

ABSTRACT

Title of Thesis: INVESTIGATING SITE 119-19 THROUGH LITHIC ANALYSIS

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The purpose of this thesis is to examine precontact site 119-19 and answer the question how does occupation of Site 119-19 in the Connecticut River Valley show the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods? Site 119-19 is located in Rocky Hill Connecticut, which is near the center of the state next to the Connecticut River. The site has been previously used as farmland, but no further known development has disturbed the site. The site was initially discovered through shovel testing (50cm x 50cm) and then further excavated using unit excavation (1m x 1m). The unit excavations recovered almost three thousand lithic artifacts. The unit excavations also showed that the soil stratigraphy was relatively intact. Artifact distribution was assessed through soil profiles, artifact provenience and density, and raw material variation. Looking at where the artifacts are falling in the soil stratigraphy and depths of the artifacts one should be able to ascertain whether or not the site function changed over multiple occupations or if it stayed the same. The analysis of site 119-19 will also provide insight into settlement patterns in southern

New England by examining raw material usage. Two distinct loci were identified at the site with the most dominant raw material being an exotic material for the area. The raw material used at Site 119-19 is primarily non-local material. By identifying where the likely source of the material is, one can then make assumptions on the ranging pattern of the group that used/created the site. The town of Rocky Hill has limited data available on precontact sites within the Terminal Archaic/Early Woodland period. This research will hopefully help fill in gaps of inland settlement patterns during the Terminal Archaic/Early Woodland period in the north-central lowlands of Connecticut.

INVESTIGATING SITE 119-19 THROUGH LITHIC ANALYSIS

by

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Dedication

To my family who have always supported and believed in me.

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I would like to thank my coworkers at Heritage Consultants LLC who have provided their time and knowledge to me throughout this writing process. Your support has been invaluable. I would also like to thank Sarah Sportman the Connecticut State Archaeologist for allowing me access to this collection without it this thesis would not have been possible. Lastly I would like to thank my advisor Dr. Palus for his support throughout my graduate studies. His support throughout this process has been instrumental in my success.

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Chapter 1: Introduction

Site Overview

The site discussed in this thesis is Site 119-19 located in Rocky Hill, Connecticut. This thesis aims to answer the question: how does occupation of Site 119-19 in the Connecticut River Valley show the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods? The site was discovered in 2017 during Phase I shovel testing for a CRM compliance project. The site went directly to a Phase III excavation that was completed in 2018 by the Connecticut Office of State Archaeology. The Phase I project area is approximately 15.5 acres and is 600 feet east from Goff Brook and is bound by a residential subdivision road on the east side. The topographical location of Site 119-19 is shown in Figure 1 below.

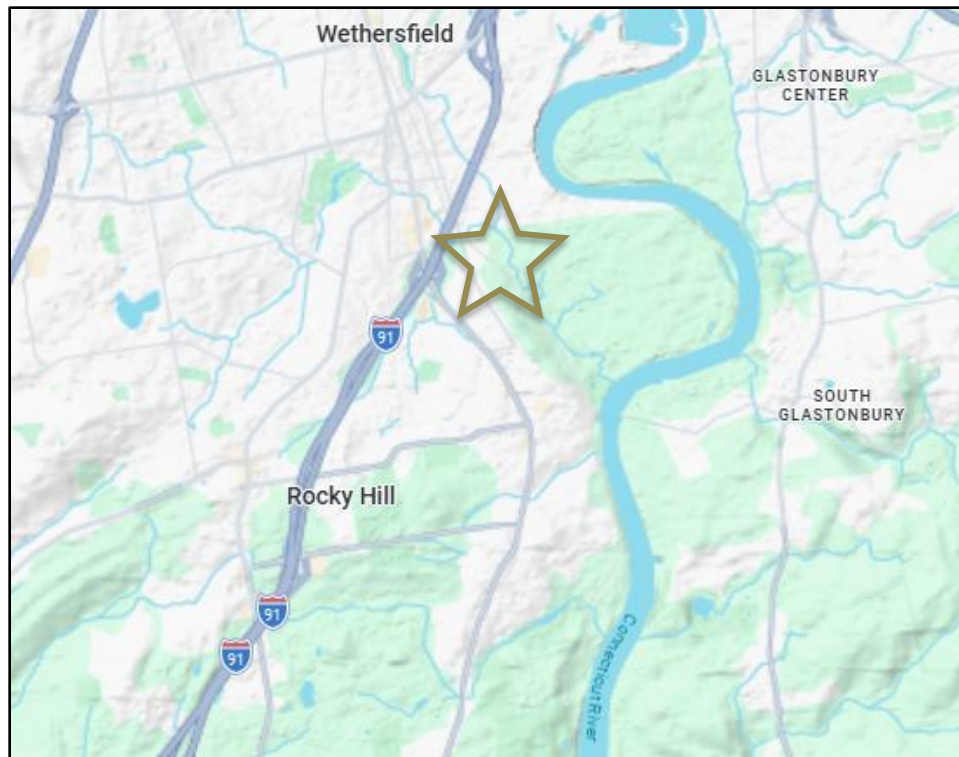


Figure 1: Topographic map depicting the location of Site 119-19. Produced by the author.

The investigation of Site 119-19 from the Phase I through the research conducted for this thesis included 68 shovel test pits, 31 excavation units, research of other previously identified Terminal Archaic sites within a one-mile radius of Site 119-19 through ConnCRIS, and a re-analysis of all materials recovered from the Phase III excavation. These research and excavation methods serve to assess Site 119-19 for variation in site function over multiple occupations using the lithic assemblage, and to assess how Site 119-19 shows the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods.

Phase III excavations at Site 119-19 focused on stratified deposits from two loci that yielded a range of stone artifacts, including flakes, cores, and formal tools. In total, 29 units were excavated across the two loci in the Phase III excavations. The total number of artifacts recovered from the Phase III unit excavation was 2,971. Of those 2,971 artifacts, 2,729 were pre-contact lithic artifacts. The lithic artifacts recovered make up 91.85% of the total artifact assemblage recovered from the Phase III investigation. The rest of the assemblage consists of 80 post-contact artifacts and 157 ecofacts. The post-contact artifacts and ecofacts recovered from this site do not contribute to the interpretation of the precontact site and they are not discussed further in this thesis.

During the analysis, artifacts were categorized by raw material type, artifact type, and unit/depth provenience. Lithic analysis from the excavation revealed variability in raw material use and artifact distribution across the excavation units. Eight different lithic artifact material types were identified within the assemblage. Projectile point typology from the site was comprised of seven distinct styles, including those representative of the Terminal Archaic and Early Woodland Broad Spear and Narrow Point Traditions in Connecticut. Lithic analyses of the

site assemblage suggest that the site may have served as a seasonal camp or activity area where tool manufacturing and maintenance were primary tasks. The analyses provide insights into raw material selection, technological strategies, and spatial organization of precontact activities. The assemblage was dominated by non-local materials which suggest formal trade and/or a large ranging migration pattern.

Site 119-19 is part of a group of camp sites dating to the Terminal Archaic/Early Woodland periods in Rocky Hill, Connecticut. However, almost all of the other known Terminal Archaic/Early Woodland sites in Rocky Hill were excavated before 2000 and there is little published data available on most of these sites. The only information readily available for these sites is site inventory forms filed with the Connecticut State Historic Preservation Office. The site forms only include brief details of each site including only a few sentences on the artifacts recovered. Currently, there are only six sites listed in the town of Rocky Hill dating to the Terminal Archaic period including Site 119-19. Unfortunately, this leads to a data gap within this area. The data collected from Site 119-19 will help address this gap in our understanding of the Terminal Archaic/ Early Woodland periods within this inland area of Connecticut.

Thesis Summary

The theoretical background portion of this thesis is presented in Chapter two. Chapter three provides the historical background information for Site 119-19 to provide context for the later analysis of site artifacts and materials. Chapter four explains further the methods for excavating Site 119-19 and how the artifacts were analyzed. Chapter five contains the presentation of data for Site 119-19. Chapter six is a discussion and interpretation of the data analyzed from Site 119-19. Lastly chapter seven concludes with how Site 119-19 shows the

transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods.

Chapter 2: Theoretical Background

This chapter will provide background and context for understanding how Site 119-19 shows the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods. In Connecticut, there are three main divisions of precontact cultural periods, which are then divided into further subsections. The three main cultural periods are the Paleoindian period (12,000 -10,000 B.P.), Archaic period (10,000 -2,700 B.P.), and the Woodland period (2,700 -350 B.P.). For this paper, I will be focusing on the Late Archaic, Terminal Archaic, and Early Woodland periods in Connecticut.

The Late Archaic Period (6,000-3,700 B.P.)

The Late Archaic period begins approximately at 6,000 B.P. and lasts to 3,700 B.P. During this period the climate warmed and sea levels rose leading to an increase in moisture and therefore an increase in the variety of tree and plant species (Lavin 2013, 85). Lavin (2013, 85) describes an abundance of “beech, butternut, elm, maple, sassafras, alder, sycamore, aspen, dogwood, bayberry, brambles, cranberries, partridgeberry” indicating an increase in regional species. This ecological diversity allows for “abundant and diverse wildlife” supported by excavated “cooking hearths and refuse pits of Late Archaic communities” (Lavin 2013, 85). As a result, the Late Archaic period sees an “explosive growth of human settlements” stemming from the environmental abundance (Lavin 2013, 86). Communities during this period practiced a seasonal round in which communities exploited resources based on geographic location and seasonal availability (Lavin 2013, 87-88). The abundance of wild plants that are extremely

nourishing is thought to have been a factor in the population boom. As when food is plentiful the land can support and provide for larger communities (Lavin 2013, 90).

The Late Archaic cultural period has two distinct overlapping cultural traditions. They are the Laurentian tradition and the Narrow Point tradition. The Laurentian tradition is “thought to have originated in southeastern Ontario, southern Quebec, northern New York, and northern New England” (Lavin 2013, 92; Ritchie 1969, 79). The Laurentian tradition has distinctive medium bladed points with side or corner notches and there is typically more ground stone tools found at these sites. Some projectile points that are distinctive of this culture are the “Otter Creek type, followed by Vosburg, Brewerton Side-Notched, Brewerton Eared Notched, and Brewerton Eared Triangles types” (Lavin 2013, 94). Some ground stone tools commonly found at Laurentian sites are “stone hammers and grinding stones; Bi-pitted stones and net sinkers; chipped stone scrapers, spokeshave scrapers, drills, and knives; chipped and ground stone ulus” (Lavin 2013, 94). The people of Laurentian tradition typically utilized more exotic or non-local materials like exotic cherts, rhyolites, and argillites (Lavin 2013, 94; Swigart 1974, 11-12) that have a more controlled flaking pattern to manufacture projectile points and other stone tools. They likely did not utilize the local quartz that is found in Connecticut very frequently as it has been argued to be harder to make the types of tools they were producing with that material.

