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COLLECTING AZTALAN: AN ANALYSIS OF THE CHIPPED STONE PROJECTILE POINTS FROM THE MILWAUKEE PUBLIC MUSEUM'S AZTALAN (JE-0001) LEGACY COLLECTIONS

by

Kevin J. Akemann

A Thesis Submitted in
Partial Fulfillment of the
Requirement for the Degree of
Master of Science
in Anthropology
at
The University of Wisconsin-Milwaukee

December 2019

ABSTRACT

COLLECTING AZTALAN: AN ANALYSIS OF THE CHIPPED STONE PROJECTILE POINTS FROM THE MILWAUKEE PUBLIC MUSEUM'S AZTALAN (JE-0001) LEGACY COLLECTIONS

by

Kevin J. Akemann

The University of Wisconsin-Milwaukee, 2019
Under the Supervision of John D. Richards, Ph.D.

This thesis is a qualitative analysis of chipped stone projectile points from the Milwaukee Public Museum that were obtained from private collectors who reportedly surface collected these artifacts from the site of Aztalan (47-JE-0001). Private collections like these, referred to as Legacy Collections, are the result of early collecting and excavation practices, by private and professional individuals, and in this research, have been only partially examined in relation to Aztalan and mostly overlooked in favor of materials with more reliable and scientific provenience. Through this research I developed a database from the MPM's digital inventory, handwritten catalogs, accession records, and collector provided documents to identify all potential artifacts associated with Aztalan. Each object and its corresponding collector were evaluated to determine how probable it is that the artifact came from the site locality. Once completed, the projectile points from these collections were compared with the previously reported analysis of points from Samuel Barrett's excavations throughout the site (Sampson 2008). The results of this analysis show that there are significantly more types and quantities of projectile points among the privately surface collected material than are represented in the Barrett excavations. A subset of the privately collected is consistent with Barrett's excavated assemblage but may be biased by collecting practices. Overall, research into museum legacy

collections has the potential to assist us in better understanding the archaeological record of a site, as well as to recognize the potential loss from unfettered private collecting.

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In memory of my father, John Frank,
whom I love and miss every day.

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I would like to give special thanks to my family. My mother Roxanne, my father John Sr., and my brother John Jr. for their love, support, encouragement, and patience, without which this graduate thesis would not have been successful. I would also like to thank my partner, Amanda Last, for her love, support, encouragement, and for acting as an excellent sounding board as this thesis coalesced. I would also like to thank Dr. Jeff Behm, whose support since my first field school has kept me grounded

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Chapter 1:
Introduction

Thesis Statement

This thesis is a comprehensive inventory of the Milwaukee Public Museum's privately collected Aztalan (47JE0001) material and a qualitative analysis of the chipped stone projectile points from those collections. These collections include 1409 individual catalog entries, some containing multiple artifacts, and which have been acquired by the museum since its founding. The analysis presented here utilizes Sampson's (2008) study of projectile points from the S.A. Barrett (1933) excavations of the site. Sampson's analysis focused on excavated material while the collector data presented here is the result of surface finds. Thus, the two data sets should be contextually representative of the whole site, with one originating from reported surface finds and the other from professionally excavated contexts. The goals of this research are to investigate how consistent the privately collected point assemblages are with the professionally excavated points based on point types, quantities, and raw material type. In addition, the analysis was designed to identify the degree to which the privately collected material may be biased by the collecting practices and preferences of collectors as well as generating new insights based on an examination of the surface collected material. In the process, this research would also: 1) identify all potential objects in the MPM's collections that may have Aztalan association; 2) identify and verify the location of each object within the MPM's exhibits and storage; 3) determine what association each collection had to the site of Aztalan; and 4) photo document the projectile points for future research.

In preparing the private materials for this thesis, an inventory was compiled from the MPM's digital inventory, handwritten catalogs, and accession records. A level of confidence in the provenience of the materials was assigned to each private collection based on this inventory to evaluate the potential each collection has of originating from Aztalan. Comparing the two

different assemblages of point types strongly suggest that the donated collections are not consistent with the MPM collection points excavated by Samuel Barrett. A smaller subset of the privately collected assemblage is more consistent but is biased towards quartz and quartzite lithic materials. There is evidence also of a previously unknown Late Paleoindian component at the site of Aztalan within this smaller subset of the collection. This process shows the steps necessary to evaluate one or more collections on the strength of their geographical provenience. It also demonstrates one example of how legacy collections in museums can be evaluated using professionally excavated artifact assemblages and can continue to contribute to our understanding of the archaeological record.

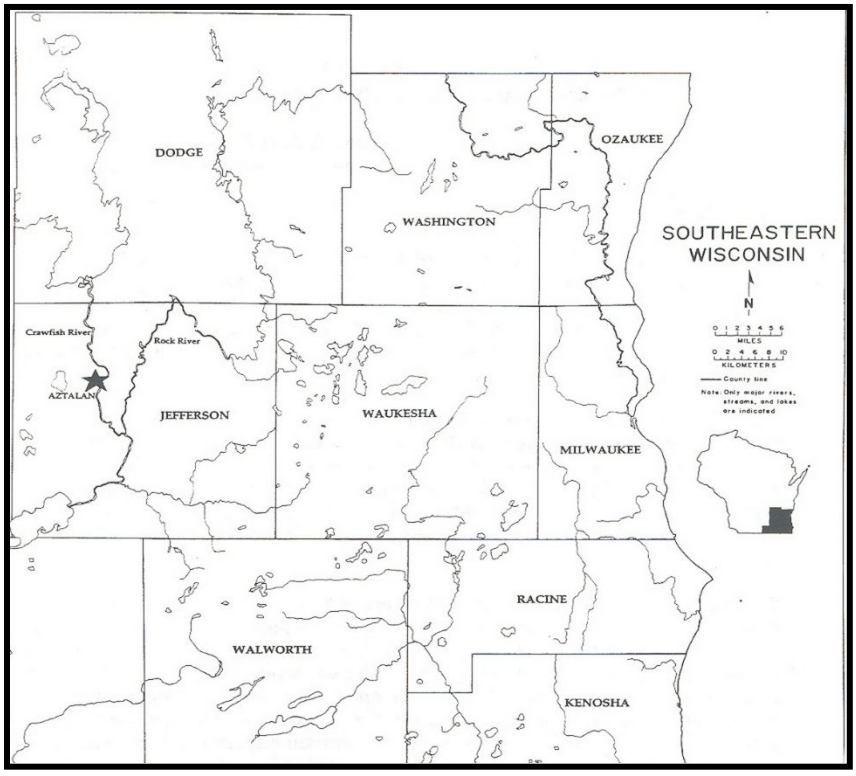

Figure 1.1: Location of Aztalan in relation to SE Wisconsin (Sampson 2008:1)

Site Background - Aztalan

Aztalan is a multi-component site consisting of a palisaded village and ceremonial mound complex oriented around a central plaza area (Birmingham & Goldstein 2006, Richards 2007a). The site is located in sections 17, 20, and 21 of the civil Township of Aztalan (Township 17N Range 14E) in Jefferson County. It is situated along the western bank of the Crawfish River, approximately five miles north of the confluence with the Rock River, three miles east of Lake Mills, and 50 miles west of the city of Milwaukee (Figure 1.1). Predominantly recognized as a Late-Woodland and Middle Mississippian occupation (Richards & Jeske 2002:34), the site also features a Middle Woodland presence (Richards 1992, Goldstein & Gaff 2002, Goldstein 2015) as well as lithic evidence extending back to the Early Archaic (Sampson 2008). An outer palisade extended 1340 meters with square bastions positioned every 20-25 meters to encompass the nine-hectare enclosure. Three flat-topped pyramidal mounds are situated at the northeast, northwest, and southwest corners of the enclosure. A gravel knoll located in the southeast corner was anthropogenically altered to function as a fourth platform mound (Goldstein 2015). An inner palisade enclosed the eastern portion of the site (2.5 hectares) immediately adjacent to the river. Both palisades were constructed of 12-foot-tall close-set wooden posts supported by heaped earth embankments and plastered with mud and grass (Figure 1.2). Archaeological evidence suggests that most of the domestic structures, pit features, hearths, and middens are concentrated within this smaller enclosure, suggesting it was the major domestic habitation area (Barrett 1933; Birmingham & Goldstein 2006; Richards 1992). Outside the walls, a line of conical mounds straddles the top of a natural ridge to the northwest and south of the palisaded enclosure are several natural springs that flow into the Rock River (Zych 2013).

Each mound within the outer palisade, as well as the gravel knoll, has been investigated previously and each are different in construction and archaeological material. The northeast mound was surveyed and described in 1850 by Lapham as rectangular in shape, extending 30 meters west to east and 15 meters north to south (Lapham 1855, Richards & Zych 2018). Geomorphic work including core sampling was conducted within the site and identified fill material that suggests this mound may have been up to 70 meters west to east (Kolb 2015, Richards & Zych 2018). The northwest mound is a platform mound with a rectangular footprint of 800 square meters and was constructed in three stages based on previous excavations (Richards & Zych 2018). A burned mortuary structure containing the remains of 11 adults was identified on the second stage of construction and had been covered by the third stage of construction (Richards & Zych 2018; Rowe 1958). Built into the eastern facing hillside, the 2,240 square meters and excavations suggest that it was constructed in three stages (Maher 1958, Richards & Zych 2018). The gravel knoll, now considered the southeast platform mound, is the least conspicuous earthen structure, occupying the southeast corner of the enclosure, and has been described as a square mound Hyer (1837) and later as roughly circular by Lapham (1855). Excavations of the mound have identified palisades, human burials, historic and prehistoric features, as well as evidence of repeated use for ritual (Barrett 1933; Harrison & Goldstein 2015; Kolb 2015).

Based on the soil types and General Land Office records, the site was swallowed up by "grasslands and/or oak openings in the upper basin, and forest with grassland openings in the lower basin" (Kolb 1985: 120). Credit is given to Timothy Johnson of Watertown, Wisconsin, who 'discovered' the site in October of 1836 (Butler 1882, Richards 2007b). In late 1836 and again in January 1837, Nathaniel Hyer, a local settler, judge, and surveyor, visited the site and

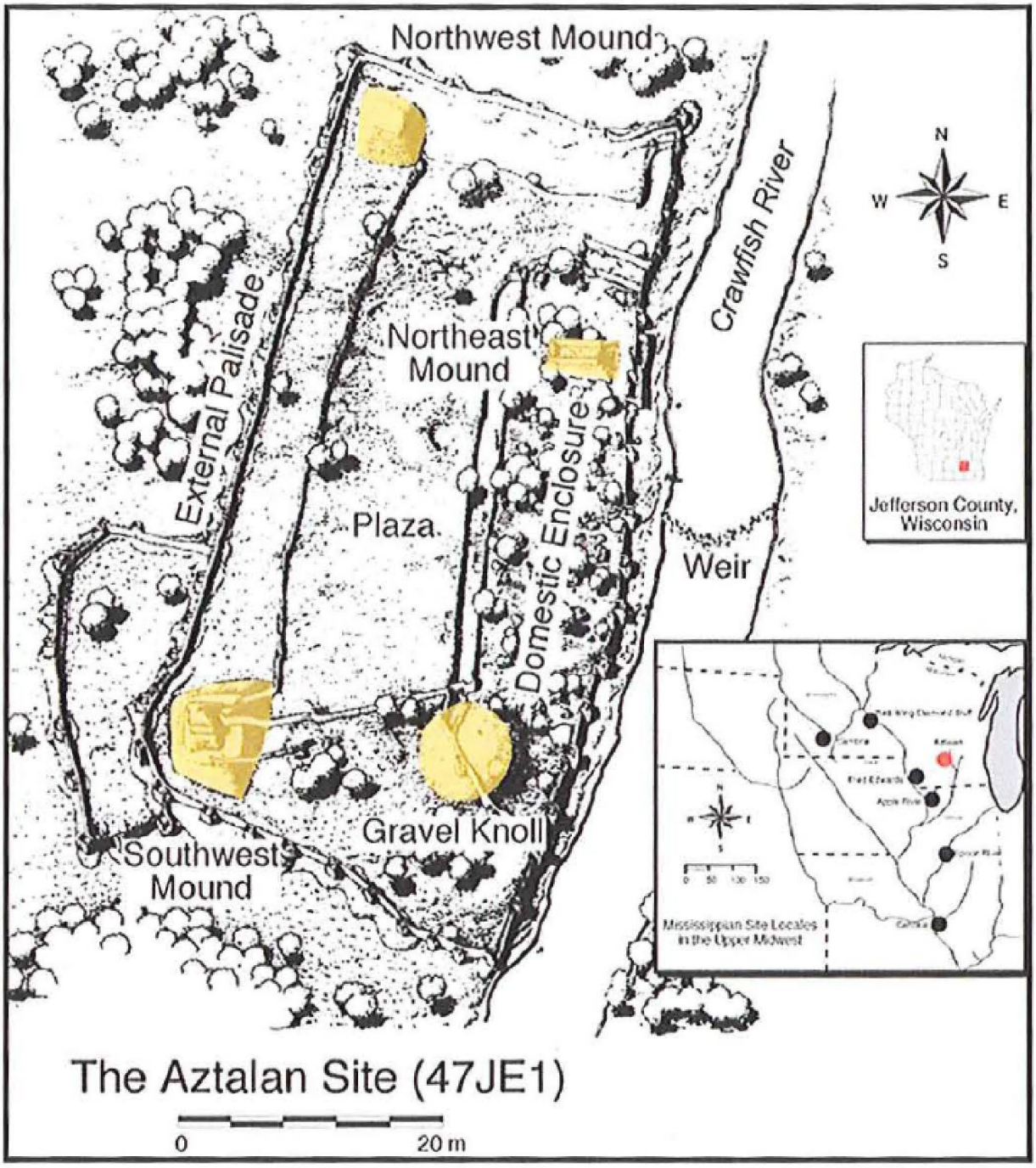

Figure 1.2: Aztalan Plan Map (Richards 2007: Fig 5)

prepared a sketch map and written account. This map and account were later reprinted in the Milwaukee Advertiser in February 1837. Aztalan gained notoriety as the 'ruins of Aztalan,' a name credited to Hyer who interpreted the site and its location as representing the origin of the Aztecs (Barrett 1933, Richards 2007b).

