

Appendix D: Cultural Resources

Phase Ia Archaeological Assessment Survey
Proposed Solar Photovoltaic Array
958 CT Route 163
Town of Montville, Connecticut

June, 2023



ACS

◆ Archaeological Consulting Services ◆

**Phase Ia Archaeological Assessment Survey
Proposed Solar Photovoltaic Array
958 CT Route 163
Town of Montville, Connecticut**

by

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June, 2023

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Abstract

This report contains the results of a Phase Ia archaeological assessment survey conducted by ACS (Archaeological Consulting Services) during the months of May through June, 2023. The project calls for an evaluation of potential cultural resources to be affected by the construction of a solar farm on a property that measures about 30 acres in Montville, Connecticut. The project impact area is smaller, limited to an open farm field on the west side of Oakdale Road at 958 Route 163. The project is being coordinated by Solli Engineering, a civil engineering firm based in Monroe, Connecticut. Solli supplied site plans which show the proposed development and existing conditions. The project is subject to review by the Connecticut Siting Council and the Connecticut State Historic Preservation Office (SHPO).

The project area lies in north-central Montville in the Oakdale section of town. Background research indicates a low sensitivity for potential prehistoric cultural resources, with a statistical prehistoric landscape sensitivity model developed and utilized by ACS indicating a high score of only 7.8 out of a potential 100.0, and therefore within the low sensitivity range (0-20). The low score can be attributed to rocky soil contexts and considerable distance to the nearest major water source, which are tributaries of Oxoboxo Brook over one-quarter mile to the south. The overall property bears a higher sensitivity for historic cultural resources, given its location on Oakdale Road that was occupied since at least the late 18th century, and the current house on the property is a saltbox Colonial built around 1790. However, the Colonel Mulford Raymond house and its associated outbuildings will not be directly impacted by the proposed project, with the project area over two hundred feet from the road.

The Raymond house is not listed with the National Register of Historic Places (NRHP), with the closest NRHP property consisting of the Raymond Bradford homestead about one-half mile to the northwest on Raymond Hill Road, along which other Raymond family historic houses are located as well as the Raymond Hill Cemetery. Because of the low prehistoric sensitivity and sufficient avoidance of the historic structures on the property, ACS recommends no further archaeological evaluation for the proposed project. However, the existing historic house should be either preserved further or subject to a state-level architectural history documentation, subject to review by the Connecticut State Historic Preservation Office (SHPO).

Project Summary

Project Name: Proposed Solar Photovoltaic Array, 958 CT Route 163, Montville, Connecticut.

Project Purpose: To investigate possible cultural resources which may be impacted by the construction of a solar farm in Montville, Connecticut, in compliance with requirements of the Connecticut Siting Council and the Connecticut State Historic Preservation Office.

Project Funding: The Nevar Company, Cheshire, Connecticut.

Project Location: 958 CT Route 163, Montville, Connecticut.

Project Size: ~29.65 acres.

Investigation Type: Phase Ia archaeological assessment survey.

Investigation Methods: Background research, pedestrian surface survey.

Dates of Investigation: May to June, 2023.

Performed by: ACS (Archaeological Consulting Services), 118 Whitfield Street, Guilford, Connecticut 06437, (203) 458-0550 (telephone), (203) 672-2442 (fax), acsinfo@yahoo.com.

Principal Investigators: Gregory F. Walwer, Ph.D. and Dorothy N. Walwer, M.A.

Submitted to:

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Connecticut Office of State Archaeology (Dr. Sarah Sportman, State Archaeologist), University of Connecticut, 354 Mansfield Road, Storrs, Connecticut 06269-1176, (860) 486-5248.

Reviewing Agency:

Connecticut State Historic Preservation Office (Catherine Labadia, Staff Archaeologist), 450 Columbus Boulevard, Hartford, Connecticut 06103, (860) 500-2329.

Recommendations: No further archaeological evaluation of the project area. Further preservation of the Colonel Mulford Raymond historic house on the property or state-level architectural history documentation.

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CHAPTER 1: INTRODUCTION

Project Description

This report provides the results of a Phase Ia archaeological assessment survey conducted by ACS for the planned development of a solar voltaic array, or solar farm, in Montville, New London County, Connecticut. The owner of the property is The Nevar Company of Cheshire, Connecticut. The project is located within a single lot, listed with the Montville tax assessor as Lot 000 on Tax Map 046, Block 008, measuring 29.65 acres. The project area itself is limited to a portion of a cleared farm field measuring less than one-half that acreage. The project area is in north-central Montville, in the Oakdale part of town. The project property contains an existing house that the tax assessor indicates was built in 1793.

ACS was contacted by Solli Engineering, a civil engineering firm based in Monroe, Connecticut to conduct the archaeological assessment survey for the project. Solli supplied ACS with a survey map, indicating that the survey was likely required for review by the Connecticut State Historic Preservation Office (SHPO) and Connecticut Siting Council. The survey map shows existing conditions, including topography and wetlands, as well as the location of the existing house and associated outbuildings. The proposed development would avoid direct impact to any of the mapped structures on the property.

ACS conducted the assessment survey in conformance with the *Environmental Review Primer for Connecticut Archaeological Resources* issued by SHPO. The assessment survey evaluated the potential need, if any, for a Phase Ib archaeological reconnaissance survey. The archaeological assessment survey consisted of a thorough background research effort and pedestrian surface survey to evaluate the potential sensitivity of the project area for any prehistoric and/or historic cultural resources, with SHPO to serve as review agency for the final report.

CHAPTER 2: BACKGROUND

Environmental Setting

The project area is located in the Town of Montville, New London County, Connecticut. The project setting is in the Southeast Hills (IV-C) ecoregion of Connecticut. The project area lies in the north-central part of Montville in the Oakdale section of town, to the south and west of Connecticut Route 163 that takes a bend at the project property. The address of the house on the property is 958 Route 163, although the house and its associated outbuildings lie to the east of the project impact area (Figure 1).

Underlying bedrock is dominated by a unit of Hope Valley Alaskite Gneiss (Zsh), a pre-Cambrian formation in excess of 590 million years old (Rodgers 1985). Associated formations at or near the southern part of the project area include Potter Hill Granite Gneiss (Zsph), and Plainfield quartzite and schist (Zp). These metamorphic formations are highly foliated in the area, with bedding dips on the order of 35 to 45 degrees to the north. The formations are part of a larger Avalonian Terrane that was formerly part of the African plate. The property is set on a glacial moraine and hillslope setting (Stone et al. 1992), with elevations varying between about 495 feet above mean sea level in the far northwest corner of the project area, to about 450 feet above mean sea level at the southern end, with a gentle to moderate slope south and east (Figure 2). The project is set within an open farm field part of the property that contains a secondary forest cover through the rest of the property to the west. There are no wetlands within the project area, which is set within the broader Oxoboxo Brook (#3004) drainage basin (McElroy 1991), with the main channel of the brook flowing east southeast well to the south of the project area, and containing a number of dammed ponds.

The project area contains two dominant soil types (Figure 3) (Crouch 1983; USDA NRCS websoil survey 2023). Canton and Charlton fine sandy loam (CbB / 60B) dominates the open farm field, although the northwest section is within a unit of Woodbridge stony fine sandy loam (WyB / 46B). The well drained Canton soils typically have a very dark grayish brown fine sandy loam surface layer about eight inches thick, followed by dark yellowish brown fine sandy loam to sandy loam subsoil to about two feet below the surface, and a substratum of grayish brown gravelly sand to five feet deep or more. The closely associated and well drained Charlton soils typically have a similar surface layer, thinner 21-inch fine sandy loam subsoil that ranges in color from dark yellowish brown, yellowish brown, to light olive brown, and a substratum of grayish brown fine sandy loam to five feet deep or more. The moderately well drained very stony Woodbridge fine sandy loam soil usually has a profile that includes a surface layer of very dark brown fine sandy loam about six inches thick, followed by a subsoil of yellowish brown, light olive brown, and grayish brown mottled fine sandy loam and sandy loam about 22 inches thick, and a substratum of firm, brittle, olive sandy loam to five feet deep or more.

Figure 1: Map of the Project Area

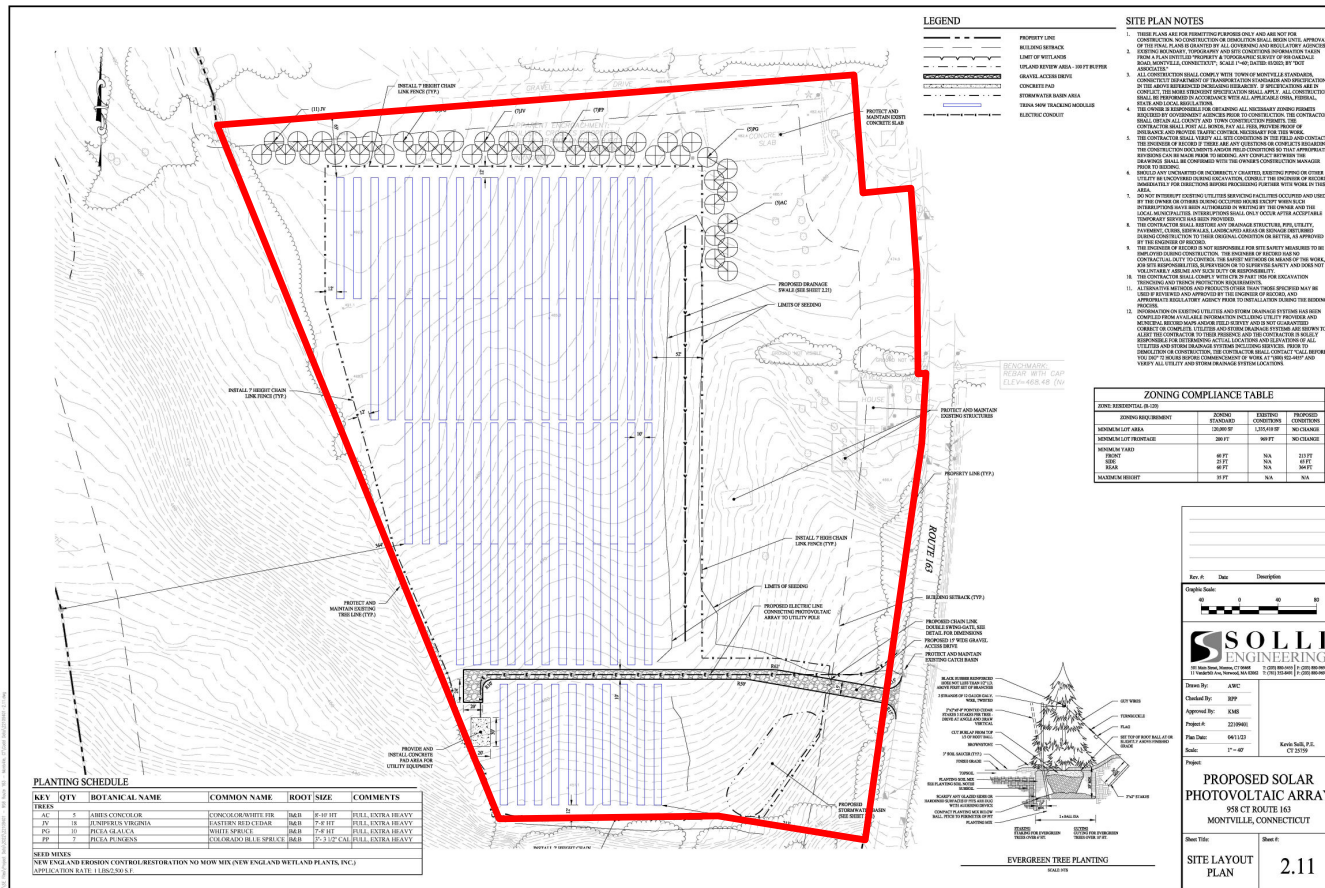


Figure 1: Map of the project area, from site plans drafted by Solli Engineering. Scale 1" = 200', 1:2,400 (1:2,400)

