL INSTITUTE OF AMERICA
AMERICAN ANTHROPOLOGICAL ASSOCIATION

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

GEORGE GRANT MACCURDY, DIRECTOR
YALE UNIVERSITY MUSEUM
NEW HAVEN, CONNECTICUT

PARIS OFFICE
IN CARE OF HOTTINGUER ET CIE.
38, RUE DE PROVENCE

CHARLES PEABODY, CHAIRMAN OF THE BOARD
PEABODY MUSEUM
CAMBRIDGE, MASSACHUSETTS

May 1st,1922

My dear Dr.Barrett,

Thank you very much for your letter of April 26th,with the enclosure from the Public Museum of Milwaukee for one hundred dollars towards the second year's budget of the School of Prehistoric Studies.

I also hope sincerely that our finds will be apposite and lucrative,especially as the work is this year to be under my direction.

Very Sincerely Yours Charles Peabody

Dr.S.A.Barrett
Public Museum
Milwaukee,WiscOnsin

Among bills passed at
Nov 15, 1921 meeting
1921 Business

Specimens; Archeology $1000

Box 2/22

Archaeological Institute of America
American Anthropological Association

GEORGE GRANT MACCURDY
Chairman
YALE UNIVERSITY MUSEUM
NEW HAVEN CONNECTICUT

CHARLES PEABODY Director
PEABODY MUSÉUM
CAMBRIDGE MASSACHUSETTS

PARIS OFFICE
In care of HOTTINGUER et Co
38 Rue de Provence

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

October 17. 1922

address

My dear Dr. Barnett.

Here is our summing up. What do you wish as to specimens? — My idea is to make a sort of cross-section that each of the eight associating museums may receive representative specimens of the various types — But I should like to have your preference, before selecting. As you see, the specimens are not numerous, but the fact is that they are intended as to section + layer — and that each benefactor will receive a description + chart (with references to publication) of the excavations which will add to the scientific value of the specimens. Also there are many bones bearing the marks of utilization — These are a specialty of Dr Sellards + the more valuable (Pliocene) bones will be found to scholars pay attention to the marked bones, more marked bones will be found). Ladder + I have taken some interest in American prehistoric marked bones also.

Do you think the Milwaukee Museum will guarantee $100 towards next year's budget? or the

2

Archaeological Institute of América
American Anthropological Association

GEORGE GRANT MACCURDY
Chairman
YALE UNIVERSITY MUSEUM
NEW HAVEN CONNECTICUT

CHARLES PEABODY Director
PEABODY MUSEUM
CAMBRIDGE MASSACHUSETTS

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

Adress { PARIS OFFICE
In care of HOTTINGUER et Co
38 Rue de Provence

same conditions as this year? I hope so — I shall have to do any work of financing the School from this side as I hope to stand by this shift & the students till July 1923.

Will you not write me & give me your opinion?

Very Sincerely Yours,
Charles Peabody.

Dr. S. A. Barrett,
Public Museum
Milwaukee.

November
Second,
1 9 2 2

Dr. Charles Peabody,
c/o Hottinguer et Co.,
38 Rue de Provence,
Paris, France.

My dear Dr. Peabody:-

Your favor of the 17th ult. is just at hand and I note that you are ready to distribute the results of the past year's work of the American School and I appreciate your giving us an opportunity to make a selection.

It seems to me that it would be best to send us from one definite locality, giving a cross-section and a stratigraphic outlook on that particular locality. This is ~~the~~ much to be preferred in our case to a general selection from different localities.

We have at the present time a fairly good selection of specimens from various localities in Central Europe, but the addition of a good series, showing a cross-section of some typical given locality would be especially desirable for us.

Trusting that you will be able to give us a good representative series of specimens of this nature and with kindest personal regards to yourself and your co-workers, I remain

Very truly yours,

S. A. Barrett, Director.

SAB:GPE

Archaeological Institute of América
American Anthropological Association

GEORGE GRANT MACCURDY
Chairman
YALE UNIVERSITY MUSEUM
NEW HAVEN CONNECTICUT

CHARLES PEABODY Director
PEABODY MUSÉUM
CAMBRIDGE MASSACHUSETTS

PARIS OFFICE
In care of HOTTINGUER et Cº
38 Rue de Provence

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

January 2nd, 1923. Feb 9/23

My dear Dr. Barrett,

Please do not get discouraged over the non-arrival of the specimens from La Quina; I have them in my laboratory at Ville-d'Avray, and am anxious to study them a little more before distributing - may we count on a similar contribution from the Milwaukee Museum for 1923-1924? I am trying to raise next year's funds, to corrall next year's students and do my duty as Director all at once.

I think you will find the marked bones in the collection interesting; there is no other site so rich in these as La Quina.

Do let us hear from you

Very sincerely Yours Charles Peabody

Dr. S.A. Barrett
Public Museum,
Milwaukee, Wisconsin

February
Seventh,
1 9 2 3

Dr. Charles Peabody,
c/o Hottinguer Et Co.,
No. 38 Rue de Provence,
Paris, France.

My dear Dr. Peabody:-

Your favor of January 22nd is at hand and I note what you say in respect to the specimens being retained there for study before being distributed to the contributors for the work of the School for 1922.

That is entirely satisfactory and so far as the specimens which are coming to this institution are concerned, please do not hesitate to keep them there as long as you need them for study, as we want them to be of as much use as possible both there and here.

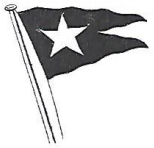
So far as the question of a contribution from this Museum for the year 1923-24 is concerned, I fear that it is going to be impossible for us to participate in the work this time. We have been hard hit in our budget and are obliged to retrench in various ways, in order to make both ends meet this year. Possibly later we can do something again, but for the present we will be obliged, I am afraid, to forego this opportunity of assisting in the good work which you are doing.

With kindest personal regards, believe me,

Very truly yours,

S. A. Barrett, Director.

SAB:GPE



ON BOARD S.S. "Olympic"

May 13. 1923.

My dear Dr. Barrett

I have been called home by the serious illness of my daughter; if all goes well I hope to return to Paris sept- month and send on the much delayed specimens which are all ready.

Very Sincerely Yours
Charles Peabody.

Address C/O Hottinguer et Cie

38,rue de Provence

Paris

August 8th,1923.

My dear Dr.Barrett,

At last I am sending you with way-bill,list and explanations,the long-delayed box of specimens. They are sent by the firm of de la Rancheraye et Cie,31,marché Saint-Honoré,Paris and their agentsin New York is Richards and Co,29 Broadway;if the box does not arrive in a reasonable time please refer to them.

Very Sincerely Yours

Arthur Peabody.

Dr.S.A.Barrett

Public Museum

Milwaukee

Wisconsin

The box is sent C.O.D. and the School will reimburse you

September
sixth,
1 9 2 3.

Mr. Chas. Peabody,
c/o Huttinguer et Cie,
58 Rue de Provence,
Paris, France.

Dear Sir:-

The box containing archeeological specimens addressed to Dr. Barrett of the Public Museum of Milwaukee, has arrived in good condition.

In the absence of Dr. Barrett, I take pleasure in acknowledging the receipt of the specimens, and at the same time thanking you for the kind attention which you have shown us in connection with this matter.

Yours very truly,

Carl Trad

Acting Director.

CT/ED

Appendix I: ASPR Documents

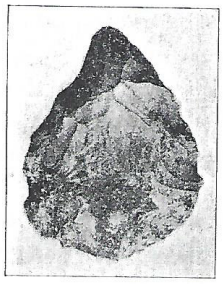
ARCHAEOLOGICAL INSTITUTE OF AMERICA
AMERICAN ANTHROPOLOGICAL ASSOCIATION

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

GEORGE GRANT MACCURDY, DIRECTOR
YALE UNIVERSITY.MUSEUM
NEW HAVEN, CONNECTICUT

PARIS OFFICE
IN CARE OF HOTTINGUER ET CIE.
38, RUE DE PROVENCE

CHARLES PEABODY, CHAIRMAN OF THE BOARD
PEABODY MUSEUM
CAMBRIDGE, MASSACHUSETTS



A POINTE MOUSTÉRIENNE
THE FIRST SPECIMEN FOUND BY THE SCHOOL

THE AMERICAN SCHOOL IN FRANCE OF PREHISTORIC STUDIES

HISTORY

In 1919 Dr. Henri Martin once President of the Société Préhistorique Française, allotted for an indefinite period a tract of ground to American anthropologists for the purposes of prehistoric excavation; the allotment, save for the title, is a gift and it was the wish of the donor that a school should be established by Americans in connection with the excavations where the students should have the opportunity of the study, classification and disposition of specimens.

The site is contiguous to the Mousterian Station of La Quina exploited for more than fifteen years by Dr. Martin and seemingly inexhaustible; it is near the town of Villebois-Lavalette, about twenty-five miles southeast of Angouleme (Charente).

Such a School has now been established under the joint auspices of the Archaeological Institute of America and of the American Anthropological Association; the original idea of Dr. Martin has been amplified, with the result that work has begun and will be carried on, following somewhat the same lines as that accomplished by the American Schools at Athens and Jerusalem.

The money necessary for the first year's work was raised by subscription, a Governing Board of nine members was elected and Professor George Grant MacCurdy of Yale University was appointed Director for one year from July first 1921.

Excavations began the first week in July, and during two months of work, a very fair result in specimens of the upper palaeolithic epochs was attained; most of these are Mousterian as the site accorded the School by Dr. Henri Martin belongs to that culture.

PLANS FOR THE SECOND YEAR 1922–1923

The activities of the School may be divided into work in the field and work in the museum and lecture halls of Paris, and the former may be said to include both excavation and excursions.

Excavations.

Beginning July 1, 1922, it is hoped to spend three months in excavation; the result in numbers of specimens is of less importance than the training in excavation and in the study of specimens that will be the duty and the privilege of the students.

All the digging is done by the students and Director themselves; the technique of excavating a rock-shelter is different from that of all classical excavations, and from that of prehistoric sites in the open, and even from the methods of clearing out a prehistoric cavern; as always, the utmost rigorousness of observation and control is expected of the Director and he in turn will require it of those under him.

The study, classification, cleaning and mending, comparison and exposition of the specimens found will be taught; in doing this full advantage will be taken of the advice, lectures and facilities of Dr. Henri-Martin. He has established on the ground a laboratory, complete in stone and bone collections of the Mousterian epoch, and containing a synoptic collection of neolithic and palaeolithic France.

