

2 CARL SANDBURG HOME
NATIONAL HISTORIC SITE

ARCHEOLOGICAL
OVERVIEW AND ASSESSMENT

Heather Russo Pence

SOUTHEAST ARCHEOLOGICAL CENTER

The Southeast Archeological Center (SEAC) is a support operation of the National Park Service's Southeast Region. In assisting parks with their cultural resource management needs, SEAC facilitates long-term protection of archeological resources and compiles and utilizes the archeological information obtained from these resources. In addition to annually generating numerous archeological reports, as mandated by federal law and park operations, SEAC is the repository for over six million artifacts that make up the Southeast Region's research collections and contribute to its cultural database. SEAC is staffed by professional NPS archeologists and regularly employs archeology students from Florida State University and other anthropology programs throughout the Southeast.

REGIONWIDE ARCHEOLOGICAL SURVEY PROGRAM

In 1992, the National Park Service initiated the Systemwide Archeological Inventory Program (SAIP) to provide a long-term and sustained program for the systematic identification, evaluation, documentation, and interpretation of archeological resources under NPS stewardship. Congress has allocated funds to implement SAIP projects nationwide, with each region prioritizing its own projects and determining how best to accomplish the work necessary to achieve the program's goals. The Regionwide Archeological Survey Program (RASP), administered by SEAC, is the implementation of SAIP in the Southeast Region. Since 1992, the RASP team has conducted archeological surveys to identify sites on park lands, assessed the integrity and research potential of sites through excavations, and prepared various documents (archeological overviews and assessments, survey reports, archeological base maps, National Register nominations) to help parks protect and manage their archeological resources.

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SEAC Accession No. 1317

Heather Russo Pence

ACKNOWLEDGMENTS

A number of people have assisted in the production of this Overview and Assessment for Carl Sandburg Home National Historic Site (CARL). I would like to thank John Ehrenhard, Chief of the Southeast Archeological Center (SEAC), and George Smith, SEAC's Chief of Investigation and Evaluation, for their support in completing this document.

Guy Prentice, regional coordinator of the RASP program, and David Brewer, a SEAC archeologist, were essential in providing guidance and assistance in producing this document. I would also like to thank John Cornelison and Regina Meyer for providing a map of the project they completed at CARL.

I am indebted to the park staff at CARL for their help and guidance in preparing this document, especially Superintendent Connie Backlund; Ann Staley, Administrative Officer; Lisa Ward, also in Administration; and Stephanie Gordon, Margaret Rogers, and Lynn Savage, Museum Specialists. I am especially indebted to Warren Weber, CARL's Cultural Resource Management Officer, for providing necessary resources and much of his time to answer numerous questions. Special thanks go to the rest of the CARL staff and volunteers for all their assistance during my visit to the park.

I wish to thank Dave Moore, Western Division of the North Carolina Office of State Archaeology, for supplying information used in the prehistoric overview section.

I would also like to thank Marilyn Ostergen and Arleen Myers of the National Park Service's natural resources project, for providing a bibliography of park natural resources documents.

My thanks go to the staff of the Denver Service Center, NPS, who supplied maps and documents.

Several other SEAC staff members also deserve special recognition for providing information and documents. They include Audrey Trauner, Bob Wilson, Dennis Finch, and Richard Vernon. Special thanks also go to Judy Hanson for formatting this report and Virginia Horak for editorial suggestions.

Special thanks go to Ed Wight, Greg Heide, and Brian Yates for their assistance with the AutoCAD maps produced for this document. Very special thanks go to Brian Yates for the reanalysis and cataloging of all the artifacts recovered from past SEAC CARL projects.

Special gratitude also goes to my coworkers, Elizabeth de Grummond, Margo Schwadron, Lou Groh, Ed Wight, Greg Heide, and Brian Yates for their unfailing support.

ACKNOWLEDGMENTS	2
FIGURES	7
TABLES	8
MANAGEMENT SUMMARY	9
INTRODUCTION	10
CHAPTERS	
1. ENVIRONMENTAL SETTING	11
Location of Study Area	11
Physiography and Topography	11
Soils and Geology	13
Vegetation	15
Fauna	19
2. CULTURAL OVERVIEW	21
Native American Cultures	21
<i>Paleoindian Period</i>	21
<i>Archaic Period</i>	22
<i>Woodland Period</i>	26
<i>Mississippian Period</i>	28
Protohistoric Period/Historic Period	29
<i>The History of the Flat Rock Area</i>	29
<i>Memminger and Rock Hill</i>	29
<i>Colonel William Gregg</i>	31
<i>Ellison Adger Smyth and Connemara</i>	31
<i>Carl Sandburg</i>	33
<i>National Park Service</i>	35
3. OVERVIEW OF PREVIOUS ARCHEOLOGICAL RESEARCH	36
John T. Dorwin, 1975	36
John W. Walker, 1976	37
<i>Parking Area and Visitor Contact Station</i>	37
<i>Residential Area</i>	40
<i>Maintenance Area</i>	41
<i>Administrative Area</i>	41

John W. Walker/Steven Shephard, 1976	41
<i>Buried Electric Line Survey</i>	42
John W. Walker/Dennis Finch, 1979	43
John W. Walker, 1979	44
John Cornelison, 1997	44
 4. DESCRIPTION OF ARCHEOLOGICAL SITES	47
Main House, HS 1	47
<i>Walker and Finch Excavations, 1979</i>	49
Family Garage, HS 2	50
<i>The First Addition</i>	51
<i>The Garage Conversion</i>	52
<i>Walker and Finch Excavations, 1979</i>	52
Swedish House, HS 3	54
<i>Walker and Shephard Excavations, 1976</i>	55
Tenant House, HS 4	56
<i>Dorwin Excavations, 1975</i>	56
<i>Walker and Shephard Excavations, 1976</i>	57
Chicken/Wash House, HS 5	57
<i>Walker and Shephard Excavations, 1976</i>	57
Woodshed, HS 6	58
<i>Walker and Shephard Excavations, 1976</i>	59
Springhouse, HS 7	59
<i>Dorwin Excavations, 1975</i>	59
Pump House, HS 8	59
Greenhouse, HS 9	60
Barn Pump House, HS 10	60
Farm Manager's House, HS 11	60
<i>Dorwin Excavations, 1975</i>	60
<i>Walker and Shephard Excavations, 1976</i>	61
Isolation Quarters (Buck House 2, Bull Barn), HS 12	61
<i>Walker and Finch Excavations, 1979</i>	61
Barn Garage, HS 13	61
<i>Walker and Finch Excavations, 1979</i>	61
Corn Crib, HS 14	62
Buck Kid Quarters (Stock Barn 1), HS 15	62
<i>Walker and Finch Excavations, 1979</i>	62
Goat Barn (Main Barn), HS 16	62
<i>Walker and Shephard Excavations, 1976</i>	62
<i>Walker and Finch Excavations, 1979</i>	63
Milk House, HS 16A	64
<i>Walker and Finch Excavations, 1979</i>	64
Horse Barn, HS 17	64
<i>Walker and Finch Excavations, 1979</i>	64
Cow Shed (Feed House), HS 18	64
<i>Walker and Finch Excavations, 1979</i>	65
Wood Shaving Shed (Hay Equipment Storage), HS 19	65

Silo, HS 20	65
Buck House, HS 21	65
<i>Dorwin Excavations, 1975</i>	66
<i>Walker and Shephard Excavations, 1976</i>	66
Gazebo, HS 22	67
Donkey House (Goat House), HS 23	67
Isolation Hut 1 (Jennifer's House), HS 24	67
Isolation Hut 2, HS 25	67
Isolation Hut 3, HS 26	67
Isolation Hut 4, HS 27	67
Ice House Ruins, HS 28	67
Caretaker's (Farm Manager's) Chicken House, HS 29	68
Caretaker's (Farm Manager's) Woodshed, HS 30	68
Cow Shed, HS 31	68
Fountain Pool, HS 32	68
Hog Pen, HS 33	68
Duck Cage, HS 34	68
Contributing Historic Resources	69
<i>Front Lake Dam, HS 35</i>	69
<i>Serpentine Drive Retaining Walls, HS 36</i>	69
<i>Duck Pond and Dam, HS 37</i>	69
<i>Elm Tree Wall, HS 38</i>	69
<i>Front Lake Bridge, HS 39</i>	69
<i>Side Lake and Dam, HS 40</i>	69
<i>Trout Pond and Dam, HS 41</i>	69
<i>Big Glassy Mountain Reservoir, HS 42</i>	70
<i>Stone Drains, HS 44A-E</i>	70
<i>Serpentine Entrance Drive, HS 45</i>	70
<i>Big Glassy Mountain Trail and Memminger Trail, HS 46</i>	70
<i>Main Entrance Gate, HS 48</i>	70
<i>Back Drive and Entrance Gate, HS 49</i>	70
Subsites Identified by 1976 Subsurface Testing	71
HS 51	71
HS 52	71
HS 53	71
Other Contributing Resources	71
<i>Main House Landscape</i>	71
<i>Summer Flower Garden</i>	72
<i>Apple Orchard</i>	72
<i>Vegetable Garden</i>	72
<i>Front Pasture</i>	72
5. ASSESSMENT OF RESEARCH AND RECOMMENDATIONS	73
Assessment of Previous Research	73
<i>Dorwin's 1975 Excavations</i>	73
<i>Walker's 1976 Excavations</i>	74
<i>Walker and Shephard's 1976 Excavations</i>	74

<i>Walker and Finch's 1979 Excavations</i>	75
<i>Walker's 1979 Archeological Survey</i>	75
<i>Cornelison's 1997 Investigations</i>	75
Recommendations for Future Research	76
<i>Systematic Survey</i>	76
<i>Possible Prehistoric Sites</i>	76
<i>Possible Historic Resources</i>	76
<i>Testing of Park Structures and Areas</i>	76
6. ACCESSIONS AND ARCHIVAL MATERIALS	78
Southeast Archeological Center	78
Carl Sandburg Home NHS	79
7. CULTURAL RESOURCE MANAGEMENT ISSUES	80
Documentation Issues	80
<i>Archeological Overview and Assessment</i>	80
<i>Archeological Identification Studies</i>	80
<i>Ethnographic Overview and Assessment</i>	80
<i>Cultural Affiliation Studies</i>	80
<i>Historic Resource Study (HRS)</i>	81
<i>Cultural Resource Base Map</i>	81
<i>Park Administrative History</i>	81
<i>Rapid Ethnographic Assessment Procedures (REAP)</i>	81
<i>Scope of Collections Statement</i>	81
Treatment Issues	82
Monitoring Issues	82
8. THEMATIC FRAMEWORK	83
APPENDICES	
1. ENABLING LEGISLATION	86
2. ACCESSIONS AND ARTIFACT TOTALS (TABLES 11–34)	87
REFERENCES	121

1.	Location of Carl Sandburg Home NHS	11
2.	Physiographic zones of North Carolina	12
3.	Carl Sandburg Home NHS park boundary	13
4.	Soils map of Carl Sandburg Home NHS	14
5.	Geology of the park	16
6.	Paleoindian period and Kirk phase projectile points	23
7.	Archaic period projectile points	25
8.	Woodland and Mississippian period projectile points.	27
9.	Memminger, Smyth, and NPS land purchases	30
10.	Memminger period base map	32
11.	Smyth period base map	33
12.	Sandburg farm area structures	34
13.	Sandburg residence area structures	35
14.	Dorwin's Springhouse excavations	36
15.	Dorwin's Tenant House excavations	36
16.	Dorwin's Farm Manager's House excavations	37
17.	Dorwin's Buck House excavations	38
18.	Walker's Buck House excavations	38
19.	Alternative areas of investigation in 1976	39
20.	Archeological tests in area A-1	39
21.	Archeological tests in alternative areas A-2 and A-3	40
22.	Archeological tests in alternative areas A-4, B-1, B-2, C-1, C-2, and D-1	41
23.	Swedish House excavations	42
24.	Chicken/Wash House excavations	43
25.	Family Garage excavations	44
26.	Archeological testing of the new Memminger Trail segment	45
27.	Historical sketch of the Memminger property	55
28.	Archeological tests at the Goat Barn	63

TABLES

1.	Area soil descriptions	15
2.	Native flora found in park area	17
3.	Mammals found in park area	19
4.	Fish found in park lakes	20
5.	Snakes found in park area	20
6.	Birds found in park area	20
7.	Suggested Appalachian Summit archeological phases	21
8.	Historic sites and structures in the park	48
9.	Thematic framework based on 1982 revision	83
10.	Themes applying to CARL structures and sites based on 1996 thematic framework	84
11.	Archeological accessions located at CARL	87
12.	SEAC Acc. 195 artifact summary	91
13.	SEAC Acc. 195, Structure 6, artifact totals	93
14.	SEAC Acc. 195, Structure 21, artifact totals	93
15.	SEAC Acc. 195, Structure 51, artifact totals	95
16.	SEAC Acc. 195, Structure 52, artifact totals	96
17.	SEAC Acc. 195, Structure 53, artifact totals	96
18.	SEAC Acc. 205 artifact summary	97
19.	SEAC Acc. 205, Structure 3, artifact totals	98
20.	SEAC Acc. 205, Structure 5, artifact totals	99
21.	SEAC Acc. 333 artifact summary	100
22.	SEAC Acc. 333, Structure 1, artifact totals	105
23.	SEAC Acc. 333, Structure 2, artifact totals	106
24.	SEAC Acc. 333, Structure 12, artifact totals	109
25.	SEAC Acc. 333, Structure 13, artifact totals	110
26.	SEAC Acc. 333, Structure 15, artifact totals	110
27.	SEAC Acc. 333, Structure 16, artifact totals	111
28.	SEAC Acc. 333, Structure 17, artifact totals	112
29.	SEAC Acc. 333, Structure 18, artifact totals	112
30.	SEAC Acc. 394 artifact summary	113
31.	SEAC Acc. 394, Structure 7, artifact totals	116
32.	SEAC Acc. 394, Structure 8, artifact totals	117
33.	SEAC Acc. 394, Structure 11, artifact totals	117
34.	SEAC Acc. 394, Structure 21, artifact totals	119

An Archeological Overview and Assessment for Carl Sandburg Home National Historic Site (NHS) has been targeted for inclusion in the Regionwide Archeological Survey Program (RASP) of the National Park Service's Southeast Region. This program is a subset of the Systemwide Archeological Survey Program (SAIP) in which systematic scientific research to locate, evaluate, and document archeological resources on National Park Service lands is conducted; eligible properties for the National Register of Historic Places are nominated; and strategies for conservation, protection, preservation in situ, management, and interpretation are recommended. One of the goals of SAIP is to address the adequacy of each individual park's archeological baseline data. Because a comprehensive survey had not yet been completed for Carl Sandburg Home NHS, this and other cultural resource management deficiencies are herein addressed.