Figure 2: USGS 7.5' Topographic Map, Montville Quadrangle

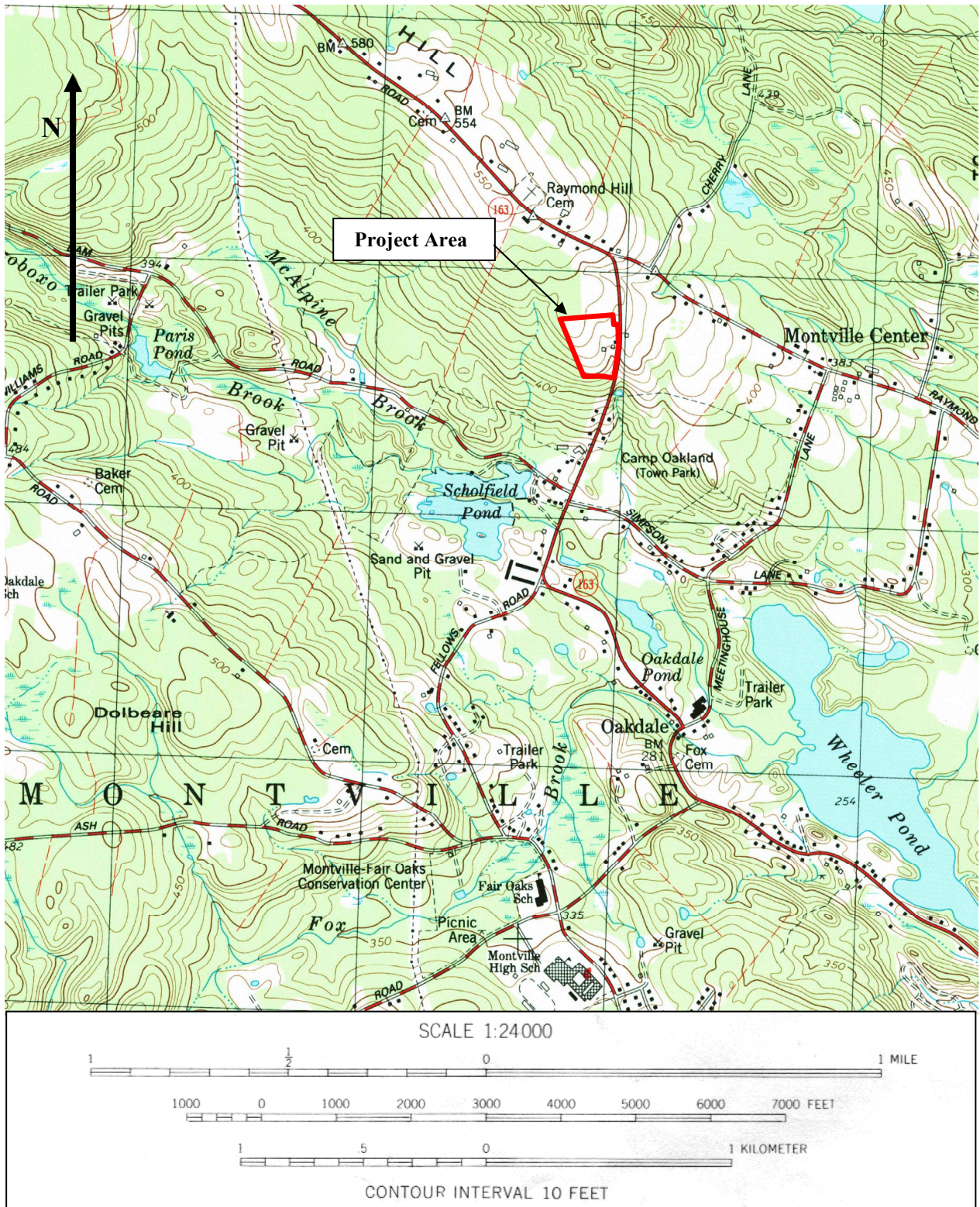


Figure 2: From USGS 1983.

Figure 3: USDA Websoil Survey Map



Figure 3: From USDA NRCS websoil survey.

Cultural Setting

Regional Prehistory

The prehistory of the project region and New England in general can be broadly divided into periods reflecting changes in environment, Native American subsistence and settlement patterns, and the material culture which is preserved in the archaeological record (Table 1). Although it remains controversial today, the conservative estimates for the first occupations of North America are about 18,000 to 15,000 years ago, just after the maximum extent of the last glaciation and the broadest extent of the Bering land bridge (Kehoe 1981:7; Parker 1987:4; Jennings 1989:52). Southern Connecticut itself remained glaciated until about 15,200 B.P. (Snow 1980:103; Gordon 1983:71; Parker 1987:5; McWeeney 1994:181, 1999:6).

Paleo-Indian

The Paleo-Indian period is documented in Connecticut after 13,000 years ago and extends to roughly 9,500 B.P. (Swigart 1974; Snow 1980:101; Lavin 1984:7; Moeller 1984, 1999). The earliest radiocarbon date in Connecticut was secured recently at the Brian D. Jones site, at about 12,500 B.P. (Leslie and Sportman 2020). An unpublished date of 12,600 B.P. was also obtained from the site (Sportman pers. comm. 2022). This was a period of climatic amelioration from full glacial conditions, and a rise in sea levels which fell short of inundating the continental shelf. It was during this time that tundra vegetation was replaced by patches of boreal forests dominated by spruce trees (Snow 1980:114; Parker 1987:5-6), and eventually white pine and several pioneering deciduous genera (McWeeney 1994:182, 1999:7). Early in the period, the environment was conducive to the existence of large herbivores and, although a low population density of humans who procured these animals as a major subsistence resource warming temperatures and denser forests contributed to their extinction. The projected social and settlement patterns are those of small bands of semi-nomadic or restricted wandering people who hunted mammoth, mastodon, bison, elk, caribou, musk ox, and several smaller mammals (Ritchie 1969:10-11; Snow 1980:117-120). Episodes of sparse vegetation during this period encouraged the use of high lookout points over hollows and larger valleys by people in pursuit of large game. The southern part of New England had an earlier recovery from glacial conditions when compared to areas to the north, however, with a higher density of vegetation that might have precluded Paleo-Indians of Connecticut from focussing heavily on the larger mammals (McWeeney 1994:182).

The cultural material associated with this period includes large to medium-sized, fluted projectile points (cf. Clovis), in addition to knives, drills, pieces esquillees and gravers, scrapers, perforators, awls, abraders, spokeshaves, retouched pieces, utilized flakes, and hammerstones (Wilbur 1978:5; Snow 1980:122-127; Moeller 1980). Although numerous finds from this period have been found in Connecticut, only a few, small *in situ* sites exist throughout the state. Finds tend to be located near very large streams in the lower Connecticut River Valley, and in rockshelters of other regions (McBride 1981). A survey performed by the Connecticut Office of State Archaeology and the Archaeological Society of Connecticut resulted in the documentation of 53 Paleo-Indian "find spots" in Connecticut (Bellantoni and Jordan 1995), while a more updated research survey indicates up to 72 locations and sites (Bouchard 2014). Many more sites have likely been eradicated by rising sea levels since the Paleoindian period (Anderson 2001).

Early Archaic

The Early Archaic period lasted from approximately 9,500 B.P. to 7,500 B.P. (Snow 1980:159; Lavin 1984:9; Moeller 1984). Sea levels and temperatures continued to rise during this period as denser stands of forests dominated by pine and various deciduous species replaced the vegetation of the former period (Davis 1969:418-419; Snow 1980:114; Parker 1987:9; McWeeney 1994:184-185, 1999:8-9). This environmental change was rapid and caused a major shift in the animals it supported, including deer, moose, other small to medium-sized mammals, migratory birds, fish, and shellfish. The material culture changed along with the environmental conditions to include the atlatl and smaller stemmed and bifurcated projectile points (Stanly, cf. Kanawha and Lecroy) for procuring smaller, faster game in more closed settings (Wilbur 1978:6-7). The expanded tool set included choppers and anvil stones. Settlement patterns were probably becoming more territorialized towards a central-based wandering character (Snow 1980:171; see also Forrest 1999). The Early Archaic period is poorly represented in Connecticut and the lower coastal river valleys, probably resulting from a combined effect of low population densities in response to rapidly changing environmental conditions, as well as site location and preservation factors (Snow 1980:168; McBride 1981; McBride and Dewar 1981:45; Lavin 1984:9; McWeeney 1986; see also Forrest 1999).

Middle Archaic

The Middle Archaic period extended from approximately 7,500 B.P. to 6,000 B.P. (Snow 1980:173; Lavin 1984:9; McBride 1984; Jones 1999). It was by the end of this period of increased warming that sea levels and coastal configurations had stabilized and approached their present conditions (Kehoe 1981:211; Gordon 1983:82; Parker 1987:9). The period is marked by the establishment of forests with increasing proportions of deciduous hardwoods in relation to the pine predecessors in Connecticut (Davis 1969; Snow 1980:114; McWeeney 1999:10). The material culture included square or contracting-stemmed points (Neville, Stark, and Merrimac), semi-lunar groundstone knives, ground and winged banner stones for atlatls, plummets for nets, gouges, denticulates, perforators, percussed celts and adzes and grooved axes for woodworking (Snow 1980:183-184), as well as tools used in previous periods. This more extensive range of material culture indicates a broader subsistence base than in previous periods, including greater fish and shellfish procurement (Wilbur 1978:8; Snow 1980:178-182) which was associated with the stabilization of sea levels towards the end of the period. The increased breadth of subsistence resources had the effect of increasing scheduling efforts and may have caused settlement patterns to take on more of a central-based or seasonally circulating pattern with bands joining and dispersing on a seasonal basis (Snow 1980:183). Sites found in the lower Connecticut River Valley region suggest that a wider range of environments and associated site types were exploited, including both large and special task sites in upland areas (McBride 1981, 1984:56). This regional pattern may confirm the suggested settlement pattern of central-based, seasonally circulating or restricted circulating groups of people supported by logistical procurement sites throughout the state. Middle Archaic sites are fairly rare in Connecticut, again a combined product of rising sea levels and poor site preservation (see Forrest 1999).

Late Archaic

The Late Archaic period ranged from approximately 6,000 B.P. to 3,700 B.P. (Snow 1980:187; Lavin 1984:11; McBride 1984; Pfeiffer 1984; Cassedy 1999). This period is marked by a warm-dry maximum evident from pollen cores in the region (Davis 1969:414; Ogden 1977). Hardwood, oak-dominated forests very similar in character to ones established today covered most of Connecticut by the Late Archaic (Parker 1987:10). The Late Archaic in Connecticut has been divided into two traditions: the Laurentian and the Narrow Point (Lavin 1984:11), with the former perhaps being distributed more in the interior. The Laurentian tradition is defined by wider-bladed, notched and eared triangular points, and ground slate points and ulus, while the Narrow Point tradition includes smaller, thicker, and narrower points. The tool kit and general material culture became even more expanded during this period, with the advent of ground stone manos, nut mortars, pestles, and bowls, as well as stone pipes, bone tools, corner-notched (Vosburg, Brewerton, and Vestal), side-notched (Otter Creek, Brewerton, Normanskill), smaller narrow-stemmed (Dustin, Lamoka, Squibnocket, and Wading River), and triangular points (Squibnocket, Brewerton, and Beekman), grooved and perforated weights, fish weirs and harpoons, and decorative gorgets (Wilbur 1978:15-24; Snow 1980:228-231). The groundstone material has been inferred as being associated with an increased vegetable diet that consisted of berries, nuts, and seeds (Snow 1980:231; Lavin 1984:13), including acorn, butternut, chestnut, walnut, hickory, bayberry, blackberry, goose foot, cranberry, partridge berry, service berry, strawberry, and swamp current (Cruson 1991:29). Deer continued to be the predominant meat source, although animal remains recovered from archaeological sites in the region include black bear, raccoon, woodchuck, rabbit, otter, gray squirrel, red fox, gray fox, wolf, wild turkey, grouse, pigeon, migratory fowl, and anadromous and freshwater fish and shellfish (Cruson 1991:28-29). Various sea mammals and fish were procured along the coast.

The increasing breadth of the subsistence base and material culture was in turn associated with a central-based settlement pattern in which a restricted range of seasonally scheduled and used areas were exploited in a more semi-sedentary fashion than previously (Lavin 1984:13; Dincauze 1990:25). Sites in the lower Connecticut River Valley suggest that the larger rivers served more as long-term bases within a central-based circulating system than in the Middle Archaic (McBride 1981; McBride and Dewar 1981:48). The interior uplands of Connecticut may have supported a relatively independent set of seasonally circulating groups which used larger wetlands as long-term bases (Wadleigh 1981). Mortuary practices of the time suggest some sedentism for certain groups of people who were buried in specialized secondary cremation cemeteries and who may have had some control over restricted resources (e.g. riparian transportation routes) (Walwer 1996). Although the cremation sites largely include utilitarian funerary objects, some contain non-local materials which suggest trade association with cultures to the west of Connecticut (Walwer 1996).