The founder of this laboratory is most anxious in his kindly interest, to help us by precept and example.

The specimens that are likely to be found are flint Mousterian points, scrapers, and knives, and bones of contemporary animals, many of which bear marks of the flint implements used in battering and cutting. The most common animals represented are the bison, horse, reindeer, stag; besides the hyena, lion, fox, wolf and wild boar. A few hundred feet away a fragment of mammoth tusk was discovered; human remains have also been found at La Quina, and there is always the chance that traces of Neanderthal man may be found.

Other sites of later palaeolithic man abound in the neighborhood and it is hoped that it may even be possible to use part of the autumn in excavating a Gallo-Roman tumulus in Southern France.

Excursions.

It is of the highest importance that trips be made to the classical centre of Les Eyzies, whence the famous caves of Font de Gaume and Combarelles, as well as the rock-shelters of La Ferracie, Le Moustier, La Madeleine, Laugeries Haute and Basse, and many others may be visited.

With good fortune it may be that Professor Capitan, Mr. Peyrony, the Abbé Breuil, and others whose names are intimately connected with these sites will be on the ground; in this case, judging from the universal rule of French scientific hospitality, it may be promised that the visit will be doubly interesting.

A trip to the Pyrenees will be arranged and it may be that Count Bégouen will again introduce the students to the wonders of the bisons of Tuc d'Audubert and the Sorcerer of Trois Frères.

Mas d'Azil, Gargas and other Pyrenean caves must be seen; the detailed itinerary of course will depend on weather, time and finance. In the spring trips will be made to Brittany, where the megalithic monuments, especially the alignments near Carnac will be studied, to some fortified camps, such as the beautiful Camp de Cesar near Dieppe, and to Alesia or some important Gallo-Roman site.

INDOOR WORK—MUSEUMS AND LECTURES.

In and around Paris are the Muséum d'Histoire Naturelle, the Muséum de Paléontologie Humaine, the Trocadéro Museum, and the great Musée des Antiquités Nationales at Saint-Germain-en-Laye. The students will be expected to familiarize themselves with the prehistoric sections of these, and under the supervision of the Director, to specialize on some particular subject and write a thesis connected with it.

There will be museum walks and lectures by the Director, but the main part of the instruction will come from attendance at the lectures of the École d'Anthropologie de Paris and of the other institutions in anthropology of the city.

These are generously opened to the public freely, and the chance of hearing and of knowing personally the men who have made the French School and the museums famous, must be appreciated by the students; the names of Capitan, de Mortillet, Hervé, and Manouvrier at once suggest themselves.

In comparative art, the collections in the Egyptian section of the Louvre, and paintings in the Luxembourg and especially in expositions of realistic modern art must be visited; an appreciation of the place in the history of art of the palaeolithic and neolithic paintings, engravings and carvings can not be gained without some knowledge of the history of technique through the years of history.

REQUIREMENTS

Students may be admitted for the summer months; they will get the advantage of the field work and of some of the excursions. Students classified as "regular" should enter for the whole period of twelve months; these will receive a certificate testifying to the amount and the quality of work done, and will be required to present a thesis showing at least the faculty of independent observation.

For summer students no special experience in prehistoric archaeology is indispensable though a short course of general reading and some visits to museums of prehistoric archaeology are highly desirable. These will vary in the individual cases; those who have any idea of attending should write to the Chairman who will advise them as to what is most feasible and desirable. Nor, for summer students, is an extended knowledge of French absolutely necessary; a few weeks on the ground and the physical necessity of speaking French in daily life will marvellously increase the students' vocabulary.

For "regular" students, some knowledge of prehistoric archaeology, and of elementary anthropology is desirable; those who intend entering should write to the Chairman giving their experience and attainments.

Some knowledge of French is here almost indispensable, though with diligent study during the summer and the Director's aid the deficiency could be made up in part.

FINANCES

The lectures and all the privileges of the School are free, but the students pay their own expenses.

It may be said that the minimum allowance for living in France is twenty to twenty-five francs a day.

There will be a very few opportunities for earning money at the excavations by doing some of the physical labor for which otherwise local workmen would have to be engaged.

In Paris, there are chances of earning money, but, as always, the time and energy put on outside duties hamper the best intensive work.

SCHOLARSHIPS

Two scholarships, one of five thousand and one of two thousand francs are offered for 1922–1923; these will be awarded by competition; applicants should address the Chairman as soon as possible giving the fullest information about themselves.

There will also be established probably a small loan fund; this may be used to tide students who deserve it over an emergency.

GENERAL

Students of both sexes are admitted.

Accommodations near the excavations, while not luxurious, are readily supportable, and the reasonable comfort and well-being of the men and women is looked out for.

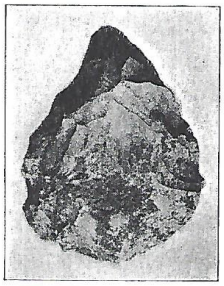
Applications for entrance to the School and all requests for information should be addressed to the Chairman,

CHARLES PEABODY
PEABODY MUSEUM, HARVARD UNIVERSITY
CAMBRIDGE, MASSACHUSETTS

AMERICAN SCHOOL IN FRANCE OF PREHISTORIC STUDIES

ARCHAEOLOGICAL INSTITUTE OF AMERICA

AMERICAN ANTHROPOLOGICAL ASSOCIATION



Two scholarships for the year 1922-1923 are available.

Applicants should have some knowledge of prehistoric archaeology, not necessarily in the European field, and some acquaintance with French; a long course of preparation is not absolutely necessary.

The work of the School begins July first of each year, and continues for one year.

The time is divided between excavations, excursions and study in museums. This is supplemented by attendance at lectures given by French scholars and by the American Director.

Those who consider entering the school, whether or not applicants for scholarships, and whether or not intending to pass the entire year in the School, should address the chairman as soon as possible.

CHARLES PEABODY, Chairman

Peabody Museum Cambridge, Massachusetts

Archaeological Institute of América
American Anthropological Association

GEORGE GRANT MACCURDY
Chairman
YALE UNIVERSITY MUSEUM
NEW HAVEN CONNECTICUT

CHARLES PEABODY Director
PEABODY MUSÉUM
CAMBRIDGE MASSACHUSETTS

PARIS OFFICE
In care of HOTTINGUER et Cº
38 Rue de Provence

AMERICAN SCHOOL IN FRANCE
OF PREHISTORIC STUDIES

PRELIMINARY REPORT ON THE SEASON IN THE FIELD

July 4 - September 15. 1922.

For the year's work from July 1,1922 To July 1, 1923 three scholarships were offered of five thousand, three thousand and two thousand francs respectivély. There were over fifteen applicants representing nearly as many states of the Union. The successful applicants are Miss E. L. Bayles-Smith College 1921, of Cincinnati, Mr. Noguera formerly at Harvard University, of Mexico City, and Mr. J. H. Goff, Oglethorpe University 1920 of Macon Géorgia.

Besides these three, three other students completed the summer's work, and one more spent a month in study in the field.

The work consisted in excavation at the station of La Quina in the forenoon, and in attendance at lectures in the laboratory of Dr. Henri Martin, near by, in the afternoon : of these, one was given by the Doctor himself, who accepted a position on the staff as lecturer in Palaeontology, and a second by the Director on Prehistoric Archaeology in general.

Numerous tests and examinations were required and a thesis was demanded on some special subject germane to the excavations.

The results of the excavations themselves may be said to be satisfactory. The trench (La Quina M.) continued in 1921 under Director MacCurdy, was extended and proved of somewhat varying richness.

The specimens found were predominently Mousterian, but Acheulean tendencies were not lacking- nor were those of Aurignacian quality (in the upper part). In addition, a small grotto (La Quina O') was excavated to a distance of eight metres; the somewhat scanty (though interesting) specimens found here proved almost exclusively Aurignacian.

Animal bones, particularly those of the horse, bison and reindeer were abundant and (as is usually the case) a large number of teeth were preserved.

Including gifts and adjacent Neolithic findings a summary would present the following implements and fragments :

Implements of percussion	75	Discs	7
Side-scrapers	179	Nuclei	81
Front-scrapers	43	Blades	21
Perforators	15	Points, other than Mousterian	31
Knives	66	Planes and "Rugines"	15
Mousterian points	32	Miscellaneous	107

Excursions were made to Les Eyzies, Teyjat, a neighboring Merovingian cemetery, etc. - and at the end of September the students undertook an excursion to the caves of Gargas. Mas d'Azil, Tuc d'Audubert and Trois Frères in the Pyrenean région.

The winter s work will be undertaken by the three scholarship holders, and the others : the latter hope to remain in Paris as long as possible.

This report as well as the school itself would not have existed had it not been for the generosity and kindness of Dr. Henri Martin and his family.

In encouragement, scientific assisiance and in hospitality they have added one more season of incomparable enthusiasm ; the Director and the students are deeply appreciative of this, as well as of the kindness of M. Hubert of the Museum of Saint Germain, and of Mr. Fassemard of Biarritz, who generously delivered lectures before the School on thé Neolithic, Bronze and Iron Ages, and on the Cavern of Isturitz respectively.

Several American travelers visited the school — among them were Professor Field of Brown University and three students in geology who passed a day at the excavations and in the laboratory.

Charles PEABODY
Director.

October 1922.

Appendix J: Inventory of La Quina material at the Putnam Museum showing trench and stratum designations that match LAQ letter combinations at the MPM. Received through personal communication with the Curator of History and Anthropology, Ms. Christina Kastell.