There are two theories of the settlement patterns of the Laurentians during the later Archaic period. One theory proposed by Dr. Kevin McBride is that Laurentian communities were small mobile groups. These communities would exploit a variety of environments and resources depending on seasonal availability (Lavin 2013, 96; McBride and Dewar 1981, 48). The Laurentian communities would “occupy different sites during different times of the year, often reoccupying these sites” (Lavin 2013, 97). Another theory that has been proposed by Dr.

John Pfeiffer is that the Laurentians had a large semi-permanent or permanent base camp; then had smaller temporary task specific camps that could be used for more specialized activities; and lastly had small “multi-activity short-term family open air camps on high ground overlooking wetlands” (Lavin 2013, 98; Pfeiffer 1992). Lavin (2013, 101) states that more regional surveys are needed to better understand the Laurentian communities in Connecticut. Below is a list of important well-known sites within Connecticut with Laurentian components provided by Lavin (2013, 100) (See Table 1 below).

Table 1: Location and Descriptions of Laurentian Sites in Connecticut

Site Name	Geographical Location	Town
Bliss- Howard Site	Overlooking a floodplain near the mouth of the Connecticut river	Old Lyme, CT
Hammonasset Beach Site	Along the Long Island Sound	Madison, CT
Grannis Island Site	Near the mouth of the Quinnipiac River	New Haven, CT
Burwell-Karako Site	Along the side of New Haven Harbor	New Haven, CT
Binette Rock Shelter	Uplands	Naugatuck, CT
Indian Hill Site	On a terrace of the Farmington River	Bloomfield, CT
Fastener Site	Within the Housatonic River estuary	Shelton, CT
Bear Rock Shelter Site	Overlooking inland wetlands	Stamford, CT
Perkins-Elmer Rock Shelter Site	Overlooking the Norwalk River floodplain	Wilton, CT
Hansel Rock Shelter Site	Near Mt. Tom and a Tributary of the Bantam River	Morris, CT
Lovers Leap Site	Overlooking the confluence of the Housatonic and Still Rivers	New Milford, CT
Hopkins Site	On a terrace between two small streams overlooking Lake Waramaug	New Preston, CT

The Narrow Point tradition during this time period is distinguished from the Laurentian tradition by small, thick, narrow stemmed or notched points. Some projectile point types associated with this cultural tradition are the “Wading River, Squibnocket Stemmed, Bare Island, Popular Island, Sylvan stemmed notched, and Lamoka-like points” (Lavin 2013, 106). These projectile points are all typically made of local quartz and quartzite instead of exotic materials. There are multiple flaked stone tools associated with the Narrow Point tradition which include “scrapers, knives, drills, and choppers; blanks and preforms; flake tools for scraping and cutting purposes” (Lavin 2013, 106). There are a few groundstone tools associated with the Narrow Point traditions which include “rough stone hammers, anvil stones, and bi-pitted stones” (Lavin 2013, 106). The people of the Narrow Point tradition seem to be less reliant on ground stone tools compared to the Laurentian tradition (Lavin 2013, 106). As with the projectile points from this tradition their general stone tools are typically made of local quartz and quartzite. Archaeologists have recorded chert associated with the Narrow Point tradition in very small amounts in locations in the upper Housatonic River Valley in western Connecticut where people would have been able to source chert easily from the Hudson River Valley and from small glacially deposited chert cobbles in the Housatonic River Valley and its tributaries (Lavin 2013, 106; Cassidy 1999, 134).

Archaeologists have been able to reconstruct the steps the Narrow Point tradition used to manufacture their projectile points from analyzing a few sites but mainly the Burwell-Karako Site in New Haven, Connecticut (Lavin 2013, 107). Through experimental reconstructive methods archaeologists have been able to recreate the process of making Narrow Point Projectile points. Archaeologists have been able to say that a Narrow Point a toolmaker would place a quartz cobble on a large flat anvil stone and strike the cobble with a hammerstone producing

large and small flakes when it shattered (Lavin 2013, 107). From the debris the toolmaker would find a flake in the size they needed and proceed to use both hard hammer and soft hammer percussion to make the point (Lavin 2013, 107). It is believed that cobble quartz was preferred to vein quartz as any fractures in cobble quartz would have been removed by the glacier or water that reduced the stone (Lavin 2013, 108; Luedtke 1981, 71).

The settlement pattern for the Narrow Point tradition during this time period differed slightly compared to the Laurentians. The Narrow Point tradition camps are typically found in micro-environments such as “open-air camps, rock shelters, shell middens, and quarry sites for toolstone” (Lavin 2013, 108; Pfeiffer 1980, 61-63). It is thought that the people of the Narrow Point tradition had a main base camp with satellite seasonal camps or temporary camps which would be used for specific seasonal resource gathering (Lavin 2013, 108). A common trait of Narrow Point sites in the region is their evidence of “repeated use over time” (Lavin 2013, 108). Many of these base camps were located overlooking wetland areas, unlike the Laurentians, which liked to settle near river environments. Below is a list of important known sites within Connecticut with Narrow Point components provided by Lavin (2013: 108) (See Table 2 below).

Table 2: Location and Descriptions of Narrow Point Sites in Connecticut

Site Name	Geographical Location	Town
Woodchuck Knoll	Connecticut River Valley	South Windsor, CT
Long Knoll	Connecticut River Valley	South Glastonbury, CT
Hubbard Brook	Connecticut River Valley	Middletown, CT
Harrison’s Landing	Eastern coastal slope	New London, CT
270A-4-1	Western Uplands	Newtown, CT
97-71	Western Uplands	Newtown, CT

97-72	Western Uplands	Newtown, CT
Cove River	By a freshwater riverine on the coastal slope	West Haven, CT
Rockrimmon Rock Shelter	Inland on the western coastal slope	Stamford, CT

Regional research has suggested that the Laurentian and the Narrow point traditions were contemporary with each other and seemingly exploited overlapping areas in Connecticut. More research needs to be completed to fully determine the extent of which these cultural traditions overlapped and their relationship with each other (Lavin 2013, 119). Following the Late Archaic Period is the Terminal Archaic Period, the transition period between the Archaic Cultural Period and the Woodland Cultural Period.

The Terminal Archaic Period (3,700-2,700 B.P.)

The Terminal Archaic Period dates approximately from 3,700 B.P. to 2,700 B.P. and archaeologists continue to see two distinctive artifact traditions present: the Narrow Point tradition and the Broad Spear tradition. However, there is some disagreement on whether these different artifact traditions are representative of different population groups (Lavin 2013, 121). The Narrow Point cultural tradition continues from the Late Archaic into the Terminal Archaic and the distinctive projectile points of the Narrow Point tradition continue to be defined by small, thick, narrow stemmed or notched points and typically made of local quartz or quartzite. There is a continuation of settlement patterns and stone tool styles of the Narrow Point tradition through the Terminal Archaic period (Lavin 2013, 122). Lavin notes in her work that “with one exception – Woodchuck Knoll – there were no Narrow Point settlements contemporary with the Broad Spear tradition in riverine areas” (Lavin 2013, 123; McBride 1984, 124).

There is also the emergence of the Broad Spear cultural tradition and archaeologists have proposed a few theories as to where this culture comes from. The Broad Spear tradition is characterized by wide bladed broad spear and fishtail projectile base point styles and also the use of steatite bowls (Lavin 2013, 123). The Broad Spear points are typically made of more exotic materials such as chert because of the flaking pattern needed to make these thin larger blades. There is a high abundance of ground stone tools associated with this tradition compared to the Narrow Point tradition. Tools associated with the Broad Spear tradition include: hammerstones, knives, scrapers, bifacial flaked ceremonial blades, ground wing shaped atlatl weights, grooved axes, gouges, whetstones, steatite containers, steatite-tempered pottery, shallow mortars and mullers, cruciform drills, adzes, cylindrical hammers and punches, and native copper (Lavin 2013, 124; Pfeiffer 1992, 208-210).

The people of the Broad Spear tradition tended to settle in the river valleys. Identified base camp sites found to be associated with the Broad Spear tradition “were situated in riverine areas, and their small, non-residential sites in the uplands represented short-term gathering trips” (Lavin, 132). Below is a list of important known sites within Connecticut with Broad Spear components provided by Lavin (2013: 132-137) (See Table 3 below).

Table 3: Location and Descriptions of Broad Spear Sites in Connecticut

Site Name	Geographical Location	Town
Timothy Stevens Site	On a terrace overlooking the Connecticut River	Glastonbury, CT
Kirby Brook Site	On a terrace overlooking the Shepaug River	Washington, CT
Lovers Leap Site	Overlooking the confluence of the Housatonic and Still Rivers	New Milford, CT
The Griffen Site	Near the mouth of the Connecticut River	Old Lyme, CT

There are several theories as to where the Broad Spear tradition emerged from in Connecticut. Two prevailing arguments have suggested that the tradition stems from the Mid-Atlantic Susquehanna cultural tradition or that the Broad Spear style is not a separate cultural tradition at all, but instead was related to specialized activities (Lavin 2013, 139). Within Connecticut archaeologists have seen “overlapping radiocarbon dates, association in a cultural feature, and close stratigraphic relationships” (Lavin 2013, 139, Reeve and Forgacs 1999, 22-23) between Broad Spear and Narrow Point assemblages. The prevalent theory suggests that the Broad Spear tradition in Connecticut is a part of the larger Susquehanna artifact tradition that “is characterized by broad-bladed broad spear and fishtail projectile point styles” as well as steatite bowls (Lavin 2013, 123). The Susquehanna artifact tradition stretches from Georgia to Maine. However, this theory is not accepted by all. A competing theory suggests that instead the broad bladed points are an expression of specialized activities conducted by the Narrow Point tradition. This could range from spear fishing to burial rites (Lavin 2013, 139; Pagoulatos 1983, 57). Another theory presented theorized that the “Laurentian communities evolved in situ into the Terminal Archaic Broad Spear users” (Lavin 2013, 141). It has been theorized that the Broad Spear tradition evolved from the Laurentians due to the many similarities in their mortuary practices, economic structure, geographic locations, lithic technology, and lithic trade patterns (Lavin 2013, 141). There is also the migration theory. During the early Terminal Archaic, the prevalence of artifacts made from non-local material was higher compared to later Terminal Archaic period sites. The theory is that the Broad Spear tradition came from people migrating into the area from the Mid-Atlantic, bringing their own lithic material to use to make these types of broad spear points (Lavin 2013, 141). Geological analysis on some broad spear points show that the possible source locations are in the Mid-Atlantic region (Lavin 2013, 141). However, an

alternative theory to the migration theory has also been presented. Lucian Lavin (2013, 141) presents it as the modified migration theory, where Mid-Atlantic people acting as traders moved northward following coastal and riverine routes to more efficiently ship their stone goods (Lavin 2013, 141). They would first come in contact with the Laurentine people as they tended to live and set up camp on the rivers, unlike the people from the Narrow Point tradition. The Laurentine people would be receptive to these traders as the materials that they offered would be more useful to creating the thinner, broader-bladed projectile points and tools that the Laurentine people relied upon (Lavin 2013, 142). Thus, leading to the Laurentian people adopting and evolving their culture based on the people they were trading with. This thesis only briefly touches on the question of the origin of the Broad Spear Tradition, focusing more on the potential significance of both Narrow Point and Broad Spear overlap at the site during the Terminal Archaic period.