Increase Lapham surveyed the site in 1850 and published the first comprehensive map. (Lapham 1855). Later, T.H. Lewis would visit the site and map the remains in 1897 (Barrett 1933). By the early 20th century the landscape of Aztalan that had been mapped by Lapham and Lewis could best be described as having been almost completely obliterated (West 1907). The main portion of the site was privately owned and farmed until 1948 when it was purchased by the Wisconsin Archaeological Society and transferred to the State of Wisconsin to become parkland (Goldstein 1992, 1995; Goldstein & Patin 1979). Prior to this, the Wisconsin

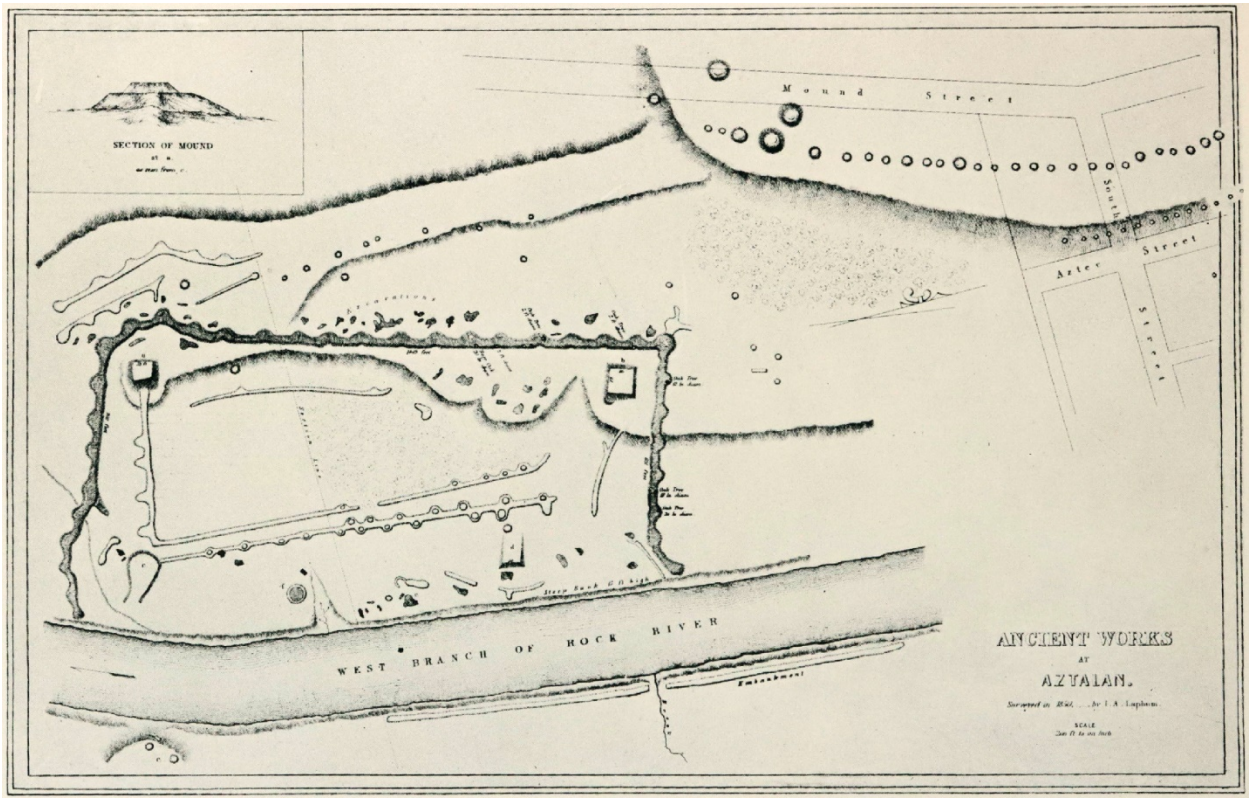

Figure 1.3. Map of Aztalan by Increase A. Lapham (1855:Plate XXXIV).

Archaeological Society had, in 1922, purchased the line of circular mounds in the northwestern portion of the site and transferred the lands to Jefferson County. During the 1950s the two platform mounds and portions of the palisade were reconstructed (Baerreis and Freeman 1958). In 1952 Aztalan State Park opened to the public, was designated a National Historic Landmark in 1962, and became listed in the National Register of Historic Places in 1966 (Wallace 2000).

Two of the earliest excavations of the site of Aztalan were made by Hyer alongside his survey of the site, and by Henry Tatham, both of whom conducted limited excavations (Richards 2008). The first systematic investigation and survey was conducted by Increase Latham in June and July of 1850, and every subsequent investigator at the site has relied upon his precise and careful survey (Figure 1.3). Samuel Barrett of the Milwaukee Public Museum led the first professional excavations of the site in 1919, with subsequent excavations in 1920 and 1932, before publishing his report on the site, *Ancient Aztalan* in 1933. This was the first and only comprehensive excavation and analysis of Aztalan and continues to be a valuable resource today. Barrett focused on mapping the different palisade segments and defining the site proper. In the process, he excavated several houses and associated domestic features located within the smaller palisade enclosure. He also tested the three pyramidal mounds and the remaining 10 conical mounds to the northwest of the main enclosure.

The Wisconsin Archaeological Survey conducted excavations to aid in the reconstruction of the palisade walls and mounds prior to the state park opening in 1952. During 1962, 1964, 1967, and 1968, further excavations were undertaken by Wisconsin Historical Society crews under the direction of Joan Freeman and concentrated on recovering additional information concerning house types and on archaeological documentation of the northeast pyramidal mound. Additional excavations directed at documenting portions of the east, west, and south palisades

were carried out in 1962 (Hurley 1977). On-site investigations have included shovel probing and test excavation undertaken as part of the Crawfish and Rock River Archaeological Project (Goldstein 1979), and to satisfy park management needs (Goldstein and Patin 1979; Goldstein 1983). A series of targeted excavations at the Aztalan site was conducted as part of the 1984 UWM Archaeological Field School directed by Lynne Goldstein. This work documented a stratigraphic sequence that provided evidence of initial late Woodland occupation in the 9th century A.D. followed by a mixed Late Woodland-Mississippian presence sometime after A.D. 1100 (Richards 1985, 1992). It also suggests that erosion of the site sediments have likely transported a significant amount of archaeological material from the upper basin to the river's edge.

A combination of relative and absolute dating has been used to temporally situate Aztalan. Richards (1992, 2003) demonstrated, by analysis of the MPM and UWM Aztalan ceramic collections, a cultural and temporal range that included components of Middle Woodland, Late Woodland/Effigy Mound, and Middle Mississippian affiliations. Sampson's analysis of the Barrett excavated chipped stone projectile points further expanded the temporal range of the site to encompass the Early Archaic through to the Mississippian, 8000 B.C. – A.D. 1150 (Sampson 2008). Recent Bayesian modeling of the Aztalan radiocarbon sequence suggests that the Aztalan occupation began in cal A.D. 925-990 and continued until cal A.D. 1230-1300 (Kruz et al. 2019)

Project Background

This project is a comprehensive inventory of archaeological materials collected by private individuals and obtained by the Milwaukee Public Museum since its earliest incarnation.

These collections have been only partially examined in relation to Aztalan and mostly overlooked in favor of material with more reliable provenience (Barrett 1933, Richards 1992, Sampson 2008). Collections like these are often called 'legacy collections' and are the result of early collecting and excavation practices, by professionals and private individuals, that are viewed as outdated and overshadowed by newer, more methodically collected and well documented collections. Eschewed in favor of these more systematic and scientific collections, legacy collections still hold valuable information on diagnostic stone, ceramic, and metal artifacts that can add to site-wide and regional studies if researchers are aware of their existence and the material made accessible. In this thesis I describe the archaeological materials from these legacy collections and compare the diagnostic projectile points to what has been previously analyzed from Barrett's excavations at the site. I will discuss what the qualitative comparison of the two assemblages represent, what it suggests about the use of private collections in the interpretation of archaeological sites, and its usefulness as a tool for research and education.

When Barrett began the first professional excavation in 1919, he unknowingly kickstarted 100 years of periodic and incremental excavations of Aztalan. This has generated a diverse range of studies and interpretations of the site's material culture, architecture, lifeways, and its position within the Woodland and Mississippian cultures. Ceramic assemblages recovered from the site have been studied by researchers addressing questions about cultural affiliations, temporal assignments, and typological frameworks (Baerreis and Freeman 1958; Barrett 1933; Bleed 1970; Hurley 1977; Kotwasinski 2014; Mollerud 2005; Richards 1992, 2003; Stoltman 2001; Zych 2013). Analysis of ceramic assemblage from Barrett's excavation suggests a roughly even split between Late Woodland grit-tempered pots and shell-tempered Middle Mississippian vessels (Richards 1992). The site is one of a few archaeological sites in Wisconsin where Middle

Mississippian ceramic forms occur with both Madison ware types and Collared ware types, the latter representing the primary Late Woodland component (Overstreet 2000; Richards 1992). Isotope analysis of human teeth recovered and petrographic analysis of ceramic sherds from Aztalan demonstrate the movement of people from the American Bottom to the site (Price et. al 2007; Richards et. al 2010; Slater et. al 2014). The Middle Mississippian presence has been shown to have affected the animal consumption and agricultural practices at the site over time (Warwick 2002, Picard 2013, Leigl 2014). Analysis of the lithic material from Barrett's excavations have suggested use of the site area from the Early Archaic through to the Middle Mississippian (Sampson 2008). Lithic technology has also identified a pattern of efficient stone tool production, economical use of local raw materials, and an influx of higher quality material during the Late Woodland and Mississippian period (Vander Heiden 2019).

While not an exhaustive list of research on Aztalan, the focus has been on professional excavations, systematically collected artifact assemblages, and the scientifically focused reports generated from them. The use of these systematic and scientific data sets resulted in the overlooking of a subset of archaeological material represented by early museum collections which are difficult to work with but are still viable as stat sets for archaeological research. Early museum collections are often referred to as 'legacy collections' and are the results of outdated survey strategies, abandoned or unfinished projects, incomplete cataloging, and antiquated standards of collection and documentation (MacFarland & Vokes 2016). These collections take the form of private donations, piecemeal acquisitions, exchanges or transfers with other institutions, and material from museum-based excavations or expeditions (Barker 2010, Miller 1994). They make up a large portion of some museum holdings, especially older institutions who accepted these collections early in their history when they were eager to obtain material to fill

empty cabinets, shelves, and to generate new exhibits (Redmond & DuFresne 2018). Over the last century the core of archaeological research has moved from museums to academia as archaeology became a more recognized profession that required a university education, underscoring a broad shift away from a long history of working for and with museum institutions and their curated collections (Barker 2010, Childs & Sullivan 2004, Huster 2013). An awareness of the material, the varied nature of its documentation, degree of preservation, level of funding for research, and the amount of time that it would take to integrate these collections into the body of available data are all factors that have likely contributed to the favoring of more accessible, well-documented, and better preserved material for research.

With the passage of the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969, the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979, subsequent regulations implementing these acts gave rise to the Cultural Resource Management (CRM) industry whose excavations and reports have generated immeasurable new data and artifacts for research and curation. Museums are one of several types of repositories that were able to take in these new collections generated by CRM projects and curate their materials for future generations. This ever-expanding body of archaeological material and associated records has unintentionally created what is now called the 'Curation Crisis' (Bawaya 2007; Marquardt et al. 1982). Recognized soon after the passage of these acts, the crisis has brought the concern over space, proper curation, and accessibility to the forefront as museums and repositories grapple with the sheer volume of new collections (Frieman & Janz 2018). A noticeable effect of this crisis has been a re-evaluation of the scientific value and utility of all collections and with the diminishing space and shrinking

budgets, greater attention is being paid to legacy collections, which consume time, funding, and effort to properly maintain (MacFarland & Vokes 2016; Redmond & DuFresne 2018).

The use of museum collections in archaeological research is a major part of the Society for American Archaeology Principles of Archaeological Ethics, specifically Stewardship and Records and Preservation (Society for American Archaeology Ethics in Archaeology Committee 1996). Museum collections are not all created equal and the integrity of legacy collections, how they were gathered and documented, require thorough research to determine (Brown 1981). However, these older collections often contain rare, well-crafted artifacts in states of better preservation than are common among newer collections and may represent the only surviving objects from sites that no longer exist (Redmond & DuFresne 2018). According to Huster (2013) there are three types of archaeological research conducted using museum collections:

> "(1) as a source of artifacts for new methods of technical analysis, (2) as examples of rare or unique items, and (3) for assemblage or collection-level studies of the same classes of variables studied in field project contexts." (Huster 2013:78)

The first two do not rely heavily on how systematic the method of collection was, or the level of documentation, as they are more concerned with the attributes of the artifact itself. The third type of research is the most difficult and underutilized because of the varied integrity of each collection and the potential bias that this can have on analytical results. However, this kind of research has produced valuable results including the development of methods for identifying the effects of repeated casual collecting on known archaeological sites (Baxter 2013) and the degree of redundancy and the value of large collections to support the educational and outreach missions of museums (Redmond & DuFresne 2018). In addition, legacy collections have been used to

identify unknown archaeological sites and assign them to a temporal and cultural component (Johnson & Denton 2004; Evans et. al 2018). They have also been instrumental in the development of methods for evaluating the potential for bias within these types of collections (Hegmon et. al. 2017, Huster 2013).

Chapter 2:
Background Research

History and Origins of Aztalan and Aztalan Township

Based on the results of soil types and GLO records, after Aztalan was abandoned ca. calibrated A.D 1250-1300 (Richards, Krus, and Jeske 2019) it was swallowed up by "grasslands and/or oak openings in the upper basin, and forest with grassland openings in the lower basin" (Kolb 1985: 120). During the same October of 1836 that Timothy Johnson 'discovered' the site, a U.S. survey team for the General Land Office, was engaged in mapping the sections of Township 17N Range 14E. Notes from the survey have the team cross through the site area twice but do not mention any realization that what they were climbing over were the remnants of the site (Richards 2007b). Indigenous peoples and European fur traders local to the area are likely to have known of the earthworks and mounds prior to 1836, however no records exist.

The General Land Office survey in 1836 was laying out survey townships as part of the Public Land Survey System. These survey townships would eventually come to represent civil townships, municipal bodies that are subordinate to the county they are a part of (White 1983). Civil townships are most often named for a prominent figure, place, landowner, or geographic feature. In Wisconsin, these civil townships are classified as towns and may also include Native American words that referenced the local environment. Similar methods are used for naming archaeological sites today and can include: 1) the land owner on whose land the site is found, 2) the person who made the discovery, 3) the municipal body that the site falls within, 4) a prominent landform or environmental condition, or 5) an alphanumeric designation from the survey that identified it. Sites with mounds, earthworks, or enclosures will often have that site element as part of their name. The site of Aztalan has none of these hallmarks and is simply

called 'Aztalan', recalling back to the 1837 article by Hyer that associated the site with the origins of the Aztecs (Barrett 1933, Richards 2007b). In an ironic twist, the site of Aztalan's notoriety led to the early settlers calling their town (Township 17N Range 14E) Aztalan and establishing a community of the same name just north of the site.

The local notoriety of the site as the 'ruins of Aztalan' and as a 'walled city' in the wilderness, was overshadowed by the national attention it gained following the 1855 publication by Increase Lapham. Lapham of *Antiquities of Wisconsin* was one of the first to note the presence of people digging into its features for material gain--early looters (1855). Local collectors frequented the site year after year, with the site becoming identified as an excellent place for surface collecting (Barrett 1933). Aztalan's mounds, earthworks, abundance of fired daub, and presence of artifacts on the plowed surface were prominent features that fueled natural curiosity and led people to visit the site over the next 110 years (Richards 2007b). After 81 years of cultivation, tourism, and collecting, it was a visit to the site by George A. West along with Samuel A. Barrett in May of 1919 that would lead to the first comprehensive professional excavation of the site. These excavations were conducted by Samuel Barrett from the Milwaukee Public Museum and took place in 1919, 1920, and after a hiatus of 12 years, finished up in 1932 (Barrett 1933). In the process of his excavations, Barrett met with several local collectors, including Albert Kracht and W.B. Jaycox. In describing the artifact types recovered from the site in his 1933 work, Barrett utilized artifacts made available to him from both local collectors (Barrett 1933). It was not until 1948 that the site would be purchased by the State of Wisconsin and subsequently end the surface collecting of the site. After 110 years of collecting, the amount of material picked up by casual visitors, tourists, relic hunters, and looters, as well as the number of artifacts that degraded once they were exposed to surface weathering will never be known.