This document assimilates current knowledge regarding the archeological content, resources, and potential of Carl Sandburg Home NHS. This information should then serve as a foundation of referential data for research, development, interpretation, and preservation in the park.

The following recommendations for future archeological work are based on information compiled in this report. The primary deficiency in archeological research at Carl Sandburg Home NHS is the lack of a systematic survey of park grounds.

GENERAL SURVEY

Most of Carl Sandburg Home NHS has not received archeological attention. Thus, a broad-scale program of systematic shovel or auger testing at regular intervals should be conducted in unsur-

veyed portions of the park. This type of survey offers the potential to discover both prehistoric and historic resources located within the park. A systematic survey of the park is likely to produce information on the early Historic period (pre-1830) occupation of the property. Given the numerous prehistoric resources in surrounding areas, such a survey is also likely to provide information on prehistoric use of the park landscape.

BUCK HOUSE

Additional testing is recommended at the Buck House since it is considered to be the oldest structure on the park's property. Previous archeological testing around the building's foundations has not provided any substantial information regarding the construction date. Given the fact that a dirt floor covers the interior, testing inside the structure is recommended. At least one and possibly two controlled stratigraphic excavations should be placed in the center of the structure. Excavations should utilize arbitrary levels of ten centimeters or less, and all materials should be screened using quarter-inch or finer hardware mesh.

SWEDISH HOUSE AND PRIVY

The park has expressed interest in finding the remains of a Memminger period privy that existed near the Swedish House. Since the general location of the privy has already been determined, an excavation unit should be placed in the area to expose any features that might be related to the privy. Excavations should utilize arbitrary levels of ten centimeters or less, and all materials should be screened using quarter-inch or finer hardware mesh.

INTRODUCTION

Carl Sandburg Home National Historic Site (NHS), which was the home of this twentieth-century Pulitzer Prize winning poet and biographer for twenty-two years prior to his death in 1967, commemorates his life and works. The park was authorized by Congress on October 17, 1968, acquired by the Federal Government the following year, and opened to the public in 1974.

The Carl Sandburg Home NHS, or Connemara as the estate was known after the turn of the century, is a 263.52-acre property located on Little River Road within the boundaries of the recently incorporated Village of Flat Rock in Henderson County, North Carolina. Connemara includes approximately 234 acres of forests and thirty to thirty-five acres of pastures, hayfields, croplands, gardens, streams, and ponds. The property on which the park is located has been occupied by three prin-

cipal owners: Christopher Memminger, the first treasurer of the Confederacy; Captain Ellison Adger Smyth, a wealthy factory owner; and, finally, Carl Sandburg. There are over fifty historic structures located within the park. Many of them were used from the Memminger period through Sandburg's ownership of the estate. Currently, the structures contain over 220,000 artifacts, mostly books and former personal property of the Sandburgs.

This Overview and Assessment presents a summary of the known archeological resources within the park and its vicinity and offers some recommendations regarding the future protection and management of these resources. Recommendations are based on the Secretary of the Interior's Standards for Archeological and Historic Preservation and the *Regionwide Archeological Survey Plan* (Keel et al. 1996).

ENVIRONMENTAL SETTING

LOCATION OF STUDY AREA

Carl Sandburg Home National Historic Site (NHS) is located in Flat Rock, in the southeastern part of Henderson County in western North Carolina (Figure 1). The historic site is situated on the south side of Little River Road, five hundred feet from the U.S. Highway 25 intersection. Hendersonville, located approximately four miles away, is the nearest city. Asheville, North Carolina, is the closest

major metropolitan area. Greenville, South Carolina, lies about thirty miles to the south of the park.

PHYSIOGRAPHY AND TOPOGRAPHY

The state of North Carolina is divided into three major physiographic zones (Fenneman 1938). The Coastal Plain extends from the Atlantic Ocean to the Fall Line. The Piedmont is located in the cen-

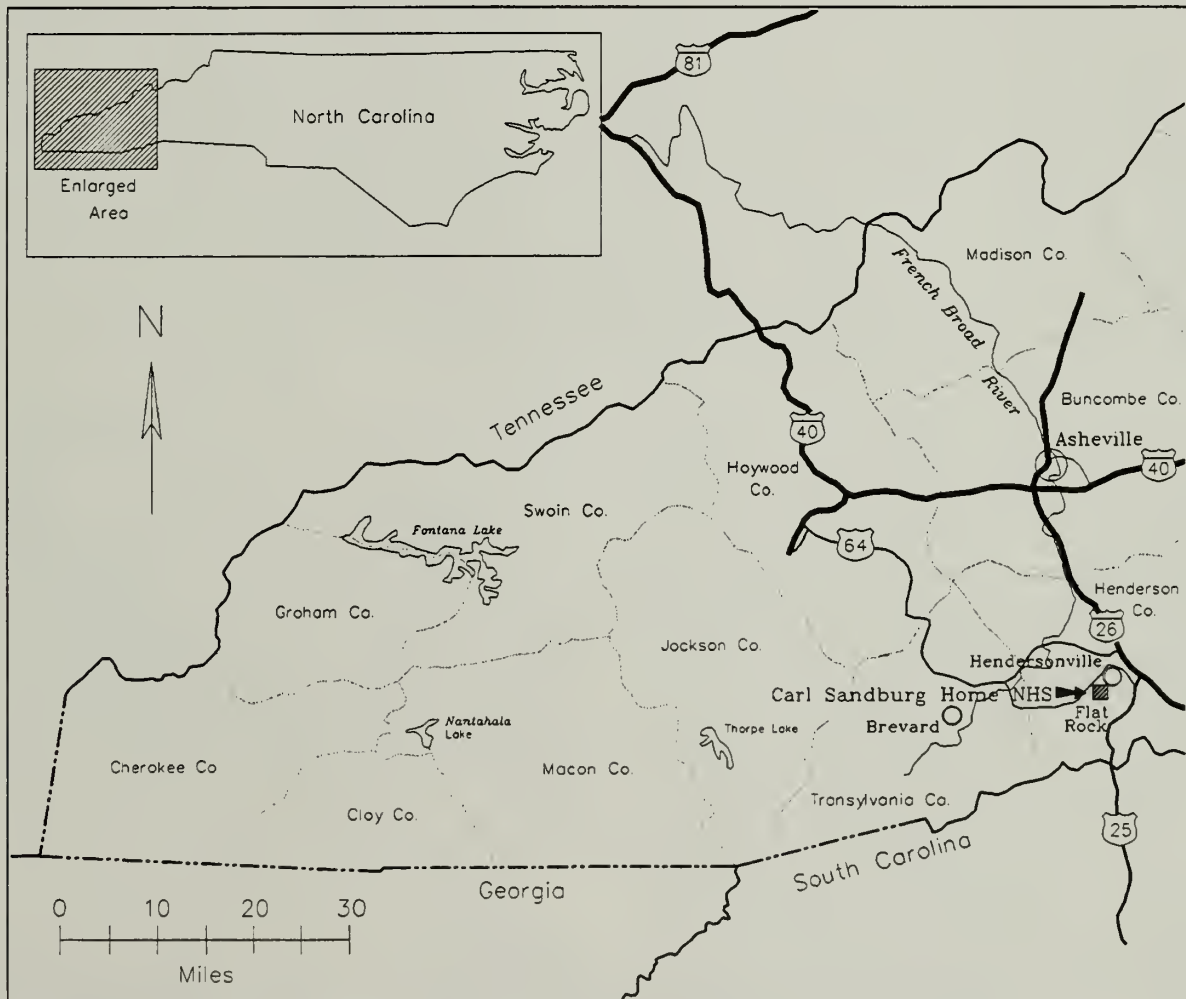


Figure 1 — Location of Carl Sandburg Home NHS.

tral portion of the state between the Fall Line and the mountains. The Blue Ridge Province lies west of the Piedmont (Figure 2). Carl Sandburg Home NHS is located well within the Blue Ridge Province.

The park is situated between the Blue Ridge and the Great Smoky Mountain ranges in the Appalachian Summit area (NPS 1971:38). The Appalachian Summit natural and cultural area, defined by Kroeber (1939:95) as the highest region of the Appalachian Mountains, includes all of extreme western North Carolina, portions of eastern Tennessee, southwestern Virginia, northeastern Georgia, and northwestern South Carolina (Dickens 1976:6). The Appalachian Summit region is bisected by several tributaries of the Tennessee River, including the Toe, French Broad, Pigeon, Little Tennessee, and Hiwassee Rivers. Memminger Creek, located within the park, is a tributary of the French Broad River.

The topography within the park area, generally speaking, is relatively steep (Figure 3). Slopes throughout the park range from 5 to 20 percent, although one area called the Big Glassy-Little

Glassy woodland unit has slopes that range in excess of 65 percent. Elevations within the park range from 2,783 feet above sea level at the peak of Big Glassy to 2,145 feet at the easternmost pond (NPS 1977a:3).

Even though the average elevation of Carl Sandburg is 2,300 feet above sea level, the winter season is relatively mild due to the southern latitude of the park. Snowfall for the park averages less than nine inches per year. Precipitation occurs in the park throughout the year, but is 25 percent more likely between the months of December and March. The average monthly rainfall during this four-month period is approximately five to six inches. The least amount of precipitation occurs during the summer months when the average rainfall is usually between three and four inches. Total precipitation for the park averages fifty-six inches per year, and the growing season is approximately 180 days.

The climate at Carl Sandburg Home NHS is characteristic of a mountain environment. Winter temperatures frequently drop below freezing at night, but almost always rise above freezing during

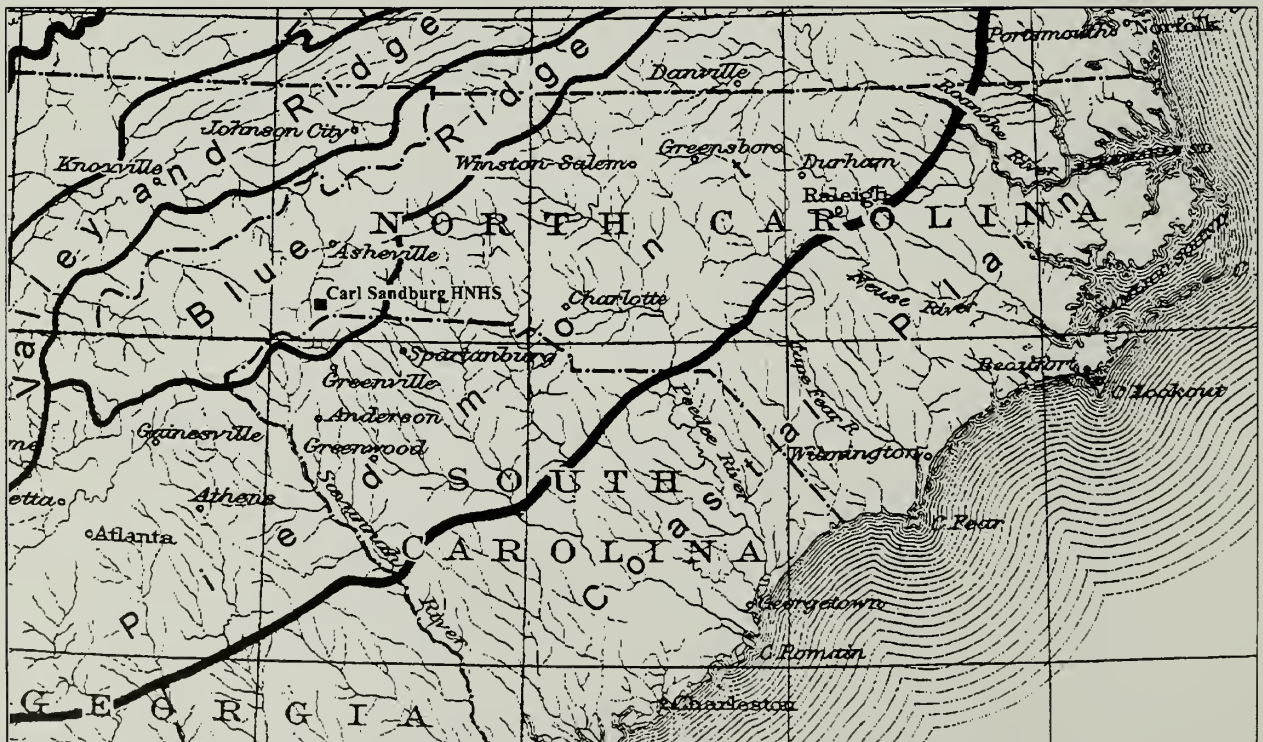


Figure 2 — Physiographic zones of North Carolina.