The Early Woodland Period (2,700-2,000 B.P.)

In Connecticut, the Early Woodland period begins around 2,700 B.P. with the significant use of clay vessels. Throughout the Woodland period from earliest to latest archaeologists see the introduction of not only clay vessels but also “smoking pipes, the bow and arrow, and domesticated plant food” (Lavin 2013, 143). The earliest style of pottery is called Vinette Interior Cord Marker or Vinette 1 (Lavin 2013, 148). At about 2,680 B.P. the Little Ice Age occurs. The climate shift would have affected “the warmth-loving nut-bearing trees that were an economic staple” (Lavin 2013, 144). Going into the Early Woodland period, the Broad Spear tradition vanished in Connecticut. Between 2,900 and 2,700 archaeologists see artifacts associated with the Broad Spear cultural tradition disappear (Lavin 2013, 144; Pfeiffer 1992, 227). This disappearance could partly be in part a result of die-off of nut bearing trees. “Nuts,

deer, and other terrestrial resources” were staples of the Broad Spear diet (Lavin 2013, 144). Archaeologists do not know for sure what happened to the Broad Spear culture. After 2,450 B.P. there no identified traces of the Broad Spear cultural tradition. It has been speculated that the people of the Broad Spear culture “migrated out of the area, died off, or joined the contemporary Narrow point peoples” (Lavin 2013, 144). After the disappearance of the Broad Spear tradition the Narrow Point tradition takes over Connecticut.

As a result, archaeologists see the Narrow Point tradition change their settlement patterns. Archaeologists see the Narrow Point tradition take over riverine areas that once were occupied by the Broad Spear tradition across Connecticut. The Narrow Point tradition moves more towards the riverine areas that would have previously been occupied by the Broad Spear tradition (Lavin 2013, 144). This includes the north-central uplands and western Connecticut (Lavin 2013, 145; Feder and Banks 1996, 49). In southwestern Connecticut archaeologists see increased settlement along the coast (Lavin 2013, 145). Through this settlement pattern shift the Narrow Point tradition keeps their practice of having the seasonal base camps and then task specific smaller camps. The Narrow Point people do continue to exploit wetlands along with the development of utilizing riverine environments. Below is a list of important known sites within Connecticut with Narrow Point components provided by Lavin (2013: 144) in Table 4.

Table 4: Location and Descriptions of Narrow Point Sites in Connecticut

Site Name	Geographical Location	Town
Broeder Point site	Overlooking a tidal backwater near the mouth of the Connecticut River	Old Lyme, CT
Great Island site	Near the mouth of the Connecticut river	Old Lyme, CT
Long Knoll site	Near the bank of the Connecticut river	Glastonbury, CT
Waldo-Hennessey site	Near the Farm River Marshlands	Branford, CT

Perkins-Elmer site	Near the Norwalk River	Wilton, CT
Indian River site	Overlooking the mouth of an unnamed river that empties into the long island sound	Westport, CT

Unfortunately, there are not always good site records readily available as some sites were dug over 30 years ago. This can make it more challenging for researchers when looking for sites with specific artifact traditions. In Rocky Hill this is the unfortunate case for most of the precontact sites within the town.

Chapter 3: Background and Context

This chapter will cover the history of the Rocky Hill area in Connecticut. As discussed previously, Site 119-19 is a Terminal Archaic/Early Woodland site located in central Connecticut in the town of Rocky Hill. Rocky Hill spans 13.8 square miles and as of 2024 has an estimated population of 21,373 people. It is important to acknowledge that the town of Rocky Hill falls within the traditional land of the Wangunk people

Precontact Era

The precontact period in Connecticut is broken into three main culture periods: the Paleoindian period, the Archaic period, and the Woodland period. The Archaic and Woodland periods are further broken down (See Table 5 below).

Table 5: Precontact periods of Connecticut

Paleoindian Period:	12,000 B.P to 10,000 B.P.
Early Archaic:	10,000 B.P. to 8,000 B.P.
Middle Archaic:	8,000 B.P. to 6,000 B.P.
Late Archaic:	6,000 B.P. to 3,700 B.P.
Terminal Archaic:	3,700 B.P to 2,700 B.P.
Early Woodland:	2,700 B.P. to 2,000 B.P.
Middle Woodland:	2,000 B.P. to 1,200 B.P.
Late Woodland:	1,200 B.P. to 350 B.P.

Rocky Hill sits in the north-central lowlands within the Connecticut River watershed. There are ten pre-contact sites within a one-mile radius of Site 119-19; eight of these fall within

the town of Rocky Hill and two are just over the northern Rocky Hill town line in Weathersfield (see Table 6 below).

Table 6: List of sites within a one-mile radius of Site 119-19

Site Name	Town	Year Discovered	Time Period	Description of Artifacts
119-1 (Sites 119-1, 119-2, 119-3 represent different Loci from the same project.)	Rocky Hill	1986	Late Archaic	Narrow-Stemmed points, bifaces, and flakes
119-2	Rocky Hill	1986	Late Archaic	Argillite flakes, and a point tip associated with the Susquehanna Tradition.
119-3	Rocky Hill	1986	Late Archaic	Narrow-Stemmed points, steatite bowl debris, Meadowood points, calcined bone, and charred botanical remains.
119-4	Rocky Hill	1986	Unknown	Lithic debitage.
119-7	Rocky Hill	1979	Archaic/Woodland	Bifurcate, Vosburg, and Brewerton points. Quartz triangles, quartz small-stemmed, axes, hoes, and hammerstones.
119-8	Rocky Hill	1979	Archaic/Woodland	Bifurcate, Vosburg, Brewerton, and Susquehanna points. Quartz small-stemmed, quartz triangles, axes, hoes, and hammerstones.
119-9	Rocky Hill	1979	Archaic/Woodland	Bifurcate, Vosburg, and Brewerton points. Quartz triangles, quartz small-stemmed, axes, hoes, and hammerstones.
119-10	Rocky Hill	1979	Archaic/Woodland	Bifurcate, Vosburg, and Brewerton points. Quartz triangles, quartz small-stemmed, axes, hoes, and hammerstones.
159-3	Weathersfield	1979	Archaic/Woodland	Quartz and flint- side-notched, small-stemmed, triangles, axes, adzes.

159-6	Weathersfield	1979	Archaic	Snook Kill, Brewerton corner-notched, and quartz small-stemmed points. Quartz and flint debitage, and a ovate knife.
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The majority of the sites listed in Table 6 are multi-component sites showing evidence of both Broad Spear and Narrow Point occupations. Unfortunately, all of these sites were excavated before 1990 and there are no official technical reports listed that detail their excavation results. In fact, all of the precontact sites in the town of Rocky Hill except for two were excavated/identified before the year 2000. One of two precontact sites excavated in Rocky Hill after 2000 is Site 119-19. The other precontact site identified after the year 2000 is Site 119-20 which is located 1.15 miles from Site 119-19. Site 119-20, which has not been formally excavated in any capacity and was identified based on surface collection of artifacts. The following section presents an overview of the settlement of Rock Hill by Europeans during the 17th century, and consequences for Indigenous groups associated with this region of Connecticut.

Post Contact Era

During the early colonial period, Rocky Hill was initially a part of the town of Wethersfield which was established in 1634. Around 1634, the area encompassing modern day Wethersfield and Rocky Hill was occupied by the Wangunk Tribe (Herron 2017, 4-6). The Wangunk were a smaller tribe that were noted to have disputes with larger tribes like the Pequots and the Mohawks. They had invited the English settlers from Watertown, Massachusetts around 1631 to settle around them in the hopes that the English presence might provide them some protection from the larger tribes (Herron 2017, 4-6). The Wangunk had lost several conflicts with the Pequots and were forced to pay tribute (“Wangunk” 2025). As more colonists moved into the

area after 1634, conflict increased between the local tribes and the colonists, eventually leading to the tribes getting pushed out of the area. Rising tensions and attacks between the region's tribes and colonists eventually lead to the Pequot war in 1637 ("Pequot War | Connecticut History | a CT Humanities Project" 2016).

This war almost destroyed the Wangunk nation entirely. In the following years, the Wangunk were forced to a small reservation in East Middletown or migrated to join other tribes in Connecticut and New York. The Wangunk reservation was no more by 1784 as the land was continuously sold off ("Wangunk" 2025). Members of the Wangunk tribe still reside in Connecticut today, however the tribe has not been able to obtain state or federal recognition.

In 1843, Rocky Hill was established as its own town (Fierro 2018). Site 119-19 sits in a historic part of Rocky Hill. Three of the houses on the street were built in the 1800s, and it is on the edge of a national historic district. It is known that the land that the site is on has, at least since the 1880s, been used for agricultural purposes ("U.S., Selected Federal Census Non-Population Schedules, 1850-1880" 2021). Starting in 1934, there are historic aerial photos of the area showing plowed fields (Fairchild Aerial Surveys 1934). By 1957, historic aerial photos show that the agricultural use of the land has stopped, and it has started to return to a forest. The land remained a forest until about 2018 when it was partially clear cut, but no further construction took place. There is no construction on the immediate property from 1934 up to the present day; the land remained undeveloped other than for agricultural use.