History of the Milwaukee Public Museum and its Collections

The collections at the Milwaukee Public Museum (MPM) were obtained through purchase, donation, transfer, and exchange over the course of the museum's 168 years. In 1851, the German-English Academy was founded in Milwaukee, Wisconsin and its principal, Peter Engelmann, encouraged student field trips, during which many specimens of organic, geologic, and archaeologic nature were collected and housed at the Academy. Engleman would go on to organize a natural history society to manage and expand the collection, due to the general interest in the collection and the influx of donations from alumni and others. As the collection grew, it exceeded the Academy's ability to accommodate it, and it was subsequently transferred to the City of Milwaukee which would go on to establish a 'free public museum'. By 1882, the Milwaukee Public Museum was chartered, and its collections were transferred out of the Academy in 1884 and into the Industrial Exposition Building. In 1899 the museum was relocated to the newly built Milwaukee Central Library. In 1905, Henry Ward was hired as the museum's fourth director, who began work on the creation of a History Museum that would incorporate the existing natural sciences that had been the focus of the museum. The MPM would move again in 1963 to its current building and location at 800 W. Wells St., Milwaukee (Lurie, & Milwaukee Public Museum 1983). This early history of the Milwaukee Public Museum highlights the interest in the wider world which was shared by the Academy and the general public and that fostered the development of its collections as an early natural history museum.

Incoming accessions to the MPM were handled by the museum librarian in the early 1900s, and although he was "neat and conscientious", he was not an archaeologist, or a person trained in collections management (McKern 1965). The anthropological collection was "meager both in quantity and subject range", with many specimens having been obtained from purchase

or donation by private collectors and their descendants (McKern 1965). Associated information on these materials was often inadequate or entirely missing. Cases and cabinets were crowded with anthropological specimens, natural objects, oddities, fake items, worthless souvenirs, and with an emphasis on filling space instead of education. This was typical of early museums in America that chose to focus on 'cabinets of wonder' or 'curiosity' to entice the public to visit the museum. McKern's remarks in 1965 about the state of the MPM, its collections, and documentation during these formative years indicate that the concern over the non-professional methods being employed at the time parallel modern concerns that archaeologists and researches have over the value and use of legacy collections.

With the hiring of Samuel A. Barrett in 1909, a shift occurred over the next 30 years while he was Curator of Anthropology and later Director of the Museum (Lurie, & Milwaukee Public Museum 1983, McKern 1965). Technical methods and standards of collection, exhibition, education, and general museology improved during this time. Scientific excavations and collecting expeditions expanded the anthropological collection and new exhibits were developed to excite the interest and convey information to the general public. This period marks a turning point for the Museum from its early beginnings to a first-rate institution of education and research. This newfound spirit has since been carried forward into the MPM's current iteration.

It isn't known how the earliest collections were cataloged, or if an actual catalog exists. The MPM's Anthropology department currently has two sets of archaeology catalogs--an old series and a new series--that are both handwritten and include a mixture of cursive and print. The Old Series consists of four volumes and records accession and catalog information from 1879 until 1900. A re-inventory that took four years was initiated in December of 1900 after the Museum's move to a wing of the new Milwaukee Central Library. The process assigned new

accession and catalog numbers to each of the existing objects in the old series catalogs as well as any new accessions that were made during the four-year process. The Anthropology department re-cataloged 11,262 archaeological objects with each entry in the New Series also referencing its corresponding entry in the Old Series, as well as the location of the object by drawer and cabinet at the time. Each entry had an identical catalog and accession number, so that catalog #525 was also accession #525. These entries form the initial volumes of the new series catalog.

The Old and The New Series archaeology catalogs both use sequential numbers for their cataloging. New accession numbers were first assigned in July 1905 and were assigned museum-wide and correspond to the next available value in sequence. The Anthropology department maintained the new series catalogs with the last written entry in August of 2011. The Milwaukee Public Museum currently uses the EMu Collections Management System to manage the digital inventory of its diverse collections. The initial 11,262 objects have a letter 'A' before the catalog number, to signify that they represented the old series re-inventory. All anthropology collections also feature the letter 'A' before the catalog number to represent the cataloging for the Anthropology Department. The Milwaukee Public Museum maintains its existing cataloging and accession scheme even as modern collections practices have moved to a trinomial recording scheme.

The following is a list of private collectors, the date their collection was accessioned, the number of objects associated with Aztalan, and the method by which the MPM obtained the materials.

Table 2.1: MPM Aztalan Private Collection Donors

Collector Name	*Accession Number*	*Date of Accession*	*Number of Artifacts*	*Form of Acquisition*
OLD SERIES				
C. W. Riggs	Multiple	Before 1901	1	Gift
Elijah H. Stiles	Multiple	Before 1901	1	Gift
M. C. Long	Multiple	Before 1901	1	Gift
Henry Haskell	Multiple	Before 1901	165	Purchase
Frederick Stanton Perkins	Multiple	Before 1901	2	Purchase
Wisconsin Natural History Society	Multiple	Before 1901	2	Gift
William Frankfurth	Multiple	Before 1901	1	Gift
Mrs. & William Frankfurth	Multiple	Before 1901	2	Gift
Henry Haskell	Multiple	Before 1901	1	Purchase
Wisconsin Natural History Society - Archaeology Section	Multiple	Before 1901	1	Gift
Charles H. Doerflinger	Multiple	Before 1901	1	Purchase
NEW SERIES				
George A. West	3639	April 24, 1913	1	Gift
Mrs. C. D. Brayton	6352	December 1, 1913	3	Not Listed
Mrs. James A. Sheridan	5860	June 18, 1918	832	Purchase
William. H. Ellsworth	6115	January 7, 1919	30	Gift
Albert Kracht	6616	January 11, 1919	57	Exchange
Theodore Nurnberg	7306	June 23, 1922	6	Gift
George A. West	7308	June 28, 1922	9	Gift
Lewis J. Dartt	7470	December 29, 1922	17	Gift
Towne L. Miller	10159	January 15, 1931	1	Gift
Albert Kracht	10714	June 16, 1932	176	Purchase
J. J. Davis	10765	July 16, 1932	5	Purchase
Albert Kracht	10772	July 21, 1932	15	Exchange
Towne L. Miller	10868	October 14, 1932	1	Collection
Thomas M. N. Lewis	11091	July 3, 1933	8	Gift
Towne L. Miller	11227	November 21, 1933	1	Exchange
Jack Heibler	11350	May 15, 1934	10	Gift
Rudolph Boettger Jr	11372	May 15, 1934	2	Gift
R. N. Leavens	11373	May 15, 1934	1	Gift
Jack Heibler	11462	August 21, 1934	17	Gift
Rudolph Boettger	12102	June 18, 1936	2	Gift
Thomas M. Pitkin	12296	December 3, 1936	2	Gift
Towne L. Miller	12301	December 3, 1936	2	Gift
Mr. Vetal Winn	15367	December 16, 1942	2	Gift
Mr. Vetal Winn	16012	January 8, 1945	1	Gift
Lee R. Whitney	16550	July 17, 1946	2	Gift
Lee R. Whitney	16605	February 20, 1947	5	Gift
Lee R. Whitney	16606	April 23, 1947	1	Gift
Robert Maier	16738	November 20, 1947	9	Gift
Rudolph H. Boettger	16929	May 23, 1949	11	Gift
Philip Wiegand	20697	April 20, 1967	1	Gift
Mrs. Fred Scholz	22700	November 1, 1971	1	Gift
Dr. Stanley Wisniewski Estate	28699	June 1, 2000	1	Gift
Bishop Charles T. Gaskell	28720	December 6, 2000	1	Gift
		Total	1409	

In the process of assessing the background of each collector and their collections, it became apparent that most reference Aztalan but do not always differentiate between the site and the town. Many other catalog entries for other accessions do not reference a site in their 'collected from' and instead reference a landowner, a town, a body of water, a county, or a state. This presents a major challenge in determining the origin of each artifact within an accession. The age of many of these collections also makes the likelihood of living descendants of the collectors having knowledge of the provenience of artifacts extremely low. This is further confounded by the lack of secondary documentation. Only a few of the accessions had an inventory from the collector indicating the provenience of their collection, with most having only a copy of the accession card to compare to the catalog entries. Several accession cards have county level locality, or the term 'various' or 'Wisconsin' with further refinement of location listed in the catalog, which suggests that either the collector verbally described where each piece came from or there was some corroborating documentation that was provided and then lost or disposed of once cataloging was complete. To determine a confidence in the provenience of Aztalan for each artifact, secondary documents about the collector or associated with the collector are used to assess a level of confidence in the provenience.

The following are biographies of the different private collectors that donated material to the MPM and was cataloged as coming from 'Aztalan'. These collectors represent a combination of active and passive collectors. Active collectors were individuals that knew the locations of archaeological sites and traveled to them in order to surface collect or to excavate. Passive collectors were individuals that owned land that harbored an archaeological site and would surface collect their land but are not known to have sought out other archaeological sites to surface collect. Many of these collectors were members of the Wisconsin Archaeological Society

and pursued archaeological investigations on behalf of the society and the Milwaukee Public Museum. It is possible that their membership and activity within the society made them aware of the site of Aztalan and would strongly suggest that their accessions did come from the site locality. I chose to focus, however, on the written records that were available to me.

Collector Biographies

C. W. Riggs

Mr. C. W. Riggs was an Indian artifact collector, dealer, and entrepreneur who was also known as Captain Riggs. Records of him at the MPM describe his dealing in pots that he had collected from Arkansas and elsewhere. Mr. Riggs' own claims were that the pots and artifacts that he sold came from Indian mounds or graves and are presumed to be associated funerary objects. Mr. Riggs donated a single artifact with no additional documentation. This accession can only be strongly linked to the town of Aztalan based on the catalog records.

Elijah H. Stiles and M. C. Long

There is very little that could be found on Mr. Elijah H. Stiles. At the time of his death, he lived in Watertown, Wisconsin and his will bequeathed a collection of artifacts to the Milwaukee Public Museum. There was also very little on Mr. M. C. Long. It is strongly suggested that he was Morris C. Long, the curator of the Public Museum in Kansas City and was involved in the investigation and excavation of at least one Indian mound in 1899 (WAS 1926). Both accessions came to the MPM prior to their issuing an accession document. Each accession is listed as a lot of 'Clay bricks from the sacrificial place of ancient works'. The use of the words 'clay bricks' strongly suggests that they are what was termed 'Aztalan brick'--the burned wattle

and daub material that was mistaken by Judge Hyer as brick that formed the foundation of the palisades. The use of the words ‘sacrificial place of ancient works” suggests the association that the site gained with the Aztecs from being named Aztalan, and from the presence of human remains mixed with other refuse and mistakenly interpreted to be similar to the Aztec practice of sacrifice that sensationalized that culture. It is strongly suggested that these materials are from the site of Aztalan.

Henry Haskell

Henry Haskell sold 166 objects to the museum in 1894 and most are listed as grooved axes and stone celts, easily recognizable artifacts when plowed up and exposed on the surface. No additional information or accession card exists at the MPM for this material. A section in the History of Jefferson County, Wisconsin titled "Relics of the Red Race" (1879) specifically mentions a Henry Haskell who lived in the town of Jefferson and who possessed a substantial archaeological collection. This section also mentions that his farm was "about three miles distant [south] from the celebrated mounds and earthworks of Aztalan" and notes his collecting of implements of stone in the vicinity of Aztalan and in other sections of Jefferson county (1879:567-568). A second reference to a Henry Haskell was found in the Jefferson Historical Society's Jefferson Banner newspaper database for June 7, 1894. The article states:

> "While excavating at Hegers plant on the grounds recently purchased of Mayor Reed, workmen found the skeleton of a human being. This is the 2nd one found at Hegers place, one having been dug up in 1889. This is without doubt the remains of some aborigines of this Co, of the so called mound builders. The corpse was buried in a sitting position, facing the rising sun. A flint arrow point, 4" long, was

> found by his side. The whole was only 20" underground. Henry Haskell, with the assistance of GJ Loetz, secured the same, contemplating that hereafter it shall occupy a position in the Public Museum, in Milwaukee, to which institution Mr Haskell has already largely contributed" (Jefferson Banner 1894).

The reference to contributions made to the Public Museum in Milwaukee in the 1894 article links that Henry Haskell with the donations made in the old series catalogs. The first reference found for Mr. Haskell also links him to Aztalan and to having collected from the site. However, it also mentions that he collected from other sections of Jefferson county as well. These two Henry Haskells are likely the same person who donated the 166 groundstone artifacts, and although these are associated with Aztalan in the catalogs, they do not further indicate that they came from the site itself, and consequently, can only be directly associated with the town of Aztalan.

Frederick Stanton Perkins

Mr. Frederick Stanton Perkins moved to Wisconsin in the late 19th century and began to collect and made the preservation and protection of antiquities his mission, mortgaging his farm and spending his own money to purchase artifacts across Wisconsin (WA 1903). He sold part of his collection to the MPM in 1885. He also transferred part of his collection to the Logan Museum in Beloit, WI. Although no inventory came to the MPM with his collection, the Logan Museum has a ledger of his. In it he indicates that his father visited Aztalan in "1844, and brought ... ancient brick found there". Although the ledger was not available during this research, the above comment indicates that he was aware of the site and it is reasonable to think that his accession came from the site locality.

Wisconsin Natural History Society and the Archaeology Section

The Wisconsin Natural History Society was organized by Peter Engelmann following the early success of the German-English Academy and comprised many of the most prominent names in Wisconsin's scientific community, including Increase Lapham. This society's members produced botanical, ethnological, and biological reports and devoted themselves to the mutual improvement of knowledge in the natural sciences. They were a driving force behind the establishment of the Milwaukee Public Museum. In 1899, the society established an archaeology section, which would later become the Wisconsin Archaeological Society. The society made two donations and although the catalogs indicate they came from Aztalan, Wisconsin, there is no inventory or record to indicate that they came from the site locality. These can only strongly be associated with the town of Aztalan at this time.

William & Mrs. Frankfurth

Mr. William Frankfurth was a businessman in Milwaukee and an amateur archaeologist who collected and donated to the MPM (Arnold 2014). He spent his later years in Europe and excavating at several sites. He is well-known for his Swiss Lake Dweller material, which was among those artifacts he later donated to the MPM. He made three accession to the MPM that are recorded in the Old and New Series catalogs. Two lots are described as 'Pieces of Moundbuilder pottery' and one lot is 'burned clay'. The catalog's notes column, the last column in each catalog entry, lists "From sacrificial place from the Moundbuilders works." Similar to other collectors listed here, the entries for Frankfurth uses 'sacrificial place' which strongly suggests a connection to Aztalan through its connection to the Aztecs. The references to the moundbuilders

does not directly tie into any myths, but it does suggest a connection to the truncated platform mounds at Aztalan. Based on these two pieces of evidence, these three accessions can be strongly associated with the site of Aztalan.

Charles H. Doerflinger

Mr. Charles H. Doerflinger was the first director (custodian) and curator of the Milwaukee Public Museum in 1884 and served until 1887. He was also the first director of the Archaeology Section of the Wisconsin Natural History Society in 1899, which would later become the Wisconsin Archaeological Society. Mr. Doerflinger was a collector and purchaser of artifacts and later in his life, traveled Europe, participated in excavations, and continued to collect. After returning from Europe, he transferred his collection to the MPM in 1913. Mr. Doerflinger sold a lot of ceramic sherds to the MPM and in the New Series catalog is listed as "Pieces of Burnt Clay from sacrificial places in the walls of the enclosure of Aztalan, Wis." The specific reference to within the walls of the enclosure strongly suggests that this accession is associated with the site of Aztalan.