Summary Data	Period/Style: (Dates)	Origin / Place Collected
[AR 730] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 731] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 732] 1923-001 POINT 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 733] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 734] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 735] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 736] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 25902] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; GROTTO, M-TALUS [TALUS GROTTO - M; GROTTO TALUS - SECTION M]
[AR 737] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 738] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 739] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 740] 1923-001 HAMMERSTONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31172] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2, 2B
[AR 741] 1923-001 HAMMERSTONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31172] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA

		2, 2B
[AR 742] 1923-001 HAMMERSTONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31172] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2, 2B
[AR 743] 1923-001 FLINT NUCLEIUS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31175] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 3
[AR 744] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 745] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 746] 1923-001 QUARTZITE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31178] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2, 2A, 3
[AR 747] 1921-013 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 748] 1921-013 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 749] 1921-013 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 750] 1921-013 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 751] 1921-013 KNIFE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 752] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 753] 1923-001 CHOPPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 754] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 755] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M,

		STRATUM 2
[AR 756] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 25902] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; GROTTO, M-TALUS [TALUS GROTTO - M; GROTTO TALUS - SECTION M]
[AR 757] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 758] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 759] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 760] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 761] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 762] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 763] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 764] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 765] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 766] 1923-001 FLINT PIECE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 767] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 768] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 769] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE

		DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 770] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 771] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 772] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 773] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 774] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 775] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 776] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 777] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 778] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 779] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 780] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 781] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 782] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 783] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M,

		STRATUM 2B [STRATA 2B]
[AR 784] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 785] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 786] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31175] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 3
[AR 787] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 788] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 789] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 25902] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; GROTTO, M-TALUS [TALUS GROTTO - M; GROTTO TALUS - SECTION M]
[AR 790] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 791] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31176] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2A
[AR 792] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 793] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 794] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 795] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 796] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 797] 1923-001 SPOKE SHAVE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M

[AR 798] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 799] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 800] 1923-001 CHOPPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13677] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA
[AR 801] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 802] 1923-001 FLINT CHUNK 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 803] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 804] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 805] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 806] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 807] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 808] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 809] 1923-001 SCRAPER 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE

		DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 810] 1923-001 HAMMERSTONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31244] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION ?, STRATUM 4
[AR 811] 1923-001 BONE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 812] 1923-001 TEETH 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 813] 1923-001 TEETH 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 814] 1923-001 ANIMAL BONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 815] 1923-001 BONE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 816] 1923-001 BONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 817] 1923-001 BONE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 818] 1923-001 PIECE OF BONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 819] 1923-001 PIECE OF BONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 820] 1923-001 PIECE OF BONE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31172] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2, 2B
[AR 821] 1923-001 JAW FRAGMENT 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 822] 1923-001 TEETH 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2

[AR 823] 1923-001 BONE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 824] 1923-001 BONE, ANIMAL 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 825] 1923-001 TIBIA, ANIMAL 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 826] 1923-001 BONE 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13688] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2A, 2B
[AR 827] 1923-001 BONE 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 828] 1923-001 BONE TOOL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13690] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION B4 [SECTION B, STRATA 4; SECTION B, STRATUM 4]
[AR 829] 1923-001 BONE, ANIMAL 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 830] 1923-001 BONE 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13688] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATA 2A, 2B
[AR 831] 1923-001 BONE FRAGMENTS, ANIMAL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13693] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, M2
[AR 832] 1923-001 BONE, BURNED 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13677] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA
[AR 833] 1923-001 BONE, ANIMAL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 834] 1923-001 HORN, ANIMAL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 835] 1923-001 BONE, ANIMAL 80,000-35,000BC	MIDDLE MOUSTERIAN	[irn: 13696] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M
[AR 836] 1923-001 BONE, ANIMAL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13677] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA

[AR 837] TEETH, ANIMAL 80,000-35,000BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 838] 1923-001 BONE FRAGMENT 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 839] 1923-001 BONE FRAGMENTS 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 840] 1923-001 TEETH 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 31162] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2
[AR 840 A] 1923-001 SOIL SAMPLE 80,000-35,000 BP	MIDDLE MOUSTERIAN	[irn: 13689] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M, STRATUM 2B [STRATA 2B]
[AR 1197] 1921-013 BONE, ANIMAL 80,000-35,000 BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1198] 1921-013 TEETH, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1199] 1921-013 BONE, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1200] BONE, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1201] 1921-013 TEETH, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1202] 1921-013 BONE, HORSE 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1203] 1921-013 TEETH, BISON 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1204] 1921-013 BONE, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1205] 1921-013 TEETH, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1206] 1921-013 TEETH, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1207] 1921-013 TEETH, ANIMAL 80,000-35,000 BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1208] 1921-013 TOOTH, ANIMAL 80,000-35,000 BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE

		DEPARTMENT, LA QUINA; SECTION M3
[AR 1209] 1921-013 TEETH, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1210] 1921-013 BONE, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1211] 1921-013 BONE, ANIMAL 80,000-35,000BP	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3
[AR 1212] 1921-013 BONE, ANIMAL 80,000-35,000	UPPER MOUSTERIAN	[irn: 13708] - EUROPE, FRANCE, POITOU-CHARENTES REGION, CHARENTE DEPARTMENT, LA QUINA; SECTION M3

Appendix K: Research History of Paleolithic Stes in the MPM Collection

Gorge d'Enfer

Gorge d'Enfer is located in the Commune of Les Eyzies-de-Tayac (Dordogne) several meters down from Laugerie-Haute. The Gorge is a small west-east facing valley that contains a number of Paleolithic sites, including the Abri du Poisson, Grand Abri, Abri Lartet, Abri Pasquet, and Oreille d'Enfer (Knecht 1991: 119). Unfortunately, Doerflinger does not specify which of the five sites he visited. Abri Lartet, Abri du Poisson and Abri Pasquet were excavated during the late part of the 19th and early 20th century and contained Aurignacian industry. Abri Pasquet is located on a rocky terrace at the entrance to the Gorge d'Enfer. It was excavated by three different individuals; including G. Peyrille who also discovered the site, D. Peyrony in 1906, and R. Daniel in 1909 (Knecht 1991: 120). Abri Lartet and Abri du Poisson are located on the left bank of the stream and are separated by a single stone.

Abri Lartet was first excavated by Lartet and Christy in 1863. It was later excavated by M. Massias and lastly by D. Peyrony in 1918. Abri du Poisson was excavated first by P. Girod in 1892, who called the site Gorge d'Enfer B. M., Galou dug at the site in 1898 and M. Marson in 1912, who found an engraved salmon sculpture, which it was later named after (Knecht: 1991: 121). The detailed nature of the fish allows for its identification. This was a significant find as fish are rarely depicted in cave art and it remains one of the oldest representations of fish in the world (Leroi-Gourhan 1984). The fish sculpture was almost a victim of both looting and sale to private collectors in the early 20th century, but was protected by Peyrony. This piece got the attention of the French government regarding the problem of the rampant sale of archaeological materials in the region and was crucial in speeding up the process of the law protecting historic monuments in 1913 (White 2006). Lastly D. Peyrony excavated Abri du Poisson in 1917. Peyrony (1932) and de Sonneville-Bordes (1960) have discussed the various lithic assemblages from Abri du Poisson.

Laugerie-Haute

Laugerie-Haute is located on the right bank of the Vezere and is approximately two kilometers upstream from Les Eyezies (Knecht 1991). The cave is of considerable size, measuring 180 meters in length with a breadth of 35 meters (Nature Publishing Group 1938). The site was first excavated by Lartet and Christy in 1863 followed by several unscientific and destructive excursions (Laville et al. 1980). Laugerie-Haute was acquired by the State right before the First World War due to allegations of espionage against Hauser who excavated at the site in 1914 (Nature Publishing Group 1938). Methodical excavations began with D. and E. Peyrony from 1921 to 1935 and revealed Perigordian, Aurignacian, Solutrean and Magdalenian levels, which showed that the site had been occupied continuously for about 20,000 years. Intriguingly, it is said that the roof began to collapse during Magdalenian occupation causing its inhabitants to abandon the shelter and migrate to the nearby Laugerie-Basse, which begins occupation in Magdalenian III (Nature Publishing Group 1938). F. Bordes excavated Laugerie-Haute between the years of 1955 and 1957. He was able to provide an in-depth and detailed stratigraphy with a total of 42 levels (Knecht 1991: 114, Laville et al. 1980). This new data allowed for the analyses of sedimentology, paleontology, artifact industries and palynology (Bordes 1958; de Sonneville-Bordes and Bordes 1958; Bordes et al. 1969).

Champs-Blancs

Champs-Blancs (also known as Jamblancs and Jean-Blancs) is located in Commune Burinquel on the right bank of the Couze (Breuil 1952: 304). Publications based on this site are rare and an accurate and detailed history of excavations has not been found. It is said that amateur excavations began in 1880 (Cretin 1996: 243-244). Scientific excavations began in 1911 conducted by Peyrony. Most recent

excavations at Champs-Blancs were conducted by J.J. Cleyet-Merle in the 1980s and 1990s. The site contains artifacts from both the upper Solutrean and Magdalenian cultures (Cretin 1996). Various animals, such as the deer and bison, have been found carved into limestone slabs at the site (Breuil 1952).

Laugerie-Basse

Laugerie-Basse is located in the French commune of Les Eyzies-de-Tayac-Sireuil on the right bank of the Vézère River (Maury 1925). The rock shelter is about fifty meters long and fifteen meters deep. The site is comprised of two rock shelters, including the Abri Classique and Abri des Marseilles. Unfortunately, today various buildings and private homes are built on the Abri Classique, which had been fully excavated. The Abri des Marseilles is still intact and can be visited by the public, located 50 meters from the former. The public can see what was left behind from past excavations as well.

The rock shelters in the area were formed by the water of the Vézère river, allowing for a number of attractive living spaces with abundant resources for early humans. A large concentration of artifacts was found at the site. In fact, the area has an uninterrupted occupation up until the present day (Maury 1925). The first excavations at Abri Classique were undertaken by Lartet and Christy in the 1863. Marquis de Vibraye began separate excavations in 1864, finding the first Venus figure in France (Daniel 1972b: 73). Other excavators include Elie Massenat, Paul Girod, L. Delpeyrat, Michel Hardy, Emile Riviere and Gustave Marty (Rossout 2000). Abri des Marseilles remained almost untouched until 1912, when Jean Maury and chemist Joesph Achille Le Bel began to excavate the site finding sophisticated decorated objects, such as a limestone slab with a horse carving. Le Bel acquired the property in May of 1913 and it is now owned by the Chemical Society of France. De Mortillet studied the stratigraphy of the site in 1913; and he found several levels characteristic of Upper Magdalenian culture, including III, IV, V, and VI (Daniel 1972b: 73).