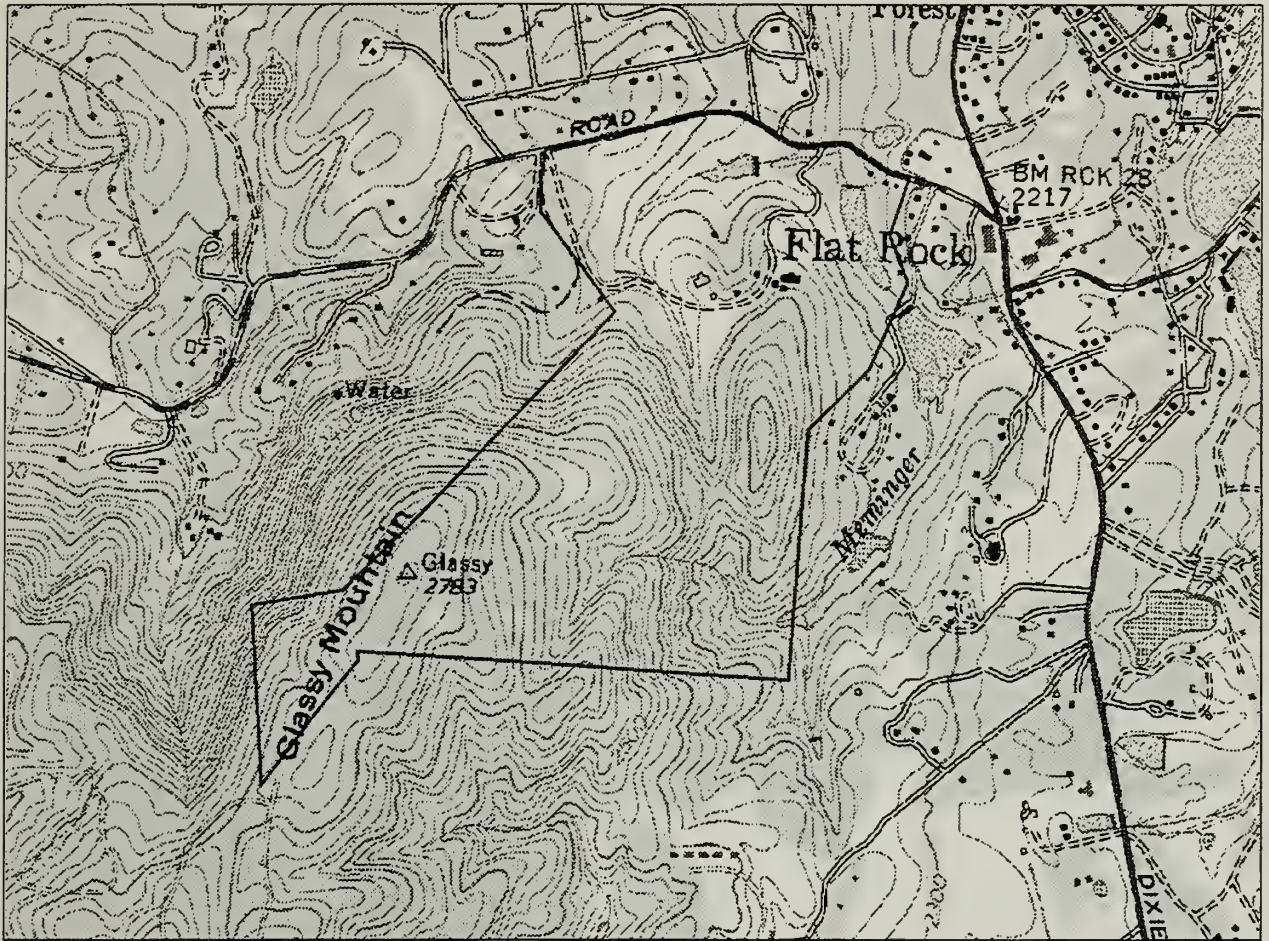


Figure 3 — Carl Sandburg Home NHS park boundary.

the day. The mean temperature in the winter is 41°F, and the first freeze generally occurs around October 19. Because of the mountain elevation, summer weather is generally cool with average temperatures around 71°F and a minimum mean temperature of 58°F. Warmer weather can also occasionally occur. The last freeze is usually around April 22. Prevailing winds are westerly in summer and northwesterly in winter, and they average eight to ten miles per hour (NPS 1971:38).

SOILS AND GEOLOGY

The soils in the region of Carl Sandburg Home NHS include the Hayesville, Tate, Hatboro, Edneyville, Ashe, and Codorus series (Figure 4) (King

1980). Ashe series soils consist of excessively drained and moderately steep to very steep soils. They are typically formed from granite and gneiss and have 25 to 45 percent slopes. Codorus series soils consist of moderately drained to poorly drained soils. These moderately permeable soils were formed in alluvium containing large amounts of mica. Edneyville series soils are well-drained, moderately permeable soils formed from granite and gneiss. The soils are sloping to steep with slopes generally ranging from 15 to 25 percent. Hatboro series soils are poorly drained soils that are formed from schist, gneiss, and other metamorphic and crystalline rocks. Slopes are generally 0 to 2 percent. Hayesville series soils are well-drained, moderately permeable soils that are formed from granite, gneiss, and schist. Slopes

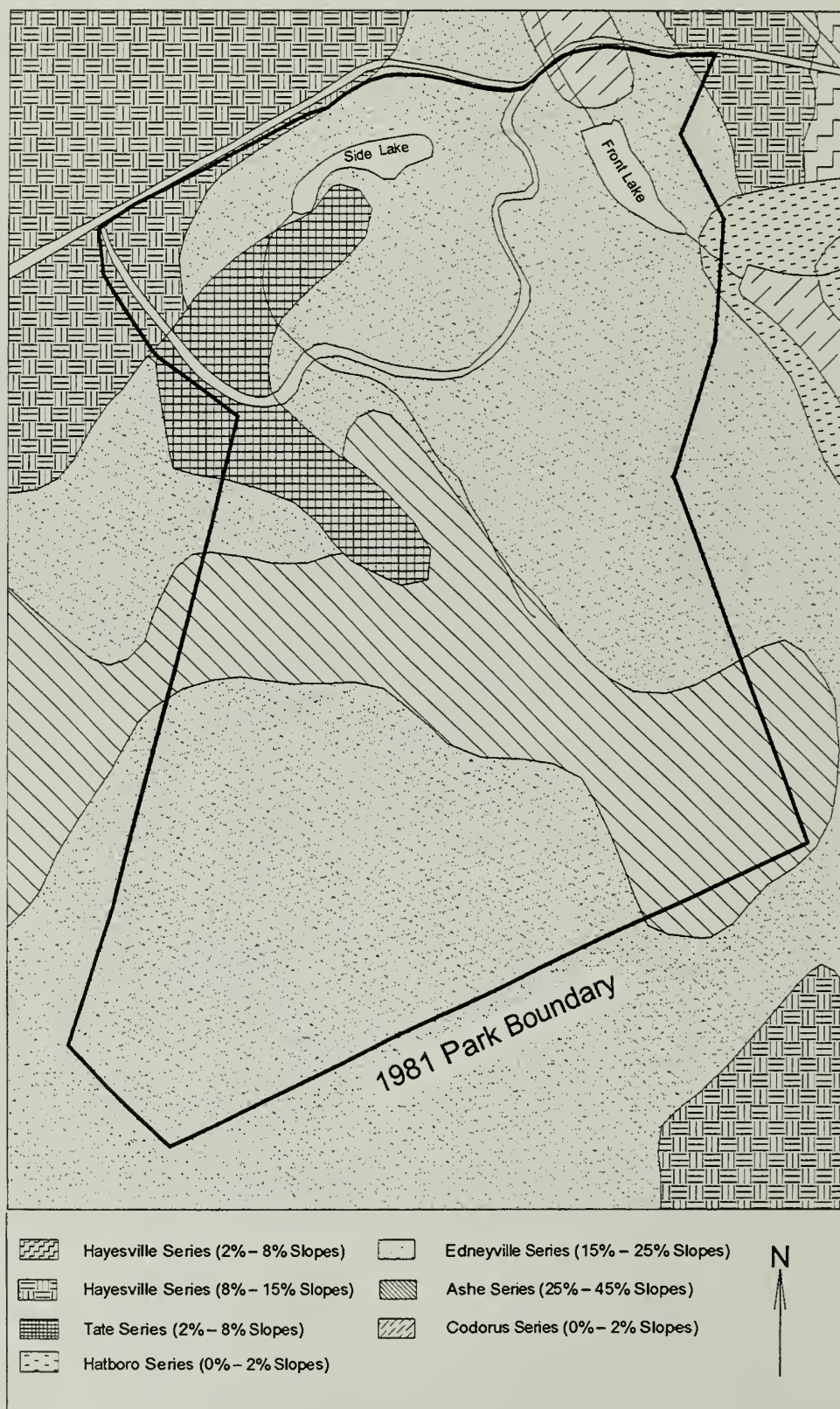


Figure 4 — Soils map of Carl Sandburg Home NHS.

Table 1 — Area soil descriptions (King 1980).

Symbol	Name	% Slope
AhF	Ashe stony sandy loam	25 – 45
Co	Codorus loam	0 – 2
EdE	Edneyville fine sandy loam	15 – 25
Ha	Hatboro loam	0 – 2
HyB	Hayesville loam	2 – 7
HyC	Hayesville loam	7 – 15
TeC	Tate fine sandy loam	2 – 15

most typically range from 7 to 15 percent. Tate series soils consist of well-drained, moderately permeable soils. These soils are formed from granite and gneiss. Tate series slopes generally range from 2 to 15 percent (Table 1) (King 1980:33–39).

The underlying surficial geology of the area is composed of Henderson gneiss (hg), a coarser, less foliated phase of Henderson gneiss (hgg), and paragneiss and schist (pgs) (Figure 5). The Henderson gneiss deposits occur in the northern section of the park, with the less foliated gneiss comprising most of the remaining portions. Paragneiss and schists can be found just southeast of the park.

VEGETATION

It is important to consider that the past environment in and around the park was decidedly different from the present-day environment. Current sea levels are approximately one hundred meters higher now than they were during the peak of the Late Wisconsinian Continental Glaciation, which occurred around 16,000 B.C. (Delcourt and Delcourt 1981:145). While much of North America was frozen under continental ice, the western North Carolina area was dominated by spruce forests. Around 12,000 B.C., as the glaciers began to melt and recede northward, the Appalachian region became dominated by spruce-jack pine forests (Delcourt and Delcourt 1981:147). By 10,000 years ago, the North Carolina area had become

dominated by deciduous mixed hardwood forests (Delcourt and Delcourt 1981:147). During the Mid-Holocene Hypsithermal Interval (ca. 6000–3000 B.C.)—a period of higher temperatures and lower rainfall—the southern and midwestern United States experienced major vegetative transitions. Mixed hardwood forests became dominant in the slope habitats of the mountain regions, and oak-chestnut forests became dominant in the Appalachian region (Delcourt and Delcourt 1981:150). Following the Hypsithermal Interval, oak-chestnut forest became dominant throughout the mountain regions of North Carolina, with spruce and jack pine forests dominating in the upper elevations (Delcourt and Delcourt 1981:152).

The current environment in and around Carl Sandburg Home NHS includes a large variety of plant species (Table 2). Generally, three types of vegetation zones occur within the park boundary. The first zone is characterized by second growth deciduous hardwoods that occur on over two hundred acres of steep terrain and medium elevations. In this zone, the trees average a diameter of fifteen to eighteen inches and are predominate in the area known as the Big Glassy-Little Glassy woodland unit. Principal trees include varieties of oak, hickory, poplar, maple, gum, and pine, with an understory of rhododendron, laurel, huckleberry, winterberry, and azalea.