George A. West

Mr. George A. West was a long-time member of the Wisconsin Archaeological Society and was awarded the Lapham Research Medal in 1926. He was also a collector and purchaser of artifacts. In 1913 Mr. West donated his collection of 600 Indian pipes to the Milwaukee Public Museum. West's collection was obtained over a period of 40 years, and two-thirds of his pipes were obtained from aboriginal village sites, graves, and mounds in Wisconsin (Wisconsin Archaeologist 1913). He was also a prominent member of the Wisconsin Archaeological Society

and kept a detailed notebook of where he obtained each pipe and when, if it had been found by someone else, and where that person had found it. This notebook represents an excellent example of early recording methods. Among this accession (#3639) is a single catalog entry (#13997) that lists 'from ruins in Jefferson Co, Wis' as the location collected from. It was collected by West from an E. F. Richter on August 4, 1907 while on a visit to Mr. Richter. This does not prove the pipe is from the site of Aztalan, but the 'ruins in Jefferson co' is an unusual and oddly specific description that strongly suggests that the pipe was collected from the Aztalan site locality.

Mrs. C. D. Brayton, Theodore Nurnberg, Robert Maier

During this research, there was no information that could be located to further identify Mrs. C. D. Brayton, Theodore Nurnberg, or Robert Maier. Each collector's catalog and accession records list Aztalan, but there is no additional inventory or other evidence to link the artifacts to the site locality. These accessions can only be strongly associated with the Town of Aztalan.

Mrs. James A. Sheridan

The Sheridan collection, accession number 5860, was sold to the MPM for $200 by Mrs. James A. Sheridan and makes up 60% of the privately collected artifacts associated with Aztalan. Associated documentation on this collection consists of an inventory compiled by Henry Ward dated May 23, 1918, a letter from S.A. Barrett dated May 29, 1918 and a letter written by Mrs. Sheridan dated June 1, 1918. The inventory calls it simply "Indian Collection", however some form of information was relayed to Barrett that this collection came from Aztalan and that this concerned him enough to write to Mrs. Sheridan for clarification. In his letter, Barrett writes:

> “Do I understand correctly that all of the archaeological specimens, both the arrow heads and the various other archaeological specimens come from Aztalan? In case any of these specimens do not come from Aztalan, would you be so kind enough to indicate which ones? It is very essential for our records here that we have as exact locations as possible for each and every one of the specimens received, and I shall esteem it a great favor if you will give us as full information as possible on this point.” (Letter from S.A. Barrett to Mrs. James A. Sheridan May 29, 1918).

In Mrs. Sheridan's response, she writes:

> "In packing the arrows I found four or six Oregon specimens ... he [James] wondered what the Oregon arrows were like, or how they differed, from the Aztalan specimens. He sent to Portland, Oregon for four or six. I put them in thinking you could make use of them. They are more transparent and readily told... The other archaeological specimens James Sheridan gathered during the 80's while he was County Superintendent of Schools in Jefferson County." (Letter from H. Sheridan to S.A. Barrett, June 1, 1918).

Mr. Sheridan was indeed elected Superintendent of Schools of Jefferson County in 1884 and held the post for six years (Thwaites 1900:746). Barrett went on to have the collection cataloged, with the entries for this collection listed as having been collected from "Aztalan, Wis". This, like many of the other Aztalan accessions, does not indicate that the collection originated from the Aztalan site, and cataloging it simply as "Aztalan, Wis" leaves open the strong possibility that the collection came from the Town of Aztalan. In addition, when writing Ancient

Aztalan, Barrett indicated that MPM had a collection of 358 projectile points from the site. His excavations uncovered 289 and the additional 69 likely came from the Albert Kracht and W. H. Ellsworth collections, whose Aztalan provenience was far more certain in Barrett's mind than was the Sheridan collection. This combination of cataloging and choosing not to use the collection as part of his 1933 work suggest that Barrett did not feel confident that the collection came from the site that he would be excavating the following year. The fact that Mrs. Sheridan refers to the 'Aztalan specimens' in relation to Oregon specimens that her husband had been interested in comparing, suggests that at least some portion of the Sheridan collection, specifically projectile points, originated from Aztalan. Overall there is no indication which specimens, if any, came from the site of Aztalan and therefore the material can only be strongly associated with Jefferson county, probably the town of Aztalan, and not the site locality.

William H. Ellsworth

Mr. William H. Ellsworth was a charter member of the Wisconsin Archaeological Society and held positions within the society including President. He was a trustee of the Milwaukee Public Museum and through his interest in Wisconsin archaeology, had developed a large library and collection of artifacts. Ellsworth was known for his record keeping concerning find locations of archaeological artifacts and his collection of projectile points was extensive. His collection of 2,323 specimens of quartz and quartzite was donated along with his catalog which lists where he found the artifact and when, and if in association with anything else. The objects that are listed as Aztalan all indicate that they were found on the Albert Kracht farm within the enclosure. Being found on Albert Kracht’s farm, which contained part of the Aztalan enclosure,

and having been found within the enclosure is strong evidence to associate these points with the site of Aztalan.

Albert Kracht

Albert Kracht was a property owner and farmer of a portion of the Aztalan site area during Barrett's excavations and surface collected numerous artifacts directly from the site. There are three accessions recorded between him and the MPM--6616, 10714, and 10772--the first was an exchange of material and the latter two were purchases made by the Museum. The first and third accessions lists the locality of the artifacts as 'Aztalan, Wis', and the second lists the locality as 'Jefferson Co. Wisc'. Based on the existing information, it can be reasonably assumed that the artifacts originate in Jefferson county, Wisconsin, in the town of Aztalan. Furthermore, Albert Kracht was actively farming part of the site, is mentioned several times in Barrett's work, allowed Barrett to use part of his private collection in his analysis of Aztalan, and cooperated with Barrett's eventual excavations, therefore it can also be reasonably assumed that these artifacts are from the Aztalan site locality.

Lewis J. Dartt

Mr. Lewis J. Dartt was a member of the Wisconsin Archaeological Society who was a collector and who investigate and excavated many burial mounds and village sites. He was also a member of Barrett's excavation crew. Although his accession lists Aztalan, Wis as its collection location, there is no additional information or inventory to indicate where he collected his artifacts from. This accession can only be strongly associated with the Town of Aztalan.

Towne L. Miller

Mr. Towne L. Miller was an active member and officer of the Wisconsin Archaeological Society, and a former historian of the Milwaukee Public Museum. He also worked with McKern on a number of McKern's mound excavations including Nitschke and Raisbeck (McKern 1930) There are, however, no inventories or additional documentation to connect his artifacts with the site locality. These accessions can only be strongly associated with the Town of Aztalan.

J. J. Davis

Dr. J. J. Davis was an early member, officer, and committee member of the Wisconsin Archaeology Society. He was acquainted with Dr. Philo R. Hoy, one of Wisconsin's early archaeologists and through him developed an interest in Wisconsin archaeology. He assisted in the survey of burial mounds, and in his later years was devoted to botany and the curation of the herbarium at the University of Wisconsin in Madison (WA 1937). Dr. Davis' accession lists Aztalan, however there is no inventory or documents directly associating his accession with the site locality and so it can only be strongly associated with the Town of Aztalan.

Thomas M. N. Lewis

Mr. Thomas M. N. Lewis was a member of the Wisconsin Archaeological Society who started out as an avocational archaeologist around his hometown of Watertown, Wisconsin. and who worked for the MPM. He excavated a conical mound on the east side of the Crawfish River (Lewis 1954), and later left the MPM to direct WPA excavations in Tennessee. He subsequently served as Director of the McClung Museum for many years. Mr. Lewis donated eight objects that he collected from refuse pits including human bones. His accession record lists at the bottom

of the contents the phrase ‘obtained from Aztalan’ in the same handwriting as the rest of the accession card. All other accession cards have listed the word ‘Aztalan’ in pencil, circled, and in different handwriting than the original cards, which suggests that they were later annotations to account for that accession during an inventory process. The choice of the phrase ‘obtained from Aztalan’ is the only indication and suggests this Aztalan is a specific place rather than a general place.

Jack Heibler

Mr. Jack Heibler was a member of the Wisconsin Archaeological Society and a artifact collector. During his membership he made surveys of mounds for the society and engaged in early salvage archaeology in Jefferson county near the Town of Aztalan, subsequently bringing material to the MPM. Mr. Heibler’s accession included 10 objects, all listed as coming from ‘Aztalan, Jefferson county, Wisconsin’. One of the objects is a lot of Aztalan brick which is a known name for a specific type of artifact found only at the site. It is the only part of this accession that can be strongly associated with the site.

Rudolph Boettger

Mr. Rudolph Boettger was a member of the Wisconsin Archaeological Society and a collector. He had previously been a part of burial mound excavations and was reported to have gathered almost a thousand flint specimens from various sites near Muskego Lake. (WA 1923). He is reported to have had a miniature home museum of archaeological, geological, and entomological specimens. He is also reported to have found a Folsom point at the Aztalan site (WA 1934). Although the site is mentioned in this context, his accession listing Aztalan does not

include any chipped stone artifacts. His accession also lacks any inventory or documentation, and so the accession can only be strongly associated with the Town of Aztalan.

R. N. Leavens, Philip Wiegand

Mr. R. N. Leavens and Mr. Phillip Wiegand were members of the Wisconsin Archaeological Society and held positions within the society at one point. There is no additional information that could be uncovered at this time. Their accessions list Aztalan as the location of collection, however there is no inventory or documents directly associating their accessions with the site locality and so they can only be strongly associated with the Town of Aztalan.

Thomas M. Pitkin

Mr. Thomas M. Pitkin was a historian of the U.S. Forest Service. He visited the site of Aztalan in November of 1935 with Samuel Barrett who was familiarizing Mr. Pitkin with the possibility of restoring the site and provided him with an estimate of the cost of purchasing the land and restoring the enclosure (WA 1936). His accession includes two historic artifacts, and although he visited the site, these artifacts and no inventory or supporting documentation can only strongly be associated with the Town of Aztalan.

Mr. Vetal Winn

Mr. Vetal Winn was an amateur archaeologist who collected and purchased artifacts for his collection. He was a member of the Wisconsin Archaeological Society, held positions within the society, reported on the state of Indian burial mounds, and conducted reconnaissance into northern counties of Wisconsin, including Oneida and Vilas. Mr. Winn made two donations to

the MPM. His second accession (#16012) included a piece of hematite and the accession record includes a letter that reads “the block of hematite, Sep. 20, 1942, on the Riedeman place just east of the west wall … that is on the edge of the high flat … of the large truncated mound”. The description of ‘east of the west wall’ and in association with a truncated mound place the piece of hematite within the site enclosure and in association with the site.

Lee R. Whitney

Mr. Lee R. Whitney was the second director of the Archaeology Section of the Wisconsin Natural History Society. He held several positions within the later Wisconsin Archaeological Society. He was passionate about the preservation of Wisconsin mounds and collected and purchased artifacts for his collections. He also gave papers and actively investigated areas of Wisconsin. He made three donations to the MPM, however there was no inventory or additional evidence to suggest that these artifacts came from the site locality, and therefore can only be strongly associated with the town of Aztalan.

Mrs. Fred Scholz

Mrs. Fred Scholz donated the collection of her late husband, Paul Scholz, to the MPM. Paul Scholz was a member of the Wisconsin Archaeological Society for 40 years, wrote several articles, and worked on excavations for the society. Mrs. Scholz's accession lists Aztalan, however there is no inventory or documents directly associating Paul's artifacts with the site locality and so it can only be strongly associated with the Town of Aztalan.

Dr. Stanley Wisniewski Estate

Dr. Stanley Wisniewski was a doctor, reported mineralogist, and collector both in Europe and North America.

Because the accession came from his estate, this accession was most likely bequeathed to the MPM following his death. He is reported to have kept an inventory of his collection, but that did not come with his collection to the MPM. An inventory was made at the time of accession that indicated Aztalan as the source for a single sherd. This strongly suggests that the accession originated from the site locality.

Bishop Charles T Gaskell

Mr. Charles T. Gaskell was the ninth Bishop of the Episcopal Diocese of Milwaukee. Background information from the Accession records mention that he was a student at the University of Minnesota and a member of Lloyd A. Wilford's 1940 field crew. He was allowed to keep some artifacts from some of the excavations he was a part of. His accession includes a single sherd associated with Aztalan, and on his 'Request for Accession Number' form lists under general description the word 'Aztalan' between the phrases 'Collections from OK Sites' and 'Nebraska sites' The listing of 'Aztalan' between two lines referring to sites in other states, suggests Aztalan was used to refer to the site, rather than the town in this context.

This research into the Old and New Series catalogs, accession cards, collector provided documents, and secondary sources has provided enough evidence to assign a level of confidence to each accession based on its association with a geographical area. This confidence level consists of a strong versus weak association. A 'partial' association was assigned if part of an accession is highlighted or singled out in the sources as having come from the site or township.

The methods for this determination are outlined in chapter 3. The following table (Table 2.2) summarizes the confidence level that each collection's Aztalan artifacts can be associated with Jefferson County, the Town of Aztalan, and the site of Aztalan.

In examining the 5431 entries for Jefferson county, it was striking that 4709 or 87% of the cataloged objects represented Aztalan. Digging into the numbers further, Samuel Barrett's excavations account for 3333 (61%) of the Jefferson County entries and 71% of the Aztalan entries. That still leaves 39% and 29% for the non-Barrett entries respectively. I identified 1409 entries that represent privately collected material associated with Aztlalan. This includes objects that weren't associated with Aztalan in the MPM's EMu database and brings the total of Aztalan objects to 4742 (87%). This leaves 722 objects (13%) to represent the remaining county, which is half as many objects as those originating from Aztalan via private collection. Examining the timeline of accessions to the MPM for Aztalan (see Table 2.1), 178 objects were accessioned prior to Samuel Barrett starting work at the MPM. Prior to his first visit to the site, an additional 923 objects are accessioned. This included two large accessions, one from Mrs. James Sheridan and the first from Albert Kracht, were accessioned within a year of Barrett's visit in May of 1919. During the remainder of his professional career at the MPM, an additional 18 accessions (275 objects) were donated to the Museum. Following Barrett's departure 11 accessions (35 objects) were donated with most coming in before the site was placed in Public hands.

In reviewing the history of the Milwaukee Public Museum, it is apparent that Samuel Barrett played a significant role in transforming the Museum. Similarly, the concern that he shows in his letter to Mrs. Sheridan over the accurate provenience of the 832 objects suggests that his professional curiosity may have been peaked regarding the Aztalan site. In January of 1919 Albert Kracht approached the MPM with an exchange of artifacts from his collection. It

was Samuel Barrett who signed off on the arrangement and this may have been the first meeting between Barrett and Kracht and may have further stimulated Barrett's professional interest in the site. Lastly, it would seem reasonable to think that the Wisconsin Archaeological Society, which started out as an extension of the MPM, and later continued to hold meetings at the MPM, to which Barrett was a member of the society, was a significant factor in the consideration of collectors to donate their materials to the MPM. Although it is speculation, the confluence of events surrounding the Milwaukee Public Museum, the presence of Samuel Barrett, and the growing interest in Wisconsin archaeology from the Wisconsin Archaeological Society activities suggests that Barrett was given a prime opportunity to investigate Aztalan, an opportunity that may not have come to pass if Barrett had never come to the MPM in 1909..

Table 2.2: Confidence Level of Private Accessions.