Soucy

Today, the site of Soucy is merely a cliff rock approximately ten meters high. The former rock shelter is located on the right bank of the Dordogne River about sixty meters from Commune Lalinde (White 1988). Soucy was discovered by Mr. Bracquemont in 1881, who excavated with captain Masson for two years. Bracquemont's personal collection was donated to the Toulouse Museum (Daniel 1972a: 492). The site was excavated several more times in the succeeding years. In 1884, under the direction of Maurice Loving, a number of lithic and worked bone tools were collected, which are stored in the Perigord Museum, Auguste de Coincy excavated in 1885 and in 1910, M.M. Delugin and Raphael Tarel resumed digging and unearthed several levels belonging to the Upper Magdalenian. In 1918, Peyrony explored what was left of the rockshelter. (Daniel 1972a: 492, Peyrony 1918).

Pair-non-Pair

The Grotte de Pair-Non-Pair is located in the commune of Prignac-et-Marcamps and measures about 30 meters deep. There have been several entrances to the cave due to the original collapsing in the Chatelperronian period (Dubourg et al. 1996). It was discovered in March of 1881 by a vineyard owner and prehistory enthusiast, Francois Daleau. He spent about 30 years excavating at the site until 1913 (Moisan 1994: 39). At the start of excavation, the cave was practically full of sediment. The cave had a height of only 70cm (Breuil 1952: 319). Therefore, Daleau had to excavate vertically, which he took great care and wrote detailed daily notes.

In 1883, Daleau sprayed the cave wall with water and noticed an equine animal engraving on the wall of Pair-Non-Pair, but he did not study the cave art until 13 years after their discovery (Breuil 1952: 319; Moisan 1994: 39, See Delluc and Delluc 1997: 41-42 for details pertaining to these discoveries). In

1896, Dalaeu made plaster casts of some of the animals portrayed in the cave art, which are now housed in the Saint-Germain and Bordeaux Museums (Breuil 1952: 319).

Pair-Non-Pair contained two main periods of occupation spanning over 60,000 years. During the first occupation, Neanderthals inhabited the space approximately 80,000 B.P, which corresponds with the Mousterian assemblages found at the site (Breuil 1952). Around 40,000 B.P. the entrance collapsed greatly reducing the size of the cave (Delluc and Delluc 1997: 42). After the collapse, early modern humans belonging to the Aurignacian and Perigordian cultures began to use the cave through different entrances located near the back of the cave. These individuals are responsible for the animal engravings inside the shelter (Breuil 1952). The ibex dominates cave art at Pair-Non-Pair and is followed by horse, deer, cattle and mammoths. Faunal remains found at the site do not match the animals engraved on the cave walls, which consists mostly of reindeer. As noted earlier in Chapter 3, Pair-Non-Pair's cave art is one of the most ancient examples of art made by early modern humans and it was significant in providing evidence of the antiquity of cave art (Bahn and Vertut 1997: 21). Many of the cave engravings were also copied by Breuil from 1934 to 1937 (See Breuil 1952 for detailed descriptions of cave art at Pair-Non-Pair).

La Quina

The collapsed rock shelter of La Quina is located in the Charente region of France on the left bank of a tributary of the Dordogne , the Voultron River (See Figure 28). Gustave Chauvet first discovered the site in 1872 during the construction of a road between Villebois-Lavalette and Le Pontaroux (Colten and Hill 2007: 158; Knecht 1991: 156). The shelter is divided into two stations, the first is upstream and contains material from the Mousterian industry and the second downstream station has Aurignacian archaeological material. The La Quina rock shelter has a length of more than 700 meters (Knecht 1991: 156).

La Quina has been excavated by three different groups, the first being Henri Martin. He excavated at La Quina from 1905 to 1936, even setting up a lab on site and allowing a field school (ASPR) to conduct excavations along side for several seasons (Knecht 1991; MacCurdy 1922; Peabody 1923). Martin was responsible for sequencing the site and finding Chatelperronian assemblages directly below Aurignacian. He also found that lithic assemblages were dominated by scrapers and were comparable to Abri Blanchard and faunal material was heavily made up of reindeer (Henri-Martin 1961). Excavations were later directed by his daughter, Germaine Henri-Martin in 1953 and lastly by Arthur Jelinek and André Debénath. Radiocarbon dates suggest a date range from 35,250$\pm$530 to 43,130 $\pm$700 B.P. These dates are consistent to Neanderthal and Mousterian industry found at the site (Colton and Hill 2007: 158).