The second vegetation zone covers approximately 38 acres of cleared land, mostly on low-relief terrain. About 2.5 acres of the land at lower elevations are used for a small vegetable garden. The rest of this vegetation zone, about 35.5 acres, is used as pasture land for grazing animals and growing hay and alfalfa. This cleared land zone is also where the Sandburg home and farm are located. As a result, several exotic species of vegetation have been introduced to the area now encompassing the park's structures. Around the central farm, these include bamboo, boxwood, ginkgo, Chinese elm, and pink dogwood.

The third and smallest vegetation zone, covering about 8.5 acres, is found around the park's various ponds and lakes. Vegetation found in these areas includes water lilies, algae, and milfoil (NPS 1977a:3).

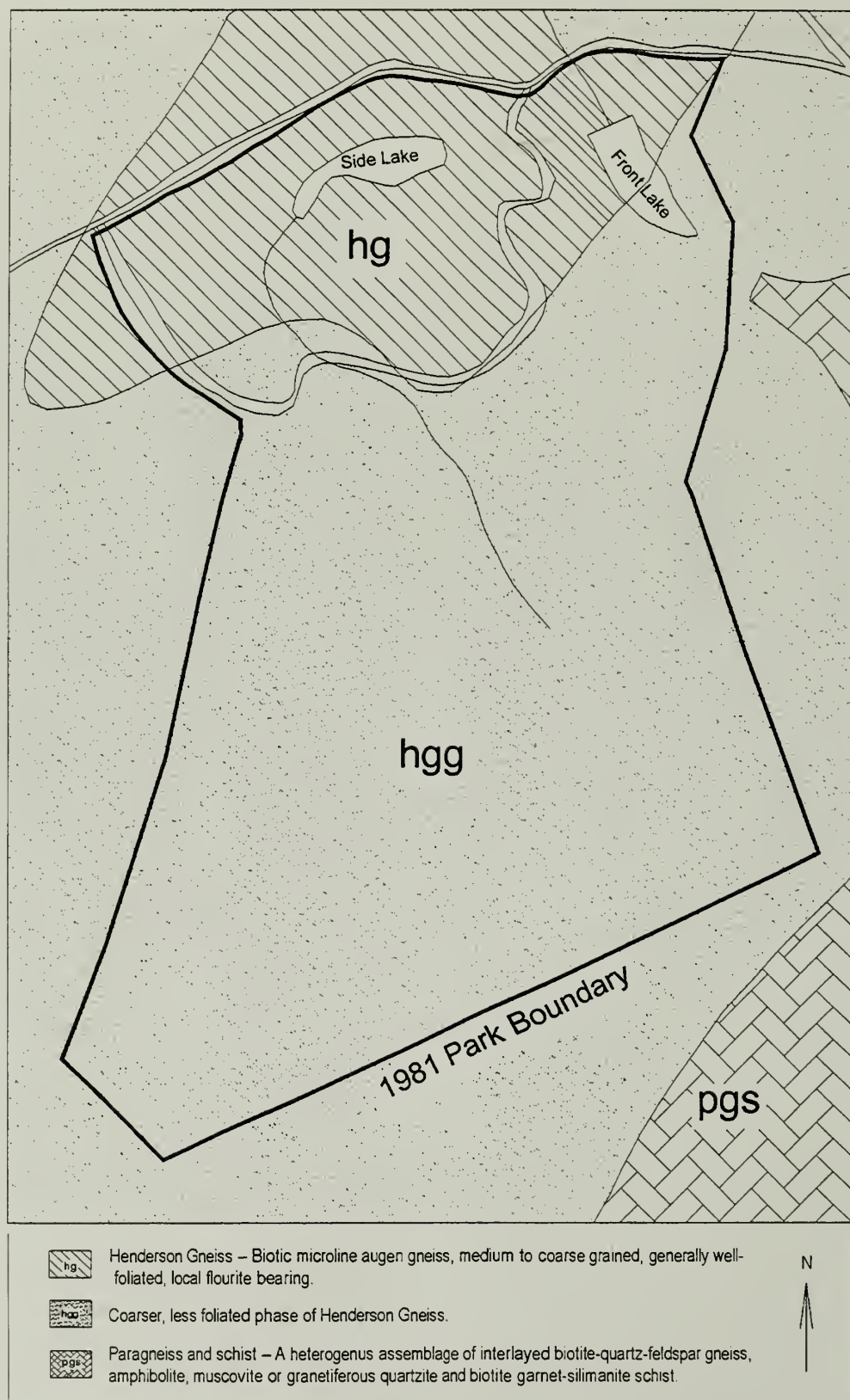


Figure 5 — Geology of the park.

Table 2 — Native flora found in park area.

Common Name	Scientific Name	Common Name	Scientific Name
Alder, Smooth	<i>Alnus serrulata</i>	Cliff-fern, Blunt-lobed	<i>Woodsia obtusa</i>
Alumroot	<i>Heuchera americana</i>	Clover, Red	<i>Trifolium pratense</i>
Aster, Bushy	<i>Aster dumosus</i>	Clover, White	<i>Trifolium repens</i>
Aster, Late Purple	<i>Aster patens</i>	Cohosh, Black	<i>Cimicifuga racemosa</i>
Aster, Narrow Leaf White.....	<i>Aster solidagineus</i>	Coral-root, Autumn.....	<i>Corallorhiza odontorhiza</i>
Aster, Wavy-leaf	<i>Aster undulatus</i>	Corydalis, Pale	<i>Corydalis sempervirens</i>
Aster, Whitewood	<i>Aster divaricatus</i>	Creeper, Virginia	<i>Parthenocissus</i>
	var. <i>divaricatus</i>		<i>quinquefolia</i>
Astilbe	<i>Astilbe biternata</i>	Cucumber-root, Indian	<i>Medeola virginiana</i>
Avens, White	<i>Geum canadense</i>	Cucumbertree	<i>Magnolia acuminata</i>
Azalea, Flame	<i>Rhododendron</i>	Daisy, Fleabane.....	<i>Erigeron annuus</i>
	<i>calendulaceum</i>	Dandelion, Dwarf	<i>Krigia virginica</i>
Azalea, Pink	<i>Rhododendron nudiflorum</i>	Dayflower, Asiatic	<i>Commelina communis</i>
Barberry, Japanese	<i>Berberis thunbergii</i>	Devil's-bit	<i>Chamaelirium luteum</i>
Beard Tongue, Gray	<i>Penstemon canescens</i>	Dewberry, Prickly	<i>Rubus flagellaris</i>
Bedstraw, Purple	<i>Galium latifolium</i>	Dewberry, Southern	<i>Rubus trivialis</i>
Beggar-ticks, European	<i>Bidens tripartita</i>	Dewberry, Swamp	<i>Rubus hispidus</i>
Beggar-ticks, Tall	<i>Bidens vulgata</i>	Dittany	<i>Cunila origanoides</i>
Bellwort, Mountain	<i>Uvularia pudica</i>	Doghobble, Highland	<i>Leucothoe fontanesiana</i>
Bellwort, Sessile-leaf	<i>Uvularia sessilifolia</i>	Dogwood, Flowering	<i>Cornus florida</i>
Bittercress	<i>Cardamine hirsuta</i>	Draba	<i>Draba aprica</i>
Bittersweet	<i>Celastrus</i> sp.	Eupatorium, Piedmont	<i>Eupatorium pubescens</i>
Blackberry	<i>Rubus argutus</i>	Fameflower	<i>Talinum teretifolium</i>
Blueberry, Highbush	<i>Vaccinium corymbosum</i>	Fern, Bracken	<i>Pteridium aquilinum</i>
Blueberry, Late Low	<i>Vaccinium pallidum</i>	Fern, Christmas	<i>Polystichum acrostichoides</i>
Blue-eyed Grass, Sweet-soil	<i>Sisyrinchium mucronatum</i>	Fern, Common Grape	<i>Botrychium dissectum</i>
	var. <i>mucronatum</i>	Fern, New York	<i>Thelypteris noveboracensis</i>
Bluet, Common	<i>Houstonia caerulea</i>	Fern, Rattlesnake	<i>Botrychium virginianum</i>
Bluet, Long-leaved	<i>Houstonia longifolia</i>	Fern, Southern Lady	<i>Athyrium filix-femina</i>
Bluet, Summer	<i>Houstonia purpurea</i>		var. <i>asplenioides</i>
Boneset, False	<i>Kuhnia eupatorioides</i>	Fireweed	<i>Erechtites hieracifolia</i>
British Soldiers	<i>Cladonia cristatella</i>	Foxglove, Downy False	<i>Gerardia virginica</i>
Broom-sedge	<i>Andropogon virginicus</i>	Foxglove, Yellow False	<i>Gerardia flava</i>
Buffalo Nut	<i>Pyrularia pubera</i>	Fringe-tree	<i>Chionanthus virginicus</i>
Bush-clover, Wandlike	<i>Lespedeza intermedia</i>	Galax	<i>Galax aphylla</i>
Buttercup, Hooked	<i>Ranunculus recurvatus</i>	Gall-of-the-earth	<i>Prenanthes trifoliata</i>
Buttercup, Kidney-leaf.....	<i>Ranunculus abortivus</i>	Garlic, Field	<i>Allium vineale</i>
Buttercup, Tall	<i>Ranunculus acris</i>	Gill-over-the-ground	<i>Glechoma hederacea</i>
Buttonweed, Rough	<i>Diodia teres</i>	Golden-aster, Grass-leaf	<i>Chrysopsis graminifolia</i>
Campion, Starry	<i>Silene stellata</i>	Golden-aster, Maryland	<i>Chrysopsis mariana</i>
Candyroot/Curtiss's Milkwort ...	<i>Polygala curtissii</i>	Goldenrod	<i>Solidago</i> sp.
Carion Vine	<i>Smilax pulverulenta</i>	Goldenrod, Gray	<i>Solidago nemoralis</i>
Carion-flower, Biltmore	<i>Smilax biltmoreana</i>	Goldenrod, Sharp-toothed	<i>Solidago arguta</i>
Cat's-ear	<i>Hypochoeris radicata</i>	Goldenrod, Sweet	<i>Solidago odora</i>
Cherry, Wild Black	<i>Prunus serotina</i>	Goosegrass	<i>Eleusine indica</i>
Chestnut, American	<i>Castanea dentata</i>	Grape, Fox	<i>Vitis labrusca</i>
Chickweed, Mouse-ear	<i>Cerastium vulgatum</i>	Grape, Muscadine	<i>Vitis rotundifolia</i>
Chickweed, Star	<i>Stellaria pubera</i>	Grape, Summer	<i>Vitis aestivalis</i> var. <i>aestivalis</i>
Chokeberry, Black	<i>Pyrus melanocarpa</i>	Grass	<i>Paspalum</i> sp.
Cinnamon Vine	<i>Dioscorea batatas</i>	Greenbrier, Common	<i>Smilax rotundifolia</i>
Cinquefoil, Canada/Dwarf	<i>Potentilla canadensis</i>	Greenbrier, Coral	<i>Smilax walteri</i>
Clearweed	<i>Pilea pumila</i>	Greenbrier, Glaucous	<i>Smilax glauca</i>
Cleavers	<i>Galium aparine</i>	Gumbo-limbo	<i>Bursera simaruba</i>

Table 2 (cont.) — Native flora found in park area.