Collector Name	*Accession Number*	*Jefferson County*	*Town of Aztalan*	*Site of Aztalan*
OLD SERIES				
C. W. Riggs	Multiple	Strong	Strong	Weak
Elijah H. Stiles	Multiple	Strong	Strong	Strong
M. C. Long	Multiple	Strong	Strong	Strong
Henry Haskell	Multiple	Strong	Strong	Weak
Frederick Stanton Perkins	Multiple	Strong	Strong	Weak
Wisconsin Natural History Society	Multiple	Strong	Strong	Weak
William Frankfurth	Multiple	Strong	Strong	Strong
Mrs. & William Frankfurth	Multiple	Strong	Strong	Strong
Henry Haskell	Multiple	Strong	Strong	Weak
Wisconsin Natural History Society - Archaeology Section	Multiple	Strong	Strong	Weak
Charles H. Doerflinger	Multiple	Strong	Strong	Strong
NEW SERIES				
George A. West	3639	Strong	Strong	Strong
Mrs. C. D. Brayton	6352	Strong	Strong	Weak
Mrs. James A. Sheridan	5860	Strong	Partial	Partial
William. H. Ellsworth	6115	Strong	Strong	Strong
Albert Kracht	6616	Strong	Strong	Strong
Theodore Nurnberg	7306	Strong	Strong	Weak
George A. West	7308	Strong	Strong	Weak
Lewis J. Dartt	7470	Strong	Strong	Weak
Towne L. Miller	10159	Strong	Strong	Weak
Albert Kracht	10714	Strong	Strong	Strong
J. J. Davis	10765	Strong	Strong	Weak
Albert Kracht	10772	Strong	Strong	Strong
Towne L. Miller	10868	Strong	Strong	Weak
Thomas M. N. Lewis	11091	Strong	Strong	Strong
Towne L. Miller	11227	Strong	Strong	Weak
Jack Heibler	11350	Strong	Strong	Weak
Rudolph Boettger Jr	11372	Strong	Strong	Weak
R. N. Leavens	11373	Strong	Strong	Weak
Jack Heibler	11462	Strong	Strong	Partial
Rudolph Boettger	12102	Strong	Strong	Weak
Thomas M. Pitkin	12296	Strong	Strong	Weak
Towne L. Miller	12301	Strong	Strong	Weak
Mr. Vetal Winn	15367	Strong	Strong	Weak
Mr. Vetal Winn	16012	Strong	Strong	Strong
Lee R. Whitney	16550	Strong	Strong	Weak
Lee R. Whitney	16605	Strong	Strong	Strong
Lee R. Whitney	16606	Strong	Strong	Weak
Robert Maier	16738	Strong	Strong	Weak
Rudolph H. Boettger	16929	Strong	Strong	Weak
Philip Wiegand	20697	Strong	Strong	Weak
Mrs. Fred Scholz	22700	Strong	Strong	Weak
Dr. Stanley Wisniewski Estate	28699	Strong	Strong	Weak
Bishop Charles T. Gaskell	28720	Strong	Strong	Strong

Chapter 3:
Methods

Modern excavations have focused increasingly on documenting and preserving the horizontal and vertical provenience of recovered artifact assemblages. For many older collections housed in museums, provenience information can vary from collection to collection and within collections. Descriptions include detailed locations of landforms and landowners' names, distance and direction from a known road or landmark, second-hand information, and very vague single words, often a state or country name. Consequently, older legacy collections require more rigorous background research into the collector, the notes that they leave with their artifacts, and any secondary sources referencing the collector and their collections, including publications and news articles.

Private Accession Confidence Level

The accession and catalog records indicated that each accession was collected from Aztalan. The variation in cataloging records, however, necessitated further evidence for connecting each accession to the site of Aztalan. To determine the confidence levels in Table 2.2, the different documents at the MPM were scrutinized for additional evidence that the accession came from the site. Table 3.1 lists the different criteria that were identified that strengthened the association of a given accession with the site. All accessions were initially assigned a weak association with the site and at least two criteria had to be met for a value of strong to be assigned.

Table 3.1: Confidence Level Criteria

Criteria	Value
Catalog entry includes details of the site structure (i.e. enclosure)	1
Catalog entry lists a landowner's property that the object was collected from and corresponds to a historic landowner of a portion of the site.	1
Collector lived within the township of Aztalan	1
Collector provided an inventory that included the location for each artifact	1

Inventory of MPM's Aztalan Collections

Prior to the analysis of the privately collected Aztalan materials it was necessary to determine if anything with Aztalan provenience had been missed, overlooked, or incorrectly stored in the Anthropology collections, or if non-Aztalan materials had been incorrectly associated with. As material from North America entered the MPM's Anthropology collections over the years, it was separated into storage drawers that represented the state and county from where it was collected. The present research was limited to the privately collected materials associated with Jefferson county, where the site of Aztalan is located. Prior research into the Aztalan collections had focused on materials already associated with the site of Aztalan and may not have evaluated the broader Jefferson county for Aztalan lithic material that could be compared to the previous analysis by Sampson (2008) and incorporated into this research. This necessitated the creation of a comprehensive inventory of Aztalan and Jefferson County materials.

The inventory was built using a copy of the EMu inventories for Aztalan and Jefferson county provided by Dawn Scher Thomae, Curator of Anthropology, the Old and New Series catalogs, and accession and donor files kept in the Anthropology department of the MPM and the physical inventory of the material. The EMu inventory for Aztalan lists 4709 cataloged objects and the Jefferson county inventory lists 5431. The inventories list the catalog number, accession number, object name, and the location of the object by drawer, exhibit, loan, unknown location,

or no longer in the museum's collections. Objects were identified as either associated with Aztalan, Jefferson county, or both. This also had the benefit of generating a list of accession numbers that were then checked against the accession records to identify the collector, the locality that the collection was from, the range of catalog numbers used in the accession and a brief list of the objects donated. By checking the range of catalog numbers, any that were missing in sequence from the EMu inventories could be checked against the New and Old Series catalogs.

Within these two comparable inventories, 12 accessions were identified as having come from Barrett, representing his three excavations seasons at the site. These accessions and their corresponding objects were filtered out, leaving 2110 catalog entries representing private collections associated with Aztalan, Jefferson, or both. These 2110 catalog entries were investigated using the New and Old Series catalogs to identify where each was collected from and whether the EMu inventories were correct in their associations. The results found discrepancies that fell into five groups: 1) objects that should be associated with Aztalan but weren't; 2) objects that should be associated with Aztalan but were not on either list, but were identified from the New Series catalog entries; 3) objects that were found in a cardinal direction from Aztalan and could only be identified as Jefferson county, e.g. south of Aztalan; 4) objects that should be associated with other counties or were associated with Jefferson counties in other states; 5) objects that had incorrect accession numbers. Further evaluation of the EMu listed locations of these discrepancies identified that most of the objects were in Aztalan storage drawers. This suggests that they may in fact have been previously examined and that the EMu database did not have up-to-date associations.

The accession records also identified three accessions listed as either 'found in department' or 'found in museum'. These were identified by museum staff at the time as associated with Aztalan, but the objects did not have any visible catalog number on them. Due to their being Found in Museum, with no known provenience or record, the objects from these three accessions were also filtered out. All objects that had association with other towns within the county or with just Jefferson county were also filtered out. In the New Series catalogs, 314 objects were identified that represented part of the re-inventory done between 1901 and 1904. From this, 178 objects were identified as associated with Aztalan, and represented purchases and donations from 10 different collectors or organizations. The result is that 1409 objects from private sources were identified as associated with Aztalan in some form. These objects were obtained from 29 different individuals and two organizations.

Prior to developing this inventory, it was my understanding that all objects identified as collected from Aztalan in the MPM's collections were associated with the archaeological site. During the evaluation of the New and Old Series catalogs, many of the 'collected from' entries included listings for 'Aztalan, Wis', 'Aztalan, Jefferson Co', or 'Aztalan, Jeff. Co, Wis'. Other catalog entries from the same time period listed similarly worded locations, including 'Ixonia, Wisconsin', 'Milford, Jefferson Co', or 'Sumner, Jeff Co, Wis'. In chapter two I outlined the history of the discovery of Aztalan and the establishment of the town (civil township) of Aztalan. Due to the varied nature of the 'collected from' entries and the comparable entries for other cataloged objects, further details were necessary to determine whether the cataloged objects were collected from the site of Aztalan or from the 36 square mile area of the Town of Aztalan. The results of this investigation generated a strong level of confidence in each accession having been collected from the site of Aztalan (see Table 2.2). The accessions strongly associated with the

site accounted for 301 objects. However, for the purposes of this research, all 1409 objects were inventoried to present the entire assemblage of materials for the purposes of future research into these materials and as potential educational tools for museum programs.

This inventory process identified 57 storage trays that house one or more pieces of the privately collected material. Each tray's contents were examined and compared to existing inventories contained in each tray. During this process, those objects listed from EMu as being 'no location on card' were looked for and several were located that were either placed in the tray after the last inventory had been done in 1999 or had been overlooked at the time of prior inventory. Each object was identified by its catalog and accession numbers and was photographed using a photo stand and DSLR camera. ISO setting was adjusted to 3200, and an aperture priority value of 16 to ensure that the pictures taken were clear and representative of the object. Photos were saved as jpeg files and raw formats, and color corrected accordingly. A list of any discrepancies identified as well as a copy of the photos in jpeg format will be provided to the MPM Anthropology department after this project is complete.

Diagnostic Stone Tool Identification

In his 2008 thesis, Sampson outlined his analytical framework using Lurie and Jeske's (1990) work on lithic analysis. This included morphological characteristics, metric analysis, and lithic typing. His focus was on recognizable and typeable projectile points, using Noel Justice's (1987) type and cluster scheme. He used the following point type guides to assign classifications: Bell (1958, 1960), Boszhardt (2003), and Morrow (1984). Lithic identification used visual identification and microscopic magnification, assigning material type, local or exotic, and level of quality (Callahan 1979), utilizing Winkler, Blodgett, and Jeske (2006), Morrow (1994),

DeRegnaucourt and Georgiady (1998), and Fergusson and Warren (1992). A copy of Sampson's thesis and database of metric and non-metric information is curated in the MPM Anthropology department and was made available for this research.

The points were then sorted by catalog number to determine if any were missing and to ensure that each point was documented. Missing points were either listed as 'Not found on card' in EMu or were located among Barrett's projectile points. In the process of completing his thesis, Sampson organized the Barrett and private collection projectile points into bags representing distinct point types. This was not consistent across bags as some bags contained a variety of projectile point types. To address this and to properly identify all the points, artifacts in each bag were sorted into the appropriate type categories.

Each projectile point was compared to the entry in Sampson's database to ensure that the correct information was used going forward and to evaluate the presence or absence of each point based on the location listed in EMu. Where possible, projectile points with unknown diagnostic or lithic types were re-examined using the methods Sampson used to assign a type to each. Several discrepancies were identified during comparison with Sampson's database, including incomplete catalog numbers or duplicate catalog numbers when a catalog entry recorded only a single artifact. This was due to some points having only part of their catalog number visible and legible on the projectile point itself. Using a combination of the metric data Sampson collected, the measurements in the new series catalog from the time of accession, and visual inspection, the correct catalog number was assigned to each point. The results of this re-inventory and examination are listed at the beginning of chapter 4. Following this research, these projectile points will be organized into corresponding bags for ease of research and education in the future.

Chapter 4:
Results

Inventory of the Aztalan Private Collections at the MPM

The inventory process identified 78 categories of objects based on the MPM's EMu database. These 78 categories were assigned based on visual inspection by employees and interns during previous inventory activities. These categories included overlapping uses of singular and plural forms of objects when a catalog entry included a 'lot' of objects. Each object that was located was visually examined to determine the accuracy of the object category assigned to it in EMu. Most of these categories were consistent with the visual exam of the object. Each object was assigned a material category, a descriptive category, and a total count (see Table 4.1). Each descriptive category also includes the previous EMu Object names.

Table 4.1: Private Collection Inventory

Material	**Description**	**Count**	EMu Object Name(s)
Ceramic	Fired daub (Aztalan Brick)	5	
	Grit-tempered, Bodysherd	24	
	Grit-tempered, Rimsherd	17	
	Shell-tempered, Bodysherd	52	
	Shell-tempered, Rimsherd	71	
	Bowl	2	
	Ear Spool	3	
	Ear Spool Fragment	2	
	Pipe, Monitor	1	
	Rimsherd	13	
	Sherd	14	
	Subtotal	**204**	
Chipped Stone	Drill	36	
	Flake	6	
	Perforator	15	
	Projectile Point	698	
	Scraper	154	
	Subtotal	**909**	
Copper	Chisel	1	
	Fragment	1	
	Point	2	
	Sheet	3	
	Spike	1	
	Subtotal	**8**	

Faunal	Antler Tip	1	
	Awl	7	
	Bead	1	
	Ear Spool	1	
	Fragment	4	
	Shell Bead	2	
	Shell Fragment	4	
	Shell Hoe	1	
	Shell Pendant	4	
	Subtotal	**25**	
Groundstone	Abrader	4	
	Celt	83	
	Discoidal	9	
	Ear Spool	3	
	Gorget	3	
	Grooved Axe	124	
	Grooved Sinker	1	
	Grooved Hammerstone	4	
	Hammerstone	9	
	Muller	1	
	Ornament	5	
	Pipe	3	
	Worked Stone	2	
	Subtotal	**251**	
Historic	Bullet and Shot Mould	1	
	Subtotal	**1**	
Mineral	Galena	1	
	Hematite	3	
	Subtotal	**4**	
Natural Stone		2	
	Subtotal	**2**	
Osteological	Skeleton	1	
	Mandible	1	
	Skull	2	
	Subtotal	**4**	
	Total	1409	

With the revised categories, we can see a more usable breakdown of the archaeological material in Table 4.1. Chipped stone objects make up the largest portion of the assemblage, followed by groundstone, and then ceramic items. Faunal, shell, and osteological objects make up relatively small portions of the assemblage. These high and low counts suggest that the assemblage did come from surface collecting methods. In the process of plowing, artifacts exposed to the surface and organic in nature--bone and shell—will degrade quickly if not collected. Ceramics material such as low-fired earthenwares typical of the pre-contact Midwest,

will also degrade, depending on a variety of post-depositional processes. However, ceramics will typically survive longer than bone or shell, and are more likely to be picked up, especially when a collector is aware of what pre-contact pottery sherds look like and has an interest in collecting them.

Artifacts made of stone account for 1169 items and make up over 82% of the assemblage. Stone tools and associated debris are likely to survive for thousands of years due to their inert state, and also hold up well against agricultural practices. Once exposed after a good rainstorm, these artifacts show up very clearly against tilled soil. Consequently, most collectors focus heavily on lithic materials as opposed to other, less well-represented material culture categories while surface collecting.

Chipped Stone Projectile Points

The chipped stone projectile points can be sorted into nine temporal periods: Late Paleoindian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, Late Woodland, and Early Mississippian. In chapter three I outlined the methods Sampson used in his thesis to identify the type and cluster associated with each point. Clusters, as defined by Justice (1987:9) are groups of types that overlap morphologically, sharing similar forms and manufacturing techniques, and may represent part of an evolution of point design, or regions within a cultural tradition. Unless listed below, all points were verified using Justice (1987). Each period listed below includes the point type, count, approximate age range, and associated cluster.

Late Paleoindian

There are 28 Late Paleoindian projectile points in the inventory, consisting of Agate Basin, Quad, Dalton, Hi Lo, Plainview, Scottsbluff, and Milnesand (Bell 1958) types (Figure 4.1). These points are representative of four different clusters, as outlined by Justice (1987), and include the Dalton, Hi-Lo, Lanceolate Plano, and Scottsbluff clusters. A breakdown by type of the 28 projectile points is shown in Table 4.2

Early Archaic

A total of 89 projectile points were identified as representing the Early Archaic period, including Kessel Side Notched, St. Charles, Thebes, Hardin Barbed, Krik Corner Notched, Le Croy Bifurcate Base, and Fox Valley Truncated Barbed types (Figure 4.2). These points are representative of five different clusters, as outlined by Justice (1987), and include the Large Side Notched Cluster, Thebes Cluster, Hardin Barbed Cluster, Kirk Corner Notched Cluster, and LeCroy clusters. A breakdown by type of the 89 projectile points is shown in Table 4.3.