A previous Phase IB survey conducted in 2017 resulted in the discovery of Site 119-19 a multi-component occupation site that was concentrated in two loci. The Phase IB results suggested that the site area contained precontact cultural deposits associated with the Terminal Archaic/Early Woodland periods that were significant to the history of the area as well as

significant for contributing to archaeologists' understanding of cultural lifeways in early history. As a result, the Connecticut Office of State Archaeology conducted a Phase III excavation at the site in 2018 to recover the artifacts associated with the site.

Chapter 4: Methods and Data Collection

Lithic analysis can provide insights into the behavior patterns of past Native American groups; such as settlement patterns, site function, and spatial analysis of day-to-day site activities (Carr and Bradbury 2000). Lithic artifacts recovered from Site 119-19 will be used to address how the occupation of Site 119-19 in the Connecticut River Valley shows the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods.

Site 119-19 was found during initial Phase I shovel testing for a CRM compliance project in 2017. The project then immediately went to a Phase III data recovery due to the high density of lithic artifact concentrations. The Phase III excavation was completed by the Connecticut Office of State Archaeology in 2018, led by the former State Archaeologist Brian Jones. The initial survey was a shovel test survey consisting of square shovel tests 50 by 50 centimeters wide. After the discovery of the site during the Phase I shovel test survey, two 1-x-1-meter units were also excavated to assess the artifact density of the area. Sixty-eight total shovel tests were dug during the initial Phase I survey along with the two units. After a brief analysis of the Phase I survey data two loci were established due to the high artifact concentrations. During the Phase III investigation, 29 1-x-1-meter units were excavated and spread across two different artifact concentrations. According to the site field records, eight units were placed in Locus 1, and 21 units were placed in Locus 2. The units were excavated in 10 cm level quads. Some levels varied in depth to accommodate the natural stratigraphic transitions. The dirt was screened through $\frac{1}{4}$ inch mesh, and any features were screened through $\frac{1}{8}$ inch mesh. Excavating the units in this manner allowed for tight control over the location of artifacts and the depth they came from. The

artifact collection from the Phase III was stored with the Connecticut Office of State Archaeology, which allowed access to the assemblage for this research. The collection was loaned out to my employer, Heritage Consultants, LLC as its office has the capacity to safely and securely store artifacts and allowed for easier access for artifact analysis.

The Phase III excavation contained 2,971 total artifacts consisting of historic and lithic materials. Of those, 2,724 were lithic artifacts recovered from the Phase III excavation. Once the Phase III excavation was completed the artifacts were bagged and cataloged. This thesis work included a reanalysis of the Phase III data. Data from the earlier Phase I was not included in this analysis. When the Phase III artifacts were initially cataloged the digital catalog was created using an older program and the catalog was more of a rough sort and catalog. Unfortunately, the digital data from the original catalog was lost, with only print copies remaining, and a new catalog needed to be created for the purposes of this thesis. The reanalysis also allowed me to catalog the data in a way that would be useful when organizing the data to answer my thesis questions. During the reanalysis of the lithic artifacts, I utilized William Andrefsky's standard reference *Lithics Macroscopic Approaches to Analysis* (2012), which outlines a generalized morphological typology for chipped stone artifacts. I used this classification scheme when cataloging my own data. In chapter four of his book, Andrefsky presents a flowchart where he outlines the different categories of stone tools starting with chipped stone and breaks it down further into tool or debitage, and the subsequent subcategories of those, such as biface, non-biface, flake, non-flake. etc. This chart is useful for separating tools from tool reduction debris. This book also illustrates how to classify different fragments of a flake and how to classify different lithic artifacts such as cores, bifaces, and scrapers. The book *A New England Typology*

of *Native American Projectile Points* by Jeff Boudreau (2016) was also used for accurately typing and dating projectile points from this assemblage.

All of the data collected during the reanalysis of the collection was organized into a digital Microsoft Excel spreadsheet. The following categories were used to organize the data: locus, unit, quad, strata, depth, object, count, weight (g), part, material, type, style, color, and specific information.

Table 7: Categories used during reanalysis and their definitions

Category	Description
Locus	The locus the artifact was found in
Unit	The unit was the artifact found in
Quad	The quadrant within each unit an artifact was found
Strata	The soil stat the artifact found in
Depth	The depth the artifact was found at
Object	The name of the object being cataloged
Count	The number of artifacts assigned to each catalog number
Material	The material the artifact is made of
Type	The artifact class the object falls into (debitage, tool, core, etc.)
Style	If decoration is present on an artifact state the decoration style
Color	The color of the artifact
Specific Information	This category is for highlighting other important characteristics of an artifact (cortex present, thermal alteration, patinated, weathered, etc.)

The artifact catalog numbers were reused from the initial inventory. Initially in the cataloging process all artifacts were assigned their locational data (locus, unit, quad, strata, depth). Lithic artifacts were then categorized by object. The object category consisted of the following designations: projectile point, biface, perform, scraper, drill, abrader, hammerstone, utilized flakes, flakes, angular debris, core, and fire cracked rock (FCR). Flakes dominated the assemblage, but formal and informal tools still appeared in both Loci. Lithic artifacts were then assigned a part designation such as complete, proximal fragment, medial fragment, distal fragment, and fragment (in cases where the specific part could not be identified). The next step was assigning a type to each artifact. The type category consisted of flaked tool, debitage tool, debitage, ground stone tool, core, and other lithic. In the style category all of the identifiable projectile points were assigned to a specific type. Following this step the material and color of each artifact was identified. The four prominent material types recovered at this site are chert, quartz, hornfels, and siltstone. The specific information category was used to note cortex, any discoloration or potlids from heat treatment, weathering, and patination. The count and weight of all artifacts was also recorded.

The categorization of data through the above categories allows for the data to be easily separated and assessed. Artifacts could be separated by level of strata, which locus they were from, and what unit. One can then look at what styles of projectile points come from the different occupation periods and see what artifacts are associated with them (Sutton 2009). Separating the data this way will help to prove if the different occupations of the site are stratified or are mixed. Grouping the artifacts by object and type can also show the likely activities taking place at the site (Wilmsen 1970). The color and specific information categories were important to help assess the types/range of the materials the artifacts were comprised of. Materials such as chert can have

different colors and characteristics depending on where they are sourced. Noting this information helps to identify the most likely source of lithic procurement. Identifying the most likely source for lithic procurement can help indicate different trade/settlement patterns (Newlander & Zacharias, 2024; Krakker 1997). Documenting the count and weight of all lithic material in an assemblage along with if the artifacts are complete or fragmented is also important. It can help to determine the average weight of each material type. Having the average weight can help to show if a material was utilized to its fullest extent. This can help show the differences in reduction intensity between different materials (Blades 2012). Overall, this organization allows for the assessment of whether site function changed during different site occupations and how different materials were used.

The methodology for the background research on this site was straightforward. The Connecticut State Historic Preservation Office (SHPO) has a digital records website (ConnCRIS) that contains all of the historic and precontact sites in Connecticut. Utilizing this tool, I was able to identify precontact sites within a one-mile radius of Site 119-19. I could further determine historic uses of the land Site 119-19 sits on, using Ancestry.com to find historic census records.

Chapter 5: Archaeological Investigations at Site 119-19

This chapter presents the results of the Phase III testing and evaluation of Site 119-19 in Rocky Hill, Connecticut. The Phase III excavation was concentrated on the two Loci that had previously been identified from the initial Phase IB testing.

Summary of Phase III Excavation Results

The Phase III investigation of the site was conducted through the excavation of 1-x-1-meter units placed throughout the two distinct Loci. The precontact artifacts are highly concentrated within the two distinct Loci at the site area. The site is 600 feet east off Goff Brook and is bound by a residential subdivision road on the east side. Goff Brook is a small stream that runs through wetlands directly into the Connecticut River. The project area is approximately 15.5 acres and was once used for agricultural purposes. Today the project area is wooded with deciduous trees with a small clearing in the center leading to the main road, as seen in Figure 2, below. The project area is found on a small 0-5% slope.



Figure 2: Aerial photo of Site 119-19. Original work of the author.

The Phase III excavation resulted in the recovery of 80 post-European Contact period artifacts, 2,729 precontact era artifacts, and 157 ecofacts. The post-contact and ecofacts were not used in the analysis of this site. The majority of the precontact era artifacts originated from intact soil horizons. The analysis of the lithic assemblage recovered from the Phase III excavation indicates that the site is most likely the remains of a camp occupied over multiple periods. This was determined due to the quantity of flakes as well as the types of chronologically-diagnostic formal and informal tools recovered (Andrefsky 2012, 201–24). The assemblage reflects tool use, tool manufacture, tool maintenance, and tool discard activities. Specific findings for each of the two loci are presented below.

Precontact Era Lithic Material Recovered During Phase III: Locus 1

The Phase III unit excavations of Locus 1, as pictured in Figure 4 resulted in the recovery of 456 precontact lithic artifacts from eight units. The assemblage consisted of cores (n=2), ground stone tools (n=2), flaked tools (n=7), debitage tools (n=7), and debitage (n=438).



Figure 3: Unit Excavations at Locus 1. Photo by the Office of State Archaeology (used with permission).

The majority of the lithic assemblage was dominated by artifacts made of chert (n=302) with the next two prominent material types being quartz (n=82) and hornfels (n=27). As seen in the Table 8 below, the precontact artifacts from Locus 1 were primarily recovered from the Ap horizon (n=429) with the remainder coming from the B horizon (n=23).