Common Name	Scientific Name	Common Name	Scientific Name
Harebell, Southern	<i>Campanula divaricata</i>	Orchid, Puttyroot	<i>Aplectrum hyemale</i>
Hawkweed, Hairy	<i>Hieracium gronovii</i>	Orchid, Rattlesnake-plantain	<i>Goodyera pubescens</i>
Hawkweed, Panicked	<i>Hieracium paniculatum</i>	Ox-eye Daisy	<i>Chrysanthemum</i>
Hawthorn, Dwarf	<i>Crataegus uniflora</i>	leucanthemum	
Heart's-a-bustin'	<i>Euonymus americana</i>	Partridgeberry	<i>Mitchella repens</i>
Hemlock, Eastern	<i>Tsuga canadensis</i>	Path Rush	<i>Juncus tenuis</i>
Hercules Club	<i>Aralia spinosa</i>	Peat Moss	<i>Sphagnum</i> sp.
Hickory, Mockernut	<i>Carya tomentosa</i>	Persimmon, Common	<i>Diospyros virginiana</i>
Hickory, Pignut	<i>Carya glabra</i>	Pine, Eastern White	<i>Pinus strobus</i>
Hickory, Red/Sweet Pignut	<i>Carya ovalis</i>	Pine, Pitch	<i>Pinus rigida</i>
Holly, American	<i>Ilex opaca</i>	Pine, Scrub	<i>Pinus virginiana</i>
Honeysuckle, Japanese	<i>Lonicera japonica</i>	Pine, Shortleaf	<i>Pinus echinata</i>
Horse-nettle	<i>Solanum carolinense</i>	Pine, Table Mountain	<i>Pinus pungens</i>
Horse Sugar	<i>Symplocos tinctoria</i>	Pinesap	<i>Monotropa hypopithys</i>
Huckleberry, Bear/Buckberry	<i>Gaylussacia ursina</i>	Pineweed	<i>Hypericum gentianoides</i>
Huckleberry, Dwarf	<i>Gaylussacia dumosa</i>	Pink, Fire	<i>Silene virginica</i>
Hyssop, Hedge	<i>Gratiola viscidula</i>	Pinweed	<i>Lechea minor</i>
Indian-pipe	<i>Monotropa uniflora</i>	Pinweed	<i>Lechea racemulosa</i>
Indian Tobacco	<i>Lobelia inflata</i>	Plantain, English	<i>Plantago lanceolata</i>
Indigo, Wild	<i>Baptisia tinctoria</i>	Plantain, Robin-	<i>Erigeron pulchellus</i>
Iris, Crested Dwarf	<i>Iris cristata</i>	Plantain, Rugel's	<i>Plantago rugellii</i>
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	Poison-ivy	<i>Toxicodendron radicans</i>
Jewelweed, Orange	<i>Impatiens capensis</i>	Pokeweed	<i>Phytolacca americana</i>
Joe-pye-weed, Spotted	<i>Eupatorium maculatum</i>	Poplar, Balsam	<i>Populus balsamifera</i>
Juneberry	<i>Amelanchier</i> sp.	Poplar, Tulip	<i>Liriodendron tulipifera</i>
Juneberry, Downy	<i>Amelanchier arborea</i>	Privet	<i>Ligustrum sinense</i>
	var. <i>austromontana</i>	Pussytoes, Plantain-leaved	<i>Antennaria plantaginifolia</i>
Juneberry, Swamp	<i>Amelanchier intermedia</i>	var. <i>plantaginifolia</i>	
Knotweed, Japanese	<i>Polygonum cuspidatum</i>	Pussytoes, Solitary	<i>Antennaria solitaria</i>
Ladies' Tresses	<i>Spiranthes</i> sp.	Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Lady's-slipper, Pink	<i>Cypripedium acaule</i>	Ragwort	<i>Senecio</i> sp.
Laurel, Mountain	<i>Kalmia latifolia</i>	Ragwort, Memminger's	<i>Senecio memmingeri</i>
Lesser Stitchwort	<i>Stellaria graminea</i>	Ragwort, Small's	<i>Senecio anonymus</i>
Lettuce, Wild	<i>Lactuca biennis</i>	Rattlesnake-root, Tall	<i>Prenanthes altissima</i>
Loosestrife, Whorled	<i>Lysimachia quadrifolia</i>	Rattlesnake-weed	<i>Hieracium venosum</i>
Magnolia, Fraser's	<i>Magnolia fraseri</i>	Redcedar, Southern	<i>Juniperus silicicola</i>
Maple, Swamp Red	<i>Acer rubrum</i> var. <i>trilobum</i>	Rhododendron, Great	<i>Rhododendron maximum</i>
Meadow-beauty	<i>Rhexia mariana</i>	Rose, Hybrid White	<i>Rosa</i> sp.
	var. <i>mariana</i>	Rose, Multiflora	<i>Rosa multiflora</i>
Meadow Parsnip, Hairy-jointed ..	<i>Thaspium barbinode</i>	Rose, Swamp	<i>Rosa palustris</i>
Medic	<i>Medicago</i> sp.	Rush, Georgia	<i>Juncus georgianus</i>
Milkweed, White	<i>Asclepias variegata</i>	Rushfoil	<i>Crontonopsis elliptica</i>
Mint	<i>Pycnanthemum flexuosum</i>	Sandwort, Mountain	<i>Arenaria groenlandica</i>
Nettle, False	<i>Boehmeria cylindrica</i>	Sanicle, Canada	<i>Sanicula canadensis</i>
Oak, Black	<i>Quercus velutina</i>	Sanicle, Maryland	<i>Sanicula marilandica</i>
Oak, Blackjack	<i>Quercus marilandica</i>	Sassafras	<i>Sassafras albidum</i>
Oak, Chestnut	<i>Quercus prinus</i>	Saxifrage, Michaux's	<i>Saxifraga michauxii</i>
Oak, Post	<i>Quercus stellata</i>	Servicberry, Downy	<i>Amelanchier arborea</i>
Oak, Scarlett	<i>Quercus coccinea</i>	Sheep-sorrel	<i>Rumex acetosella</i>
Oak, Southern Red	<i>Quercus falcata</i>	Skullcap, Downy	<i>Scutellaria incana</i>
Oak, White	<i>Quercus alba</i>	Skullcap, Hairy	<i>Scutellaria elliptica</i>
Oakleach, Downy Yellow	<i>Aureolaria laevigata</i>	Skullcap, Larger	<i>Scutellaria integrifolia</i>
Orchid, Crane-fly	<i>Tipularia discolor</i>	var. <i>integrifolia</i>	

Table 2 (cont.) — Native flora found in park area.

Common Name	Scientific Name	Common Name	Scientific Name
Snakeroot, White	<i>Eupatorium rugosum</i>	Tickseed, Greater	<i>Coreopsis major</i>
Solomon's-plume	<i>Smilacina racemosa</i>	Tickseed, Lance-leaf	<i>Coreopsis lanceolata</i>
Solomon's-seal, Hairy	<i>Polygonatum pubescens</i>	Tick-trefoil, Naked-flowered	<i>Desmodium nudiflorum</i>
Solomon's-seal, Smooth	<i>Polygonatum biflorum</i>	Trailing Arbutus	<i>Epigaea repens</i>
Sourwood	<i>Oxydendrum arboreum</i>	Tree-of-heaven	<i>Ailanthus altissima</i>
Spanish Needles	<i>Bidens bipinnata</i>	Trumpet Vine	<i>Campsis radicans</i>
Speedwell, Corn	<i>Veronica arvensis</i>	Tupelo, Black	<i>Nyssa sylvatica</i>
Spicebush	<i>Lindera benzoin</i>	Tupelo, Swamp	<i>Nyssa biflora</i>
Spike-rush	<i>Rhynchospora globularis</i>	Vetch, Narrow-leaved	<i>Vicia angustifolia</i>
Spirea	<i>Spiraea</i> sp.	Viburnum, Maple-leaf	<i>Viburnum acerifolium</i>
Spleenwort, Ebony	<i>Asplenium platyneuron</i>	Violet, Arrow-leaved	<i>Viola sagittata</i>
Spurge, Flowering	<i>Euphorbia corollata</i>	Violet, Birdfoot	<i>Viola pedata</i>
Squaw Huckleberry, Deerberry ..	<i>Vaccinium stamineum</i> var. <i>stamineum</i>	Violet, Early Blue	<i>Viola palmata</i>
St. Andrew's Cross	<i>Ascyrum hypericoides</i>	Violet, Halberd-leaf	<i>Viola hastata</i>
St. Johnswort, Dotted	<i>Hypericum punctatum</i>	Violet, Marsh Blue	<i>Viola cucullata</i>
St. Johnswort, Outcrop	<i>Hypericum denticulatum</i> var. <i>acutifolium</i>	Violet, Southern Wood	<i>Viola hirsutula</i>
Stargrass, Yellow	<i>Hypoxis hirsuta</i> var. <i>hirsuta</i>	Violet, Three-lobed	<i>Viola triloba</i>
Strawberry, Indian	<i>Duchesnea indica</i>	Wall-rue	<i>Asplenium ruta-muraria</i> var. <i>cryptolepis</i>
Strawberry, Wild	<i>Fragaria virginiana</i>	Walnut, Black	<i>Juglans nigra</i>
Sumac, Smooth	<i>Rhus glabra</i>	Water Pepper	<i>Polygonum cespitosum</i> var. <i>longisetum</i>
Sumac, Winged	<i>Rhus copallina</i>	Wild Yam	<i>Dioscorea villosa</i>
Sweet Shrub	<i>Calycanthus floridus</i> var. <i>laevigatus</i>	Winterberry, Common	<i>Ilex verticillata</i>
Sweet Shrub, Eastern	<i>Calycanthus floridus</i> var. <i>floridus</i>	Wintergreen, Spotted	<i>Chimaphila maculata</i>
Tea, New Jersey	<i>Ceanothus americanus</i>	Wood Sorrel, Yellow	<i>Oxalis stricta</i>
Thoroughwort, Round-leaf	<i>Eupatorium rotundifolium</i> var. <i>rotundifolium</i>	Yellowroot	<i>Xanthorhiza simplicissima</i>
		Zizia, Bebb's	<i>Zizia trifoliata</i>

FAUNA

The native fauna in the mountainous regions of North Carolina is vast and diverse. Generally, fauna in the park is restricted to smaller mammals, fish, birds, and reptiles that are native to western North Carolina. Mammals include chipmunks, gray squirrels, raccoons, bobcats, fox, and, occasionally, bear (Table 3). The two artificial lakes on park property contain bass and several varieties of sunfish, including bream (Table 4). Amphibian species include frogs, toads, and several types of salamanders. Copperheads, rattlesnakes, black snakes, and garter snakes are present (Table 5), as are other reptiles, such as snapping turtles, terrapins, and several varieties of lizards (NPS

1977a:4). The most common bird species are blue jays, quail, crows, juncos, and robins (Table 6).

Table 3 — Mammals found in park area.

Common Name	Scientific Name
Bat, Red	<i>Lasiurus borealis</i>
Bear, Black	<i>Ursus americanus</i>
Bobcat	<i>Felis rufus</i>
Chipmunk, Eastern	<i>Tamias striatus</i>
Cottontail, Eastern	<i>Sylvilagus floridanus</i>
Fox, Gray	<i>Urocyon cinereoargenteus</i>
Fox, Red	<i>Vulpes vulpes</i>
Muskrat	<i>Ondatra zibethica</i>
Raccoon	<i>Procyon lotor</i>
Squirrel, Eastern Gray	<i>Sciurus carolinensis</i>

Table 4 — Fish found in park lakes.

Common Name	Scientific Name
Bass, Large Mouth	<i>Micropterus salmoides</i>
Bluegill	<i>Lepomis machrochirus</i>
Crappie, Black	<i>Pomoxis nigromaculatus</i>
Mosquitofish	<i>Gambusia affinis</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Sunfish, Red Breast	<i>Lepomis auritus</i>

Table 5 — Snakes found in park area.

Common Name	Scientific Name
Copperhead	<i>Agkistrodon contortrix</i>
Corn Snake	<i>Elaphe guttata</i>
Garter Snake, Common	<i>Thamnophis sirtalis</i>
Racer, Eastern Black	<i>Coluber constrictor</i>
Rat Snake, Common	<i>Elaphe obsoleta</i>
Rattlesnake	<i>Crotalus</i> sp.

Table 6 — Birds found in park area.

Common Name	Scientific Name	Common Name	Scientific Name
Blackbird, Red-winged	<i>Agelaius phoeniceus</i>	Robin, American	<i>Turdus migratorius</i>
Bluebird, Eastern	<i>Sialia sialis</i>	Sparrow, Field	<i>Spizella pusilla</i>
Bobwhite	<i>Colinus virginianus</i>	Sparrow, Song	<i>Melospiza melodia</i>
Chickadee, Carolina	<i>Parus carolinensis</i>	Swallow, Barn	<i>Hirundo rustica</i>
Crow, Common	<i>Corvus brachyrhynchos</i>	Swift, Chimney	<i>Chaetura pelagica</i>
Dove, Mourning	<i>Zenaida macroura</i>	Tanager, Scarlet	<i>Piranga olivacea</i>
Finch, Purple	<i>Carpodacus purpureus</i>	Thrasher, Brown	<i>Toxostoma rufum</i>
Goldfinch, American	<i>Carduelistristis</i>	Titmouse, Tufted	<i>Parus bicolor</i>
Grosbeak, Evening	<i>Coccothraustes vespertinus</i>	Towhee, Rufous-sided	<i>Pipilo erythrophthalmus</i>
Grosbeak, Rose-breasted	<i>Pheucticus ludovicianus</i>	Warbler, Chestnut-sided	<i>Dendroica pensylvanica</i>
Hummingbird, Ruby-throated	<i>Archilochus colubris</i>	Warbler, Tennessee	<i>Vermivora peregrina</i>
Jay, Blue	<i>Cyanocitta cristata</i>	Warbler, Yellow-throated	<i>Dendroica dominica</i>
Junco, Slate-colored	<i>Junco hyemalis</i>	Whip-poor-will	<i>Caprimulgus vociferus</i>
Mockingbird	<i>Mimus polyglottos</i>	Woodpecker, Downy	<i>Picoides pubescens</i>
Nuthatch, White-breasted	<i>Sitta carolinensis</i>	Woodpecker, Pileated	<i>Dryocopus pileatus</i>
Oriole, Baltimore	<i>Icterus galbula</i>	Woodpecker, Red-bellied	<i>Melanerpes carolinus</i>
Owl, Screech	<i>Otus asio</i>	Wren, Carolina	<i>Thryothorus ludovicianus</i>
Quail, Scaled	<i>Callipepla squamata</i>	Wren, House	<i>Troglodytes aedon</i>

Chapter 2

CULTURAL OVERVIEW

NATIVE AMERICAN CULTURES

Since there has been no systematic survey of the park property and few prehistoric artifacts have been found in the park, little attention has been paid to the Native American cultural sequence. Therefore, the information on the prehistoric periods is derived from cultural chronologies of the surrounding areas (Table 7). The following discussion is largely adapted from Coe (1964), Purrington (1983), Keel (1976), Dickens (1976), and Bass (1977). The Paleoindian section is adapted from Anderson (1990) and Anderson et al. (1996).