Appendix L: MPM French Paleolithic Faunal Collection Photographs

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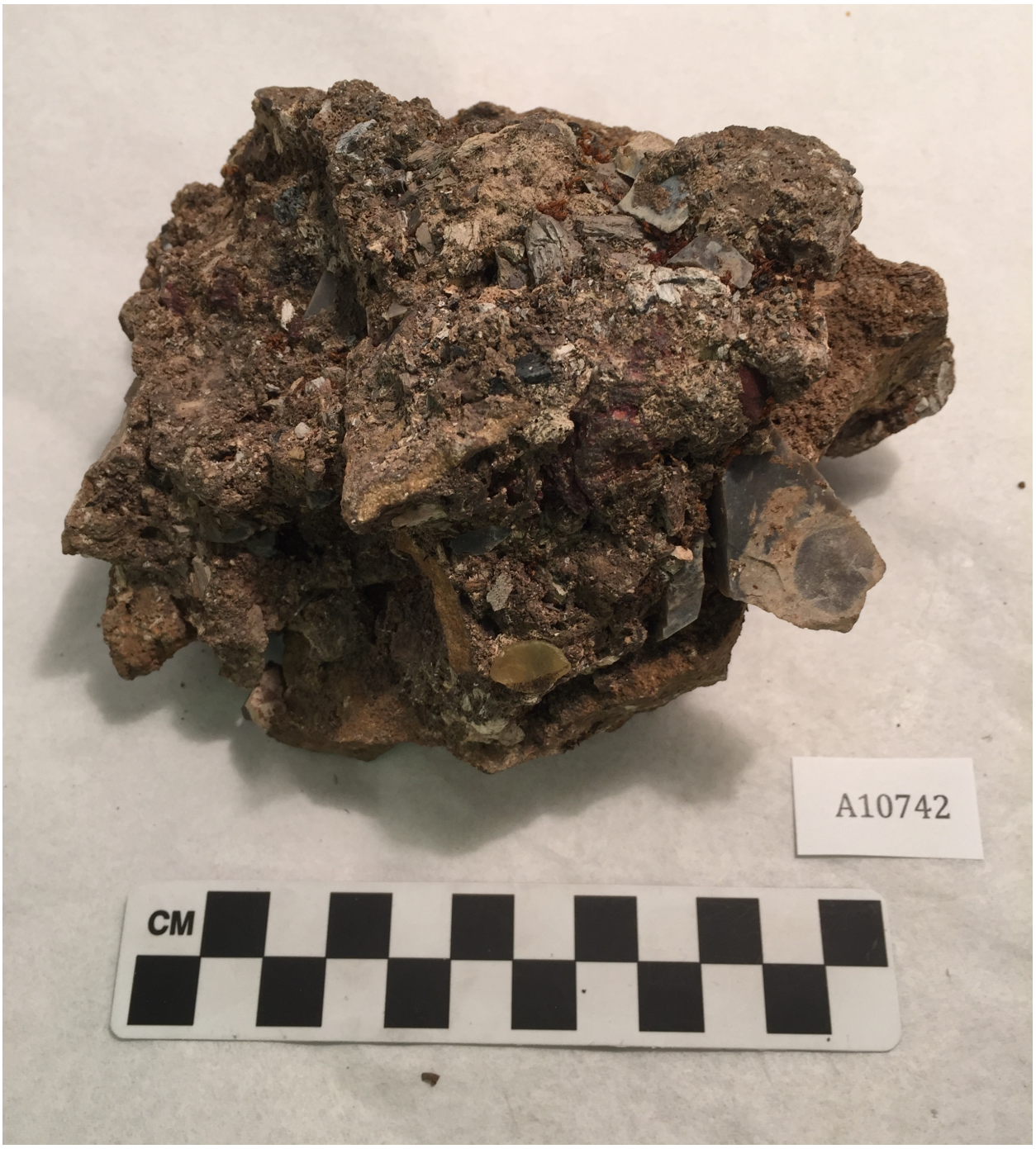
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CHAMPS BLANCS
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Cne. Beaumont (Dordogne)
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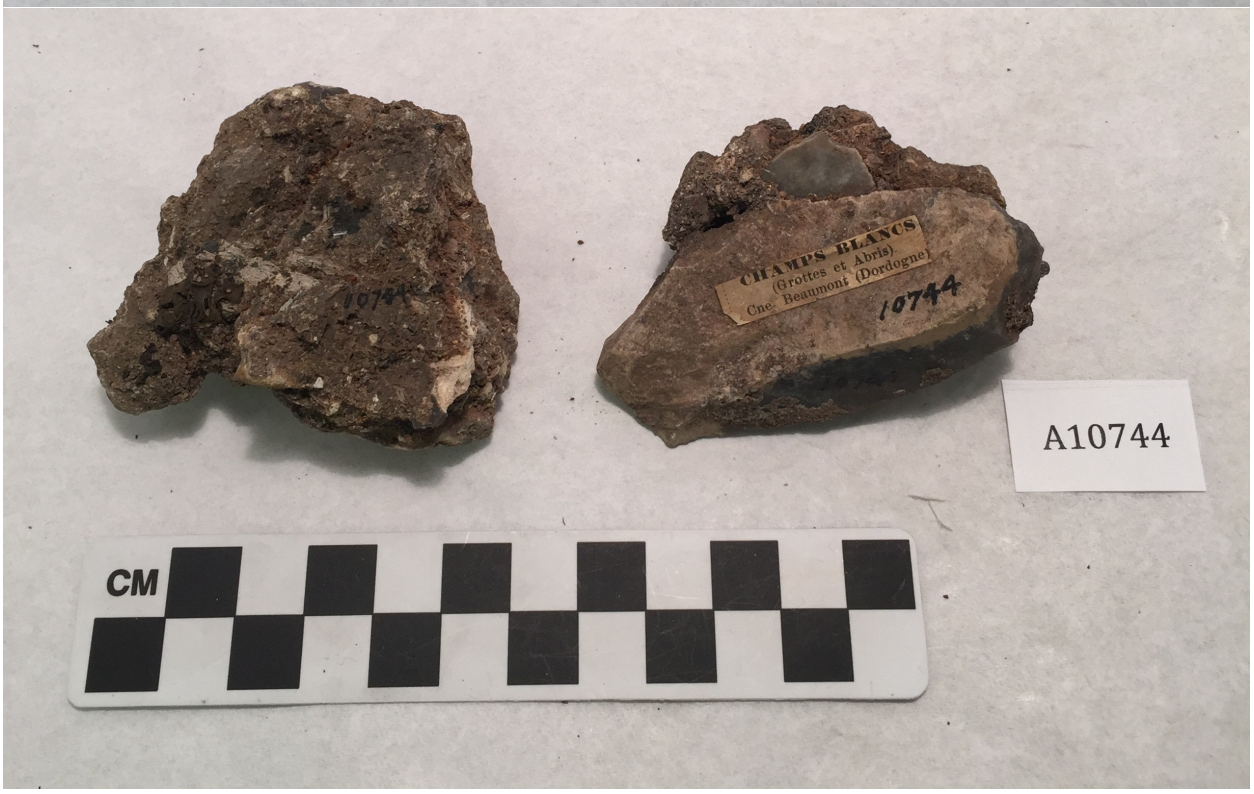
CHAMPS BLANCS
(Grottes et Abris)
Cne Beaumont (Dordogne)
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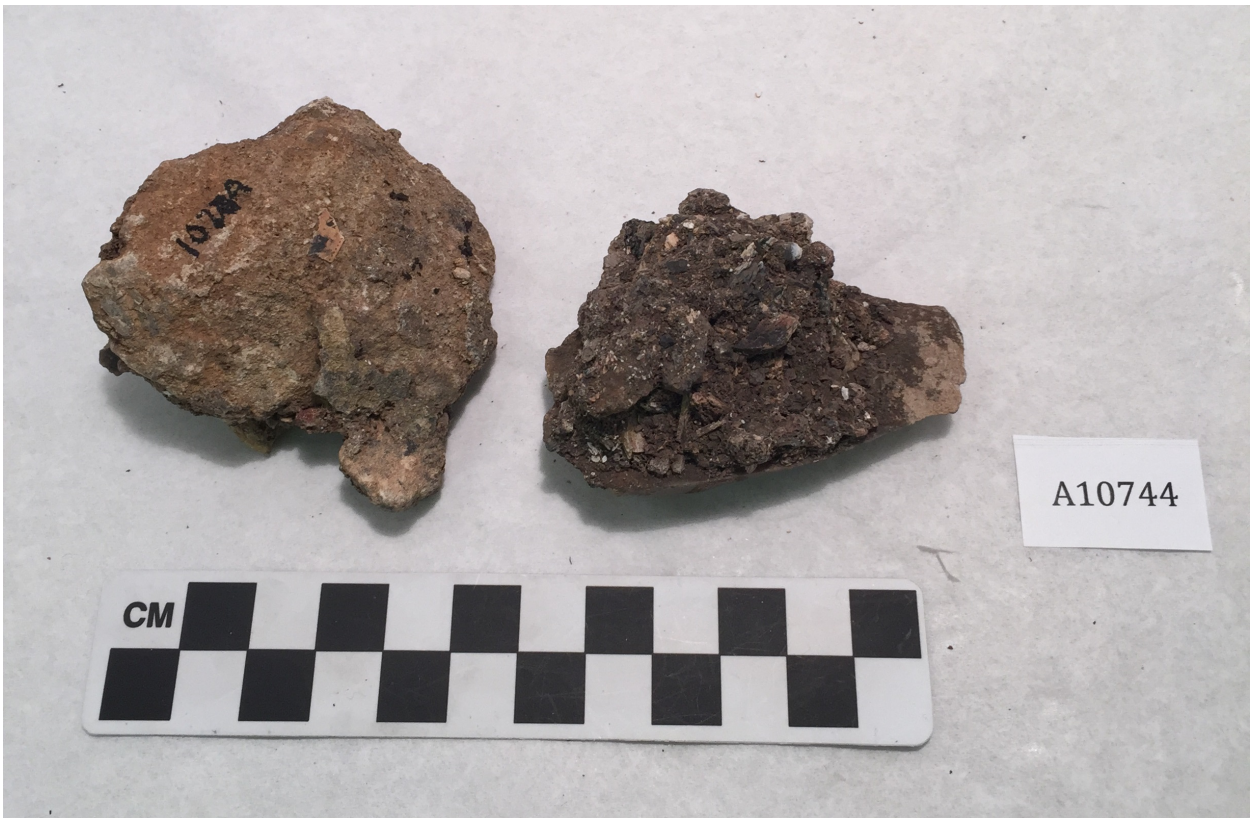
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(Grotte)
Cne. Lalinde (Dordogne)
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MAGNAC 62.
(Abris sous Roches)
Cne. Magnac (Dordogne)
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MAGNAC 61.
(Abris sous Roches)
Cne. Magnac (Dordogne)
MAGNAC 63.
(Abris sous Roches)
Cne. Magnac (Dordogne)
MAGNAC 52
(Abris sous Roches)
Cne. Magnac (Dordogne)
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MAGNAC 65.
(Abris sous Roches)
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(Abris sous Roches)
Cne. Magnac (Dordogne)
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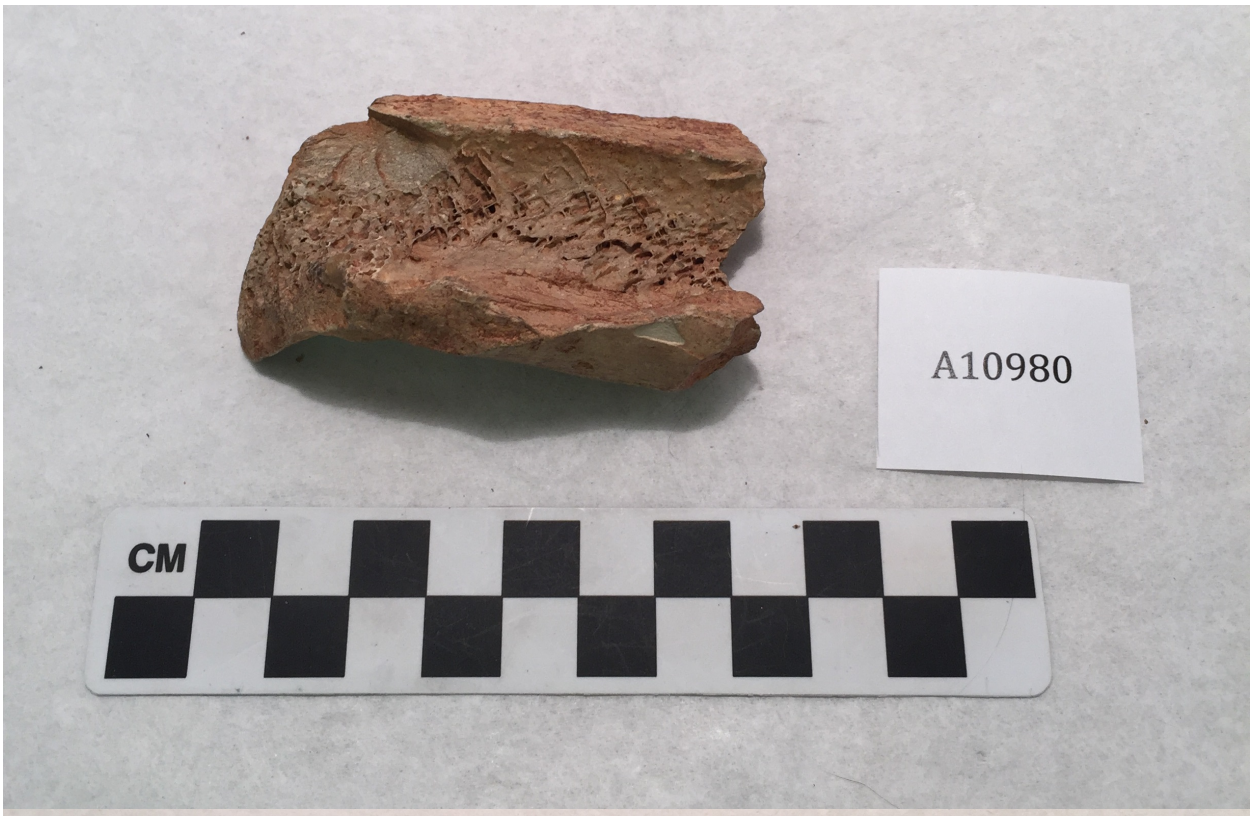
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SOUCY
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F. PAIA-NON-PAIR D.
Marcamps (Gironde)
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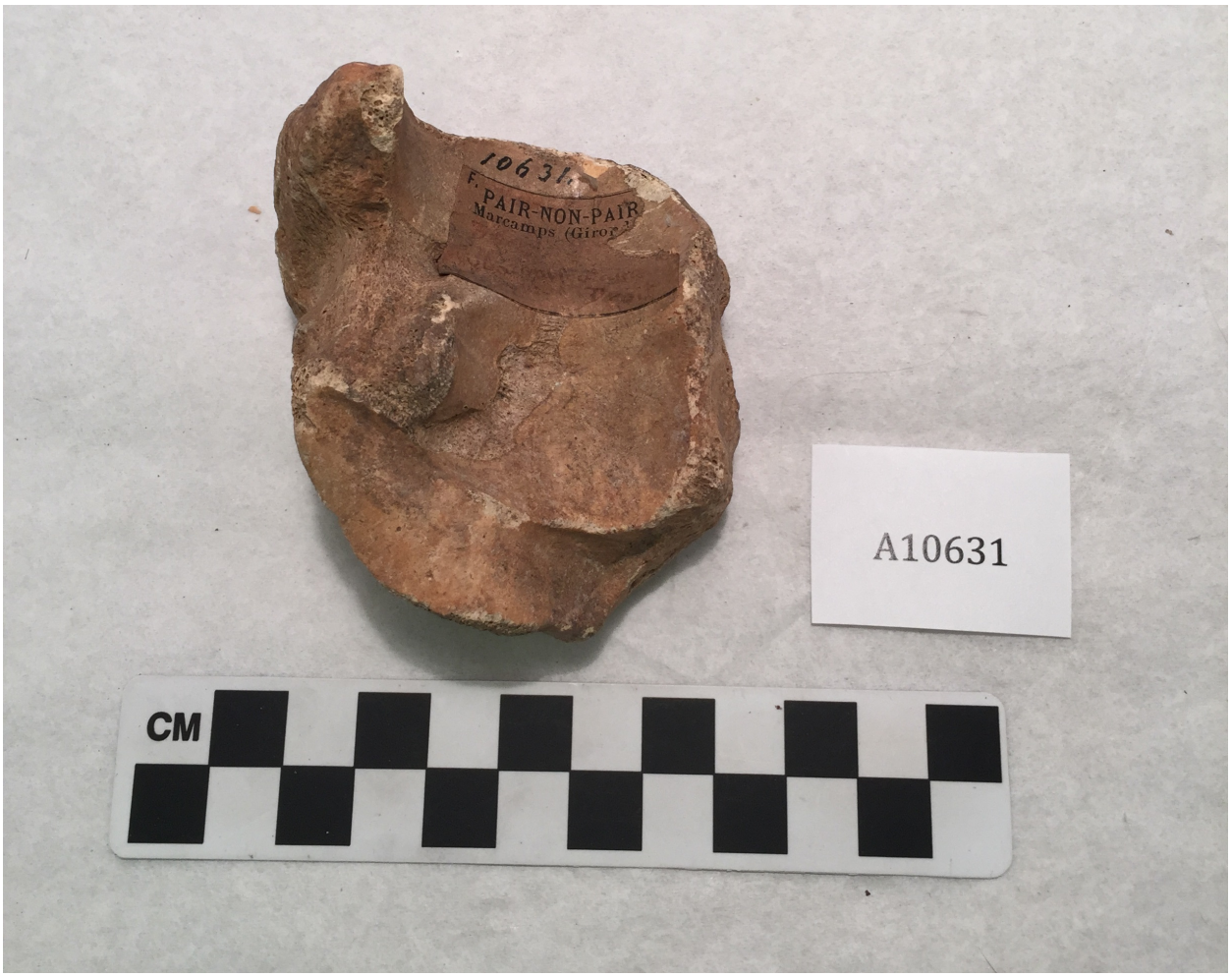
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PAIR-NON-PAIR D.
Marcamps (Gironde)
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Marcamps (Gironde)
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Astragale Droit
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Marcamps (Gironde)
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F. PAIR-NON-PAIR D.
Marcamps (Gironde)
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Pair-non-Pair D.
Marcamps (Gironde)
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F. PAIR-NON-PAIR D.
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F. Pair-non-Pair D.
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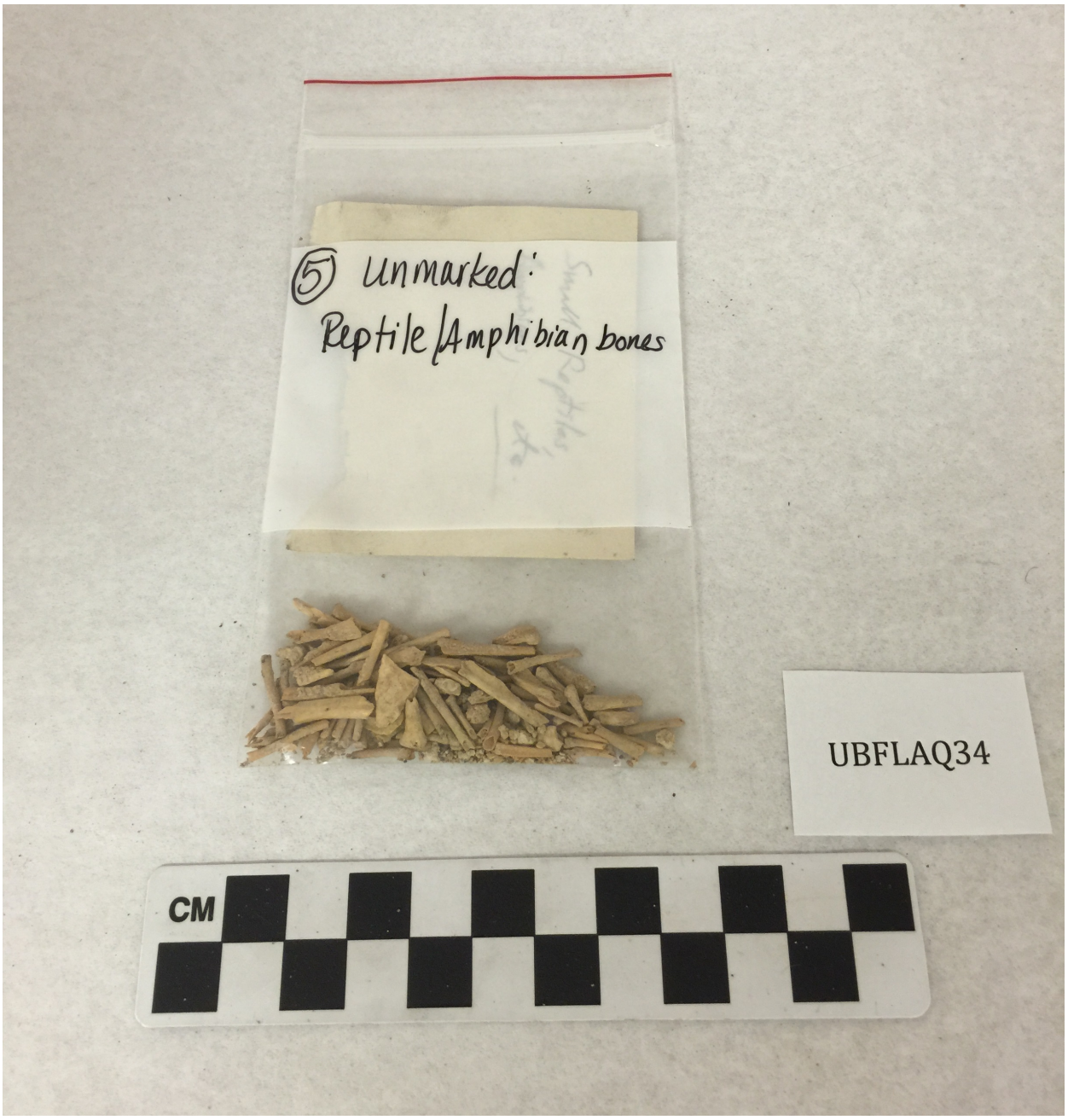
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Reptile/Amphibian bones