Terminal Archaic

The Terminal Archaic period extended from approximately 3,700 B.P. to 2,700 B.P., as defined by the Susquehanna and Small-Stemmed traditions (Swigart 1974; Snow 1980:235; Lavin 1984:14; Pfeiffer 1984; Pagoulatos 1988; Cruson 1991; Cassedy 1999). Steatite, or soapstone, was a frequently used material by this time, and could be fashioned into bowls and other objects. The mass, permanency, and labor intensiveness of creating these heavy items have

led to the inference of more sedentary base camps, especially on large rivers where the development of a canoe technology had become fully established and increased the effective catchment area within which groups of people were gathering resources on a continuous basis. The material culture of the period was very similar to the Late Archaic, with a proliferation of stemmed projectile point types including Snook Kill, Bare Island and Poplar Island stemmed points, Orient Fishtail points, Sylvan and Vestal side-notched points, and Susquehanna corner-notched points. The resource base continued to consist of deer and small mammals, nuts, shellfish, turtles, and birds (Snow 1980:249). The first signs of ceramics (Vnette I pottery) tempered with steatite fragments appeared during this period (Lavin 1984:15; Lavin and Kra 1994:37; see also Cassedy 1999:131), and archaeological evidence of trade with other regions becomes more substantial for this time (Pfeiffer 1984:84).

The distribution of sites and site types in the lower Connecticut River Valley during this period suggests that there was a change in settlement to one with fewer, yet larger sites in riverine settings, and associated satellite task-specific sites in the uplands (McBride 1981; McBride and Dewar 1981:49). The implications are less foraging-strategy residential movement and more task-oriented collection activities within a radiating settlement pattern, but probably one in which some degree of seasonal circulation of settlement took place. Pagoulatos (1988) has shown that while sites associated with the Small-Stemmed tradition tend to suggest a more mobile settlement pattern in the interior uplands, sites of the Susquehanna tradition indicate a semi-sedentary collector strategy in major riverine and estuarine environments. At least certain groups exhibited semi-sedentism and some control over restricted resources, as indicated by the elaborate burials of the Terminal Archaic (Walwer 1996). Mortuary practices from the period include secondary cremation interments in formalized cemetery areas, with individual pits containing fragmented utilitarian material from communal cremation areas, as well as highly stylized funerary objects from non-local material (Walwer 1996). The lack of other, less formalized burial types evident in the archaeological record may be a matter of poor preservation, in which case it has been proposed that the cremation cemeteries are representative of a stratified society in which a portion of the people (of the Susquehanna "tradition") were able to generate a surplus economy that supported a semi-sedentary settlement pattern. This surplus may have been generated by the procurement and control over the transportation of steatite from various areas in Connecticut and surrounding territory.

Early Woodland

The Early Woodland period in Connecticut extended from about 2,700 B.P. to 2,000 B.P. (Lavin 1984:17; Juli and McBride 1984; Cruson 1991; Juli 1999). A cooling trend during the Early Woodland (Davis 1969:414; Parker 1987:10; McWeeney 1999:11) is thought to have reduced population sizes and regional ethnic distinction as the hickory nut portion of the resource base was significantly decreased, although the apparent decline in populations may possibly be related to other factors such as the inability to confidently distinguish Early Woodland sites from those of other periods (Filios 1989; Concannon 1993). Climatic deterioration and depopulation are in turn thought to have inhibited the progression towards, and association with, more complex social structures and networks that were developing further to the west and south (Kehoe 1981:215). A proliferation of tobacco pipes may indicate the beginnings of agricultural

efforts in the northeast. The Early Woodland of this region, however, exhibits no direct traces of subsistence crop remains, indicating continuity with previous periods in terms of subsistence practices (Lavin 1984:18).

Materially, the period is marked by a substantial development of a ceramic technology, with the Early Windsor tradition of pottery being dominant in the Early Woodland of Connecticut (Rouse 1980:68; Lavin 1984:17, 1987). Both Early Windsor cord-marked and Linear Dentate ceramic forms were being produced at this time. Diagnostic projectile points can be developmentally traced to indigenous points of previous periods, consisting of many stemmed forms in addition to Meadowood and Fulton side-notched points, Steubenville points, and Adena-Rossville types, but now may have been used in conjunction with the bow and arrow (Lavin 1984:18). Adena-like boatstones are also found in this period. Although rare contact with the Adena culture is evident throughout assemblages of the period, the Early Woodland in southern New England remained a very gradual transitional period (Snow 1980:279,287; Lavin 1984:19).

A heightened use of ceramics has been erroneously promoted as an automatic indication of increased sedentism in many areas. Instead, central-based camps with restricted seasonal encampments appear to be the dominant settlement pattern (Snow 1980:287). Minimal archaeological evidence from the lower Connecticut River Valley appears to suggest a similar settlement pattern to the Terminal Archaic in which large riverine sites served as central bases with upland seasonal dispersal or specific task sites (McBride 1981; McBride and Dewar 1981:49), but with a lesser degree of sedentism. Interior uplands populations also decreased during the Woodland era, perhaps related to the intensification of agricultural resources along major riverine and coastal areas (Wadleigh 1981:83). The trend towards greater mobility may in part be attributed to the decline in the use of steatite that no longer gave certain groups control over critical and restricted resources, as indicated by the declining ceremonialism of burial sites at the time which were more often located in habitation sites and exhibited combinations of secondary cremation features and primary inhumations (Walwer 1996). This transition in the socio-economics of the region was brought about by the decrease in importance of steatite as ceramics obscured its value for producing durable containers. Partially preserved primary inhumations appear for the first time in the region based on preservation considerations.

Middle Woodland

The Middle Woodland period lasted from about 2,000 B.P. to 1,000 B.P. (Lavin 1984:19; Juli and McBride 1984; Cruson 1991; Juli 1999). The climate was returning to the conditions basically witnessed today (Davis 1969:420; McWeeney 1999:11). It is a period which exhibited considerable continuity with previous periods in terms of both subsistence and material culture. Cylindrical pestles and groundstone hoes are tools diagnostic of the period and reflect developing agricultural efforts, including the cultivation of squash, corn, and beans on a seasonally tended basis (Snow 1980:279). Direct evidence for agriculture in the form of preserved vegetal remains, however, does not generally appear until the early Late Woodland (Lavin 1984:21) when corn is thought to have been introduced into the Connecticut River Valley from the upper Susquehanna and Delaware River Valleys (Bendremer and Dewar 1993:386). Projectile point forms from the period include Snyders corner-notched, LongBay and Port Maitland side-notched, Rossville

stemmed, and Greene lanceolate types. A proliferation of ceramic styles was witnessed during the Middle Woodland (Rouse 1980; Lavin 1984:19-20, 1987; Lavin and Kra 1994:37), including Rocker Dentate, Windsor Brushed, Sebonac Stamped, Hollister Stamped, Selden Island, and Windsor Plain types that were all also produced in the Late Woodland, with the exception of the Rocker Dentate. Ceramic forms from the Early Woodland were still being produced as well. Minor traces of the Hopewell cultures to the west are also present in the archaeological record of this period. Site types and distributions in the lower Connecticut River Valley imply that a moderate increase of sedentism with aspects of a radiating settlement pattern took place on large rivers, supported by differentiated upland task sites (McBride 1981; McBride and Dewar 1981:49). This trend may have been supported by the expansion of tidal marshes up larger rivers (McBride 1992:14).

Late Woodland

The Late Woodland period extended from approximately 1,000 B.P. to 1600 A.D., the time of widespread European contact in the broader region (Snow 1980:307; Kehoe 1981:231; Lavin 1984:21; Feder 1984, 1999). A warmer climate and increased employment of large scale agriculture for subsistence in New England were associated with increased population densities, more sedentary settlements, and more permanent living structures and facilities in larger villages. Settlements in Connecticut, however, tended to remain smaller with only small scale agricultural efforts, and as part of a seasonal round in which smaller post-harvest hunting and task-specific settlements were established in fall, and protected settlements occupied in winter (Guillette 1979:CI5-6; McBride and Bellantoni 1982; Lavin 1984:23; Starna 1990:36-37). Instead of maintaining permanent villages near agricultural plots, aboriginal populations engaged in the slashing and burning new plots and let old plots lie fallow periodically (Salwen 1983:89). In this area, domestic resources included corn, beans, squash, Jerusalem artichoke, and tobacco (Guillette 1979:CI5; Starna 1990:35). Agriculture was largely maintained by women, with the exception of tobacco (Salwen 1983:89; Starna 1990:36). Deer, small mammals, fish and shellfish, migratory birds, nuts and berries, and other wild foods continued to contribute significantly to the diet (Waters 1965:10-11; Russell 1980). Many of the foods produced were dried and/or smoked and stored in baskets and subterranean holes or trenches.

The increasing diversity of wild estuary resources may have served to increase sedentism in the coastal ecoregions of Connecticut (Lavin 1988:110; Bragdon 1996:67), while agriculture and sedentism may have been even more prominent along the larger river bottoms (Bragdon 1996:71). Late Woodland settlement patterns of groups in the uplands interior ecozones of Connecticut may have included the highest degree of mobility, while many sites from the central lowlands represent task-specific sites associated with larger settlements along the Connecticut River (McBride 1992:16). House structures consisted of wigwams or dome-shaped wooden pole frameworks lashed and covered with hides or woven mats, and clothing was made from animal hides (Guillette 1979:CI7-8; Starna 1990:37-38). Pottery for the period is defined as the Late Windsor tradition in Connecticut (Rouse 1980:68; Lavin 1984:22, 1987). Most of the ceramic forms of the Middle Woodland were still being produced, in addition to the newer Niantic Stamped and Hackney Pond forms. Ceramics of the East River tradition also appear in the area during the Late Woodland, having originated and been concentrated in the New York area (Rouse 1980; Wiegand 1987; Lavin 1987). The period exhibits some continuity in terms of

projectile point forms, although the Jack's Reef, Madison triangular, and Levanna points are considered diagnostic for the period. As likely with earlier periods, the material culture included various textile products such as baskets and mats, and wooden utensils such as bowls, cups, and spoons (Willoughby 1935; Russell 1980:56).

Unlike groups of the Mississippi valley, the overall cultural pattern for the entire Connecticut Woodland era exhibits considerable continuity. Interregional contact increased during this period, however, with non-local lithic materials increasing from as low as 10% to as high as 90% from the early Middle Woodland to the Late Woodland (McBride and Bellantoni 1982:54; Feder 1984:105), although most trade appears to have been done between neighboring groups rather than initiated through long-distance forays (Salwen 1983:94). The lack of enormous agricultural surpluses for the time is indicated by the low density of small storage features in habitation sites, as well as the ubiquitous primary inhumation of people without a select portion of graves exhibiting special treatment that would require high energy expenditure (Walwer 1996). As confirmed by early ethnohistoric accounts, this suggests a largely egalitarian and relatively mobile society for the Late Woodland despite the fact that this period marks the highest development of food production (i.e. agriculture) during the course of prehistory in the region. Corn was undoubtedly important, however, as a disproportionate amount of the simple, flexed burials were oriented towards the southwest which was the aboriginally acknowledged direction for the origins of corn and the Spirit Land.

Local Sites and Surveys

A very low density of prehistoric sites has been identified in central Montville (CT SHPO 2023; Figure 4), with a much higher density located well to the east in the Thames River drainage basin and well to the southwest in the upper Niantic River drainage basin. The closest previously recorded sites are located a couple of miles to the east of the project area near Cohegan Hill and Falls Brook. The sites were recorded during professional surveys of a gas pipeline alignment (Gillis et al. 2014; Doucette et al. 2015). The Find Spot I site (86-013) is where a Late Archaic small-stemmed argillite projectile point was recovered. At Find Spot II (86-014), another Late Archaic small-stemmed point made from quartz was found. Chert debitage was found in numerous tests at the Raymond Hill Wetland site (86-015), where phase II evaluations recorded mostly chert and quartz debitage, as well as a chert scraper and a fragment of calcined bone with no apparent feature contexts. Cohegan Rock itself was a well known Mohegan landmark, which included habitation, sheep herding, council meeting, and ceremonial uses, and is cited as the largest free standing glacial erratic in the region (Walwer 1996; Chase 2004:97).