Table 4.2 Late Paleoindian Projectile Points

Type	Count	Age Range (Justice 1987)	Type Cluster
Agate Basin	1	8500 B.C. - 7400 B.C.	Lanceolate Plano Cluster
Quad	12	8500 B.C. - 7900 B.C.	Dalton Cluster
Dalton	1	8500 B.C. - 7900 B.C.	Dalton Cluster
Hi Lo	1	8500 B.C. - 8000 B.C.	Hi Lo Cluster
Plainview	3	8000 B.C.	Lanceolate Plano Cluster
Scottsbluff	9	7400 B.C. - 6300 B.C.	Scottsbluff Cluster
Milnesand	1	7000 B.C. - 5000 B.C.	Lanceolate Plano Cluster
Total	28		

Figure 4.1 Late Paleoindian Examples, from left to right: AgateBasin (21748), Dalton (20450), Hi-Lo (20521), Milnesand (20337), Plainview (20448), Quad (20497), Scottsbluff (20916). MPM Aztalan collection.

Table 4.3: Early Archaic Projectile Points

Type	Count	Age Range (Justice 1987)	Type Cluster
Kessel Side Notched	6	8400 B.C. - 7400 B.C.	Large Side Notched Cluster
St. Charles	16	8000 B.C. - 6000 B.C.	Thebes Cluster
Thebes	4	8000 B.C. - 6000 B.C.	Thebes Cluster
Hardin Barbed	3	8000 B.C. - 5500 B.C.	Hardin Barbed Cluster
Kirk Corner Notched	49	7500 B.C. - 6900 B.C.	Kirk Corner Notched Cluster
Le Croy Bifurcate Base	8	6200 B.C. - 5800 B.C.	Le Croy Cluster
Fox Valley Truncated Barbed	3	6200 B.C. - 5800 B.C.	Le Croy Cluster
Total	89		

Figure 4.2 Early Archaic Examples, from left to right: Top: Kessel Side Notched (20516), LeCroy Bifurcate Base (20520), St Charles (20804); Bottom: Fox Valley Truncated Barbed (20998), Hardin Barbed (20622), Kirk Corner Notched (20604), Thebes (20593).

Middle Archaic

There are 31 identified Middle Archaic projectile points, consisting of Raddatz Side Notched and Middle Archaic Stemmed types (Figure 4.3). These points are representative of two different clusters, as outlined by Justice (1987), and include the Large Side Notched and Archaic Stemmed clusters. A breakdown by type of the 31 projectile points is shown in Table 4.4

Table 4.4: Middle Archaic Projectile Points

Type	**Count**	**Age Range (Justice 1987)**	**Type Cluster**
Raddatz Side Notched	29	6000 B.C. - 3000 B.C.	Large Side Notched Cluster
Middle Archaic Stemmed	2	4000 B.C. - 1500 B.C.	Archaic Stemmed
Total	31		

Figure 4.3 Middle Archaic Examples, from left to right: Middle Archaic Stemmed (20624), (20802), Raddatz Side Notched (20487), (20614).

Late Archaic

A total of 154 projectile points were identified as representing the Late Archaic period, including Late Archaic Stemmed, Bottleneck Stemmed, Matanzas, Vosbert Corner Notched, Table Rock, Brewerton, Preston Corner Notched, Durst, and Terminal Archaic Barbed types (Figure 4.4). These points are representative of six different clusters, as outlined by Justice (1987), and include the Brewerton, Durst, Matanzas, Table Rock, Late Archaic Stemmed, and the Terminal Archaic Barbed clusters. A breakdown by type of the 154 projectile points is shown in Table 4.5.

Early Woodland

There are 66 identified Early Woodland projectile points in the inventory, consisting of Ashtabula, Meadowood, Early Woodland Stemmed, Adena Stemmed, Kramer, Dickson Contracting Stemmed, and Waubesa Contracting Stemmed (Boszhardt 2003) types (Figure 4.5). These points are representative of four different clusters, as outlined by Justice (1987), and include the Susquehanna, the Meadowood, the Dickson, and the Early Woodland Stemmed clusters. A breakdown by type of the 66 projectile points is shown in Table 4.6.

Table 4.5: Late Archaic Projectile Points

Type	Count	Age Range (Justice 1987)	Type Cluster
Late Archaic Stemmed	2	4000 B.C. - 1000 B.C.	Late Archaic Stemmed Cluster
Bottleneck Stemmed	2	3700 B.C. - 3000 B.C.	Table Rock Cluster
Matanzas	62	3700 B.C. - 2000 B.C.	Matanzas Cluster
Vosberg Corner Notched	1	3200 B.C. - 2500 B.C.	Brewerton Cluster
Table Rock	8	3000 B.C. - 1000 B.C.	Table Rock Cluster
Brewerton	6	2980 B.C. - 1723 B.C.	Brewerton Cluster
Preston Corner Notched	22	1500 B.C. - 1000 B.C.	Unknown
Durst	48	1000 B.C.	Durst Cluster
Terminal Archaic Barbed	3	1500 B.C. - 200 B.C.	Terminal Archaic Barbed Cluster
Total	154		

Figure 4.4 Late Archaic Examples, from left to right: Top Row: Bottleneck Stemmed (20828), Brewerton (20758), Durst (20714), Late Archaic Stemmed (20990), Matanzas (20524); Bottom Row: Preston Corner Notched (20668), Table Rock (20625), Terminal Archaic Barbed (20677), Vosberg Corner Notched (20634).

Table 4.6: Early Woodland Projectile Points

Type	Count	Age Range (Justice 1987)	Type Cluster
Ashtabula	1	1700 B.C. - 700 B.C.	Susquehanna Cluster
Meadowood	2	1300 B.C. - 500 B.C.	Meadowood Cluster
Early Woodland Stemmed	3	1000 B.C. - A.D. 200	Dickson Cluster
Adena Stemmed	13	800 B.C. - 300 B.C.	Dickson Cluster
Kramer	11	500 B.C.	Early Woodland Stemmed Cluster
Dickson Contracting Stemmed	9	500 B.C. - 100 B.C.	Dickson Cluster
Waubesa Contracting Stemmed	27	500 B.C. - A.D. 200	Dickson Cluster
Total	66		

Figure 4.5 Early Woodland Examples, from left to right: Adena Stemmed (20944), Ashtabula (20759), Dickson Contracting Stemmed (20947), Early Woodland Stemmed (20912), Kramer (20613), Meadowood (20794), Waubesa Contracting Stemmed (20983).

Middle Woodland

A total of 89 projectile points were identified as representing the Middle Woodland period, including Synders, Affinis Synders, Steuben Expanding Stemmed, and Lowe Flared Base types (Figure 4.6). These points are representative of two different clusters, as outlined by Justice (1987), and include the Synders and Lowe clusters. A breakdown by type of the 89 projectile points is shown in Table 4.7.

Table 4.7: Middle Woodland Projectile Points

Type	**Count**	**Age Range (Justice 1987)**	**Type Cluster**
Snyders	8	200 B.C. - A.D. 400	Snyders Cluster
Affinis Snyders	6	200 B.C. - A.D. 400	Snyders Cluster
Steuben Expanding Stemmed	64	A.D. 100 - A.D. 800	Lowe Cluster
Lowe Flared Base	1	A.D. 200 - A.D. 600	Lowe Cluster
Total	89		

Figure 4.6 Middle Woodland Examples, from left to right: Affinis Synders (20619), Lowe Flared Base (20646), Snyders (20807), Steuben Expanding Stemmed (20865).

Late Woodland

There are 14 identified Late Woodland projectile points in the inventory, consisting of the Scallorn types (Figure 4.7). This point represents the Scallorn cluster, as outlined by Justice (1987). The breakdown of these points are shown in Table 4.8.

Table 4.8 Late Woodland Projectile Points

Type	**Count**	**Age Range (Justice 1987)**	**Type Cluster**
Scallorn	14	A.D. 700 - A.D. 1100	Scallorn Cluster
Total	180		

Figure 4.7 Late Woodland Examples, from left to right: Scallorn (20567), (20574).

Late Woodland/Mississippian

There are 166 identified Late Woodland/Mississippian projectile points in the inventory, which represent a set of overlapping cultural traditions that exist simultaneously in different areas of North America and can appear to be in use into the early Historic Period. These points are representative of one cluster, outlined by Justice (1987) as the Late Woodland/Mississippian Triangular cluster (Figure 4.8). The Late Woodland Side and Corner Notched points are catch-all categories used to describe a corresponding side or corner notched point from sites associated

with both Late Woodland and Mississippian cultural components (Goldstein & Osborn 1988; Naumann 2008, Perino 1971). A breakdown by type of the 166 projectile points is shown in Table 4.9.

Table 4.9 Late Woodland Projectile Points

Type	Count	Age Range (Justice 1987)	Known Type Cluster
Hamilton Incurvate	16	A.D. 500 - A.D. 1000	Late Woodland/ Mississippian Triangular Cluster
Late Woodland Small Corner Notched	19	A.D. 700 - A.D. 1500	---
Late Woodland Small Side Notched	23	A.D. 700 - A.D. 1500	---
Madison Triangular	108	A.D. 800 - Historic Period	Late Woodland/ Mississippian Triangular Cluster
Total	166		

Figure 4.8 Late Woodland/Mississippian Examples, from left to right: Hamilton Incurvate (21256), Late Woodland Small Corner Notched (20579), Late Woodland Small Side Notched (20752, Madison Triangular (20396).

Late Lohmann-Early Stirling

A total of 35 projectile points were identified as representing the Late Lohmann-Early Stirling period, including Alba, Cahokia Double Side Notched, and Cahokia Triple Notched types (Figure 4.9). These points are representative of two different clusters, as outlined by Justice (1987), and include the Alba and Cahokia clusters. A breakdown by type of the 35 projectile points is shown in Table 4.10.

Table 4.10: Late Lohmann-Early Stirling

Type	**Count**	**Age Range (Justice 1987)**	**Type Cluster**
Alba	1	A.D. 900 - A.D. 1200	Alba Cluster
Cahokia Double Side Notched	33	A.D. 900 - A.D. 1150	Cahokia Cluster
Cahokia Triple Notched	1	A.D. 900 - A.D. 1150	Cahokia Cluster
Total	35		

Figure 4.9 Late Lohmann-Early Stirling Examples, from left to right: Left to Right: Alba (20909), Cahokia Double Notched (21030), Cahokia Triple Notched (28691).

Lithic Material

A total of 18 identifiable lithic materials were identified from the projectile points and included both local and non-local materials. Local materials were classified by Sampson as available within a 15-mile (25 km) radius of the site of Aztalan and exotic was considered

anything outside that range. Lithic quality ranged from good (.5-3.5) to fair (4.0) to poor (4.5-5.0) and represented how well the material could be flaked (Callahan 1979). Initial review of the data shows that 65% of the material is classified as local and is represented in four types, whereas exotic examples makes up 20% and includes fourteen different types (Table 4.11).

Table 4.11: Lithic Material of Assemblage

Lithic Material	**Count**	**%**	**Rarity**	**Quality**
Arcadia Ridge Silicified Sandstone	2	0.3%	Exotic	Poor
Burlington Chert	41	5.9%	Exotic	Good
Cataract Silicified Sandstone	2	0.3%	Exotic	Poor
Cobden Chert	2	0.3%	Exotic	Good
Cochrane Chert	1	0.1%	Exotic	Good
Coshocton Chert	2	0.3%	Exotic	Fair
Dongola Chert	9	1.3%	Exotic	Good
Galena Chert	186	26.6%	Local	Fair
Hixton Silicified Sandstone	48	6.9%	Exotic	Fair
Knife River Flint	3	0.4%	Exotic	Good
Moline Chert	4	0.6%	Exotic	Fair
Oneota Formation Prairie du Chien Chert	174	24.9%	Local	Fair
Platteville Formation Chert	40	5.7%	Local	Poor
Quartz	6	0.9%	Exotic	Poor
Rhyolite	2	0.3%	Exotic	Poor
Root River Chert	1	0.1%	Exotic	Good
Shakopee Formation Prairie du Chien Chert	53	7.6%	Local	Poor
Upper Mercer Chert	4	0.6%	Exotic	Good
Unknown	118	16.9%		
Total	698	100%		

Chapter 5:
Analysis

Overall Projectile Points

During analysis of the projectile point assemblage, several factors were considered regarding the generation of the privately collected materials. Collectors generated and curated their collections for many years and may have preferred to collect certain raw materials or certain artifact types. Bias favoring certain artifacts can skew the comparison of an assemblage to one from an excavated context. Also, these collections were obtained by the Milwaukee Public Museum through donations and purchases and may not represent all that a collector collected, just what he or she was willing to part with at the time. Several of the accessions included in this research contain artifacts not associated with Aztalan, instead deriving from other towns, counties, states, and countries.

This analysis required comparing the privately collected materials to an assemblage collected under more systematic standards that do not discriminate what is collected and that comes from the site in question. Barrett's excavations of Aztalan were considered advanced compared to other methods employed in Wisconsin in the early 20th century. The maps from his excavations document numerous structures and features that his team encountered and excavated and *Ancient Aztalan* is a guide to many of these features and the artifacts from the site. Any evidence of Barrett's field notes from his excavations have not been located, except for a single notebook that is primarily concerned with mapping procedures. In Sampson's analysis of the Barrett projectile point assemblage, he noted that over 55% of the assemblage had no specific provenience within the site (2008:116).

This makes the Barrett assemblage challenging because we don't know if the entire assemblage came from excavated contexts or if Barrett and his crew conducted surface collecting. We can only say that the entire assemblage was recovered from the Aztalan site and that 45% or roughly half of it comes from excavated contexts. Barrett's professional approach to the excavations would not have discriminated in what was collected, making his assemblage representative of the entire site, and therefore the best available candidate to compare the surface collected Aztalan assemblage against.

The privately collected projectile point assemblage consists of 698 projectile points, 672 of which could be assigned known diagnostic types. These include types typical of all major periods of the Midwest from the Late Paleoindian through the Late Lohmann-Early Stirling period. Table 5.1 shows a breakdown of the projectile point counts and percentages by cultural tradition for the private collections and Barrett's excavations. In his thesis, Sampson treated the Late Woodland category as Late Woodland/Mississippian, determining that it was not possible to distinguish unnotched triangular points as Late Woodland or Mississippian. To facilitate this comparison, the point types in chapter 4 were grouped using the same method.

Table 5.1: Projectile Point types Comparison by Assemblage.

	Private Collections		**S.A. Barrett Excavations**	
Cultural Tradition	**Count**	**Percentage**	**Count**	**Percentage**
Late Paleoindian	28	4.01%	0	0.00%
Early Archaic	89	12.75%	2	0.69%
Middle Archaic	31	4.44%	1	0.35%
Late Archaic	154	22.06%	13	4.50%
Early Woodland	66	9.46%	8	2.77%
Middle Woodland	89	12.75%	6	2.08%
Late Woodland	14	2.01%	7	2.42%
Late Woodland/Mississippian	166	23.78%	221	76.47%
Late Lohmann-Early Stirling	35	5.01%	22	7.61%
Unknown	26	3.72%	9	3.11%
Total	698	100%	289	100%

Barrett's excavated assemblage is dominated by Late Woodland point types that account for almost 80% of the total. Mississippian types account for less than 8% of the assemblage and the remaining types are poorly represented accounting for a meager combined 14% of the total. The private collections are more evenly distributed with Late Woodland and Late Archaic types accounting for almost half of the total points. However, these collections include Late Paleoindian types that are lacking in the excavated assemblage. The private collections also have elevated levels of Early Archaic and Middle Woodland points compared to Barrett's collection.