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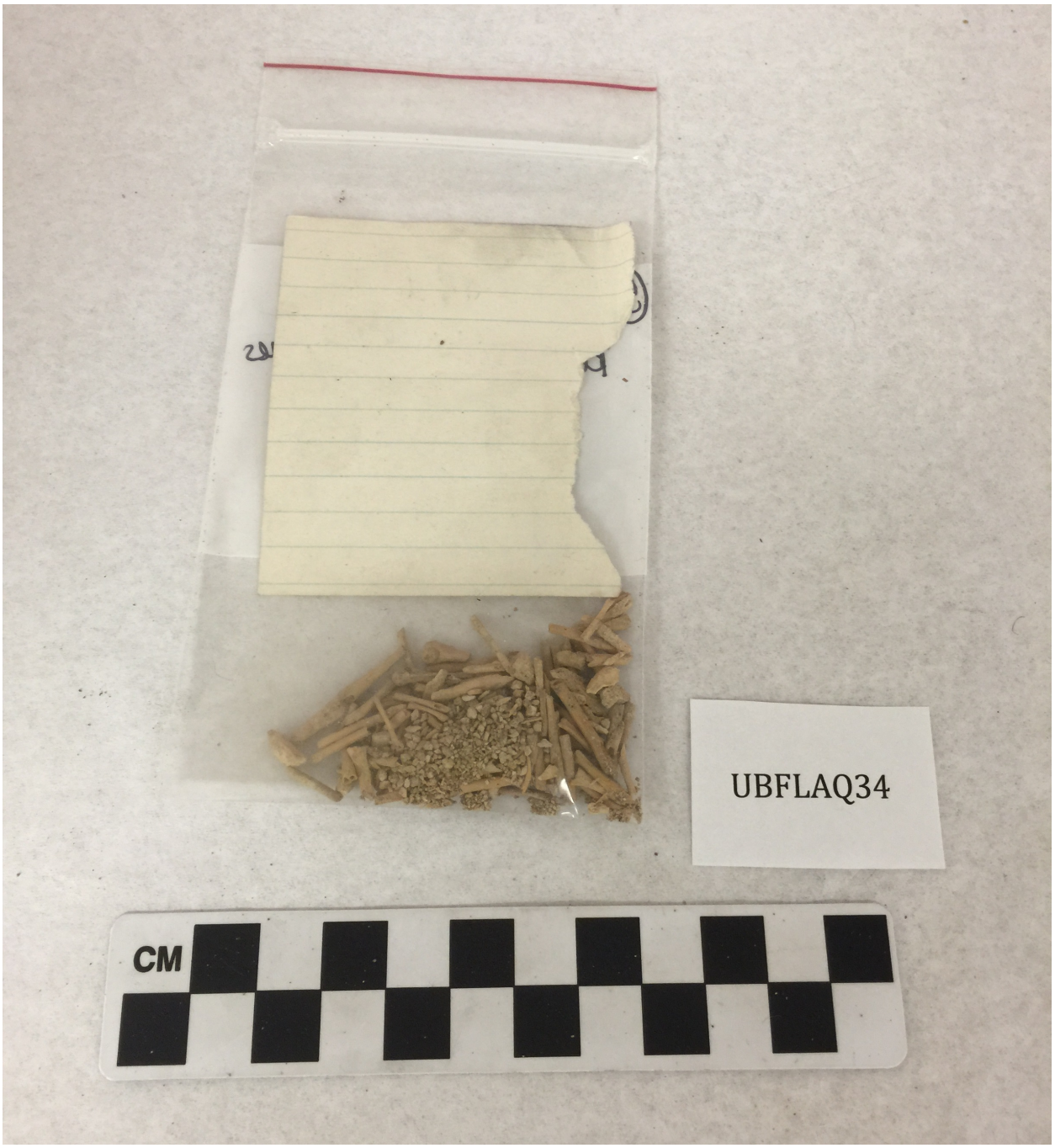
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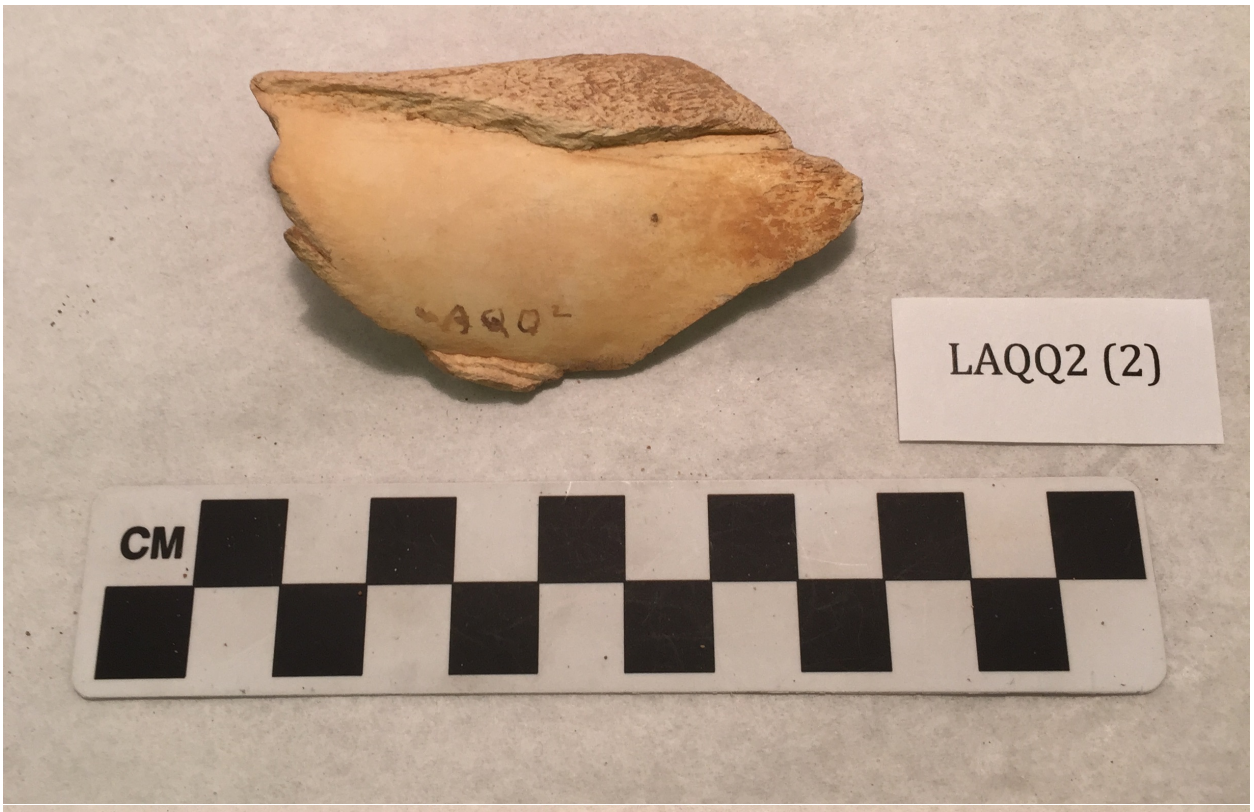
LAQQ2 (2)
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LAQQ2 (2)
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LAQMB
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LAQMB
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LAQB4 (8)
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LAQB4 (8)
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LAQB4 (9)
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LAQB4 (9)
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LAQB4 (10)
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LAQB4 (10)
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LAQB4 (11)
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LAQB4 (11)
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LAQB4 (12)
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LAQB4 (12)
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LAQB4 (13)
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LAQB4 (13)
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LAQB4 (14)
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LAQB4 (14)
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LAQM2T
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LAQM2T
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LAQM22B(3)
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LAQM22B(3)
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LAQM22B(4)
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LAQM22B(4)
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LAQM22B(5)
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LAQM22B(5)
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LAQM2
2B
LAQM22B(6)
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LAQM22B(6)
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LAQM22B(7)
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LAQM22B(7)
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LAQM22B
LAQM22B(8)
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LAQM22B(8)
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LAQM22B(9)
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LAQM22B(9)
CM