PALEOINDIAN PERIOD (10,500 – 8000 B.C.)

The term Paleoindian is used to refer to the earliest known inhabitants of the New World. These people are believed to have migrated across the Bering Strait land bridge to North America during the last glacial ice age. Archeological evidence in the Southeast indicates that the Paleoindians were present in the area as early as 10,500 to 8000 B.C. (Anderson 1990). Recent archeological investigations have produced evidence that suggests that Paleoindian peoples were nomadic, egalitarian bands composed of several nuclear or extended families (Anderson 1990).

Table 7 — Suggested Appalachian Summit archeological phases (after Anderson 1990 and Purrington 1983).

Time Period		Phase Name	Date
Paleoindian	Early	Clovis	10,500–9000 B.C.
	Middle	Cumberland	9000–8500 B.C.
	Late	Dalton/Hardaway	8500–8000 B.C.
Archaic	Early	Kirk	8000/7500–6900 B.C.
		LeCroy	6900–6000 B.C.
	Middle	Stanly	6000–5500 B.C.
		Morrow Mountain	5500–4000 B.C.
		Guilford	4000–3000 B.C.
	Late	Savannah River	3000–1000 B.C.
		Otarre	1000–700 B.C.
Woodland	Early	Swannanoa	700–300 B.C.
	Middle	Pigeon	300 B.C. –A.D. 200
		Connestee	A.D. 200–600
	Late	Unnamed	A.D. 600–900/1000
Mississippian	Early	Pisgah	A.D. 1000–1450/1500
	Late	Qualla	A.D. 1450–Removal

Much of the archeological research that has been conducted in the Appalachian Summit region of western North Carolina has lumped the Paleoindian period into one large period with no distinctive subperiods. However, current research into the Paleoindian period in the Southeast has further refined the chronology of this period. The division of the Paleoindian period into three subperiods, referred to as Early Paleoindian, Middle Paleoindian, and Late Paleoindian, is generally based on variations in projectile point types (Anderson et al. 1996). The beginning of the Paleoindian period in the Southeast is marked by the appearance of early fluted projectile points in the archeological record. In the Appalachian region of North Carolina, Clovis-like Paleoindian projectile points have been found in Jackson, Macon, and Henderson Counties, however, none of these points were recovered in situ (Keel 1976:17). Although no Paleoindian artifacts have been found within the boundary of Carl Sandburg Home National Historic Site, Henderson County has yielded one known Paleoindian projectile point. Other surrounding counties, such as Transylvania, Macon, and Jackson Counties, have all produced Clovis-like projectile points (Keel 1976:17).

▪ *Early Paleoindian*

The Early Paleoindian period in the Southeast is associated with the presence of Clovis projectile points. These are relatively large lanceolate points with nearly parallel sides, ground haft margins, slightly concave bases, and single or multiple flutes that rarely extend more than a third of the way up the body (Anderson et al. 1996:9). Additionally, other points characterized as Clovis-like are attributable to the Early Paleoindian period (Figure 6). Some of these Clovis-like point types have been referred to as Cumberland, Ashe, and Madison types (Purrrington 1983:108).

▪ *Middle Paleoindian*

The Middle Paleoindian period in the Southeast is identified by different varieties of projectile points, including smaller fluted points, unfluted lanceolate points, and fluted or unfluted points with broad

blades and constricted haft elements. Middle Paleoindian point types vary from region to region in the Southeast. Some common varieties are Suwannee, Simpson, Clovis variant, and Cumberland types (Anderson et al. 1996:11). The Middle Paleoindian projectile point type most common to the mid-South is the Cumberland type. The Cumberland point type is characterized by Lewis (1954) as being a narrow, deeply fluted, slightly waisted lanceolate with faint ears and a slightly concave base (Anderson et al. 1996:11).

▪ *Late Paleoindian*

The beginning of the Late Paleoindian period is marked by the appearance of Hardaway and Dalton projectile points, sometimes referred to as Hardaway-Dalton. Other related points include Quad, San Patrice, and Beaver Lake types (Anderson et al. 1996:12; Goodyear 1982:390; Justice 1987:35–44). Hardaway-Dalton points have a lanceolate blade outline and a concave base that can be thinned and ground on the lateral and basal margins. Hardaway-Dalton blades have incurvate, straight, or excurvate edges that are usually serrated. In cross-section, Hardaway-Dalton points appear flattened and bi-convex (Anderson et al. 1996:12). Beaver Lake, Quad, and some Dalton points are usually characteristic of a transitional period from the Middle to the Late Paleoindian.

ARCHAIC PERIOD (8000 – 700 B.C.)

The Archaic period in the Southeast is marked by the introduction of a number of new adaptations in technology, subsistence, and settlement strategies. Much like the Paleoindian period, the Archaic period is also temporally divided by archeologists into three subperiods called the Early Archaic, Middle Archaic, and Late Archaic. The introductions of notched and stemmed triangular points, ground and polished stone artifacts, and pottery to a limited extent are some of the cultural developments of the Archaic period in the Southeast (Bense 1994:62). The transition to the Archaic stage also coincides with some major climatic changes. With the retreat of the polar ice sheets, average temperatures began to drop and the aver-

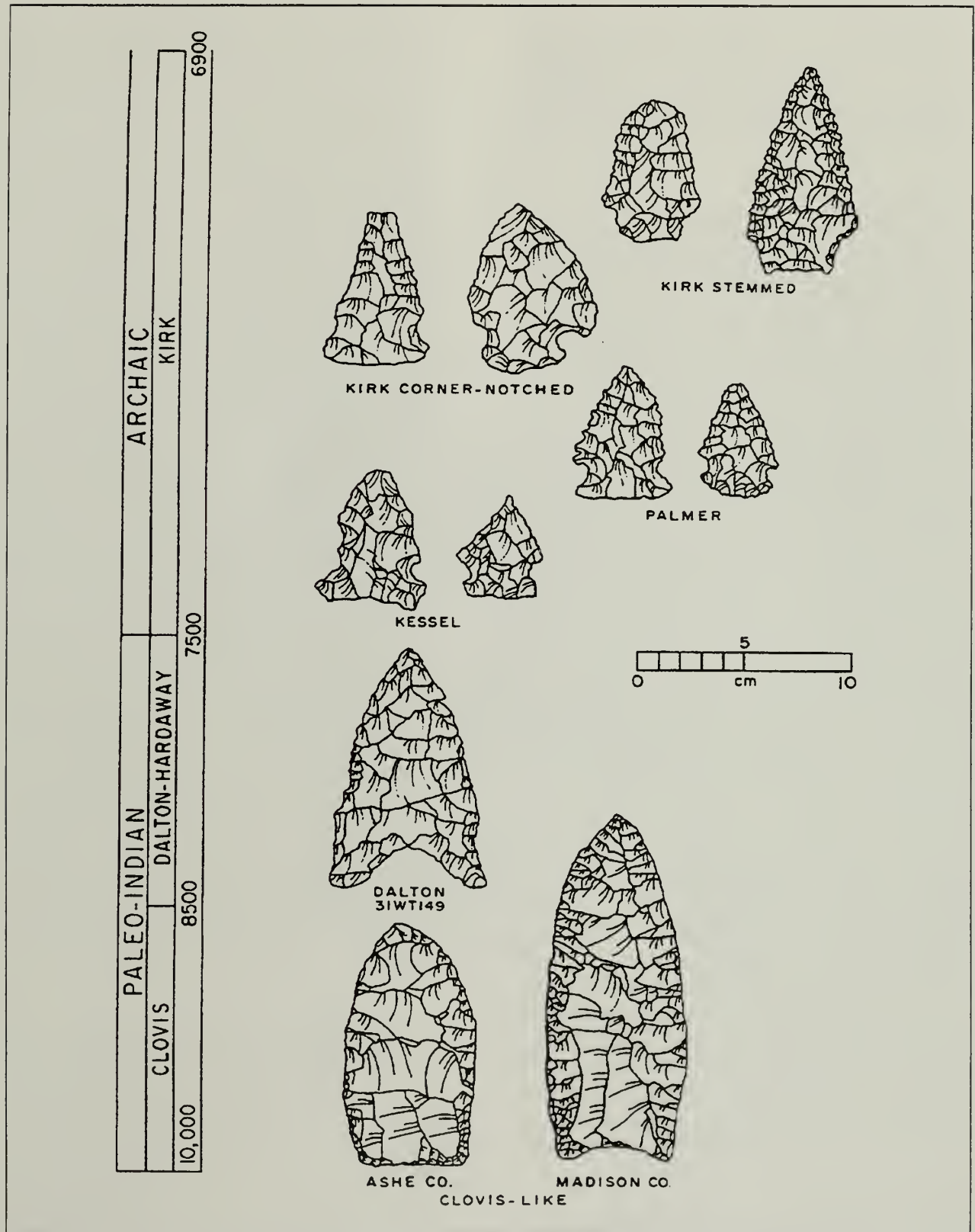


Figure 6 — Paleoindian period and Kirk phase projectile points (adapted from Purrington 1983:106).

age mean sea level began to rise (Bense 1994:62). As a result, a series of major vegetative changes also occurred. This, in turn, caused changes in animal populations. It was during this period of environmental transition that Archaic peoples developed and grew.

▪ *Early Archaic*

In the North Carolina Appalachian Summit region, the Early Archaic period is marked by the introduction of corner-notched and stemmed projectile points, including Palmer and Kirk types. The Kirk phase (8000/7500–6900 B.C.), the first phase of the Early Archaic in this region, has been identified mainly from archeological excavations in the adjacent Piedmont region of North Carolina, since no undisturbed Kirk phase sites have been excavated in the Appalachian Summit. This phase has been identified from excavations by Joffrey Coe (1964) at the Hardaway site (St4) in the Piedmont of North Carolina, and at excavations of sites in the Lower Little Tennessee River Valley, the Ridge and Valley Province, and in the West Virginia mountains (Purrington 1983:111). Evidence from excavated Kirk phase settlements in the Appalachian Summit region suggests that Early Archaic peoples in the region were highly mobile. This is supported by the fact that settlements are located in a variety of habitats, from upland areas to low-lying, main valley areas (Purrington 1983:113).

The next Early Archaic phase in the area is the LeCroy phase (6900 to 6000 B.C.), the beginning of which is marked by the introduction of bifurcate-based projectile points and knives. Types associated with this phase include MacCorkle, St. Albans, LeCroy, and Kanawha. Like the Kirk phase, there has been no stratigraphic recovery of any of these point types in the Appalachian area. However, these types have been found in stratigraphic context in sites on the Lower Little Tennessee River and the Kanawha River in West Virginia (Purrington 1983:120). Generally, LeCroy settlement patterns mimic those of the earlier Kirk phase (Bass 1977).

▪ *Middle Archaic*

The introduction of Stanly projectile points signals the beginning of the Middle Archaic period

in North Carolina's Appalachian region. Stanly projectile points have been recovered in limited quantities in this region. It has been suggested that some points classified as terminal Late Archaic or Early Woodland may, in fact, be Stanly period points. Errors in identification and classification may explain why Stanly points appear less frequently than the earlier LeCroy phase projectile points (Bass 1977:66, 69; Purrington 1983:121).

The next phase of the Middle Archaic in the Appalachian Summit region is the Morrow Mountain phase (5500–4000 B.C.). Projectile points recovered from single component Morrow Mountain sites show a heavy dependence on local raw lithic materials, a pattern noted for many Middle Archaic cultures in the mid-South (Novick 1980; Steen and Braley 1994). Local lithic raw materials in the region include chert, felsite, quartzite, and rhyolite. Stone tools are made from local veins of quartz and quartzite (Purrington 1983:122). Overall, Morrow Mountain settlement patterns remained much like those of the Early Archaic, with wide varieties of habitats being utilized (Bass 1977).

The third and final phase of the Middle Archaic is the Guilford phase, which was defined in the North Carolina Piedmont by Coe (1964:43–44). The Guilford phase (4000–3000 B.C.) is characterized by thick, lanceolate projectile points and knives. The common range of Guilford points in North Carolina is the Piedmont and the Appalachian Summit. Guilford phase settlement patterns appear to follow those of the Morrow Mountain phase, although there may have been an increase in settlement in the valley margins and upland stream bottoms during this time period (Purrington 1983:125).