Summary

There is a low density of previously recorded prehistoric sites in the central Montville area. This is likely due to a number of factors, including the uplands setting of the area, but also due to a lack of substantial survey work. The three previously recorded sites likely reflect short-term camp sites dating to the Late Archaic time period at Falls Brook near Cohegan Hill. There are probably many other unrecorded sites along the Oxoboxo Brook drainage to the south of the project area and along its direct tributaries. Sites of the broader region tend to occur on non-rocky, well drained soils in close proximity to major bodies of water, thus the project area bears a low likelihood of containing prehistoric sites.

Figure 4: Prehistoric Sites of the Region



Local History

Contact Period

The Contact period is designated here as the time ranging from the first substantial contact between European explorers and Native American inhabitants of Connecticut to the time of thorough occupation by European settlers, roughly 1600 to 1700. Initial contact in the broader region occurred in 1524 when Verrazano reached the coast of New England (Terry 1917:16). Others followed in the first decade of the 1600s (Salwen 1983), and in 1614 Dutch explorers reached the Connecticut River (DeForest 1852:70; DeLaet 1909 [1625-1640]). The Dutch were met by the Quinnipiacs at New Haven Harbor in 1625 (Brusic 1986:9) when they initiated fur trading relationships with several local tribes. The trade relationship between local tribes and the Dutch was short-lived, however, coming to an abrupt end by the mid 1630s (Guillette 1979:WP2) when substantial English settlements were being established in the area. DeForest (1852:48) estimates about 6,000 to 7,000 Native Americans in pre-epidemic Connecticut (early 1630s), while others consider the aboriginal population to have been as high as 16,000 to 20,000 or more (Trumbull 1818:40; Gookin 1970 [1674]; Cook 1976; Snow 1980:35; Bragdon 1996:25).

The spatial configuration of tribal territories at the time of initial contact is fairly well known, although boundaries are known to have fluctuated significantly, as did the political alliances by which the tribes could be defined (Thomas 1985:138). Three major divisions of Algonkian speaking groups can be delineated in eastern Connecticut, and their original territories conform well to present ecozone distributions (see Dowhan and Craig 1976:26 and Speck 1928:Plate 20). Centralized in East Windsor and South Windsor (Trumbull 1818:40; DeForest 1852:54-55; Spiess 1933), the Podunks occupied that part of the Connecticut River drainage basin which constitutes the North-Central Lowlands east of the river. Linguistically, the Podunks were part of the Wappinger or Mattabesec Confederacy of tribes that extended west of the Connecticut River and onto Long Island (Speck 1928). The validity of the Wappinger-Mattabesec Confederacy as a cultural entity has been challenged (Salwen 1983:108-109), however, with many smaller and somewhat independent tribes occupying much of the western half of the state. In the northeast part of the state, the Nipmucs occupied areas covering the Northeast Uplands and Northeast Hills ecoregions, but were centrally based in Massachusetts (Gookin 1970 [1674]; Van Dusen 1975:21; DeForest 1852:57). Blanketing the Southeast Hills and Eastern Coastal regions east of the Connecticut River, the territory of the Pequots lay adjacent to the Narragansetts of Rhode Island to the east, and would have included Montville (Speck 1928).

Several cultural distinctions can be made at a higher level of resolution within these three broad divisions. For instance, the Western Nehantics were concentrated just east of the Connecticut River on the coast, while the Eastern Nehantics occupied the southeast corner of the state and part of Rhode Island (Speck 1928: Plate 20; Swanton 1952:31 and map insert). Although considered to be two separate cultural groups, the Nehantics may have been historically divided by an incursion of the Mohegan-Pequots. The Western Nehantics are frequently cited as confederates of the Pequots (Guillette 1979:WP2), while the Eastern Nehantics may have been more aligned with the Narragansetts of Rhode Island (Caulkins 1895:20).

There is considerable debate as to the origins of the Pequots, or Mohegan-Pequots who would eventually split into two distinct tribes. Many authors believe that they originated in the Hudson Valley or upstate New York (Caulkins 1895:21; Learned 1903:52; Speck 1909:184; Tantaquidgeon 1972:65; Fawcett 1995:10), with cultural and traditional knowledge links to the Lenni Lenape (Delaware) of the Pennsylvania region who have stories of their wolf clan having moved to the northeast, and later migrating to southeastern Connecticut during the late 16th to early 17th Century. Others cite archaeological and linguistic evidence to support the idea that they developed *in situ* (Salwen 1969, 1983:107). The Pequots may have received their name from an Algonkian word for "destroyers" (Salwen 1969:81; Guillette 1979:WP1) or "powerful ones" (Avery 1901:254) or "invaders" (Fawcett 1995:10). Alternatively, it may have derived from the informal name of several Pequot Sachems shortly before the arrival of Euroamericans, including Wopiguand (Wo-pequoit or Wo-pequand or Pekoath) (Caulkins 1895:21) or Tamaquashad (Pekoath or Pequot) (Guillette 1979:WP1).

Most early historic accounts describe the Pequots as an invading tribe which had forcibly entered southeast Connecticut, although it is not clear what their motivation for migration might have been. While the Pequots were concentrated near the southern coast between the Thames River and the Pawcatuck or Wecapaug River (Guillette 1979:WP2), Pequot political control was more extensive, in the form of tributes exacted on aboriginal populations on parts of Long Island and some of the "river" tribes to the west. The Narragansetts were the principal rivals of the Pequots, for they were most able to resist Pequot aggression (Guillette 1979:WP2). Tribes who were subject to Pequot power approached Dutch traders and English colonists in Massachusetts with offers of attractive settlement areas in order to help defend against Pequot domination (DeForest 1852).

The fluctuating nature of tribal territory boundaries can be additionally attributed to aspects of mobility and subsistence. Ethnohistoric sources offer descriptions of terminal Woodland and early Contact subsistence-settlement strategies of the area (McBride and Bellantoni 1982; Starna 1990:36-37). Spring settlements were located to take advantage of anadromous fish runs in larger drainages and along the coast. By late spring, attention was focussed on tending corn fields on alluvial terraces and glacial meltwater features along perennial streams and rivers. Semi-sedentary settlements near these fields were supported by task-specific hunting and gathering sites. Dispersal in the late fall and winter brought smaller groups into protected, upland or interior valleys where hunting and gathering continued. This model is confirmed by an archaeological survey of the lower Connecticut River Valley (McBride and Dewar 1981:49-50) in which large, early Contact period villages were found to be a part of a central-based circulating settlement pattern. Family units occupied major villages on a seasonal basis. The dispersal phase had a longer duration in the Contact period than the Late Woodland, and consisted of smaller subsistence units (single families).

The fortification of some larger villages in the early Contact period was likely a response to intertribal and intercultural political conflicts resulting from increased economic pressures induced by Euroamerican trade relationships (Salwen 1983:94; McBride 1990:101; but see Thomas 1985:136). The fortified villages are representative of the trend towards increasing sedentism and territoriality during the Contact period. Eventually, Native American populations became dispersed and afflicted by disease, warfare, and intertribal conflict to the point that small, scattered reservations served as the final restricted territories for some indigenous populations.

The economic base for Native Americans in eastern Connecticut continued to consist of hunting deer and small mammals, gathering berries, nuts, and roots, and procuring shellfish and fish on larger drainages and along the coast (Waters 1965:7; Salwen 1970:5). This basic subsistence strategy was supported by various horticultural products, including corn as a staple, squash, beans, Jerusalem artichoke, and tobacco (Guillette 1979:CI5; Starna 1990:35). The importance of corn is evident in historic descriptions of ritual activities, including variations of the Green Corn Festival that extended with various groups, including the Mohegans, into the present day (Speck 1909:194; Speck 1928:255; Tantaquidgeon 1972:81; Fawcett 1995:54-57). Elderly women possessed extensive knowledge of wild plants which provided a host of medicines and treatments (Russell 1980:35-37).

The material culture included a mix of aboriginal forms and European goods such as metal kettles and implements (e.g. knives and projectile points), cloth, glass beads, and kaolin pipes (Salwen 1966, 1983:94-96). Wigwams continued to serve as the principal form of housing, in some cases well into the 18th Century (Sturtevant 1975). Unlike the Late Woodland, Contact aboriginal lithic products were predominantly manufactured from local quartz sources (McBride and Bellantoni 1982:54). Dugout canoes may have continued to provide a major form of transportation in larger drainages (Salwen 1983:91). Late Contact period Euroamerican trade goods included various metal tools, glass bottles, ceramic vessels, kaolin clay pipes, and nails (McBride and Grumet 1992).

Wampum (shell beads) served as an important item for exchange by Native Americans with European traders, but their original use was in the form of belts as symbolic signs of allegiance or reciprocity between tribes, and as sacred markers or tokens of honor for individuals (Guillette 1979:CI8; Ceci 1990:58-59; Salisbury 1990:87; Fawcett 1995:59). With European metal drill bits, tribes along the coast were now mass producing wampum for trade with the Dutch and English, who in turn used the shell beads to trade with other tribes farther inland (Salwen 1983:96; Ceci 1990:58). Control of wampum production along the eastern Connecticut coast may have contributed to Pequot dominance over other tribes at this time. Although wampum was initially traded for Euroamerican goods, it was eventually used to pay fines imposed by colony governments on the tribes for "illegal" acts. While colonization brought new material goods to Native Americans in the area in exchange for fur, land, and services, the indigenous inhabitants became increasingly subject to legislative economic restrictions by the colonists (Salisbury 1990:83).

Sachems and councils of leading males formed the basic political unit for groups of villages (Gookin 1970 [1674]; Simmons 1986:12). The authoritative roles of clan mothers had diminished as a result of a strong European leadership bias towards males in trade relationships (Fawcett pers. comm. 1996). Tributes paid to sachems were generally used as reserves for the tribe at large. Although sachems were generally assigned by hereditary lineage, this was not always the case (Bragdon 1996:140-141). Additionally, authority was usually enforced by persuasion of a council. Shamans were "magico-religious" specialists of the tribes who also had a considerable role in leadership and decision-making (Speck 1909:195-196; Simmons 1986:43; Starna 1990:42-43). Other special status roles included warriors and persons who had visions, thus social status was largely based on achievement and recognition. Rules of obligation and reciprocity operated on all levels of tribal-wide decision-making (Bragdon 1996:131-134), serving to diffuse centralized authority. While the assignment of lineality (i.e. matrilineal vs.

patrilineal) for the area tribes is still debated (Bragdon 1996:157), the well established practice of bride-pricing and traditional accounts support the contention of a patrilineal social organization (Speck 1909:193; Salwen 1983:97). Post-marital residence appears to have been ambilocal.

On a larger scale, more powerful tribes demanded tributes from smaller ones, often resulting in loose alliances between the latter. This process created a dynamic political environment that prompted intertribal conflict, especially after contact with Euroamericans (Guillette 1979; Bragdon 1996). The European settlers of the Contact period used this embedded rivalry system to their advantage in trade relationships and the procurement of land. The colonists were placed at a further political advantage because of the severe reduction in aboriginal populations as a result of disease (Starna 1992). Major epidemics occurred between 1616 and 1619, and more severely around 1633 (Snow and Lanphear 1988; Starna 1990:45; Snow and Starna 1989). Diseases introduced into the Americas included chicken pox, cholera, diphtheria, malaria, measles, oncocercosis, poliomyelitis, scarlet fever, smallpox, tapeworms, trachoma, trichinosis, typhoid fever, whooping cough, and yellow fever (Newman 1976:671).

The Pequot Sachem Wopiguand was killed in the early 1630s by the Dutch over trade disagreements (DeForest 1852:73), essentially ending the Dutch-Pequot trade relationship and initiating a pattern of increased hostilities between Euroamericans and Native Americans of the region (Hauptman 1990). Political turmoil ensued within the Pequot tribe as to who should succeed Wopiguand and how best to engage the Europeans. The choice of Sassacus to lead the tribe and subsequent disputes as to tribal policy with respect to the Europeans prompted Uncas and his supporters to defect as the Mohegan tribe (DeForest 1852:84; Fawcett 1995:11). The Mohegan base of settlement was situated at the confluences of the Shetucket, Quinebaug, and Yantic Rivers, and along the Thames River in Montville (Baker 1896:10; Speck 1909:185). The Mohegans were, however, still largely under the control of the Pequots, as were the southern groups of Nipmucs (i.e. Quinebaugs) who occupied northeast Connecticut (Gookin 1970 [1674]:7).