Table 8: Summary of Locus 1 Artifacts

Site	Soil Horizon	Artifact Type	Material	Object	Total	
Locus 1	Ap	Core	Quartz	Core	2	
		Debitage	Chalcedony		Flake	1
			Chert		Angular Debris	2
					Flake	270
					Microflake	5
			Crystal Quartz		Flake	5
					Microflake	1
			Hornfels		Angular Debris	1
					Flake	24
			Jasper		Flake	1
			Quartz		Angular Debris	9
					Flake	63
					Microflake	1
			Quartzite		Flake	1
			Rhyolite		Angular Debris	1
					Flake	7
		Siltstone		Angular Debris	1	
				Flake	19	
		Debitage Tool	Chert		Utilized Flake	7
		Flaked Tool	Chert		Biface	2
					Projectile Point	1
			Hornfels		Projectile Point	1
			Quartz		Preform	1
					Projectile Point	1
		Quartzite		Biface	1	
		Ground stone Tool	Quartzite		Hammerstone	1
		AP Total:				
	B1	Debitage	Chert		Flake	15
			Hornfels		Flake	1
			Quartz		Angular Debris	2
				Flake	3	
Rhyolite				Flake	1	
Siltstone		Flake	1			
B1 Total:					23	
Wall Fall	Debitage	Siltstone		Flake	2	
Wall Fall Total:					2	
Locus 1 Total:					454	

Summary of Lithics Recovered from Locus 1 Excavation

The Phase III unit excavation recovered 456 lithic artifacts from Locus 1, a selection of which is in Figure 4 below. Of the artifacts recovered, there were three projectile points that are temporally diagnostic.



Figure 4: Lithics recovered from Locus 1: top row left to right Quartz Lamoka projectile point, Hornfels Orient Fishtail projectile point, Chert Atlantic projectile point; bottom row left to right Quartz biface, Quartz preform, Utilized chert flake. Photo taken by author.

They were classified as one quartz Lamoka projectile point (Narrow Point Tradition), one hornfels Orient Fishtail projectile point (Broad Spear Tradition), and one chert Atlantic projectile point (Broad Spear Tradition). The Orient Fishtail and Atlantic projectile points are diagnostic points from the Terminal Archaic Period (3,700 -2,700 B.P) (Boudreau 2016). The Lamoka projectile point has a larger diagnostic range from the Late Archaic through the Middle

Woodland (6,000 -1,200 B.P.) (Boudreau 2016). The four highest occurring materials from Locus 1 are chert (66.23%), quartz (17.98%), hornfels (5.92%), and siltstone (5.26%). Chert artifacts make up more than half of the artifact material type in this locus. The majority of the chert recovered from this excavation is macroscopically similar to varieties found in the Hudson River Valley, NY.

The soil stratigraphy for Locus 1 is relatively simple, with a plowed soil (Ap) overlying intact B horizon soils. The Ap is typically a dark yellow brown sandy loam. There is an intact B1 horizon that is typically a brown sandy loam. There is an occasional B2 that is typically a light brown sandy loam. There were no features that yielded artifacts from this Locus. The Ap soil layer has been plowed and used for agricultural purposes which has likely disturbed the stratigraphy and mixed the artifacts found in the Ap layer. There were 18 historic artifacts recovered from the Ap layer in Locus 1. The majority of the historic artifacts recovered from the Ap were indeterminate nails. Other historic artifacts included window glass, brick, coal, and redware. All of the diagnostic projectile points from Locus 1 were also recovered from the Ap soil. These include projectile points that are diagnostic of the Broad Spear and Narrow Point cultural traditions. The lithic artifacts of different cultural traditions mixed with historic artifacts indicates that if the multiple site occupations had been stratified at one point in time, the plowing would have mixed the artifact-bearing soils into one deposit.

Precontact Era Lithic Material Recovered During Phase III: Locus 2

The Phase III unit excavations of Locus 2, as seen in Figure 5 resulted in the recovery of 2,252 precontact lithic artifacts from 21 units. The assemblage consisted of cores (n=4), groundstone tools (n=1), flaked tools (n=24), debitage tools (n=25), and debitage (n=2,198).



Figure 5: Unit Excavations at Locus 2. Photo by the Office of State Archaeology (used with permission).

The majority of the lithic assemblage was dominated by chert material (n=1,962). The next two prominent material types were quartz (n=146) and hornfels (n=73). As seen in Table 9 below, the precontact artifacts from Locus 2 were primarily recovered from the Ap horizon (n=1,382) with the remainder coming from the B horizon (n=827), feature soils (n=42), and 1 surface find.

Table 9: Summary of Locus 2 Artifacts

Site	Soil Horizon	Artifact Type	Material	Object	Total		
Locus 2	Ap	Core	Chert	Core	1		
			Quartz	Core	1		
			Quartzite	Core	1		
		Debitage	Chalcedony	Flake	1		
			Chert	Angular Debris	3		
				Flake	1095		
				Microflake	28		
			Crystal Quartz	Angular Debris	1		
				Flake	3		
			Hornfels	Flake	56		
			Quartz	Angular Debris	13		
				Flake	103		
				Microflake	3		
				Angular Debris	2		
				Flake	1		
			Rhyolite	Flake	16		
			Siltstone	Flake	20		
			Debitage Tool	Chert	Utilized Flake	15	
		Flaked Tool	Chert	Biface	3		
				Drill	1		
				Projectile Point	4		
			Hornfels	Biface	4		
			Quartz	Biface	2		
				Preform	1		
				Projectile Point	1		
				Scraper	1		
		Siltstone	Biface	1			
		Ground stone Tool	Rhyolite	Hammerstone	1		
		AP Total:					1382
		B1	Core	Quartz	Core	1	
				Chalcedony	Flake	17	
			Debitage	Chert	Flake	751	
Microflake	17						
Hornfels	Flake			9			
Quartz	Flake			12			
Rhyolite	Flake			2			
Siltstone	Flake		5				
Debitage Tool	Chert		Utilized Flake	10			
Flaked Tool	Chert		Biface	1			

			Projectile Point	1
		Hornfels	Biface	1
B1 Total:				827
Feature 2A	Debitage	Chert	Flake	3
		Quartz	Flake	1
Feature 2A Total:				4
Feature 4B	Debitage	Chert	Flake	2
		Quartz	Angular Debris	1
Feature 4B Total:				3
Gully Feature	Debitage	Chert	Flake	26
			Microflake	1
		Hornfels	Flake	3
	Flaked Tool	Quartz	Flake	3
			Biface	1
Projectile Point	1			
Gully Feature Total:				35
Surface	Flaked Tool	Quartz	Projectile Point	1
Surface Total:				1
Locus 2 Total:				2252

Summary of Lithics Recovered from Locus 2 Excavation

The Phase III unit excavation recovered 2,252 lithic artifacts from Locus 2. Charcoal samples were taken for both feature 2a and 4b, but it was not analyzed for this thesis. Of the artifacts recovered there were four projectile points that were temporally diagnostic, as pictured in Figure 6.



Figure 6: Lithics Recovered from Locus 2. Top row left to right Chert Atlantic projectile point, Quartz Wading River projectile point, Quartz Sylvan side-notched projectile point, Quartz Wading River projectile point; bottom row left to right Hornfels biface, Utilized chert flake, Chert drill tip, Quartz scraper. Photo taken by author.

They were classified as one chert Atlantic projectile point (Broad Spear Tradition), two quartz Wading River projectile point (Narrow Point Tradition), and one quartz Sylvan side-notched projectile point (Narrow Point Tradition). The two Wading River projectile points are diagnostic of the Late Archaic to Late Woodland Period (6,000 - 350 B.P). The Sylvan side-

notched projectile point is diagnostic of the Late Archaic to Terminal Archaic Period (4,150 - 3,450 B.P) (Boudreau 2016). Lastly the Atlantic projectile point is diagnostic points of the Terminal Archaic Period (3,700 -2,700 B.P) (Boudreau 2016). There is variability in the lithic material at Locus 2, but three materials dominate the assemblage. The three highest occurring materials from this locus are chert (87.12%), quartz (6.48%), and hornfels (3.24%). Chert artifacts still far surpass any other artifact material type in this locus. The majority of the chert recovered from this excavation is also macroscopically similar to varieties found in the Hudson River Valley, NY similar to Locus 1.

The soil stratigraphy for this locus is similar to Locus 1. The Ap layer is typically a dark brown sandy loam. There is an intact B1 horizon under the Ap. The B1 is typically a strong brown sandy loam. Occasionally there is a B2 layer that is typically brown fine sandy loam. There were three features that contained artifacts from the Phase III excavations. The Gully feature was identified initially in unit N14 W16. The Gully feature starts around the Ap/B1 interface and intrudes into the B1 layer. Based on the unit paperwork and feature drawings it appears as though the Gully feature is truncated by the Ap layer. The Gully feature likely would have extended farther up into the Ap but was disturbed by the historic plowing that took place at the site. Both features 4B and 2A are found within unit N14 W17. Feature 4B begins in the Ap layer and is fully contained within the Ap layer. Feature 2A begins below feature 4B in the Ap layer and intrudes into the B1 layer. Based on the unit paperwork and feature drawings it appears as though Feature 4B and Feature 2A are a part of a larger burrow that extends into the units on either side of unit N14 W17. All three of these features post-date the B1 layer. Like in Locus 1 there were historic artifacts recovered from the Ap in Locus 2. There were 62 historic artifacts recovered from Locus 2 primarily consisting of indeterminate nails, brick, window glass, and

ceramics. Two of the four projectile points from Locus 2 were recovered from the Ap soil. One of the points recovered from the Ap is an Atlantic point representative of the Broad Spear tradition and the second is a Wading River point representative of the Narrow Point tradition. The third point recovered from the site was found on the surface and was a Sylvan side-notched point representative of the Narrow Point tradition. The last projectile point recovered was from the Gully feature which starts in the Ap and intrudes into the B1 layer. The point was identified as a Wading River point and is representative of the Narrow Point tradition. There were 62 historic artifacts recovered from the Ap soils mixed with lithic artifacts indicating that like in Locus 1 the historic plowing likely mixed any separate strata from the different occupations of the site.

Comparison of Both Loci

In both Loci the majority of the artifacts are recovered from the Ap layer. In Locus 1 out of 456 artifacts, 430 are recovered from the Ap. All of the tools and projectile points recovered from this locus are recovered from the Ap. This associates both artifact traditions with the Ap layer. There are not enough diagnostic artifacts to associate an artifact tradition with the B1. Similarly to Locus 1, Locus 2 also sees most of its artifacts recovered from the Ap layer. Of the 2,252 artifacts recovered from Locus 2 1,382 artifacts are recovered from the Ap layer. The majority of the tools and projectile points also are recovered from the Ap layer. However, there are a few exceptions to this. In the B1 layer there is a chert projectile point base fragment recovered along with two bifaces (chert and hornfels) and 10 utilized flakes (chert). While chert is typically associated with the Broad Spear tradition it was not exclusive to that tradition so without a diagnostic artifact it is difficult to associate the artifacts from the B1 with a specific artifact tradition. Two other exceptions were the Wading River point recovered from the Gully

Feature, and the Sylvan side-notched point recovered from the surface. The two other features from Locus 2 have a mix of chert and quartz debitage so it is difficult to discern which artifact tradition they are associated with without diagnostic artifacts. As both Loci are similar in the presence of diagnostic projectile points, material of the lithic artifacts, and the distribution of lithic artifacts in each stratum, it can be assumed that they were likely occupied during the same time period.