▪ *Late Archaic*

The Savannah River phase (3000–1000 B.C.) marks the beginning of the Late Archaic period in the Appalachian Summit. Savannah River phase projectile points (Figure 7) are characterized as large, broad-bladed, straight-stemmed projectile points and knives (Purrington 1983:125). Other artifacts of the Late Archaic include bar gorgets, notched net weights, groundstone grooved axes, other large bifaces, and flake scrapers (Keel

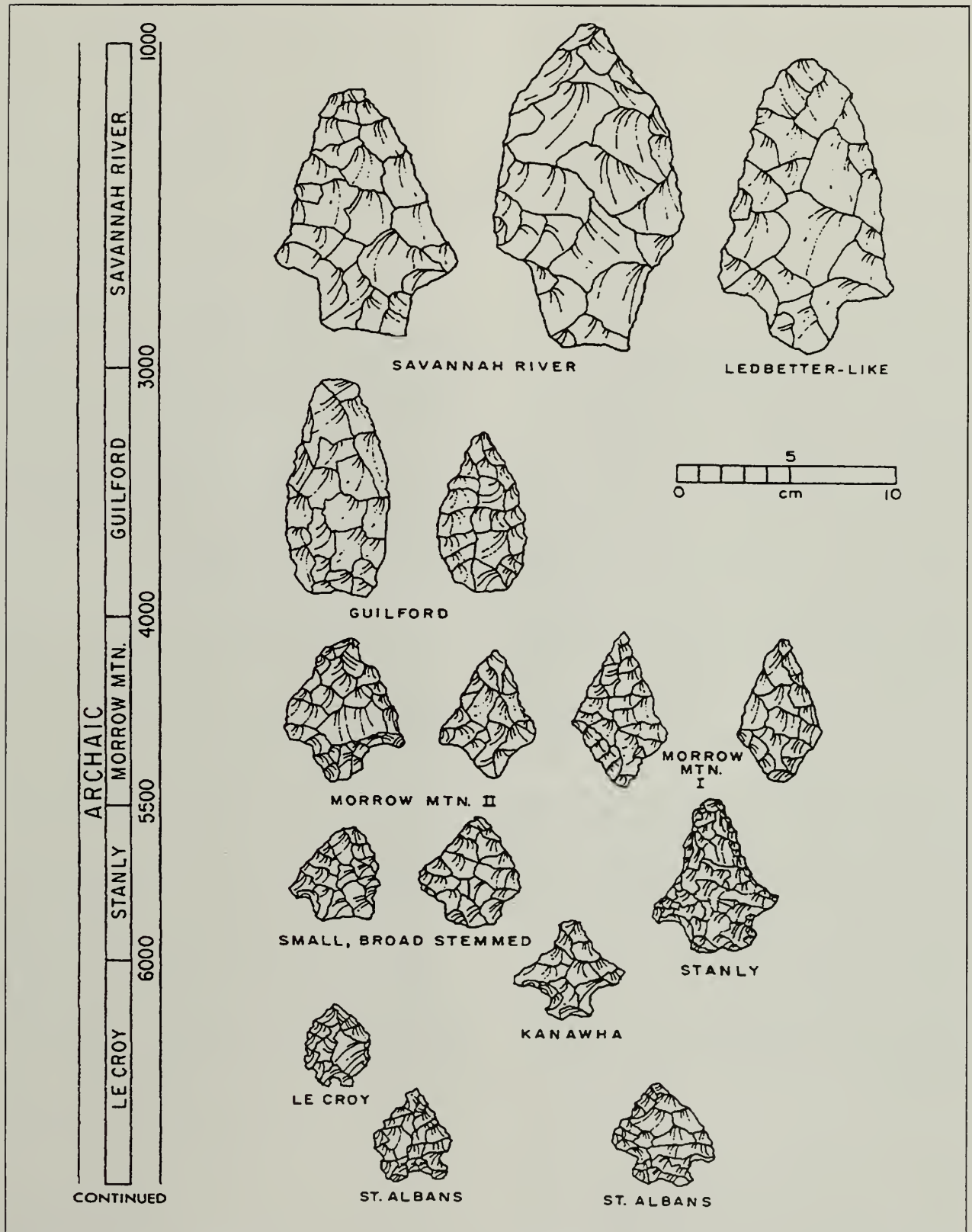


Figure 7 — Archaic period projectile points (Purrrington 1983:105).

1976:125). In the Appalachian Summit region, Savannah River projectile points were usually made of quartzite. Bass (1977:77) has determined that Late Archaic settlements in the Great Smoky Mountains were mainly located in large river valleys. Bass also developed a settlement model for the Late Archaic, which suggests different uses of three geographical areas. He indicates that larger populations would have been located in the floodplain zones, while the upper valley would have been utilized seasonally by smaller groups, and the ridge and gaps regions of the mountains utilized as temporary hunting camps for people staying in the valley areas (Bass 1977:77). Savannah River phase components have been stratigraphically observed at several sites in the Appalachian region, including Warren Wilson (Bn 29), Tuckasegee (Jk 12), and Garden Creek (Hw 2) (Keel 1976:231). The terminal Late Archaic Otarre phase (1000–700 B.C.), defined by Keel (1976), is characterized by a stemmed projectile point or knife that is generally smaller than the Savannah River types (Figure 8). Otarre period sites are found in a wide range of habitats, much like the Savannah River phase settlement pattern (Purrington 1983).

WOODLAND PERIOD (700 B.C. – A.D. 900/1000)

Like the preceding Archaic period, the Woodland period in the Southeast, in general, is characterized by the widespread adoption of pottery and horticulture along with changes in settlement patterns and other technological innovations (Bense 1994). The Woodland period is also a period of widespread adoption of earthen mound construction, wide-reaching trade networks, and the apparent introduction of maize from Mexico. The Woodland period is divided into three subperiods: Early Woodland, Middle Woodland, and Late Woodland.

▪ Early Woodland

The Early Woodland period in the Appalachian region begins with the Swannanoa phase (700–300 B.C.). Purrington (1983:130) states that the beginning of the Swannanoa phase is approxi-

mately 700 B.C. Apparently, during this phase, ceramics were introduced to the Appalachian region. The majority of Swannanoa ceramics have cord-marked or fabric-impressed designs on simple bowls or jar forms (Purrington 1983:131–132). Diagnostic projectile points of the period include Swannanoa stemmed, Plott short stemmed, and Transylvania triangular (Purrington 1983:132). Other artifacts of the Swannanoa phase include bone awls, soapstone vessels, and tubular ceramic pipes (Dickens 1976:11).

In the Southeast, the Early Woodland period is one of increased sedentism ostensibly related to the widespread adoption of horticulture, population growth, and shrinking group territories. However, in the Appalachian Summit, Swannanoa period settlements seem to be a continuation of previous Archaic period subsistence strategies. Swannanoa period sites are located in a broad spectrum of environments, the inhabitants of which utilized a variety of resources (Keel 1976:231).

▪ Middle Woodland

The Middle Woodland in the Appalachian Summit is separated into two phases, the Pigeon and the Connestee. The early Middle Woodland Pigeon phase dates from approximately 200 B.C. to A.D. 100 (Keel 1976:18). It is possible, however, that the Pigeon phase began as early as 300 B.C. and ended as late as A.D. 200 (Purrington 1983:135). Characteristics of the Pigeon phase include quartz-tempered, burnished interior ceramics with bowl, jar, and shouldered jar forms. Surface decoration is usually check stamped or well smoothed. Projectile points common to the Pigeon phase include Garden Creek triangular points (Keel 1976:130–131) and the shallow side-notched Pigeon points (Figure 8) (Keel 1976:127–129). Pigeon phase settlements appear to have been concentrated on floodplain areas (Bass 1977:81). Purrington suggests that this increased use of valley bottoms may have represented the emergence of, or an increased use of, horticulture (Purrington 1983:136).

Another characteristic of Middle Woodland cultures in the Appalachian Summit is an apparent interaction with outside cultures in what is often referred to as the Hopewellian Interaction

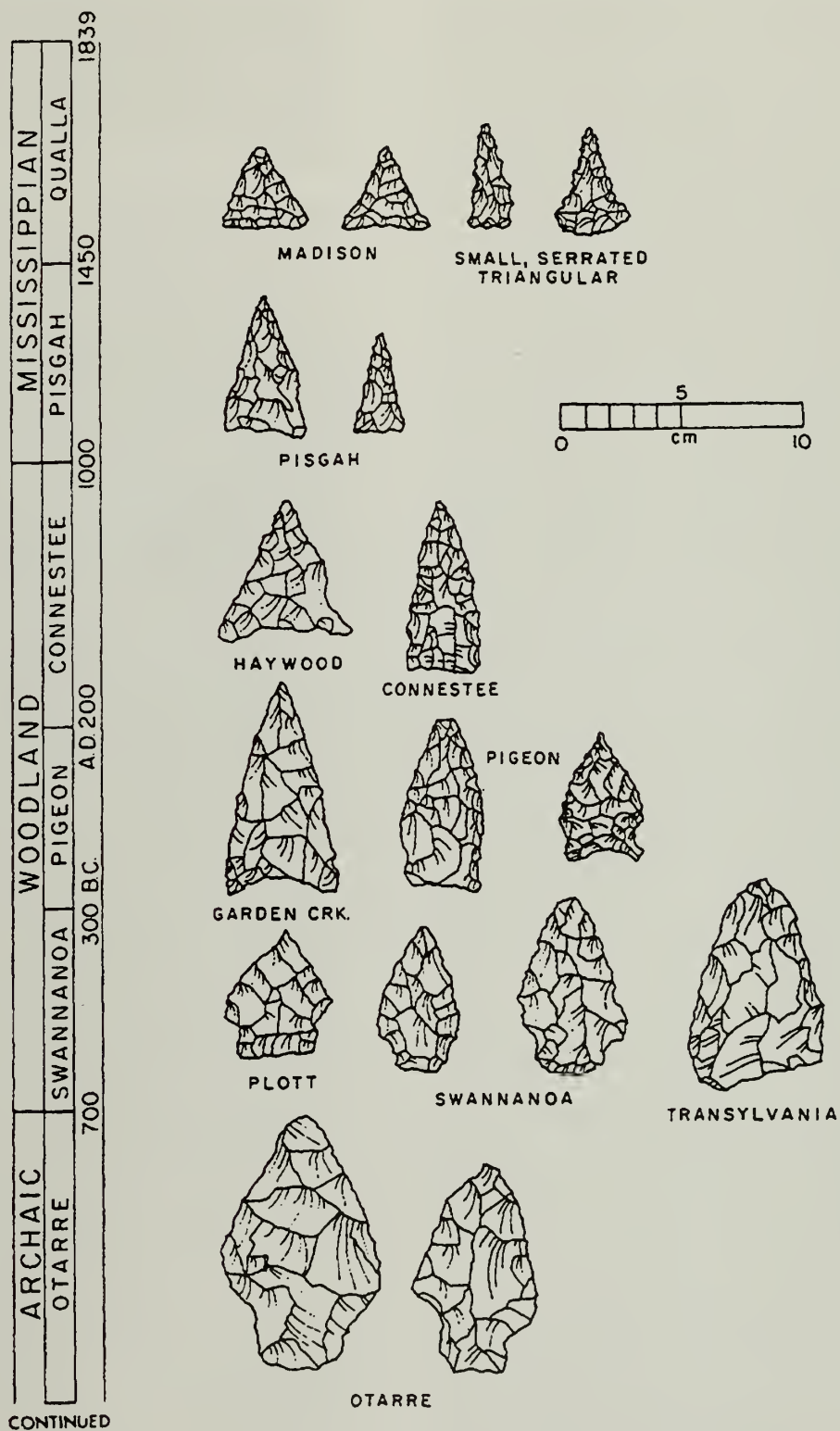


Figure 8 — Woodland and Mississippian period projectile points (adapted from Purrington 1983:104).

Sphere. This interaction is manifested in ceramic styles, which appear to be influenced by Piedmont Georgia (Keel 1976:229) and Tennessee Candy Creek ceramics (Purrington 1983:137). Keel (1976:227) related the Pigeon phase ceramics to Deptford Cross-Stamped ceramics found on the Georgia coast and to Norwood Simple-Stamped ceramics from the northwest coast of Florida.

The Connestee phase is dated from approximately A.D. 200 to 600 (Purrington 1983:137) although it might have begun as early as 100 B.C. (Keel 1976). The late Middle Woodland Connestee in the Appalachian Summit region is characterized by thin, sand-tempered ceramics with brushed, simple-stamped, or plain exteriors. Vessel forms include jars with constricting necks, flaring rims, and punctated, notched, or incised lips. Projectile points of the Connestee phase are the Connestee triangular and the Haywood triangular types. Keel has identified a number of characteristics common to the Connestee phase. He notes that Connestee phase sites appear to be sedentary settlements located in the floodplains with specialized use of the uplands (Keel 1976:226). This phase is also identified as part of the Hopewellian Ceremonial Complex. The influences of the Hopewellian cultures of the central Ohio Valley are apparent in the zoomorphic and anthropomorphic designs, as well as in the rocker stamping on ceramics and cross-hatching on rims that appear during the Connestee phase (Keel 1976:118–123, 134–144).