When the Plymouth Colony began to make plans for settlement in Connecticut in the early 1630s, the Dutch resisted the idea because of their perceived proprietorship over the area by "right of discovery" (Guillette 1979:WP3). The Dutch responded by creating a trading post in Hartford, while the English followed with a fortified post in Windsor. In 1635, English colonists of the Massachusetts Bay Colony established other settlements on the Connecticut River (Hauptman 1990:71). Isolation of the Dutch was completed that year when Winthrop built a settlement at the mouth of the river in Saybrook (Guillette 1979:WP4). Conflicts in the trade relationship between the Pequots, neighboring tribes, Dutch traders, and English colonists heightened in the mid 1630s. In response to these tensions, the Pequots maintained fortified villages at Pequot Hill in Groton, and later Fort Hill near Noank. Further conflicts resulted in several skirmishes between the Pequots and English colonists, culminating in the "Pequot War" (DeForest 1852:96).

In 1637, a contingent of soldiers from the Connecticut colonies was joined by the Mohegan sachem Uncas, who led his newly divergent tribe and some Narragansetts on a campaign against the Pequots (Hauptman 1990:73). Most of the latter were massacred at Mystic Fort, the survivors of which were forced to scatter widely. The Mohegan acceptance of some of the conquered Pequots into its tribe caused hostilities to emerge between the Narragansett sachem Miantonomo and Uncas. The defeat of the Pequots and the emergent hostilities between

the Mohegans and Narragansetts led to the Tripartite Treaty of 1638, which in theory allied the Mohegans and Narragansetts, forbade any reorganizing attempts by the Pequots, redistributed Pequot prisoners between the Mohegans and Narragansetts, and provided ownership of Pequot territory to the Connecticut colonists (DeForest 1852:159,181). Some young male Pequots were sold into slavery in the West Indies (Salwen 1983:108; Campisi 1990a:118), while many of the Pequots held by the Narragansetts left to be with or near the Mohegans, causing further hostilities between the latter two tribes. The English colonists granted Uncas territory that had not been part of the Tripartite Treaty, heightening the antagonism between the Narragansetts and Mohegans which would continue into the 1640s (Fawcett 1995:14-15). Speck (1909:186) cites several Mohegan forts which were built partly in response to heightened intertribal warfare, including the one on Fort Hill, the one on Uncas Hill, and the nationally registered Fort Shantok.

The Connecticut English favored alliances with the Mohegans because of proximity and a greater role in the subjugation of the Pequots (Guillette 1979:M6). After numerous skirmishes between the two sachems, the Connecticut government effectively sanctioned the execution of Miantonomo by Uncas (DeForest 1852:195). The Mohegans and the Connecticut colonists continued to exhibit mutual support in King Philip's War of 1675, when they defeated attempts of the Wampanoags of Massachusetts, the Nipmucs, and some Podunks, to thwart the expansion of Euroamerican settlement (Gookin 1836 [1677]; Barber 1838:20-21; DeForest 1852:288). This war effectively ended any military threat or potential resistance to full fledged settlement of southern New England by the Europeans (Fawcett 1995:16).

The Pequot War set a trend of English control over, and arbitration between, native groups (Twitchell 1899; Hauptman 1990:69). Most of the tribes looked favorably on this situation at first, for it had relieved them of control by the Pequots. This control, however, was merely shifted to the English colonists who demanded shell bead payments in return for protection and as penalties for "crimes" (Ceci 1990:61). Eventually, demand for wampum decreased as the fur trade was diminished following the widespread depletion of commercially targeted animals (Salisbury 1990:90). The colonists then turned to land as the principal aboriginal resource to be tapped through "fines." Native American subsistence patterns were becoming increasingly hindered by English settlement, and closure of the surrounding land further prevented adequate use of hunting ranges. Colonist encroachments on "unused" portions of reservations occurred without reasonable chance of recourse by legal means (McBride 1990:107; Campisi 1990b).

Pequot populations were reduced from at least several thousand to less than a thousand towards the end of the 17th Century (Cook 1976:52), while almost all land had been lost following the war. Uncas and the Mohegans fared better at first, gaining territory in various areas of Connecticut through marriages and alliances with tribes such as the Podunks. But Mohegan territories also dwindled through ambiguous land transactions with the Euroamerican colonists (DeForest 1852:292). Various tracts sold by Uncas and his son Oweneco, for example, had overlapping boundaries (Guillette 1979:M13). By the time Uncas died in 1682, Mohegan land was reduced to tracts on the west side of the Thames between New London and Norwich as the main focus of Mohegan populations, an area just north of Lyme, and the "Mohegan Hunting Grounds" which included an area between Norwich, Lebanon, Lyme, Haddam, Middletown, and into Colchester (DeForest 1852:297,311; Guillette 1979:M14,16). The trend of land divestiture

witnessed by the Pequots and the Mohegans similarly affected the Quinebaug (southern Nipmucs) and Western Nehantics (DeForest 1852:376,385).

18th Century

Estimates for the Mohegan population in the area are as low as 750 for the beginning of the 18th Century (Speck 1909:185), while Pequot reservation populations dropped from approximately 1,500 to less than 200 between 1674 and 1731 (Speck 1928:213). Early attempts to convert aboriginal populations to Christianity met with little success (Gookin 1836 [1677]:435; DeForest 1852:179,252). Because it tended to cause rifts in the tribes, Uncas and other sachems came to oppose what they initially thought were harmless teachings (Guillette 1979:M11). Efforts to convert and assimilate local aboriginal populations gained momentum during the 18th Century, however. A schoolhouse for educational and “moral” instruction was ordered to be built in 1726 for the Mohegans (Guillette 1979:M18). By the 1740s, the Great Awakening period of increased Christianity among Euroamericans also started to gain support among the Mohegans, Pequots, and Quinebaugs (DeForest 1852:380,430; Simmons 1990:148). The movement was incorporated by many Mohegans with the conversion of Samson Occum, a highly visible and active member of the tribe who was a founder of Moore’s Indian Charity School in Lebanon (Guillette 1979:M21). Christianity among Native Americans was on the decline by the end of the century, however, as Occum and many others left the region.

The early Euroamerican settlers of the Montville area primarily engaged in self-subsistence farming (Baker 1896:616-617). The first Euroamerican industrial concerns of the late 17th Century and 18th Century consisted of a saw mill, and small, short-lived iron foundries in which iron was smelted from bog-ore at the mouth of the Oxoboxo River (Baker 1896:621-623). Various mills were in operation by the end of the 18th Century, including four grist-mills, seven saw-mills, and a fulling mill, mostly along the Oxoboxo River that flowed within one-half mile to the south of the project area (Baker 1896:623). Before its incorporation, Montville had been the North Parish of New London since 1714 (Baker 1896:636). Various roads, including the road leading from New London to Colchester, were commissioned shortly thereafter (Baker 1896:638). The first meeting house was built in 1723 on Raymond Hill Road (Chase 2004:22), and the first school-house for the town was built in 1724 (Baker 1896:639). A tavern was in place at this time on the farm of Samuel Allen on Old Colchester Road (Chase 2004:10).

Euroamerican efforts to assimilate Native American populations included attempts to create privately owned land within tribal territories which could then be sold. Encroachment by Euroamerican settlers on Pequot and Mohegan lands continued through various other means during the 18th Century (DeForest 1852; Campisi 1990b). Intratribal political strife developed as different factions encouraged opposing approaches to land transactions with Euroamerican settlers. In 1769, the Mohegan Sachemship and its political structure was effectively outlawed by the Connecticut Colony as a result of the failure of tribe to support a colony-endorsed sachem (Fawcett 1995:17-18). Such tribal rifts were perpetuated as a result of excessive land sales by English-backed sachems (Simmons 1986:32). Ironically, many Mohegans and Pequots served on the side of the English in the French and Indian War of the 1750s, as well as the Revolutionary War in the late 1770s and others to follow.

By the end of the 18th Century, Mohegan territory was significantly reduced, and the recorded population was less than 100 (DeForest 1852:473; Speck 1909:185; Swanton 1952:30). Mohegan lands were being actively occupied by Euroamericans, often under controversial conditions during the late 17th Century and early 18th Century (Caulkins 1895:424-431). Euroamerican settlement increased further after Montville was incorporated in 1786 (Barber 1838:334; Caulkins 1895:605). Late in the 18th Century, many Mohegans and Pequots and members of other area tribes moved to unoccupied Iroquois territory in New York, becoming known as the Brothertown tribe (DeForest 1852:469,476; Avery 1901:256-257; Fawcett 1995:18).

For the remaining Mohegans of the area, Euroamerican material culture was being incorporated steadily into many aspects of Native American life (Fawcett 1995:19). Structures were frequently built with Euroamerican-manufactured glass and brick, and likewise, architectural styles mirrored those of the Euroamericans with wells and root cellars near frame houses (McBride and Grumet 1992). Native American subsistence and settlement were also becoming more similar to the surrounding Euroamerican communities during the 18th Century (McBride 1991:72), including aspects of housing, animal husbandry, and horticulture.

Pequot and Mohegan subsistence shifted in the early to mid 18th Century from more traditional consumption of wild game to that of livestock (pigs, sheep, and cattle), and they supplemented corn with orchard-fruit harvesting (Salwen 1970:6; McBride 1990; Fawcett 1995:19). Settlement patterns were more sedentary, with a greater use of stone architecture. As men frequently traveled in search of work, reservation populations disproportionately consisted of women as a majority, the elders of which often served as tribal leaders (Campisi 1990a:127). Territorial encroachments and land closure by Euroamericans on second-rate agricultural land made it impossible to maintain traditional forms of subsistence. The impoverished Pequots and Mohegans attempted to survive by leasing or selling portions of land, practicing small scale horticulture, selling home industry goods, and working for Euroamerican neighbors. The desperation of the Native American tribes is exemplified by the following excerpt from a letter by the Mohegans petitioning the state of Connecticut in 1789:

“The times are exceedingly altered, yea the times are turned upside down; or rather we have changed the good times, chiefly by the help of the white people. For in times past our forefathers lived in peace, love and great harmony, and had everything in great plenty. When they wanted meat, they would just run into the bush a little way, with their weapons, and would soon return, bringing home good venison, racoon, bear, and fowl. If they chose to have fish, they would only go to the river, or along the seashore; and they would presently fill their canoes with variety of fish, both scaled and shell-fish. And they had abundance of nuts, wild fruits, ground nuts and ground beans; and they planted but little corn and beans. They had no contention about their lands, for they lay in common; and they had but one large dish, and could all eat together in peace and love. But alas! It is not so now; all our hunting and fowling and fishing is entirely gone.” (DeForest 1852:480).

This aboriginal economic devastation may have been directly associated with spiritual and community turbulence, as native groups could no longer rely on the ecological factors with which their world view was so closely bound (Martin 1974:25; Juli 1982:15-16). To some,

Christianity may have become a new, valid spiritual view of the universe in which the idea of man above nature conformed well to the destruction or alteration of wildlife that was taking place around them. Aboriginal spiritual expression had always been viewed by Euroamericans as uncultured, ignorant, or even as devil worship (Simmons 1981, 1986:37-38). The shift away from aboriginal adaptations in the late 18th Century included a shift away from community action, as Native American petitions were often submitted by individuals rather than sachems and councils, and aid recorded by overseers was being distributed to individuals families rather than entire communities (McBride 1992:74).

Mulford Raymond, born in 1760, built the house that now stands on the project property around 1790 (Baker 1896:580). Mulford Raymond held many town offices. Raymond was married to Eleanor Bradford, and they had seven children, the last of which was Mulford C. Raymond born in 1800.

19th Century

Attempts for the conversion of Mohegans to Christianity witnessed a revival during the 1820s when local “philanthropist” groups perceived an obligation to engage in the transformation of native world views. In 1827, one group established the Society for the Improvement of the Mohegan Indians Sabbath School, for which a chapel was built and a full time minister hired (Guillette 1979:M24). The Mohegans established a Christian church and school in 1831 on the reservation, partly in an effort to resist federal relocation (Fawcett 1995:21). Conversion was never complete, however, as many aboriginal belief structures pervaded, even with the most ardent Christians. The revival of the Mohegan Wigwam or Green Corn Festival helped to maintain the Mohegan community despite the drastic decreases in reservation land at this time (Fawcett 1995:54). Montville had four other churches at this time, including two Congregationalist and two Baptist churches (Barber 1838:335).