Summary of Phase III Lithic Material Results

The Phase III unit excavation effort at Site 119-19 recovered thousands of lithic artifacts from two distinct loci. Seven temporally diagnostic points were recovered from across the site with the date ranges starting in the Late Archaic period and ending in the Late Woodland period. The dominant material type across both loci was chert, representing 83.6 percent of the entire site assemblage. The chert from both loci was determined to be macroscopically similar to chert sourced from the Hudson River Valley in New York.

The next chapter will provide a more detailed analysis of the data recovered from Site 119-19. The analysis will describe in detail how the projectile points were analyzed and identified. It will also include a more thorough discussion on the percentage of stone tools recovered from the excavation. Lastly the analysis will discuss the breakdown of different lithic materials recovered from Site 119-19 and where those materials likely came from.

Chapter 6: Analysis and Interpretation

This chapter presents the analysis and interpretation of the Phase III lithic artifacts recovered from Site 119-19 in Rocky Hill, Connecticut. More specifically, the following will review the projectile point typology, lithic tool assemblage, and raw material that aided in the assessment of the site within the cultural setting. This information helps in understanding how Site 119-19 shows the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods.

For the purpose of the following analysis the artifacts from both Loci are combined along with artifacts from each stratum/feature. Both Loci are very similar with the distribution of artifacts in each strata as well as the materials recovered from each Loci. As previously mentioned in Chapter 5 all of the features originate in the Ap and contain artifacts that represent artifact traditions also present in the Ap soil. All of the features also begin in the Ap indicating that they postdate the B1 strata.

Stone Tool Identification

Identifying formal and informal tools at this site was important for determining site function. When archaeologists know what tools are found at a site they can make inferences about the types of activity occurring at the site (Wilmsen 1970). A total of 72 stone tools were recovered during the excavations at Site 119-19 (see Table 10 below). The assemblage included ground stone tools (abrader, hammerstone), debitage tools (utilized flakes), flaked tools (preform, biface, scraper, drill, projectile points), and cores.

Table 10: Summary of Stone Tools from Site 119-19

Artifact	Tool Type	Material	Count	Total	Percent of Total
Abrader	Groundstone tool	Unidentified hardstone	1	1	1.39
Hammerstone	Groundstone tool	Unidentified hardstone	2	2	2.78
Utilized Flake	Debitage Tool	Chert	32	32	44.44
Preform	Flaked Tool	Quartz	2	2	2.78
Biface	Flaked Tool	Chert	6	16	22.22
		Hornfels	5		
		Quartz	3		
		Quartzite	1		
		Siltstone	1		
Scraper	Flaked Tool	Quartz	1	1	1.39
Drill	Flaked Tool	Chert	1	1	1.39
Projectile Point	Flaked Tool	Chert	2	7	9.72
		Hornfels	1		
		Quartz	4		
Projectile Point Base Fragments	Flaked Tool	Chert	4	4	5.56
Core	Core	Chert	1	6	8.33
		Quartz	4		
		Quartzite	1		
Tool Total:				72	100%

Table 10 above shows that utilized flakes make up the highest percentage of tools recovered from Site 119-19 at 44.44% (n= 32). The next highest percentage was bifaces at 22.22% (n= 16). When looking at the material of the utilized flakes, 100% (n= 32) were made of chert. Within the biface assemblage chert made up 37.5% (n= 6) of the artifacts while hornfels made up 31.25% (n= 5), quartz made up 18.75% (n=3), and quartzite and siltstone each made up 6.25% (n= 2). Overall, chert makes up 63.89% (n= 46) of the entire tool assemblage. Based on the assemblage of tools recovered from Site 119-19 it can be inferred that the site is a shorter-term camp site and the primary tasks at this site were related to tool manufacture/maintenance. It can be determined that this site's primary tasks were related to tool manufacturing/maintenance

for a few reasons. There is a large number of lithic artifacts representing debitage (n=2,636) at the site along with a large number of tools and tool fragments (n=72) for the small area that contains the site. Many of the mostly complete projectile points have chips, are heavily retouched, and/or are missing their tips, as detailed in Table 11. There are also multiple projectile point base fragments located at this site.

Table 11: Summary of Projectile Point Retouch

Point Type	Retouched (Yes/No)	Raw material
Atlantic	No	Chert
Atlantic (no tip)	Yes	Chert
Orient Fishtail	No	Hornfels
Wading River	No	Quartz
Wading River (no tip)	Yes	Quartz
Sylvan Side-Notched	Yes	Quartz
Lamoka	No	Quartz

This is evidence of people discarding tools that are no longer salvageable, and the high volume of debitage is likely from retouching other tools or making new tools to replace the broken ones.

Table 12: Percentage of Flake Stages

Flake type	Count	Percentage
Primary Reduction Flakes	19	0.73%
Biface Reduction, Thinning, and Retouch Flakes	2,581	99.27%
Total	2,600	100%

Most of the debris is biface reduction, thinning, and retouch flakes (n=2,581), and only a small portion of the flakes are primary reduction flakes (n=19; 0.7%). All of the primary reduction flakes recovered from this site are local materials and were defined as flakes that retained approximately 50% of cortex on the dorsal surface. It has been theorized that materials that travel far distances will have their cortex removed close to their source (Will 2000). According to Nelson (1991), Andrefsky (2001) and Johnson (1987), when looking at sites where tool manufacture/maintenance happens, a high percentage of the flakes should have utilized edges. This site does have a high number of utilized flakes and that is reflected in Table 12, above with 32 utilized flakes coming from this assemblage. There is also a high quantity of non-local or “exotic” material (83.6%) at this site, with over half of the assemblage made of chert. This can show a desire to conserve the finer grade exotic material.

Projectile Point Typology

To further define the occupational time period for Site 19-119, the projectile point assemblage was assessed for diagnostic materials, which are indicative of cultural time periods. Projectile points can be crucial for site analysis due to their diagnostic elements which can often be used to date an assemblage to a particular time or cultural period (Eren 2013). In total, 11 projectile points were identified within the assemblage, seven of which retained diagnostic

elements and an additional four were identified as untyped projectile point base fragments. The identified four additional projectile point bases were too fragmented to retain any diagnostic elements. The book *A New England Typology of Native American Projectile Points* by Jeff Boudreau (2016) was used as a regional reference to identify the points from this site. Dr. David Leslie with Heritage Consultants, LLC was also consulted when identifying projectile points from this site. The results of the projectile point identification in Table 13 below show that both Broad Spear and Narrow Point types are present at the site.

Table 13: Summary of Projectile Points Recovered from Site 119-19

Point Type	Count	Raw material
Atlantic	2	Chert
Orient Fishtail	1	Hornfels
Wading River	2	Quartz
Sylvan Side-Notched	1	Quartz
Lamoka	1	Quartz
Projectile Point Base Fragments	4	Chert

Broad Spear Tradition

The site assemblage yielded two Atlantic points which are defined as a broad spear-type point “with roots in the southeastern Savannah River Phase” (Boudreau 2016). The Atlantic point is described by Boudreau as an asymmetrical triangular blade, typically with obtuse

shoulder angles and straight stemmed. The Atlantic point is also thought to be an eastern variant of the Snook Kill point found in New York and identified by William Ritchie (Boudreau 2016). Boudreau gives four different measurement ranges length, width, basal width, and thickness for typical Atlantic points (See Table 14). The two chert Atlantic points recovered from this site are shown below in Figures 7 and 8. One was recovered from Locus 1, and the other was recovered from Locus 2. Both Atlantics were recovered from the Ap stratum.



Figure 7: Atlantic point from Locus 2. Photo taken by author.



Figure 8: Atlantic point from Locus 1. Photo taken by author.

Table 14: Measurements for Atlantic Projectile Points

	Boudreau's Measurements for Atlantic Point Style		Locus 1 Atlantic	Locus 2 Atlantic
		Mean:		
Length	31.35-117 mm	58.5 mm	-	51.92 mm
Width	28.7-64.4 mm	34.2 mm	30.27 mm	30.38 mm
Basal Width	12.1-18.9 mm	15.3 mm	19.71 mm	17.91 mm
Thickness	7.1-8.45 mm	7.8 mm	7.68 mm	6.40 mm

Unfortunately, the Atlantic from Locus 1 is missing its tip so the length measurement taken from that will not be as useful for the comparative measurements taken. When reviewing the comparative measurements for both of these points, fit well within the typical range provided by Boudreau. There is some slight variation in the Locus 1 Atlantic; looking at Table 14 it does have a slightly larger basal width than the typical range. However, even with heavy resharpening and a missing tip the measurements taken for width and thickness fall within the published ranges. The Locus 2 Atlantic also varies slightly in that the thickness measurement falls below the published range provided. However, the point still falls within the length, width, and basal width published ranges provided by Boudreau. Both points also fit the visual description of the Atlantic point as both have slightly asymmetrical triangular blades with straight stems and obtuse shoulder angles.

The next point recovered from Site 119-19 with broad spear roots is the Orient Fishtail point. It is thought that this point is a narrow blade continuation of the Susquehanna Broad Spear Tradition. The Orient Fishtail point is described by Boudreau as a lanceolate blade with a flaring stem. Boudreau notes that the base of the stem is “usually concave, sometimes straight and may be slightly ground” (Boudreau 2016: 107). Boudreau gives six different measurement ranges for typical Orient Fishtail points: length, width, shoulder height, neck width, basal width, and

thickness for typical Orient Fishtail points (see Table 15). Only one Orient Fishtail made of hornfels was recovered from Site 119-19 in the Ap stratum (see Figure 9 below).



Figure 9: Orient Fishtail Point from Locus 1. Photo taken by author.

The comparative measurements taken of the hornfels Orient Fishtail point recovered are provided in the table below.