LAQM3 (1)
CM

LAQM3 (1)
CM

LAQM
S.T
LAQMGT (1)
+
(2)
CM

LAQMGT (1)
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(2)
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Unmarked, found with LQM2
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Unmarked, found with LQM2
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Unmarked, found with LAQM22
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Unmarked, found with LAQM22
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Unmarked, found with LAQB4
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Unmarked, found with LAQB4
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Unmarked, found with LAQM22B
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Unmarked, found with LAQM22B
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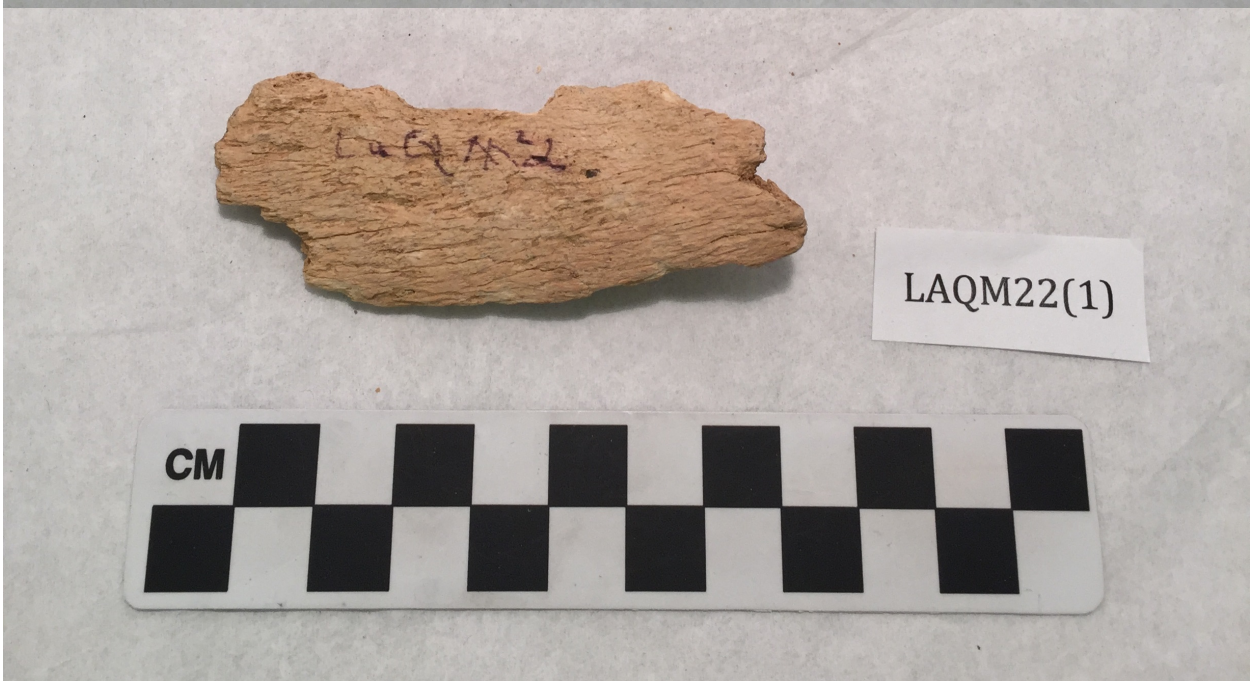
LAQM22(1)
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LAQM22(1)
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LAQM22(2)
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LAQ 13 4
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LAQB4
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LAQM
LAQM
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LAQM2
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LAQM2
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LAQM22
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LAQM22
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LAQM2LB
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LAQM2LB
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LAQM22A
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LAQM22A
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CM
LAQM22B
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CM
CM
LAQM22B