At the beginning of the 19th Century, the Mohegans controlled 2,700 acres of land. By the middle of the 19th Century, Mohegan territory was approximately 2,300 acres, most of which was being cultivated by Euroamericans leasing individual plots (DeForest 1852:487). Recorded Mohegan population was as high as 350 in 1832 (Speck 1909:185), but most other estimates of the 19th Century hover around 100 (Speck 1928:212). In 1860, the General Assembly passed legislation which redistributed much of the land commonly held by the Mohegans under the supervision of the tribal overseer (Simmons 1986:24). This resulted in even more loss of land than intended. During much of the 19th Century, Mohegan and Pequot territories were being sold by overseers, illegally permitted by the state, until the end of the 19th Century at which point the western Pequot reservation had been reduced to 10% of its original size, the eastern reservation down to 20% of its original size (Guillette 1979:WP13,EP10; Campisi 1990a), and almost all Mohegan lands lost (Fawcett 1995:22). This trend occurred despite the passage of the Federal Indian Non-Intercourse Act in 1790 that prohibited such activity without congressional approval (Guillette 1979:WP13). Pequot populations decreased steadily since the 18th Century wars and the Brothertown removal, the latter of which is linked to the abandonment of several Mohegan and Pequot settlements including “Indian Town” near Cedar Swamp on the Pequot Reservation (McBride 1990; Campisi 1990a:125; Fawcett 1995:23).

Euroamerican settlement of the Montville area increased significantly during the early part of the 19th Century (Baker 1896:615). Small early 19th Century industries in Montville included three cotton factories, two woolen factories, and an oil mill, with the town supported by

two post offices (Barber 1838:335). By 1868, industry had expanded considerably, with the local town business directory (Beers 1868:19) listing two paper mills, a carriage manufacturer, three clothing manufacturers, three rope or cordage manufacturers, blacksmith, freighter and timber dealer, and other milling operations. Merchants of the area included two dry good grocers, a meat market, and three general stores. By the end of the century, even more business had emerged, particularly as the result of the New London, Willimantic & Springfield Railroad which was built along the west bank of the Thames River through Montville and operational by 1849 (Baker 1896:635). Industry continued to be concentrated on the Oxoboxo River for its hydrological power supply into the 20th Century (Marshall 1922:232). This growth in business was accompanied by a growth in overall population and diversity of adherents to various denominations of Christianity (Baker 1896).

Mid to late 19th Century maps (Figures 5a and 5b) show the occupation of the house on the project property by Mulford C. Raymond, son of Mulford Raymond who built the house (Baker 1896:588). Like his father, Mulford C. Raymond was a person of public service, and served as town clerk, probate judge, and town representative. The project property is referenced in land records as the Mulford Raymond Farm, formerly 150 acres and extending to both sides of Oakdale Road (Route 163). The Raymonds were a prominent farming family in the area, with the major road following the course of Raymond Hill named after the same, and a family cemetery plot maintained on the north side of that road and to the west of the project property. Mulford C. Raymond sold the farm to Orrin Park in 1888 (volume 21, page 459), and a couple of years later it was sold to Mier Kirsch (volume 23, page 339).

20th Century+

The recorded population of Pequots declined steadily during the 20th Century until fewer than 10 people resided on the western reservation by 1974 (Guillette 1979:WP14). The Mohegan population remained more stable, with most working at mills, on whaling vessels, joining the military, or working in domestic service (Fawcett 1995:22). The Mohegan Indian Association was formed in 1920 in an effort to maintain tribal identity among known members, although its reservation population had decreased to about 30 (Speck 1928:212-213; Guillette 1979:M25). The Association increased identification of the local population to more than 120 (on and off reservation), however. The 1960s witnessed a considerable increase in Native American activism, in New England and throughout North America (Josephy 1990:13). Through the formation of the Connecticut Indian Affairs Council in 1973 and several Native American movements in the latter part of this century, local tribes had increased hopes for self-determination (Bee 1990). The Council consisted of the Mohegan, Mashantucket Pequot, Pawcatuck Eastern Pequot, Schaghticoke, and Golden Hill Paugusset tribes (latter two in western Connecticut). Renewed efforts by the Mashantucket Pequots resulted in several small reservation industries during this time, but there was little initial capital or resources to make substantive changes (Guillette 1979:WP14).

Lawsuits filed by the Mohegans in the mid 20th Century to acquire federal recognition had largely failed, although within the last several years dramatic changes have place for the Mohegans and the Pequots (Hauptman 1990:77-78; Wherry 1990; Fawcett 1995:31-34). The Mashantucket Pequots gained federal recognition as a tribe in 1983, when a trust fund was established by the federal government for the repurchase of lands (Hauptman and Wherry 1990:xviii). Since this time, the Mashantucket Pequots have invested considerable effort and

Figure 5a: Historic Sites of the Area (1854 Map)

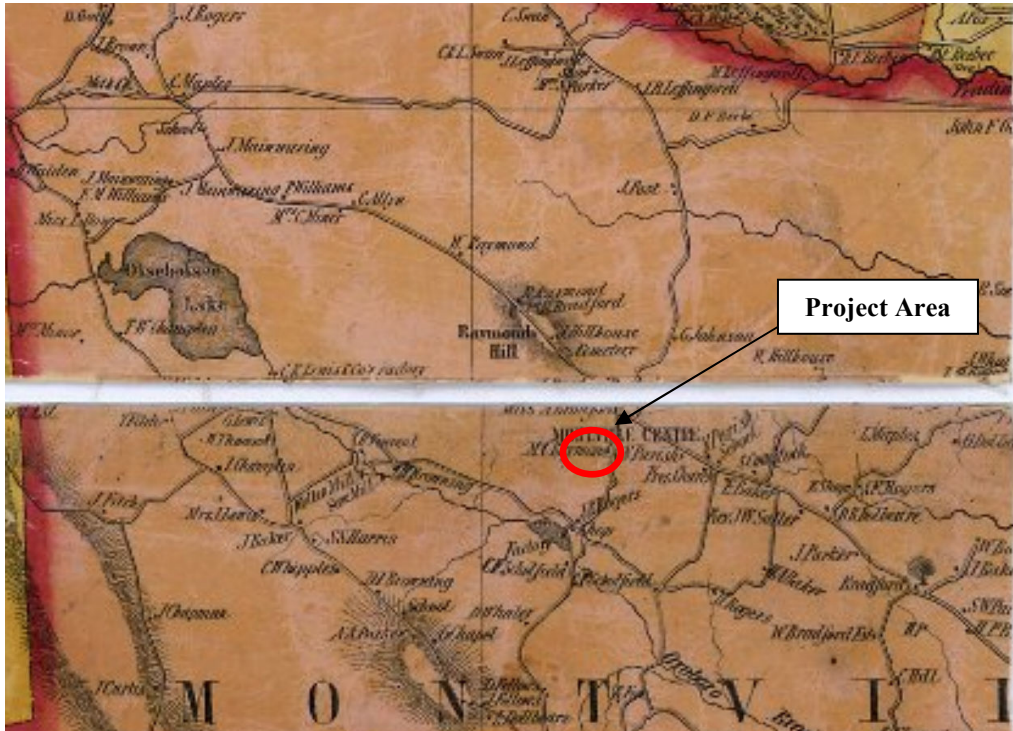


Figure 5a: From Walling 1854.

Figure 5b: Historic Sites of the Area (1868 Map)

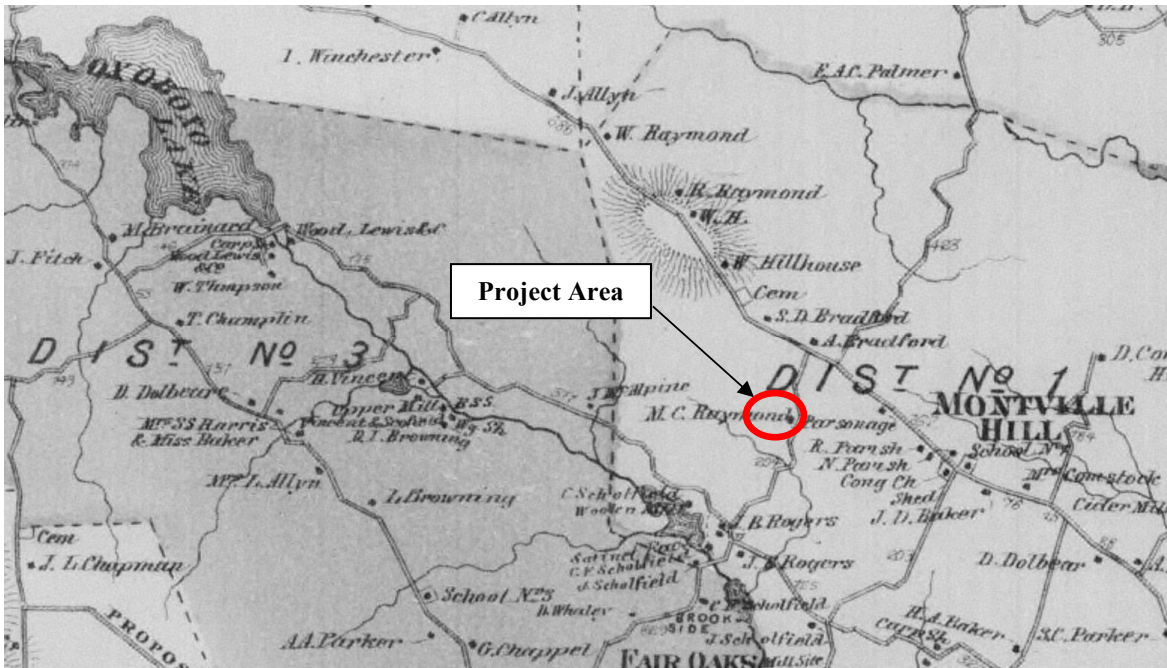


Figure 5b: From Beers 1868.

funding unto revitalizing cultural identity among the Pequots, and to increase awareness of their heritage among the nation at large. The Mohegans have recently gained similar status (Fawcett 1995:32), and the Pawcatuck Eastern Pequots have an outstanding petition with the federal government to that effect. Recognition as a tribe is defined by the federal government as its ability to establish a group as a clearly defined American Indian tribe throughout its history, a demonstration of a separate community with an effective leadership, proof of descent for membership, and lack of termination by Congress (Campisi 1990b:183-184). Unfortunately, many tribes have failed to gain recognition status despite continued evidence of community involvement and cultural identity. In the face of drastic economic, political, and social changes since contact with Euroamerican cultures, traditional tribal knowledge has served as the major source of continuity in Native American cultural identity (Simmons 1986:267; Fawcett 1995).

Much of Montville remained fairly agricultural in terms of economic subsistence until shortly after World War II. The Fair Oaks School was built just east of the project area in 1947 according to tax assessor records. Most farming consisted of dairy and poultry farming, with some forest, nursery, and vineyard products being produced later in the 20th Century. Renovation in major cities such as New London along the coast increased property taxes for local residents, encouraging many to move to surrounding towns such as Montville. This transition was facilitated by population increases and transportation developments of the area after the war. Thus Montville has shown a trend towards becoming a suburb to the larger cities of the area. Most 20th Century industry of the region has been limited to the Thames River to the north (i.e. Norwich) and south (i.e. New London) of Montville (Marshall 1922:220-222). 20th Century industries and major manufactured items of the region include chemicals, clothing, containers, plastics, shipbuilding (submarines in Groton), and wire products. Before the creation of the Mohegan Sun and Foxwoods casinos, tourism in the area was largely limited to coastal towns, while interior towns such as Montville have provided recreational facilities and parks such as Fort Shantock State Park.

Historic maps of the 20th century show that all of the project area was historically open farm fields (Figures 5c and 5d). Land records indicate that the Kirsch family owned the farm through the first half of the 20th century, selling it to Mary Jane and Raymond Mostowy in 1947 (volume 52, page 587). The current project owner purchased the property in 2021 (volume 674, page 282).

Local Sites and Surveys

There are no properties listed with the National Register of Historic Places (NRHP) in close proximity to the project area. The historic house on the project property is recorded with the Connecticut State Historic Preservation Office (SHPO) as the Colonel Mulford Raymond House. The structure is a saltbox Colonial style building constructed around 1790. Other historic houses and properties of the Raymond family are located along Raymond Hill Road just north of the project property, including the Raymond Hill Cemetery. The closest property listed with the NRHP is the Raymond Bradford Homestead, located about one-half mile to the northwest (Keiner 1979). That house, built around 1710, was subject to major alterations over time, and was also noteworthy because of its occupation by the Raymond family for most of its history.

Figure 5c: Historic Sites of the Area (1934 Map)



Figure 5c: From Fairchild 1934.