Table 15: Measurements for Orient Fishtail Projectile Points

	Boudreau's Measurements for Orient Fishtail Point Style		Locus 1 Orient Fishtail
Length	34.2- 112.1 mm	Mean: 60.9 mm	44.02 mm
Width	14.5-24.6 mm	Mean: 17.1 mm	14.61 mm
Shoulder Hight	10.7-16.1 mm	Mean: 13.55 mm	9.66 mm
Neck Width	9.7-15.2 mm	Mean: 12.2 mm	10.65 mm
Basal Width	10.7-19.7 mm	Mean: 13.55 mm	12.80 mm
Thickness	6.2-8.4 mm	Mean: 7.8-8 mm	8.47 mm

As seen in Table 15 above the point recovered from Locus 1 fits almost exactly into the measurement range provided by Boudreau. The measurements for length, width, neck width, and basal width fall within the published range. The two outliers are the shoulder height and thickness. The measurement for shoulder height falls below the published range. The measurement for thickness falls slightly above the published range. The Orient Fishtail point recovered fits the visual description provided. The blade is lanceolate in shape with a flaring stem and, while angled, the base is straight.

Narrow Point Tradition

The remaining projectile points (Wading River, Lamoka, and Sylvan Side-Notched) are all narrow points recovered from Site 119-19. All of these points are made of local quartz. Unfortunately, no measurements are provided for any of the following points by Boudreau. Instead, the measurements were taken from William Ritchie's *New York Projectile Points a Typology and Nomenclature* (1971). The Wading River points are described by Boudreau as a small, stemmed point with "weak to nonexistent shoulders" (2016: 67) typically with a straight or slightly tapered stem. These points typically have a rounded, straight or lobate base but have also been identified with angled bases (Boudreau 2016). Ritchie gives two different measurement ranges for length, and thickness for typical Wading River points (See Table 16). The two quartz Wading River points recovered from this site are shown below (Figures 10 and 11). Both were recovered from Locus 2 but from different stratum. The Wading River point with no tip was recovered from the Ap stratum and the complete Wading River point was recovered from the Gully Feature.



Figure 10: Wading River point from Locus 2. Photo taken by author.



Figure 11: Wading River point from Locus 2. Photo taken by author.

Unfortunately, one Wading River point recovered from Locus 2 is missing its tip so the length measurement taken from that will not be as useful for the comparative measurements. The measurements taken regarding the Wading River points recovered are provided in Table 16 below.

Table 16: Measurements for Wading River Projectile Points

	Ritchie's Measurements for Wading River Point Styles		Locus 2 Wading River No Tip	Locus 2 Wading River
Length	25.4- 50.8 mm	Mean: 38.1 mm	-	40.05 mm
Thickness	9.52-12.7 mm	Mean: 11.11 mm	5.60 mm	9.38 mm

Looking at Table 16 above, note that the complete Wading River point from Locus 2 fits near perfectly within the ranges provided by Ritchie. The complete Locus 2 projectile point falls just under the published thickness measurements. However, the complete Locus 2 projectile point fits well within the measurements published for length. The Wading River point with no tip is slightly smaller than the ranges provided by Ritchie. It falls below the thickness range

published by Ritchie but that could be due to the quality of material or due to resharpening of the point. Both points fit the visual description provided by Boudreau as both points have weak shoulders, with a straight stem and a straight base.

The next narrow point recovered was a Lamoka. The Lamoka is described by Boudreau as a small thick triangular bladed point with weak to moderately pronounced side notches or stemmed with sloping shoulders. While this point is similar in shape and size to the Wading River point there is a key difference; the bases are typically unworked and exhibit the cortex of the material the point is made of. The “unfinished condition of the base is a prime diagnostic feature of the Lamoka point” (Boudreau 2016: 66). Ritchie gives two different measurement ranges length, and thickness for typical Lamoka points (See Table 17). The one quartz Lamoka point recovered from Locus 1 in the Ap stratum is shown below (Figure 12).



Figure 12: Lamoka point from Locus 1. Photo taken by author.

The comparative measurements taken of the quartz Lamoka point recovered are provided in table 17 below.

Table 17: Measurements for Lamoka Projectile Point

	Ritchie's Measurements for Lamoka Point Styles		Locus 1 Lamoka
Length	25.4-63.5 mm	Average: 31.75-44.45 mm	34.14 mm
Thickness	< 6.35 mm	Average: not provided	7.14 mm

Looking at the table above this Lamoka point falls almost perfectly within the ranges provided by Ritchie. The measurement for length falls within the published range. However, the measurement for thickness falls slightly above the published range, by less than one millimeter. The point from Locus 1 also fits the visual description provided by Boudreau. The above point has a thick triangular blade with a straight stem and sloping shoulders. The Lamoka point above also retains cortex on its unfinished base which, as stated earlier, is a key feature of this point.

The last narrow point recovered from Site 119-19 is a Sylvan side-notched. This point is described by Boudreau as a “small to medium sized, thick, broad, sloppily manufactured side-notched point” (Boudreau 2016: 150). Boudreau also states that the blade on these points is typically ovoid with broad shallow asymmetrical side notching and straight or convex bases. An interesting note from Boudreau states that when traveling east to west across southern New England towards New York, this style of point becomes more common. Ritchie gives three different measurement ranges length, width, and thickness for typical Lamoka points (See Table 18). The one quartz Sylvan Side Notched point recovered from Locus 2 on the surface is shown below in Figure 13.



Figure 13: Sylvan Side Notched point from Locus 2. Photo taken by author.

The comparative measurements taken of the quartz Sylvan Side-Notched point recovered are provided in Table 18 below.

Table 18: Measurements for Sylvan Side-Notched Projectile Points

	Ritchie's Measurements for Sylvan Side-Notched Point Styles		Locus 2 Sylvan Side-Notched
Length	26.98-55.56 mm	Mean: 41.27 mm	20.67 mm
Width	15.87-26.98 mm	Mean: 21.42 mm	13.73 mm
Thickness	6.35-22.22 mm	Mean: 14.285 mm	7.05 mm

As seen in Table 18 above both the ranges for length and width fall below the published ranges. However, the point does fall within the published range for thickness. The point also fits the visual description provided by Boudreau. The point is a small sloppy side-notch point. It has an ovoid blade with shallow asymmetrical side notching and a straight base.

Raw Material Analysis

The raw material variability at this site is important to the analysis of Site 119-19. There is a high volume of non-local or exotic material that was recovered from this site. This can be indicative of wide settlement patterns, or it can be indicative of trade networks between groups (Odell 2012).

Table 19: Summary of Lithic Materials

Material	Count	Percentage of Assemblage
Chert	2,264	83.60%
Quartz	228	8.42%
Hornfels	100	3.69%
Siltstone	50	1.85%
Rhyolite	29	1.07%
Chalcedony	19	0.70%
Crystal Quartz	10	0.37%
Quartzite	7	0.26%
Jasper	1	0.04%

As seen in Table 19 the four materials that occur in the highest amounts at Site 119-19 are chert, quartz, hornfels, and Siltstone. Below (Figure 14) is an artifact density map showing the distribution of these materials across both loci.

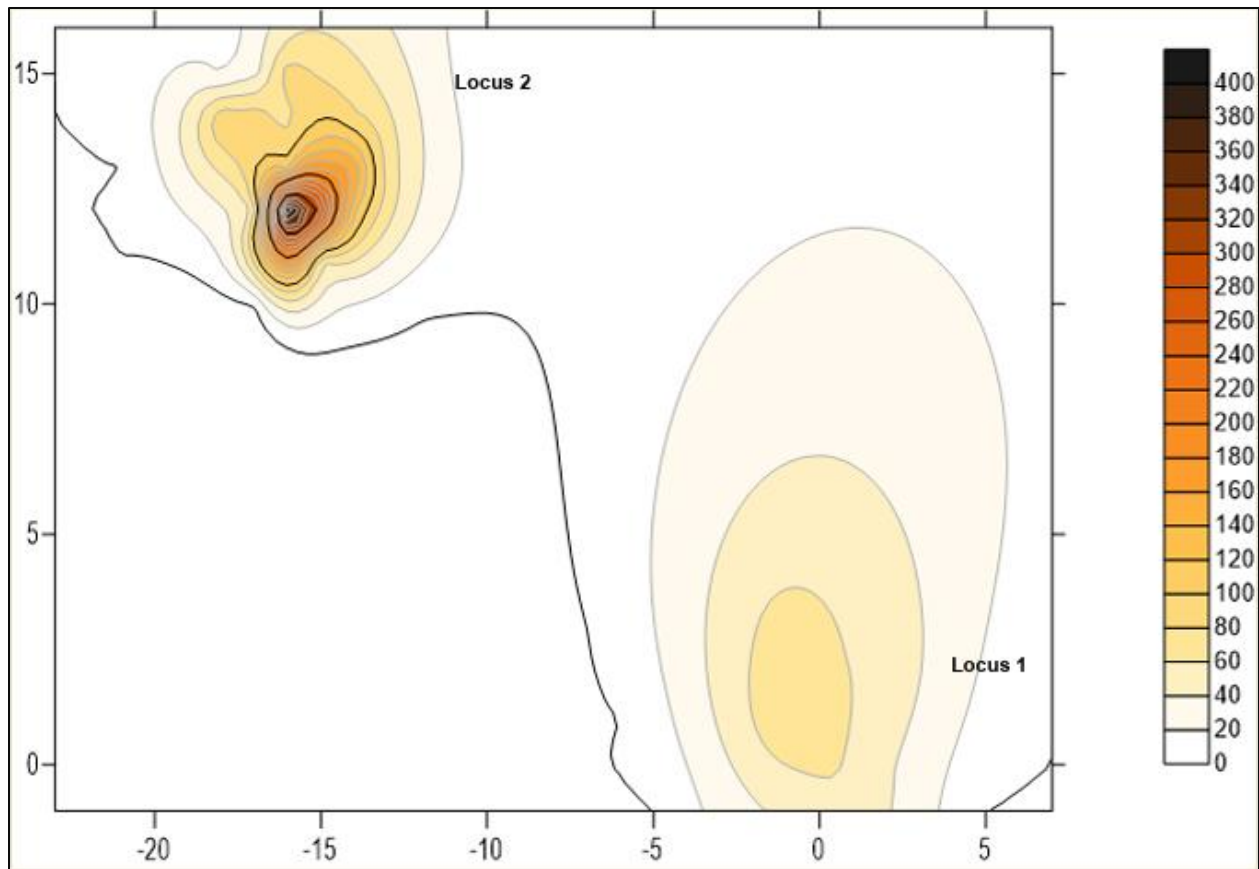


Figure 14: Lithic Material Density Map. Produced by the author.