There are three scenarios that may have generated this disparity. First, the disparity may be a result of the fact that, as far as we know, Barrett did not surface collect the site prior to excavating. The collector assemblage presumably consists of surface finds recovered from all plowed areas of the site while Barrett's assemblage was excavated from a less extensive sample of the site area. Second, types that are known to be rarer at the site may have been so heavily collected that few or none remained to be found by Barrett. Lastly, the privately collected assemblage may not be representative of the archaeological record of the site of Aztalan proper. Most of the privately collected points come from the Sheridan collection and while the records indicate that some of the points likely do come from Aztalan, most of the collection can only be positively associated with Jefferson County.

The majority of the projectile points come from the Sheridan collection which according to the letter from Mrs. Sheridan included Aztalan specimens as well as a majority coming from Jefferson county as a whole. The Wisconsin Historical Society maintains an online database of all known archaeological and burial sites within the state, including all pertinent location data, whether approximate or definite, cultural components that are associated with each site, past excavations bibliographies and current known site status. This Wisconsin Historic Preservation

Database (WHPD) currently lists 1186 archaeological and burial sites within the county, with 310 (26%) in the township of Aztalan. That represents a significant amount of archaeology within a 36 square mile area. It is equally and perhaps more likely that the presence of Aztalan may have encouraged more collecting and more documenting of the archaeology in the vicinity, than of the surrounding townships altogether.

Jefferson county altogether has 124 Late Archaic sites, 177 Late Woodland sites, as well as sites extending from the Early Paleo-Indian through to the Late Prehistoric and Early Historic periods. These numbers of sites are similar to the totals for projectile points by time period and suggest that the 698 projectile points are much more representative of the county.

Strongly Associated Projectile Points

The research in chapter 2 identified three levels of geographic association for each accession. Based on the results of Table 2.2 there are 14 accessions that can be associated with Aztalan, and of those only three accessions include projectile points. These 71 points are listed by their type in Table 5.2 along with the types identified by Sampson among Barrett's assemblage. Out of the 71 projectile points, there are 10 types represented that account for all major periods from Late Paleoindian through Early Mississippian, with the exception of the Middle Archaic. There are also nine projectile point types missing from the privately collected materials while their corresponding counts in the Barrett assemblage total 20 points (7.3%) and include the only Middle Archaic type present, a Raddatz Side Notched point.

There are other interesting differences between the two assemblages also. For example, the Barrett assemblage is more diverse in terms of point types than is the collector assemblage. Both assemblages are dominated by Late Woodland types with these points accounting for 70%

of the collector and full 85% of the Barrett collection. On the other hand, Mississippian point styles account for 21% of the collector assemblage but only 8% of the Barrett collection. Nonetheless, both assemblages reflect a strong trend toward dominance by Late Woodland/Mississippian point types. It is difficult to account for these differences except to speculate that they may derive from different recovery procedures, portions of the site targeted, and depth of deposits.

Table 5.2: Projectile Point types Comparison of Strongly Associated Aztalan Assemblages

	Strong Aztalan Association		**S.A. Barrett Excavations**	
Diagnostic Type	**Count**	**Percentage**	**Count**	**Percentage**
Agate Basin	1	1.4%	0	---
St. Charles	1	1.4%	1	0.4%
Kirk Corner Notched	0	---	1	0.4%
Le Croy Bifurcate Base	0	---	2	0.7%
Raddatz Side Notched	0	---	1	0.4%
Matanzas	0	---	2	0.7%
Preston Corner Notched	1	1.4%	3	1.1%
Durst	0	---	6	2.1%
Kramer	1	1.4%	1	0.4%
Waubesa Contracting Stemmed	1	1.4%	7	2.5%
Snyders	0	---	1	0.4%
Affinis Snyders	0	---	1	0.4%
Steuben Expanding Stemmed	1	1.4%	4	1.4%
Hamilton Incurvate	4	5.6%	13	4.6%
Late Woodland Small Side Notched	0	---	3	1.1%
Madison Triangular	45	63.4%	205	73.2%
Scallorn	1	1.4%	7	2.5%
Cahokia Double Side Notched	15	21.1%	19	6.8%
Cahokia Triple Notched	0	---	3	1.1%
Total	71	100%	280	100%

Breaking down the 71 points by their accession numbers (Table 5.3), one can see that they come from two different collectors, W.H. Ellsworth and Albert Kracht. As noted in chapter 2, Albert Kracht was farming part of the enclosure portion of the site at the time of the Barrett excavations. Kracht was accommodating of this work and opened his collection to Samuel Barrett. W.H. Ellsworth's collection consists of finds made by Ellsworth who documented where each of his

points was found and provided the MPM with his inventory listing the Aztalan site as the source. Thus, it is reasonable to suggest that these 71 points did come from Aztalan. The similarities between the three highest projectile point counts all represent the prominent Late Woodland and Early Mississippian cultural components that occupied the site during its height. The presence of nine extra projectile point types among Barrett's assemblage and one extra type among the private collections, all with very low quantities, suggests that these point types were minimally present within the site—to begin with.

Table 5.3: Strongly Associated Points by Accession Number

	W. H. Ellsworth	**Albert Kracht**	**Albert Kracht**
Diagnostic Type	**6115**	**6616**	**10772**
Agate Basin	1	---	---
St. Charles	---	1	---
Preston Corner Notched	1	---	---
Kramer	1	---	---
Waubesa Contracting Stemmed	---	1	---
Steuben Expanding Stemmed	---	1	---
Hamilton Incurvate	1	3	---
Madison Triangular	18	27	---
Scallorn	1	---	---
Cahokia Double Side Notched	---	14	1
Total	23	47	1

Lithic Raw Material

The lithic material present among the assemblages from Barrett's excavations and the private collections (see Table 5.3) show similarities in the variety and count of raw materials. There are eight additional types of material among Barrett's excavations, including Cochrane Chert, Knife River Flint, Mill Creek Chert, Rhyolite, Silicified Sandstone, Silurian Chert, and Upper Mercer Chert. Seven of the eight represent less than 5% of the Barrett assemblage, and include exotic materials that are not found within a 20-mile radius of the site locality. This

suggests that their presence at the site is both minimal and rare. The key difference is the Silicified Sandstone, which accounts for 19.6% of Barrett's assemblage. Silicified Sandstone is a general category that includes a variety of orthoquartzite found in western Wisconsin that cannot be accurately identified (Winkler et al. 2009:34). The private collections contain no general Silicified Sandstone.

Table 5.4: Lithic Material in the Barrett and Strongly Associated Private Collections

	Strong Aztalan Association		S.A. Barrett Excavations	
Lithic Material	**Count**	**Percentage**	**Count**	**Percentage**
Arcadia Ridge Silicified Sandstone	1	1.4%	---	--
Burlington Chert	6	8.5%	9	3.2%
Cataract Silicified Sandstone	2	2.8%	1	0.4%
Cobden Chert	1	1.4%	3	1.1%
Cochrane Chert	--	--	2	0.7%
Coshocton Chert	1	1.4%	3	1.1%
Galena Chert	4	5.6%	27	9.6%
Hixton Silicified Sandstone	25	35.2%	35	12.5%
Knife River Flint	--	--	1	0.4%
Mill Creek Chert	--	--	3	1.1%
Oneota Formation Prairie du Chien Chert	9	12.7%	74	26.4%
Platteville Formation Chert	1	1.4%	5	1.8%
Quartz	4	5.6%	18	6.4%
Rhyolite	--	--	1	0.4%
Shakopee Formation Prairie du Chien Chert	2	2.8%	6	2.1%
Silicified Sandstone	--	--	55	19.6%
Silurian Chert	--	---	6	2.1%
Speckled Silicified Sandstone	--	--	2	0.7%
Upper Mercer Chert	--	--	1	0.4%
Unknown	15	21.1%	28	10.0%
Total	71	100%	280	100%

Both assemblages are dominated by silicified sandstone varieties, 93 pieces (33.2%) among the Barrett assemblage and 26 pieces (36.3%) among the private assemblage. Each represents approximately 1/3 of the overall assemblage. Although Barrett's excavation crew does not appear to have employed screening of spoil piles, it is likely that any projectile point encountered during excavations was collected. Barrett did not discriminate in what he collected

from his excavations and we can be relatively certain that his assemblage is representative of the Late Woodland/Mississippian component of the site.

However, closer scrutiny of the Silicified Sandstone points from the private collections suggests a potential bias in collecting procedures. Of the 71 privately collected points from Aztalan, 22 are from a single accession by W. H. Ellsworth and 17 of those are made from silicified sandstone, four from quartz, and a single point made from Burlington chert. Ellsworth's Aztalan material included 30 objects, and the remaining eight non-diagnostic items also include both quartz and silicified sandstone material. This was a small fraction of the 2322-piece collection he donated in 1919, which was comprised of primarily quartz and quartzite pieces. This evidence strongly suggests that Ellsworth's accession, although it is strongly associated with Aztalan based on background evidence, is strongly biased towards quartz and quartzite materials. It is entirely possible that he encountered a cluster of debitage and points of this material, just as Samuel Barrett also encountered clusters within various pits throughout the site (Barrett 1933).

Chapter 6:
Conclusions

The primary goal of this thesis was to compare the privately collected and professionally excavated assemblages of chipped stone projectile points from the Aztalan site to determine if the privately collected materials could be confidently associated with the site. This comparison strongly suggests that the privately collected assemblage is not consistent with makeup of the excavated collection due to the presence of 27 new diagnostic types and an evaluation of the corresponding accession records. A subset of the privately collected assemblage was determined to have come from the site and is also more consistent with the excavated assemblage. However, the comparison of lithic material and accession records suggests that there may a degree of bias on the part of one collector's preference for quartz and quartzite points. Through this process, a single Scottsbluff projectile point made from Hixton Silicified Sandstone was identified that can reasonably be associated with Aztalan and thus extends the temporal range of the site to include a Late Paleoindian component.

This research has demonstrated one method of testing the relationship of a legacy collection to a presumed procenience using an excavated artifact assemblage as a control group. The inventory process identified objects in the MPM's collection that can be positively associated with the site of Aztalan, thereby enriching the record of the site. There is also the possibility that some of these objects were not previously analyzed due to the uncertainty or awareness of their association with the site. Future research into the other categories of material culture identified, in particular ceramics, would lend additional weight to the value of legacy collection research.

Although 627 of the projectile points could not be definitively associated with the site of Aztalan, the 45 representative projectile point types can be associated with Jefferson County. As I described in chapter 5, these points are, at least by cultural period, representative of Jefferson County. The distribution associated with the different projectile point types shows that several point types represented among the 627 have geographical ranges that do not intersect with Jefferson County (Justice 1987). This suggests that there may be a greater interplay between projectile point cultural traditions in southern Wisconsin or that these points were obtained from out of state by one or more of the collectors through purchase or trade. An examination of archaeological reports from sites within Jefferson county may provide further evidence for the presence of these different cultural traditions or strengthen the possibility of their out-of-state origins.

Surface collecting is also a technique used in the early stages of modern archaeological investigations to gain a sense of the nature of a site before excavating. Modern agricultural practices have moved away from traditional moldboard or chisel plowing methods, exposing fewer artifacts to the surface. Collecting practices in the past and in the present continue to remove material from sites that we know about and those we have yet to find. If we focus only on what is currently on the site, we are increasingly likely to misinterpret a site as being less significant because there are only a small number of flakes on the surface. Further research into legacy collections like these has the potential to enhance our understanding of existing archaeological sites and material cultural traditions as well as identifying potentially missed cultural associations due to excessive surface collecting by private individuals.

At the same time, archaeologists today can never be sure of exactly how much of a site may have been collected. Although Barrett only uncovered 289 projectile points, and most of

those were Late Woodland, the record of Aztalan may have been severely compromised before he first saw the site. It is possible that the 698 privately collected points may reflect the site-wide assemblage composition before the site was heavily collected. To test this would require investigating all existing collections related to Aztalan, including professionally curated as wells private collections such as the Albert Kracht collection at the Lake Mills Aztalan Museum and the Jaycox collection at the University of Whitewater (WA 1926). Kracht and Jaycox both had large collections that they opened to Barrett for his use in writing *Ancient Aztalan* and their collections may also be able to expand our understanding of the site 86 years after the publication of Barrett's monograph.

This research described the necessary steps taken to ensure that all available information on each collection was accounted for, including early newspaper and journal articles that describe the collectors. No two collections will require the same amount of research or will be supported by the same level of documentation, and in each case, research can only work with what is available. It was also beneficial to pursue this line of research because it helped to verify the existence of 1409 artifacts, rectify any inconsistencies in the MPM's digital record, and potentially make those artifacts more accessible to future research. There is also a strong opportunity for public engagement and education through this research, the history of these collections, and as an example of what collecting like this can do for the archaeological record and our ability to accurately interpret it.

In the present case, the biggest challenge was in differentiating between the site of Aztalan and the Town of Aztalan. The unique circumstances that established the site before the town was platted, and subsequently gave the town its name may be incredibly rare, but it also made it impossible to separate the two based on the accession and catalog records. In instances

like this, it is better to err on the side of caution and assign objects to a broader geographical area than a single site. Regional studies of artifact types would benefit greatly from the use of legacy collections, which often contain many more diagnostic projectile point types, whether they are associated with a site, a town, or a county.

The specific circumstances and unbridled collecting practices that created these legacy collections were for a long time, and still are to many, considered unacceptable. There are current ethical discussions among the archaeological community about whether to work with modern day collectors at the risk of further commercializing the archaeological record (Childs 2015, Duff 2008, LaBelle 2003, Pitblado 2014, Shott 2017). This debate may never be resolved; however, there are a multitude of legacy collections in museums today that are in no danger of commercialization and have a great deal to offer the archaeological profession. This research also helps to fulfill many museum's missions of education and research through the use of their collections.

In pursuing this research, I had no prior scheme to conduct research or any prior researcher to consult with. It is my hope that by engaging in this research, I have set down some first steps for investigating legacy collections that future researchers will find useful in their own endeavors. In investigating the different collectors, I came to realize that many of them had good intentions in collecting and preserving the archaeology of Wisconsin. Their methods were not always recorded, nor were their proveniences, but their collections were donated to museums for the purpose of preservation and continued inspiration for future generations.

These collector collections form the legacy collections of the MPM, as well as other museums and institutions, and their collections likely formed the basis of many early exhibits as well as numerous articles. Some of these collectors are well known for their role in the Museum,

whereas others, as I found out, have largely been forgotten. Legacy collections are a legacy of modern archaeology and we should take the time to look back more often at the collections of old and the potential new insights we might be able to excavate from them.

References

Arnold, William

2014 *Fire on the Mountain: The Bronze and Iron Alpine Ash Altar Material in the Frankfurth Collection at the Milwaukee Public Museum F*. Unpublished Master's Thesis, University of Wisconsin-Milwaukee, Milwaukee.

Baerreis, David A. and Joan Freeman.

1958 Late Woodland Pottery as Seen from Aztalan. *The Wisconsin Archeologist.* 39(1):35-65.

Barker, Alex W.

2010 Exhibiting Archaeology: Archaeology and Museums. *Annual Review of Anthropology* 39:293–308.

Baxter, J. E.

2013. "Investigating Absence: Assessing the Cumulative Effects of Casual Collecting at a 19th Century Bahamian Plantation." *Journal of Field Archaeology* 38: 174–184.

Barrett Samuel A.

1933 *Ancient Aztalan*. Bulletin of the Museum of the City of Milwaukee, Milwaukee.

Bawaya, Michael

2007 Curation in Crisis. *Science* 317:1025-1026.

Bell, Robert E.

1958 Guide to the Identification of Certain American Indian Projectile Points, edited by Oklahoma Anthropological Society. Vol. Special Bulletin No. 1.