Figure 5d: Historic Sites of the Area (1939 Map)

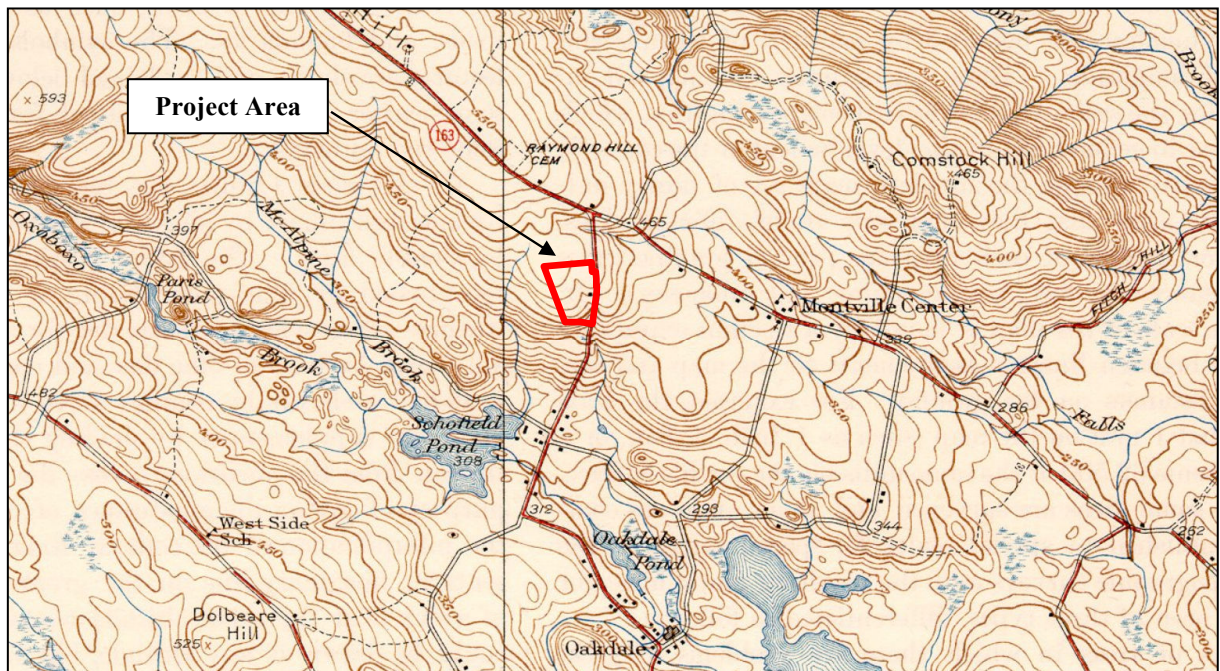


Figure 5d: From USGS 1939.

As with prehistoric sites, there are very few historic archaeological sites recorded in central Montville. The Scholfield Woolen Mill site (86-009) is located about one-half mile to the south of the project area on Scholfield Pond where the remains of an 18th Century mill are located, including a mill pond and raceway (see Chase 2004:40-43). An archaeological survey in that area documented the remains of the mill and indicated it to be the third woolen mill in the United States (Del Bene et al. 1977). Stone wall alignments were recorded near the woolen mill and also at the surveys of the gas pipeline a couple miles east of the project area (Gillis et al. 2015).

Summary

Historically, central Montville would have been within the Pequot territory of occupation, although major settlements were concentrated closer to the Thames River and along the coast. When the Mohegan tribe diverged from the Pequots in the 1630s, their active range expanded up the Thames drainage and into more uplands settings of New London County. Mohegan land divestiture through various means resulted in a diminished population and decline in aboriginal lifeways, and occupation by Euroamerican farmers during the 18th Century. Principal early Euroamerican settlements in central Montville were concentrated along the Oxoboxo River drainage, and along Raymond Hill Road just north of the project area. The project property itself contains the Colonel Mulford Raymond house, built around 1790. The house is not listed with the National Register of Historic Places (NRHP), with the closest NRHP property consisting of the Raymond Bradford 1710 house located about one-half mile to the northwest, not far from the Raymond Hill Cemetery. The project property remained in the Raymond family until sold to the Kirsch family at the end of the 19th century, later the Mostowys, and the project area appears to have remained as an agricultural lot without development for over two centuries.

CHAPTER 3: CONCLUSION

Prehistoric Sensitivity

Background research and the pedestrian surface survey indicate a low sensitivity for potential prehistoric cultural resources in the project area. A statistical prehistoric landscape sensitivity model developed and employed by ACS utilizes eight environmental variables to rank sections of project properties relative to a scale of 100.0 (www.acsarchaeology.com/sensitivity-model.html). In this case, the project area scores no higher than 7.8 out of a possible 100.0, and therefore solidly within the low (0-20) sensitivity range. Factors contributing to this low sensitivity score include great distance to the nearest major water source for the project area, moraine and hill slope context, and fine particle fraction for dominant soils. There are no wetlands within the project area, and the closest bodies of water are intermittent streams as part of the larger Oxoboxo River drainage basin that has a relatively low order stream rank. A review of previously recorded prehistoric sites in the region reveals none in close proximity to the project area, with sites concentrated close to substantial water sources, particularly on glacial meltwater landforms and alluvial terraces. No further archaeological conservation efforts are required for the proposed project development with respect to potential prehistoric cultural resources.

Historic Sensitivity

Historically, the broader project property has a moderate to high sensitivity for historic cultural resources. The project setting was within the Mohegan settlement range during the Contact period, a tumultuous time when indigenous populations were experiencing significant impact from non-indigenous disease, land occupation by Euroamerican settlement, and removal to other regions. Euroamerican settlement within this part of Montville was low in density throughout the historic era. The project property contains a saltbox Colonial house and associated outbuildings close to the road (Figures 6 to 9), although the project impact area is set a couple of hundred feet to the west in an open farmfield (Figures 10 and 11). A late historic foundation with concrete slab is located closer to the project area, along with some other late historic features, but there were no traces of historic features within the project area during a detailed pedestrian surface survey conducted by ACS. Land records and historic maps indicate the house belonged to the Mulford Raymond family during the 19th century, and then the Kirsch and Mostowy families during the 20th century. The farm was once 150 acres, with land on both sides of Route 163 (Oakdale Road). The historic land holdings of the Raymond family were once much larger, with Raymond Hill constituting the major landform of hills along which the road of the same name runs, and the historic Raymond Hill Cemetery is located just north of that road to the west of the project property. The house is not listed with the State or National Register of Historic Places (NRHP). Given the avoidance of the historic house and outbuilding cluster, and the setback of the project from the house, no further archaeological evaluation is warranted for the project with respect to potential historic cultural resources. Measures should be taken to either preserve or record the historic house at a state level of documentation.

Figure 6: House and Garage



Figure 6: Northwest view of the Colonel Mulford Raymond House and garage.

Figure 7: Garage



Figure 7: Northwest view of south end of garage, showing stone foundation.

Figure 8: Foundation – Field Edge



Figure 8: Southwest view of late historic foundation and concrete slab of former structure located just east of project area, which occupies farm field in background.

Figure 9: Structural Features



Figure 9: Northeast view of other structural features behind the house, not within project area.

Figure 10: Open Field



Figure 10: South view of project area, showing open field with waist high grass.

Figure 11: Stone Wall



Figure 11: Southeast view of loose stone wall alignment along southern boundary of the project area. Scale bar five feet.

REFERENCES

- Avery, J.
1901 *History of the Town of Ledyard, 1650-1900*. Norwich: Noyes & Davis.
- Baker, H.A.
1896 *History of Montville, Connecticut, 1640 to 1896*. Hartford: Case, Lockwood & Brainard.
- Barber, J.W.
1838 *Connecticut Historical Collections*. New Haven: Durie & Peck.
- Bee, R.L.
1990 Connecticut's Indian Policy. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 194-212. Norman: University of Oklahoma Press.
- Beers, F.W.
1868 *Atlas of New London County, Connecticut*. New York: F.W. Beers, A.D. Ellis & G.G. Soule.
- Bellantoni, N.F. and D. Jordan
1995 *Distribution of Paleo-Indian Cultural Material in Connecticut*. Paper presented to the Archaeological Society of Connecticut, fall 1995 meeting, Essex, Connecticut.
- Bendremer, J. and R.E. Dewar
1993 The advent of prehistoric maize in New England. In *Corn and Culture in the Prehistoric New World*, edited by S. Johannessen and C.A. Hastorf, pp. 369-393. Boulder: Westview Press.
- Bragdon, K.J.
1996 *Native People of Southern New England, 1500-1650*. Norman: University of Oklahoma Press.
- Brusic, L.M.
1986 *Amidst Cultivated and Pleasant Fields: A Bicentennial History of North Haven, Connecticut*. Canaan: Phoenix Publishing.
- Campisi, J.
1990a The emergence of the Mashantucket Pequot Tribe, 1637-1975. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 117-140. Norman: University of Oklahoma Press.
1990b The New England Tribes and their quest for justice. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 179-193. Norman: University of Oklahoma Press.
- Cassedy, D.F.
1999 The Archaic florescence: The Late and Terminal Archaic periods of Connecticut as seen from the Iroquois pipeline. *Bulletin of the Archaeological Society of Connecticut* 62:125-140.
- Caulkins, F.M.
1895 *History of New London, Connecticut*. New London: H.D. Utley.
- Ceci, L.
1990 Native wampum as a peripheral resource in the Seventeenth-Century world-system. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 48-63. Norman: University of Oklahoma Press.
- Chase, J.B.
2004 *Images of America: Montville*. Charleston: Arcadia Publishing.
- Concannon, M.T.
1993 Early Woodland depopulation: A review of the literature. *Bulletin of the Massachusetts Archaeological Society* 54(2):71-79.
- Connecticut State Historic Preservation Office (CT SHPO)
2023 *Site Files*. Manuscripts filed with the State Historic Preservation Office, Connecticut State Historic Preservation Office, Hartford, Connecticut.
- Connecticut Office of State Archaeology (CT OSA)
2023 *Site Files*. Manuscripts filed with the Connecticut Office of State Archaeology, University of Connecticut, Storrs, Connecticut.

- Cook, S.F.
1976 *The Indian Population of New England in the Seventeenth Century*. University of California Publications in Anthropology, Volume 12. Berkeley: University of California Press.
- Crouch, M.H.
1983 *Soil Survey of New London County, Connecticut*. Washington, D.C.: U.S.D.A. Soil Conservation Service.
- Cruson, D.
1991 *The Prehistory of Fairfield County*. Newtown: Newtown Historical Society.
- Cunningham, J. And E.A. Warner
2001 *Historic and Architectural Resource Survey, Town of Montville, Connecticut*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
- Davis, M.B.
1969 Climatic changes in southern Connecticut recorded by pollen deposition at Rogers Lake. *Ecology* 50:409-422.
- DeForest, J.W.
1852 *History of the Indians of Connecticut: From the Earliest Known Period to 1850*. Hartford: Hamersley.
- DeLaet, J.
1909 From the 'New World' [1625-1640]. In *Narratives of New Netherland, 1609-1664*, edited by J.F. Jameson, pp. 36-60. New York: Charles Scribner's Sons.
- Dincauze, D.F.
1990 A capsule prehistory of southern New England. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L. Hauptman and J. Wherry, pp. 19-32. Norman: University of Oklahoma Press.
- Doucette, D.L., E. Flynn, J. Ort, and G. Dubell
2015 Archaeological Site Evaluations. Susquetonscut Brook Pre-Contact Sites 1-9, 11, and 12; Meeting House Hill Site; Johnnycake Brook Site; Elisha Brook Site; and Raymond Hill Wetland Site. Algonquin Incremental Market (AIM) Project: E-1 System T&R and E-1 System Loop. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
- Dowhan, J.J. and R.J. Craig
1976 *Rare and Endangered Species of Connecticut and Their Habitats*. Report of Investigations Number 6. Hartford: State Geological and Natural History Survey of Connecticut.
- Fairchild
1934 *Aerial Maps*. Manuscripts filed with the Connecticut State Library, Hartford, Connecticut.
- Fawcett, M.J.
1995 *The Lasting of the Mohegans*. Uncasville: Mohegan Tribe.
- Feder, K.L.
1984 Pots, plants, and people: The Late Woodland period in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 47:99-111.
1999 The Late Woodland revisited: The times, they were a-changin' (but not that much). *Bulletin of the Archaeological Society of Connecticut* 62:155-174.
- Filios, E.L.
1989 The end of the beginning or the beginning of the end: The third millennium B.P. in southern New England. *Man in the Northeast* 38:79-93.
- Forrest, D.T.
1999 Beyond presence and absence: Establishing diversity in Connecticut's early Holocene archaeological record. *Bulletin of the Archaeological Society of Connecticut* 62:79-100.
- Gillis, N., J. Ort, J. Elam, and S. Cherau
2015 *Archaeological Overview and Identification Survey, Algonquin Incremental Market (AIM) Project: Southeast T & R, and E-1 System Loop, Volumes I and II*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.