As seen in Table 19, 83.60% of the assemblage is chert. Chert is not typically found locally in Connecticut. The closest known chert sources are in the Hudson Valley region of New York and to a smaller degree in Massachusetts. It is important to note that it is possible to find small deposits of glacially deposited chert through Connecticut, but they are not common. The chert recovered from this site is macroscopically similar to chert from the Hudson Valley region of New York. In Connecticut, Jasper is a common indicator of trade due to the lack of local raw material sources in the region. While there are only a few instances of jasper artifacts in the assemblage, its presence suggests the occupants of Site 119-19 had active trade routes to procure this material. Local materials make up 16.36% of the raw material present at Site 119-19. While local materials make up a small portion of the lithic assemblage they are still important in

creating a full picture of the site. The stratum the materials are found in is also significant for understanding all aspects of the site. Table 20 below shows the breakdown of materials across both Loci by stratum.

Table 20: Materials by Stratum

Stratum	Material	Total	Percentage of total
Ap	Chert	1,437	79.35%
	Quartz	202	11.15%
	Crystal Quartz	10	0.55%
	Quartzite	7	0.39%
	Chalcedony	2	0.11%
	Hornfels	86	4.75%
	Rhyolite	25	1.38%
	Siltstone	41	2.26%
	Jasper	1	0.06%
	AP Total:		
B1	Chert	795	93.53%
	Quartz	18	2.12%
	Chalcedony	17	2%
	Hornfels	11	1.29%
	Rhyolite	3	0.35%
	Siltstone	6	0.71%
	B1 Total:		
Feature 2A	Chert	3	75%
	Quartz	1	25%
	Feature 2A Total:		
Feature 4B	Chert	2	66.67%
	Quartz	1	33.33%
	Feature 4B Total:		
Gully Feature	Chert	27	77.14%
	Hornfels	3	8.57%
	Quartz	5	14.29%
	Gully Feature Total:		
Surface	Quartz	1	100%
	Surface Total:		
Wall Fall	Siltstone	2	100%
	Wall Fall Total:		

All of the primary reduction flakes and debris are local materials and are primarily quartz. Five out of six cores recovered from the site consist of local materials, while all of the bifacial reduction, thinning, and retouch flakes are chert. As noted previously, this can be

indicative of people trying to conserve and get the most use out of the higher quality exotic material (Andrefsky 2008). This can also be seen when looking at the utilized flakes from the assemblage as they are all chert. The raw material analysis was also important when analyzing the projectile points recovered from Site 119-19. When analyzing the projectile point assemblage, it shows all of the broad spear style points (Atlantics) are made of chert, while all the narrow stem points (Wading River, Lamoka, and Sylvan Side-Notched) are made of quartz.

Site 119-19 Within the Terminal Archaic/Early Woodland Settlement System in Connecticut

As described earlier, during the Terminal Archaic and Early Woodland periods, there are two different cultural traditions present, the Broad Spear tradition and the Narrow Point tradition. Both cultural traditions coexist at the same time in Connecticut. During the Terminal Archaic period the Broad Spear tradition tends to stay around the river flood plains, where the Narrow Point tradition tends to be associated with settlement adjacent to the interior wetlands. During the Early Woodland period with the disappearance of the Broad Spear tradition the Narrow point tradition moves into the riverine areas that would have previously been occupied by the Broad Spear tradition. Site 119-19 is located in central Connecticut, close to the Connecticut River which divides the state in half. An interesting note about the landscape and placement of Site 119-19 is its location above a wetland near the Connecticut River in the north-central lowlands. The Broad Spear tradition settlements tend to prefer to settle and camp more on the rivers where the Narrow Point tradition tend to prefer to be above wetlands. So, Site 119-19 satisfies the preferences for both cultural traditions during the Terminal Archaic and Early Woodland periods. As noted previously, there is also a difference in preference of materials between the two cultural traditions when making lithic tools. The Broad Spear Tradition tends to prioritize more exotic cherts because it is better for creating the thin, broad blades that are associated with

the tradition, whereas the Narrow Point Tradition tends to favor more local materials, especially quartz, and it is usually defined by small, chunky stemmed points. The lithic assemblage from Site 119-19 reflects an intersection of both of these cultural traditions at this one site. Even though the site is not culturally stratified, there were likely multiple occupations, and that can be shown by the presence of both Broad Spear Tradition blades and Narrow Point Tradition blades that are both present at the site. All of the Broad Spear points from the assemblage are made of exotic cherts and all of the narrow points are quartz. Therefore, it can be inferred that there was an overlap of these cultural traditions at the site, and the site was used by both cultural traditions, likely for the same purposes.

Chapter 7: Conclusions

This thesis aimed to answer the question: how does occupation of Site 119-19 in the Connecticut River Valley show the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods? To answer this question a reanalysis of the Phase III artifacts from Site 119-19 in Rocky Hill, Connecticut was conducted.

The results of the initial analysis showed that there was a high volume of lithic artifacts recovered from Site 119-19. Of the 2,971 artifacts recovered from Site 119-19 2,708 were lithic artifacts which made up 91.15% of the total assemblage. The lithic artifacts were spread across two loci. The lithic artifacts consisted of debitage, debitage tools, flaked tools, cores, and groundstone tools. After the assemblage was reanalyzed a more specific analysis was conducted. To assess the primary site function and activities at Site 119-19 a more thorough analysis was conducted on the stone tools recovered from Phase III excavations.

An analysis of the stone tools and debitage at Site 119-19 showed that the site's primary task was related to stone tool manufacture/maintenance. There is a high number of debitage (n=2,600), along with a high number of tools (n=72) and tool fragments recovered from the site. Many of the projectile points recovered are heavily retouched, missing their tips, along with multiple projectile point base fragments. This can be seen as evidence of people discarding tools that are no longer salvageable. The high amount of debitage can be seen as evidence of people retouching their tools or making new tools to replace the broken ones. While there was a low number of primary reduction flakes (n=19) recovered from this site that can be explained by the dominant material recovered from this site being chert which is a non-local material. It has been

theorized that when non-local material is being traveled long distances most of the cortex will be removed closer to the material source (Will 2000). It has also been noted that sites where tool manufacture/maintenance are primary activities there is typically a high proportion of the flakes should have been utilized (Nelson 1991, Andrefsky 2001, Johnson 1987). Utilized flakes make up 44.44% of the entire tool assemblage at Site 119-19.

Next, to determine what time period Site 119-19 fit into projectile point typology was determined for the seven complete or mostly complete projectile points recovered. The projectile points recovered were two Atlantics, one Orient fishtail, two Wading Rivers, one Sylvan side-notched, and one Lamoka. These points showed evidence of two different cultural traditions. The Atlantic and Orient Fishtail points are indicative of the Broad Spear cultural tradition. While the Wading River, the Sylvan side-notched, and the Lamoka points are indicative of the Narrow Point cultural tradition. The Broad Spear tradition is diagnostic to the Terminal Archaic and Early Woodland period (Boudreau 2016), while the Narrow Point tradition ranges from the Late Archaic to the Late Woodland period (Boudreau 2016). Even though the points associated with the Narrow Point tradition have a longer time period range it can be said that this site fits into the Terminal Archaic/ Early Woodland Period. This is based on the depth and strata from which the projectile points come from. All of the projectile points except for two were found within the Ap stratum within centimeters of each other. This indicates a possibility that the Narrow Point tradition occupied the site in the same time period as Broad Spear tradition or moved into the area with the disappearance of the Broad Spear tradition. To say for certain which of the two options is more likely, further research would be necessary. Further research and excavations of Terminal Archaic/Early Woodland sites in the area with greater stratigraphic integrity will also

help archaeologist better understand the interactions of the Broad Spear tradition and the Narrow Point tradition during this time period.

Lastly, to help answer the question of how Site 119-19 shows the transition from the Broad Spear Tradition to the Narrow Point Tradition, this thesis examined the materials that made up the lithic assemblage from the Phase III excavation. As mentioned previously, chert is the dominant material of the assemblage, making up 83.60% of the total assemblage. Chert is a non-local material in Connecticut; the closest known chert sources are in the Hudson Valley of New York and to a smaller degree in Massachusetts. This means that either people were trading for this material or they were traveling far distances to acquire this material (Odell 2012).

These different forms of analysis serve to answer the research question stated in this paper. The data presented here lead to the conclusion that the primary site tasks are related to tool manufacture/maintenance. It is also able to be concluded that the lithic analysis data supports the interpretation that there were two different cultural traditions using this site during the Terminal Archaic/Early Woodland period in Connecticut. The methodology of projectile point manufacture and the materials used for each culture are very different. Chert is by far the dominant artifact material across both Loci suggesting that the site might have been used more by the Broad Spear Tradition. The style of point that makes up the Broad Spear cultural tradition has many similarities with the Susquehanna artifact tradition. Now whether that is indicative of the Laurentian populations adopting the Broad Spear technology as they were exposed to it from trading with groups from the Mid-Atlantic or just groups from the Mid-Atlantic region moving into New England is harder to distinguish. Site 119-19 seems to show that both cultural traditions occupied this site during the Terminal Archaic/Ealy Woodland periods. This is more uncommon during these time periods as the two cultural traditions tend to prefer different ecozones. Narrow

Point tradition sites tend to be found along wetlands while Broad Spear tradition sites tend to be near rivers. It was only when the Broad Spear tradition disappears that the Narrow Point tradition moves into the riverine areas. Site 119-19 seems to cater to both cultural traditions for either the Terminal Archaic or Early Woodland period. Site 119-19 sits overlooking a wetland close to the Connecticut River.

This research does have some limitations as only lithic analysis was used to analyze the Phase III data recovered from Site 119-19. As only the Phase III artifacts were analyzed, while they provide a wealth of information it is possible that also including the Phase I artifacts would have provided more information about the site. In my opinion it would also be valuable that given more time and funding for this project to perform radiocarbon dating on some of the charcoal recovered from the features could have helped to solidify the dates this site was occupied. Lastly, having more time and funding to perform residue analysis on some of the stone tools could have been a valuable addition to getting a full picture of this site. Overall, the lithic analysis conducted on the Phase III artifact was able to provide valuable information about Site 119-19 and how it shows the transition from the Broad Spear Tradition to the Narrow Point Tradition during the Terminal Archaic and Early Woodland Periods. Hopefully in the future more research will be conducted to explore how both cultural traditions interacted and understand where the Broad Spear tradition originated from.

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