Birmingham, Robert A. and Lynne Goldstein

2006 *Aztalan: Mysteries of an Ancient Indian Town*. University of Wisconsin Press, Madison, Wisconsin.

Bleed, Peter

1970 Notes on Aztalan Shell-Tempered Pottery. *The Wisconsin Archeologist* 51(1):1-20.

Boszhardt, Robert F.

2003 *A Projectile Point Guide for the Upper Mississippi River Valley*. University of Iowa Press, Iowa City.

Brown, James A.

1981 The Potential of Systematic Collections for Archaeological Research. In: *The Research Potential of Anthropological Museum Collections*. Volume 376:65-76. The New York Academy of Sciences, New York.

Butler, J.D.
1882 Early Historic Relics of the Northwest. *Wisconsin Historical Collections* 9:99-105.

Callahan, Errett
1979 The Basics of Biface Knapping in the Eastern Fluted Point Tradition: A Manual for Flintknappers and Lithic Analysts. *Archaeology of Eastern North America.* 7:1-180.

Childs, S. Terry
2004 *Our Collective Responsibility: The Ethics and Practice of Archaeological Collections Stewardship*. Society for American Archaeology, Washington, DC.

2015 Pragmatic Considerations For Responsible Collectors Who Donate Their Collections To Museums. *SAA Archaeological Record* 15(5):11–13, 39.

Clauter, Jodi A., and John D. Richards
2009 *Archaeological Investigations at Aztalan State Park*. Archaeological Research Laboratory Report of Investigations Submitted to Historic Resource Management Services, 168. Copies available from University of Wisconsin-Milwaukee, Milwaukee, WI.

Duff, Andrew (Editor)
2008 SAA Committee Response to Shott. *SAA Archaeological Record* 8(3):3-4

Evans, Madeleine G., Constance Arzigian, Jean Dowiasch, Brad H. Koldehoff, and Thomas J. Loebel
2018 Addressing Private Collections and the Results of Avocational Archaeology as a Cultural Resource That Enhances Our Understanding of Archaeological Landscapes. In *Collaborative Engagement: Working with Private Collections and Responsive Collectors*, edited by Michael J. Shott, Mark F. Seeman, and Kevin C. Nolan, pp. 67-82. Occasional Papers No. 3. Midwest Archaeological Conference.

Frieman, Catherine J. & Lisa Janz
2018 A Very Remote Storage Box Indeed: The Importance of Doing Archaeology with Old Museum Collections. *Journal of Field Archaeology*, 43:4, 257-268.

Goldstein, Lynne G. (editor)
2015 *2013 Aztalan Excavations: Work on the Gravel Knoll and West of the Palisade.* Submitted to Wisconsin Office of the State Archaeologist, Wisconsin Historical Society, and the Office of the Departmental Archaeologist, Wisconsin Department of Natural Resources, Michigan State University, East Lansing.

Goldstein, Lynne G.

1992 The Southeastern Wisconsin Archaeology Program: 1991-1992. University of Wisconsin Milwaukee Archaeology Research Laboratory Report of Investigations No. 112. Milwaukee, WI.

1995 The Southeastern Wisconsin Archaeology Program: 1994-1995. University of Wisconsin Milwaukee Archaeology Research Laboratory Report of Investigations No. 125. Milwaukee, WI.

Goldstein, Lynne G. and Donald H. Gaff
2002 Recasting the Past: Examining Assumptions About Aztalan. *The Wisconsin Archaeologist* 83:98-110.

Goldstein, Lynne and Michele Patin
1979 Final Report of an Archaeological Survey of Two Building Sites at Aztalan State Park, Jefferson County, Wisconsin. The University of Wisconsin-Milwaukee Archaeological Research Laboratory. Milwaukee, WI.

Goldstein, Lynne G. and Sannie K. Osborn
1988 *A Guide to Common Prehistoric Projectile Points in Wisconsin*. Milwaukee Public Museum, Milwaukee, Wisconsin.

Harrison, Ian and Lynne G. Goldstein
2015 Radiocarbon Dating. In *2013 Aztalan Excavations: Work on the Gravel Knoll and West of the Palisade*, edited by Lynne G. Goldstein, pp. 51-54. Consortium for Archaeological Research, Michigan State University, East Lansing.

Hegmon, Michelle, James R. McGrath, and Marit K. Munson
2017 The Potential and Pitfalls of Large Multi-Source Collections. *Advances in Archaeological Practice* 5(2), pp. 138–146.

Western Historical Company
1879 The History of Jefferson County, Wisconsin: Containing a history of Jefferson County, its early settlement, growth, development, resources, etc. Chicago: Western Historical Company

Hurley, William M.
1977 Aztalan Revisited. The Wisconsin Archaeologist 58:256-294.

Huster, Angela c.
2013 Assessing Systematic Bias in Museum Collections. *Advances in Archaeological Practice* 1(2), pp. 77-90.

Hyer, Nathaniel
1837 Ruins of the Ancient City of Aztalan. *Milwaukee Advertiser*, February1837.

Jefferson Banner

1894 The Jefferson Banner. http://jeffersonhistoricalsociety.org/database/show_event php?event=42702. accessed 1 September 2019.

Johnson, Paula and Steven W. Denton
2004 Something Old, Something New: Marrying Overlooked Museum Resources with Countywide Resource Protection. In *Our Collective Responsibility: The Ethics and Practice of Archaeological Collections Stewardship*. Edited by S. Terry Childs. pp. 93-103. The Society for American Archaeology, Washington, D.C

Justice, Noel D.
1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States A Modern Survey and Reference*. Indiana University Press, Bloomington and Indianapolis.

Kolb, Michael F.
1985 Aztalan Geomorphic and Midden Analysis. *The Southeastern Wisconsin Archaeology Project: 1984-1985*. edited by Lynne G. Goldstein, pp. 110-128. UWM Archaeological Research Laboratory Report of Investigations. No. 81., Milwaukee, Wisconsin.

2015 *Geomorphological Investigations at Aztalan State Park during 2013 and 2014*. Submitted to Strata Morph Geoexploration Inc.

Kotwasinski, Jill M.
2014 Understanding Use and Function: An Intrasite Comparative Analysis of the 2011 UWM Aztalan Ceramic Assemblage. M.S., Anthropology, University of Wisconsin-Milwaukee, Milwaukee, WI.

Krus, Anthony, John D. Richards and Robert J. Jeske
2019 *Chronology for Mississippian and Oneota Occupations at Aztalan and the Lake Koshkonong Locality*. Paper presented at the 63rd Midwest Archaeological Conference, October 10-12, 2019. Mankato, MN.

LaBelle, Jason M.
2003 Coffee Cans and Folsom Points: Why We Cannot Continue to Ignore the Artifact Collectors. In *Ethical Issues in Archaeology*, edited by Larry Zimmerman, Karen Vitelli, and Julie Hollowell-Zimmer, pp. 115–127. Altamira Press, Walnut Creek, California.

Lapham, Increase
1855 *The Antiquities of Wisconsin as Surveyed and Described* Smithsonian Contributions to Knowledge, Washington D.C.

Leigl, Megan
2014 An Intra-site Spatial Analysis of Selected Faunal Remains From the Aztalan Site (47JE01), Anthropology, University of Wisconsin- Milwaukee, Milwaukee, WI.

Lewis, T. M. N.
1954 Mound Group Opposite Aztalan. *The Wisconsin Archeologist* 35(1):37-41.

Lurie, Nancy Oestreich and Milwaukee Public Museum.
1983 *A Special Style: The Milwaukee Public Museum, 1882-1982*. Milwaukee Public Museum.

MacFarland, Kathryn, and Arthur W. Vokes
2016 Dusting Off the Data: Curating and Rehabilitating Archaeological Legacy and Orphaned Collections. *Advances in Archaeological Practice* 4:161–175.

Maher, Robert F.
1958 The Excavation and Reconstruction of the Southwestern Pyramidal Mound at Aztalan. *The Wisconsin Archeologist* 39 (1): 77-100.

Marquardt, William H., Anta Montet-White, and Sandra C. Scholtz
1982 Resolving the Crisis in Archaeological Collections Curation. *American Antiquity* 47:409–418.

McKern, W. C.
1930 *The Kletzien and Nitschke Mound Groups*. Bulletin of the Public Museum of the City of Milwaukee, Vol. 3, No. 4.

1965 The Barrett Era. In *Lore*. 15(4), pp.114-119.

Miller, Daniel
1994 Things Ain't What They Used to Be. In *Interpreting Objects and Collections*, edited by S. M. Pearce, pp. 13–18. Leicester Readers in Museum Studies. Routledge, London.

Mollerud, Katy J.
2005 Messages, Meanings and Motifs: An Analysis of Ramey Incised Ceramics at the Aztalan Site. M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.

Naumann, Aaron J.
2008 An Initial Analysis of the Gottschall Rochshelter Lithic Assemblage. Master of Arts, Anthropology, Michigan State University.

Overstreet, David F.
2000 Cultural Dynamics of the Late Prehistoric Period in Southern Wisconsin. In *Mounds, Modoc, and Mesoamerica. Papers in Honor of Melvin L. Fowler*, edited by Steven A. Ahler, pp. 405-438. Illinois State Museum, Springfield, Illinois.

Perino, Gregory
1971 Guide to the Identification of Certain American Indian Projectile Points. In *Special Bulletin*. Vol. 4. Oklahoma Anthropological Society.

Picard, Jennifer L.
2013 Northern Flint, Southern Roots: A Diachronic Analysis of Paleoethnobotanical Remains and Maize Race at the Aztalan Site (47-JE-0001). M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.

Pitblado, Bonnie L.
2014 An Argument for Ethical, Proactive, Archaeologist-Artifact Collector Collaborations. *American Antiquity* 79:385–400.

Price, Douglas T., James H. Burton and James B. Stoltman
2007 Place of Origin of Prehistoric Inhabitants of Aztalan, Jefferson Co., Wisconsin. *American Antiquity* 72:524-538.

Redmond, Brian G. and Ann S. DuFresne
2018 Dealing with Museum Legacy Collections in the Twenty-First Century: Three Case Studies from Ohio. In *Collaborative Engagement: Working with Private Collections and Responsive Collectors*, edited by Michael J. Shott, Mark F. Seeman, and Kevin C. Nolan, pp. 67-82. Occasional Papers No. 3. Midwest Archaeological Conference.

Richards, John D.
1992 Ceramics and Culture at Aztalan, A Late Prehistoric Village in Southeast Wisconsin. PhD, Anthropology, University of Wisconsin- Milwaukee.

2003 Collars, Castellations, and Cahokia: A Regional Perspective on the Aztalan Ceramic Assemblage. *The Wisconsin Archeologist* 84:139-153.

2007a Context and Process: Red Slipped Pottery in Cahokia's Northern Hinterlands. In *Illinois Archaeology* 19:1-26.

2007b Viewing the Ruins: The Early Documentary History of The Aztalan Site. In *Wisconsin Magazine of History*. The Wisconsin Historical Society Press. Madison, Wisconsin. Winter Edition. 2007-2008:28-39.

Richards, John D. and Robert J. Jeske
2002 Location, Location, Location: The Temporal and Cultural Context of Late Prehistoric Settlement in Southeast Wisconsin. *The Wisconsin Archeologist* 83:32-54.

Richards, John D., Seth A. Schneider and Timothy R. Pauketat
2010 Comparative Analysis of Red-and-White Pottery from Cahokia and Aztalan. Paper presented at the 75th Annual Meeting of the Society for American Archaeology, St. Louis, MO.

Richards, John D. and Thomas J. Zych

2018 A Landscape of Mounds: Community Ethnogenesis at Aztalan. In *Archaeology and Ancient Religion in the American Midcontinent*, edited by Brad H. Koldehoff and Timothy R. Pauketat, pp. 234-268. University of Alabamba Press, Tuscaloosa, AL.

Rowe, Chandler W.
1958 A Crematorium at Aztalan. *The Wisconsin Archaeologist* 39:101-110.

Sampson, Kurt A.
2008 The Projectile Points in the Milwaukee Public Museum Ancient Aztalan Collection. M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.

Shott, Michael J.
2017 Estimating the Magnitude of Private Collection of Points and Its Effects upon Professional Survey Results: A Michigan Case Study. *Advances in Archaeological Practice* 5(2):125–137.

Slater, Philip A., Kristin M. Hedman, and Thomas E. Emerson
2014 Immigrants at the Mississippian Polity of Cahokia: Strontium Isotope Evidence for Population Movement. *Journal of Archaeological Science* 44(April):117–127.

Society for American Archaeology
1996 Principles of Archaeological Ethics. http://saa.org/AbouttheSociety/PrinciplesofArchaeologicalEthics/tabid/203/Default.aspx, accessed 1 September 2019.

Stoltman, James B.
2001 The Role of Petrography in the Study of Archaeological Ceramics. In *Earth Sciences and Archaeology*, edited by P. Goldberg, V. T. Holliday and C. R. Ferring, pp. 297-326. Kluer Academic/Plenum, New York.

Thwaites, Reuben G. (Editor)
1900 The University of Wisconsin: Its History and Its Alumni : with Historical and Descriptive Sketches of Madison, Part 2. J.N. Purcell, Madison. https://books.google.com/books?id=u5Z51s8kh5UC&pg=PA746&lpg=PA746&dq=jefferson+county+Wisconsin+history+superintendent+of+schools+%221884%22+Sheridan&source=bl&ots=pnuOfeFQbo&sig=ACfU3U112Nv9RxibY_7P5. accessed October 15, 2019.

Vander Heiden, Robert W.
2019 Lithic Technological Organization at the Aztalan Site (47-JE-01). M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.

Wallace, Jeremy A.
2000 The Mysteries of Ancient Aztalan. M.S., Anthropology, University of Wisconsin-Madison, Madison, Wisconsin.

Warwick, Matthew C.
2002 A Diachronic Study of Animal Exploitation at Aztalan, a Late Prehistoric Village in Southeast Wisconsin. M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.

West, George A.
1907 The Indian Authorship of Wisconsin Antiquities. *The Wisconsin Archeologist* (OS) 6(4): 69-256.

White, C Albert
1983 A History of the Rectangular Survey System. U.S. Department of the Interior, Bureau of Land Management, Washington, D.C

Whittaker, John C.
1994 *Flintnapping*: *Making & Understanding Stone Tools*. University of Texas Press, Austin, Texas.

Winkler, Daniel M., Dustin Blodgett, and Robert J. Jeske
2009 The Lithic Resources of Wisconsin: A Guide to Lithic Raw Materials that are Located in Wisconsin.

Wisconsin Archaeologist
1903 Frederick S. Perkins. *The Wisconsin Archaeologist. (OS)* 3(1), p.12.

1913 The West Collection of Aboriginal Pipes. *The Wisconsin Archaeologist. (OS)* 12(2), p.64-65.

1923 Muskego Township. *The Wisconsin Archaeologist. (NS)* 2(2), p.96.

1926 Collections. *The Wisconsin Archaeologist. (NS)* 5(4), p.111-112.
Mound Exploration. *The Wisconsin Archaeologist. (NS)* 5(4), p.122.

1934 The Folsom Point Controversy. *The Wisconsin Archaeologist. (NS)* 14(2), p.29.

1936 Archaeological Notes - Meetings. *The Wisconsin Archaeologist. (NS)* 16(4), p.109-110.

1937 Dr. J. J. Davis. *The Wisconsin Archaeologist. (NS)* 17(2), p.25-26.

Zych, Thomas J.
2013 The Construction of a Mound and a New Community: An Analysis of the Ceramic and Feature Assemblages from the Northeast Mound at the Aztalan Site. M.S., Anthropology, University of Wisconsin- Milwaukee, Milwaukee.