- Gookin, D.
1836 An historical account of the doings and sufferings of the Christian Indians in New England [1677]. *Transactions and Collections of the American Antiquarian Society* 2:423-534.
1970 *Historical Account of the Indians in New England [1674]*. Towtaid: Fiske.
- Gordon, R.B.
1983 History of sea level changes along the Connecticut shore. In *Connecticut Archaeology: Past, Present and Future*, edited by R. Dewar, pp. 67-84. Storrs: Department of Anthropology, University of Connecticut.
- Guillette, M.E.
1979 *American Indians in Connecticut: Past to Present*. Hartford: Connecticut Indian Affairs Council.
- Hauptman, L.M.
1990 The Pequot War and its Legacies. In *The Pequots of Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 69-80. Norman: University of Oklahoma Press.
- Hauptman, L.M. and J.D. Wherry, editors
1990 *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 194-212. Norman: University of Oklahoma Press.
- Jennings, J.D.
1989 *Prehistory of North America*. Mountain View: Mayfield Publishing.
- Jones, B.D.
1999 The Middle Archaic period in Connecticut: The view from Mashantucket. *Bulletin of the Archaeological Society of Connecticut* 62:101-124.
- Josephy, A.M.
1990 New England Indians: Then and now. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 5-16. Norman: University of Oklahoma Press.
- Juli, H.D.
1999 Current perspectives on Early and Middle Woodland archaeology in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 62:141-154.
- Juli, H.D. and K.A. McBride
1984 The Early and Middle Woodland periods of Connecticut prehistory: Focus on the lower Connecticut River Valley. *Bulletin of the Archaeological Society of Connecticut* 47: 89-98.
- Kehoe, A.B.
1981 *North American Indians: A Comprehensive Account*. Englewood Cliffs: Prentice-Hall.
- Keiner, H.
1979 *National Register of Historic Places Inventory – Nomination Form: Raymond - Bradford Homestead*. Manuscript filed with the Connecticut State Historic Preservation Office.
- Lavin, L.
1984 Connecticut prehistory: A synthesis of current archaeological investigations. *Archaeological Society of Connecticut Bulletin* 47:5-40.
1987 The Windsor ceramic tradition in southern New England. *North American Archaeologist* 8(1):23-40.
1988 Coastal adaptations in southern New England and southern New York. *Archaeology of Eastern North America* 16:101-120.
- Lavin, L. and R. Kra
1994 Prehistoric pottery assemblages from southern Connecticut: A fresh look at ceramic classification in southern New England. *Bulletin of the Archaeological Society of Connecticut* 57:35-51.
- Learned, B.P.
1903 The Distribution of the Pequot Lands. In *Papers and Addresses of the Society of Colonial Wars in the State of Connecticut*, pp. 49-60.
- Marshall, B.T.
1922 *A Modern History of New London County, Connecticut, Volumes I-III*. New York: Lewis Historical Publishing.

- Martin, C.
1974 The European impact on the culture of a northeastern Algonkian tribe: An ecological interpretation. *William and Mary Quarterly, 3rd Series* 31(I):3-26.
- McBride, K.A.
1981 *Lower Connecticut River Valley Project: Report on the 1981 Field Season*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
1984 Middle and Late Archaic periods in the Connecticut River Valley: A re-examination. *Bulletin of the Archaeological Society of Connecticut* 47:55-72.
1990 The historical archaeology of the Mashantucket Pequot, 1637-1900: A preliminary analysis. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L. Hauptman and J. Wherry, pp. 96-116. Norman: University of Oklahoma Press.
1991 Ancient and Crazie: Pequot lifeways during the historic period. In *Algonkians of New England: Past and Present*, edited by P. Benes, pp. 63-75. The Dublin Seminar for New England Folklife, Annual Proceedings. Boston: Boston University.
1992 Prehistoric and historic patterns of wetland use in eastern Connecticut. *Man in the Northeast* 43:10-24.
- McBride, K.A. and N.F. Bellantoni
1982 The utility of ethnohistoric models for understanding Late Woodland-Contact change in southern New England. *Bulletin of the Archaeological Society of Connecticut* 45:51-64.
- McBride, K.A. and R.E. Dewar
1981 Prehistoric settlement in the lower Connecticut River Valley. *Man in the Northeast* 22:37-65.
- McBride, K.A. and R.S. Grumet
1992 *National Historic Landmark Nomination - Mashantucket Pequot Indian Reservation Archaeological District*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
- McBride, K.A., W.M. Wadleigh, Robert E. Dewar, and M.G. Soulsby
1980 *Prehistoric Settlement in Eastern Connecticut: The North-Central Lowlands and Northeastern Highlands Surveys: 1979*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
- McElroy, M.
1991 *Natural Drainage Basins in Connecticut, revised edition* (map). Hartford: Connecticut Department of Environmental Protection.
- McWeeney, L.
1986 Sea level rise and the submergence of archaeological sites in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 49:53-60.
1994 *Archaeological Settlement Patterns and Vegetation Dynamics in Southern New England in the Late Quaternary*. Unpublished PhD dissertation, filed with Yale University, New Haven, Connecticut.
1999 A review of late Pleistocene and Holocene climate changes in southern New England. *Bulletin of the Archaeological Society of Connecticut* 62:3-18.
- Moeller, R.W.
1980 *6LF21: A Paleo-Indian Site in Western Connecticut*. American Indian Archaeological Institute, Occasional Paper Number 2. Washington: American Indian Archaeological Institute.
1984 Paleo-Indian and Early Archaic occupations in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 47:41-54.
1999 A view of Paleo-Indian studies in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 62:67-78.
- Newman, M.T.
1976 Aboriginal New World epidemiology and medical care, and the impact of Old World disease imports. *American Journal of Physical Anthropology* 45(3):667-672.

- Ogden, J.G.
1977 The late Quaternary paleoenvironmental record of northeastern North America. In *Amerinds and Their Paleoenvironments in Northeastern North America. Annals of the New York Academy of Sciences* 288:16-34.
- Pagoulatos, P.
1988 Terminal Archaic settlement and subsistence in the Connecticut River Valley. *Man in the Northeast* 35:71-93.
- Parker, J.
1987 Changing paleoecological relationships during the late Pleistocene and Holocene in New England. *Bulletin of the Archaeological Society of Connecticut* 50:1-16.
- Pfeiffer, J.E.
1984 The Late and Terminal Archaic periods of Connecticut prehistory. *Bulletin of the Archaeological Society of Connecticut* 47:73-88.
- Ritchie, W.A.
1969 *The Archaeology of New York State, revised edition*. Garden City: Natural History Press.
- Rodgers, J.
1985 *Bedrock Geological Map of Connecticut* (map). Hartford: Connecticut Geological and Natural History Survey.
- Rouse, I.
1980 Ceramic traditions and sequences in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 43:57-75.
- Russell, H.S.
1980 *Indian New England Before the Mayflower*. Hanover: University Press of New England.
- Salisbury, N.
1990 Indians and colonists in southern New England after the Pequot War. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 81-95. Norman: University of Oklahoma Press.
- Salwen, B.
1966 European trade goods and the chronology of the Fort Shantok site. *Bulletin of the Archaeological Society of Connecticut* 34:5-39.
1969 A tentative in-situ solution to the Mohegan-Pequot problem. In *An Introduction to the Archaeology and History of the Connecticut Valley Indian*, edited by W.K. Young, pp. 81-88. Springfield: Springfield Museum of Science.
1970 Cultural inferences from faunal remains: Examples from three northeast coastal sites. *Pennsylvania Archaeologist* 40(1-2):1-8.
1983 Indians of southern New England and Long Island. In *Connecticut Archaeology: Past, Present and Future*, edited by R.E. Dewar, p. 85-121. Storrs: Department of Anthropology, University of Connecticut.
- Simmons, W.S.
1981 Cultural bias in the New England Puritans' perception of Indians. *William and Mary Quarterly, 3rd Series* 38(3):56-72.
1986 *Spirit of the New England Tribes: Indian History and Folklore, 1620-1984*. Hanover: University Press of New England.
- Snow, D.R.
1980 *The Archaeology of New England*. New York: Academic Press.
- Snow, D.R. and K.M. Lanphear
1988 European contact and Indian depopulation in the Northeast: The timing of the first epidemics. *Ethnohistory* 35(1):15-33.
- Snow, D.R. and W.A. Starna
1989 Sixteenth-Century depopulation: A view from the Mohawk Valley. *American Anthropologist* 91:142-149.

- Speck, F.G.
 1909 Notes of the Mohegan and Niantic Indians. *Anthropological Papers of the American Museum of Natural History* 3:183-210.
 1928 Native tribes and dialects of Connecticut. *Annual Report of the Bureau of American Ethnology* 43:199-287.
- Spiess, M.
 1933 *The Indians of Connecticut*. Tercentenary Commission of the State of Connecticut Committee on Historical Publications. New Haven: Yale University Press.
- Starna, W.A.
 1990 The Pequots in the early Seventeenth Century. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L. Hauptman and J. Wherry, pp. 33-47. Norman: University of Oklahoma Press.
 1992 The biological encounter: Disease and the ideological domain. *American Indian Quarterly* 16(4):511-519.
- Stone, J.R., J.P. Schafer, E.H. London, and W.B. Thompson
 1992 *Surficial Materials Map of Connecticut* (map). Washington D.C.: United States Geological Survey.
- Sturtevant, W.G.
 1975 Two 1761 wigwams at Niantic, Connecticut. *American Antiquity* 40 (4): 437-444.
- Swanton, J.R.
 1952 *The Indian Tribes of North America*. Washington, D.C.: United States Government Printing Office.
- Swigart, E.K.
 1974 *The Prehistory of the Indians of Western Connecticut: Part I, 9000-1000 B.C.* Washington: American Indian Archaeological Institute.
- Tantaquidgeon, G.
 1972 *Folk Medicine of the Delaware and Related Algonkian Indians*. Harrisburg: Pennsylvania Historical and Museum Commission.
- Terry, R.
 1917 The first European visitors to Narragansett Bay. *Bulletin of the Newport Historical Society* 22:1-30.
- Thomas, P.A.
 1985 Cultural change on the southern New England frontier. In *Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern North America, A.D. 1000-1800*, edited by W. Fitzhugh, pp. 131-162. Washington D.C.: Smithsonian Institution Press.
- Trumbull, B.
 1818 *A Complete History of Connecticut, Volume I*. New Haven: Maltby, Goldsmith and Company.
- Twitchell, W.I., editor
 1899 *Hartford in History*. Hartford: Plimpton Manufacturing Company.
- United States Geological Survey (USGS)
 1939 *Montville Quadrangle, Connecticut, 7.5 Minute Series (Topographic)*. Washington D.C.: United States Geological Survey.
 1983 *Montville Quadrangle, Connecticut, 7.5 Minute Series (Topographic)*. Washington D.C.: United States Geological Survey.
- Van Dusen, A.E.
 1975 *Puritans Against the Wilderness: Connecticut History to 1763*. Chester: Pequot Press.
- Wadleigh, W.M.
 1981 Settlement and subsistence patterns in the Northeastern Highlands of Connecticut. *Man in the Northeast* 22:67-85.
- Walling, H.F.
 1854 *Map of New London County*. Philadelphia: William E. Baker.

- Walwer, G.F.
1996 *Survey of Native American Burials and Cemeteries East of the Connecticut River*. Manuscript filed with the Connecticut State Historic Preservation Office, Hartford, Connecticut.
- Waters, J.H.
1965 Animal remains from some New England Woodland sites. *Bulletin of the Archaeological Society of Connecticut* 33:4-11.
- Wherry, J.D.
1990 Afterward. In *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*, edited by L.M. Hauptman and J.D. Wherry, pp. 213-222. Norman: University of Oklahoma Press.
- Wiegand, E.A.
1987 The prehistoric ceramics of southwestern Connecticut: An overview and reevaluation. *Bulletin of the Archaeological Society of Connecticut* 50:23-42.
- Wilbur, C.K.
1978 *The New England Indians*. Chester: Globe Pequot Press.
- Willoughby, C.C.
1935 *Antiquities of the New England Indians*. Cambridge: Peabody Museum of American Archaeology and Ethnology, Harvard University.