LAQM(9 or q?) T
CM

LAQM(9 or q?) T
CM

L.Q. M2
L.Q.M2
L.Q.M2
L.Q.M2
L.Q.M2
LQM2
CM

L.Q. M2
L.Q. M2
L.Q. M2
L.Q. M2
LQM2
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UBFLAQ1
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UBFLAQ1
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UBFLAQ2
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UBFLAQ5
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UBFLAQ6
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UBFLAQ9
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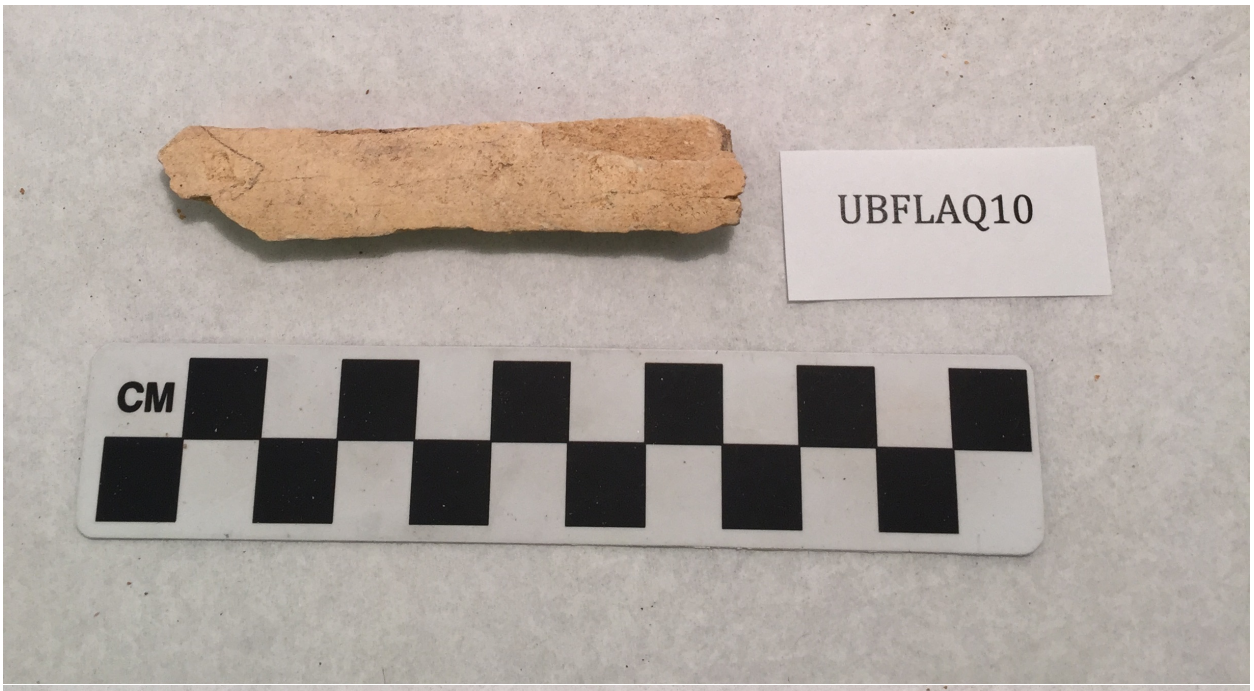
UBFLAQ10
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UBFLAQ11
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UBFLAQ12
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UBFLAQ12
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UBFLAQ13
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UBFLAQ13
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UBFLAQ14
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UBFLAQ14
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UBFLAQ15
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UBFLAQ15
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UBFLAQ16
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UBFLAQ16
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UBFLAQ17
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UBFLAQ17
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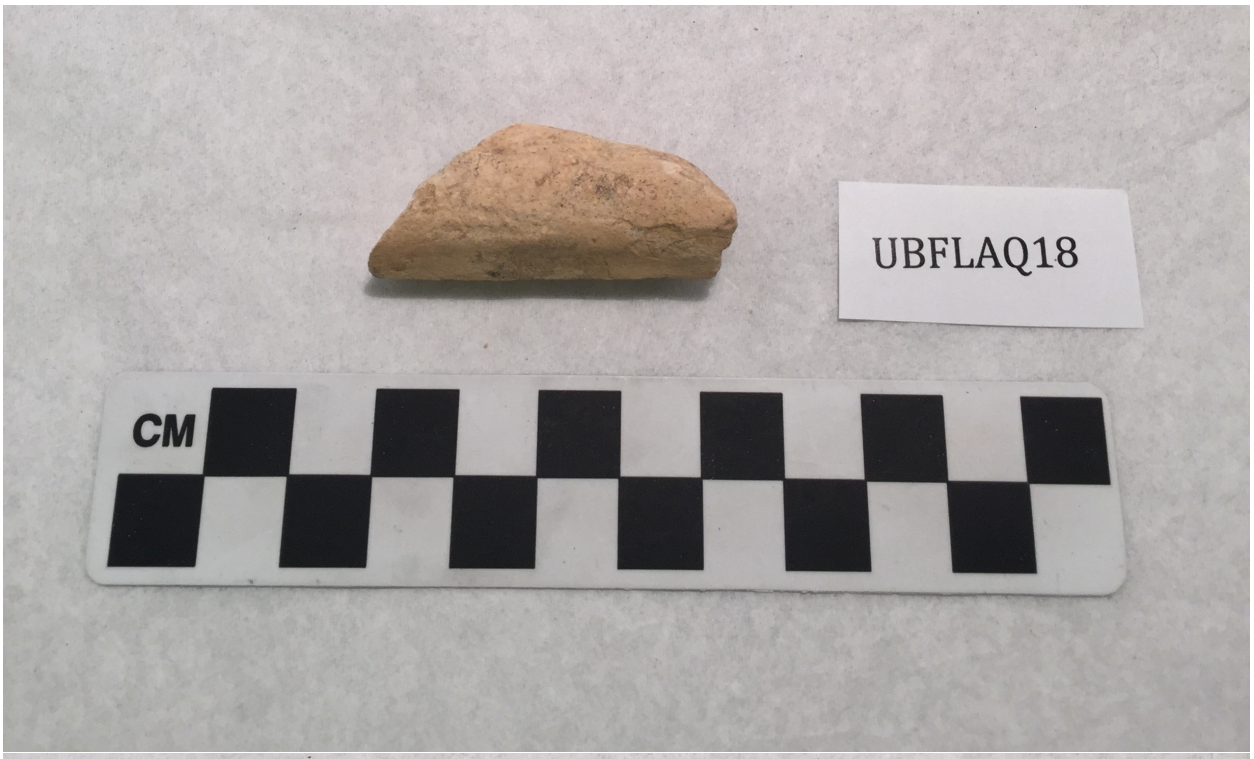
UBFLAQ18
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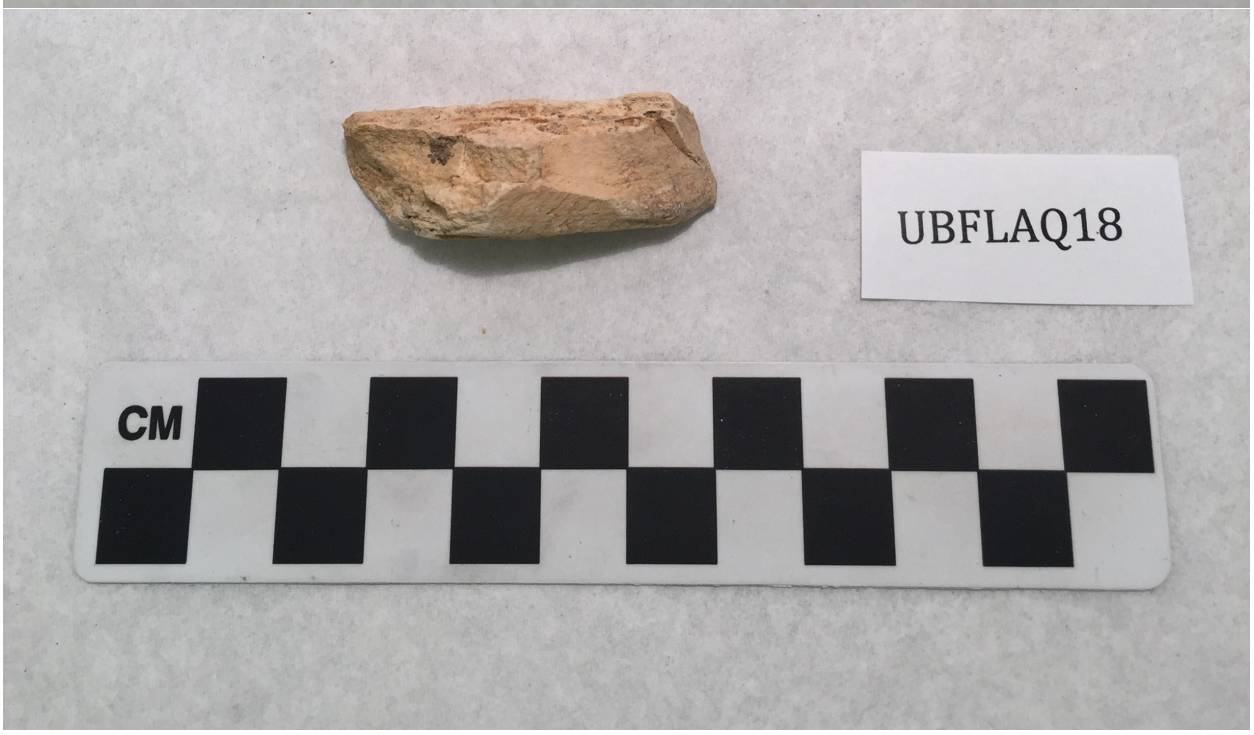
UBFLAQ18
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UBFLAQ19
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UBFLAQ19
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UBFLAQ20
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UBFLAQ21
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UBFLAQ26
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UBFLAQ26
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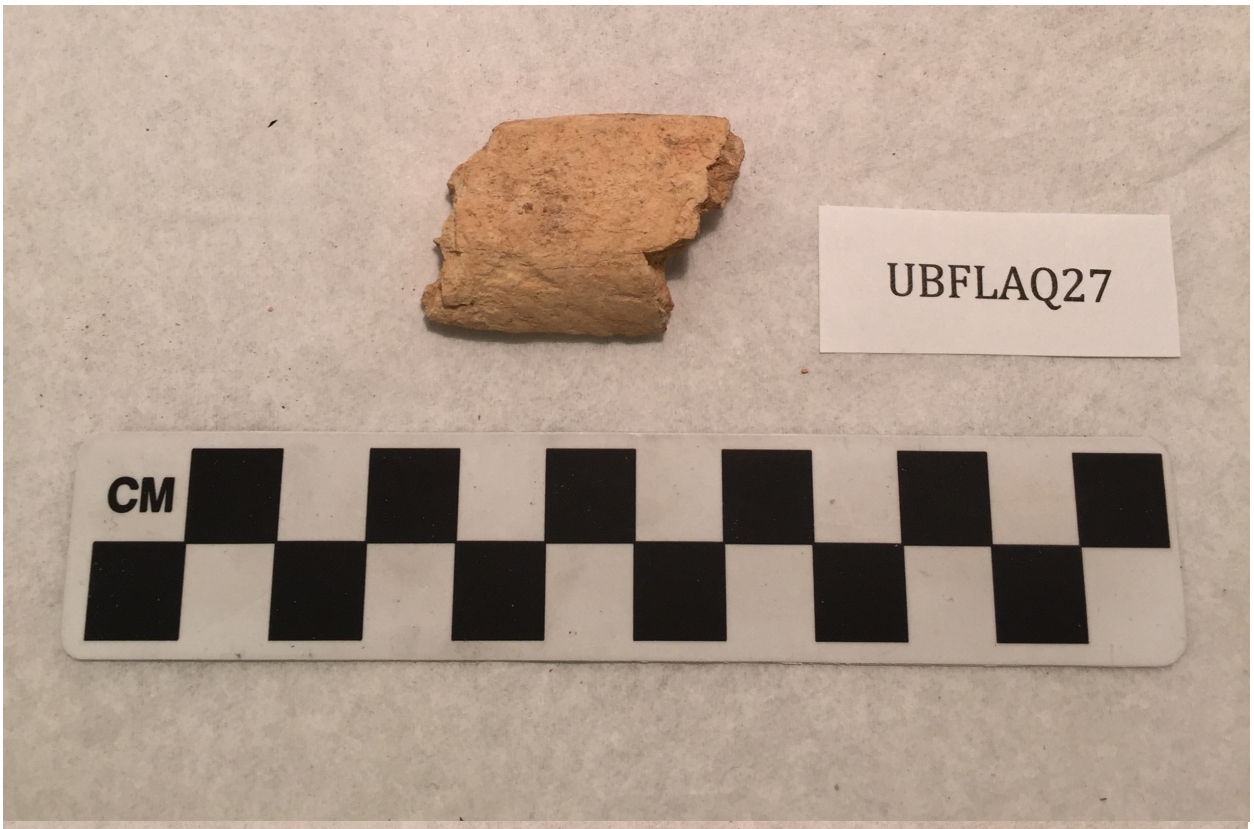
UBFLAQ27
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UBFLAQ27
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UBFLAQ28
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UBFLAQ28
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UBFLAQ29
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UBFLAQ29
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