Recently, radiocarbon dates from the Appalachian Summit area have been obtained for the Middle Woodland Connestee phase. Initial results seem to suggest that the Middle Woodland Connestee phase ceramics may have persisted into the Late Woodland period, possibly lasting until approximately A.D. 1000 (Robinson et al. 1994:14).

▪ *Late Woodland*

The Late Woodland period (A.D. 600–1000) in the Appalachian Summit is not very well understood (Purrington 1983:142). Therefore, no specific phase for this time period has been defined. Keel (1976:239) states that around A.D. 600, the Connestee phase possibly evolved into a transitional phase that later became the early Mississippian

pian Pisgah phase. Some diagnostic characteristics that have been suggested for this time are pentagonal and isosceles triangular points that appear to be transitional forms between Connestee triangular and Pisgah triangular points (Purrington 1983:142).

MISSISSIPPIAN PERIOD (A.D. 1000 – 1450/1500)

The Mississippian stage in the Southeast (A.D. 1000–1500) refers to the period in which prehistoric cultures reached their highest levels of cultural complexity. Mississippian period adaptations included changes in prehistoric subsistence, such as the transition to intensive maize agriculture. Technology and settlement patterns also changed with the establishment of permanent towns, while increased sociopolitical organization resulted in the establishment of chiefdom level societies (Bense 1994:184).

The early Mississippian phase in the Appalachian region is referred to as the Pisgah phase. Purrington (1983:142) delineates the Pisgah phase as having occurred from A.D. 1000 to 1450. Keel (1976:218) and Dickens (1976:13) state that this phase occurred from A.D. 1000 to 1550. Common Pisgah phase artifacts include Pisgah projectile points, which are small triangular, isosceles-shaped arrow points, shell artifacts, and ceramics with rectilinear complicated stamping, fabric impression, and cord marking. Ceramics of the Pisgah phase are generally tempered with fine to coarse sand and, occasionally, large chunks of quartz and/or soapstone (Purrington 1983:143). Purrington states that the densest concentrations of Pisgah communities were located in spacious areas like the intermontane basins of Asheville, Pigeon, and Hendersonville (Purrington 1983:150). Settlement patterns during the Pisgah phase consisted of centrally located ceremonial centers with platform mounds and, occasionally, earth lodges. Additionally, smaller satellite farming communities were dispersed around the ceremonial center. Villages were surrounded by log palisades and composed of rectangular structures with wall posts set in trenches (Keel 1976:218). The Pisgah phase is the first period that is firmly attributed to the Chero-

kee culture in the Appalachian highlands (Purington 1983:144–145). Pisgah phase subsistence was based on a combination of hunting and gathering and horticulture. Keel (1976:218) wrote that Dickens correlated the Pisgah phase to the Dallas phase in eastern Tennessee.

PROTOHISTORIC PERIOD/ HISTORIC PERIOD

The Late Mississippian period gave rise to a cultural phase known as the Qualla phase (A.D. 1450–1838), which is generally divided into two periods: Early Qualla and Late Qualla. The Early Qualla phase (A.D. 1450–1650) covers the end of the late Mississippian and the early Protohistoric periods. The Late Qualla phase (A.D. 1650–1838) refers to the historic period through the period of Cherokee removal in 1838 and 1839 (Dickens 1976:14–15).

Qualla phase projectile points are small, triangular arrow points. Ceramics of the Qualla phase are characterized by complicated stamping and bold incising (Egloff 1967; Keel 1976:214–215). Qualla phase ceramics are considered manifestations of the Lamar style of pottery (Williams and Shapiro 1990:4). As such, Qualla ceramics are considered part of the South Appalachian Mississippian culture, which Ferguson (1971) defined as a subset of the larger Mississippian culture area. South Appalachian Mississippian cultures are distinguished from those of the larger region by the use of complicated stamped designs on the exterior of pottery. Typically, Qualla sites appear more frequently in stream valleys, like the Keowee and the Little Tennessee (Purington 1983:150).

THE HISTORY OF THE FLAT ROCK AREA

The area known as Flat Rock in Henderson County, North Carolina, began as a trading post in the early Historic era. Ethnographic accounts indicate that traders from the South followed the old “Saluda Path,” an early trading path, to an area with a great flat rock. The large flat rock outcrop was apparently used as a meeting place between the traders

and the Cherokee, the Native American culture of the area (Bailey 1980:10). Other ethnographic accounts by traders indicate that the flat rock outcrop was also used by the Cherokee for ceremonial purposes (Patton 1961:1).

After the American Revolution, the area experienced an influx of settlers from Ireland, England, and Scotland. The “Flat Rock Tract” was so designated in 1807. Subsequently, a number of planters and statesmen began to arrive, buying much of the land from the early pioneers in the area. A number of the new inhabitants of Flat Rock came from the state of South Carolina, particularly Charleston. Flat Rock became known as the “Little Charleston of the Mountains” since it was primarily used as a summer retreat by wealthy South Carolinians. These wealthy men from Charleston built large homes that primarily functioned as summer retreats for their families (Bailey 1980:10).

MEMMINGER AND ROCK HILL

Christopher Gustavus Memminger was one of the wealthy Charlestonians that came to Flat Rock to build a home. He purchased large parcels of land from former residents of Flat Rock to create his Rock Hill estate. He called his new estate “Rock Hill” because of a large granite outcrop on the property, which was part of the flat rock that gave the community its name. Although Memminger’s main home was still in Charleston, he used Rock Hill as a retreat from his responsibilities as a lawyer and political statesman.

Memminger’s Rock Hill estate was created through the successive purchase of adjoining lands (Figure 9). The first piece of property, a ten-acre tract of land, was bought on October 27, 1838, from George Summey, a neighboring landowner. This property was bisected by Memminger Creek and contained an area that would later become part of Front Lake (Walker et al. 1980). Memminger’s second purchase was a 143.5-acre tract that was bought from Charles Baring on November 27, 1838. The north part of this property was bounded by Crab Creek Road (Hart 1993:13). The tract contained the remainder of the Front Lake property

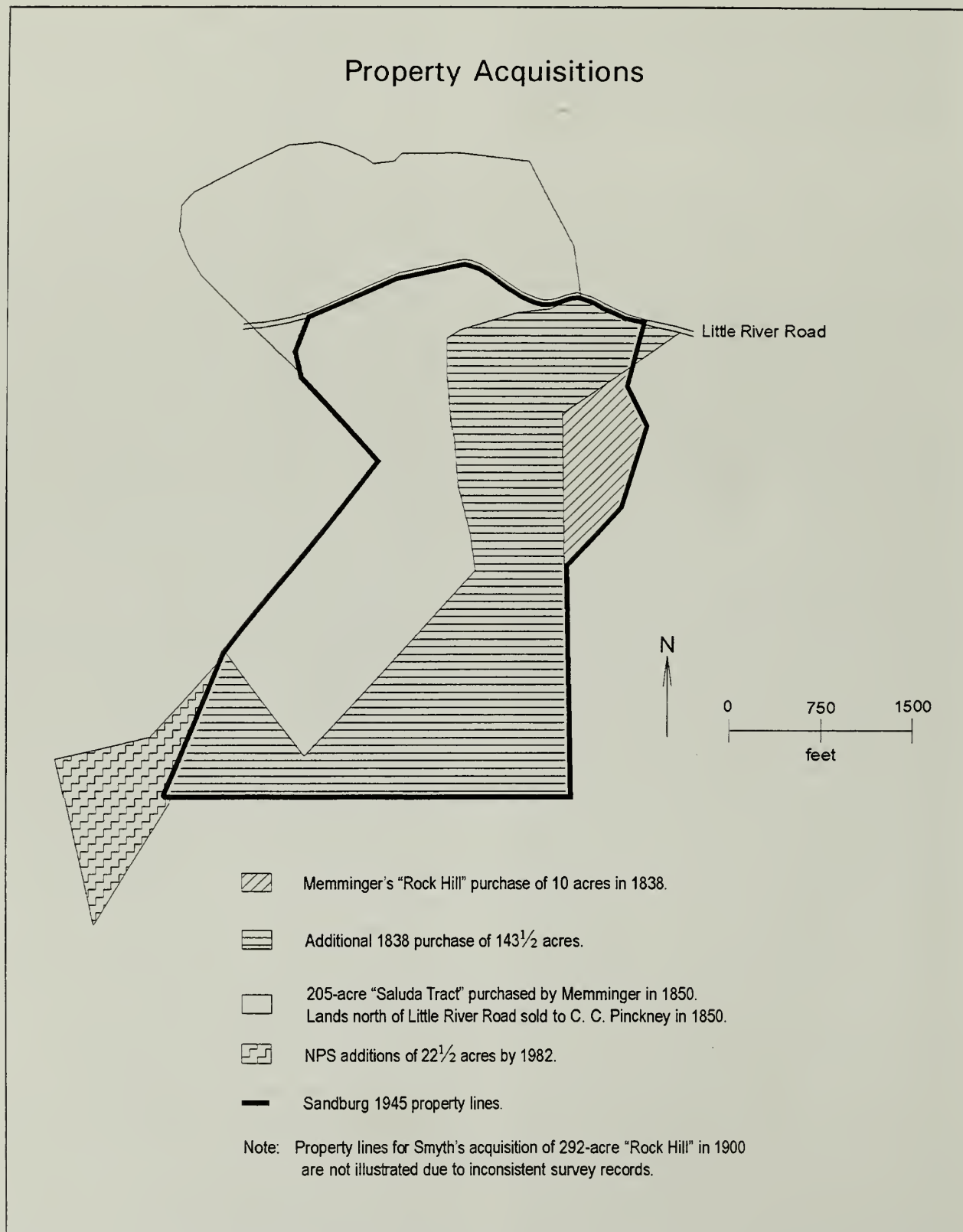


Figure 9 — Memminger, Smyth, and NPS land purchases.

and the site on which the Main House was later built. On March 12, 1842, Memminger bought the Buck House tract, a fifteen-and-a-half-acre tract that was located immediately west of the lands Memminger had already acquired. This tract included the sites of the vegetable garden, stable lot, and possibly the structure now known as the Buck House (Hart 1993:13). Finally, in 1850, Memminger purchased a 205-acre tract of land called Saluda Cottages from A. S. Willington and created the road known as Little River Road. Later that year he sold all of the land north of the road to Rev. C. C. Pinckney (Memminger 1954:12). The Saluda Cottages property included the spring on Glassy Mountain, which previous residents of the property had used to pipe water to the residential area (Memminger 1954:12). Memminger diverted this water supply to the Main House and had a fountain installed in the front of the house.

The Civil War brought a time of strife to the Flat Rock area. Memminger was a member of the South Carolina Convention when it passed the Ordinance of Secession in 1860. In 1861, the Provincial Congress met in Montgomery, Alabama, and adopted a provisional constitution. The Congress chose Jefferson Davis as President, Alexander Stephens as Vice President, and Christopher Memminger as Secretary of the Treasury of the Confederacy (Grimshaw 1970:8–9). Memminger returned to his home at Rock Hill when George H. Trenholm succeeded him in July 1864. Because Memminger was no longer a member of the Executive Cabinet of the Confederacy at the end of the war, he escaped imprisonment.

During the years following the Civil War, Flat Rock was a place of lawlessness, disorder, and economic depression. There were frequent raids on homes by a group of army deserters, and many residents sold their homes/property to Northern speculators (Bailey 1980:25; Grimshaw 1970:10). Memminger remained at Rock Hill until 1880, when he appointed Allard Memminger and Edward Memminger as administrators and Casper Chisolm as trustee of his estate. At this time, Memminger returned to Charleston where he remained until his death at age 85. As he had requested, his body was returned to Flat Rock to be

buried next to his wife in the graveyard at St. John-in-the-Wilderness.

There are a number of structures at Carl Sandburg Home NHS associated with the Memminger period. Structures either attributed to Memminger or known to exist when Memminger owned the estate include the Main House, the kitchen, two servants quarters, a privy, a stable, a carriage house, a corn crib, a wagon house, the ice house, a shed room, and the smoke house (Figure 10). An early drawing relating to the installation of the fountain in front of the house depicts some of the locations of these structures.

The carriage house, wagon house, and corn crib no longer exist. Although there is no information on where they were located, it is likely that a subsequent owner, Smyth, later built his barn and other structures on the same sites where the Memminger structures once stood (Hart 1993).

COLONEL WILLIAM GREGG

After Memminger's death, the Rock Hill estate was briefly owned by Colonel William Gregg of South Carolina. Gregg, a member of the former Confederacy, apparently owned the Rock Hill estate for approximately ten years, although no records exist that indicate that he or his family ever occupied the house or made any changes to the property or structures (Bailey 1980:32). Gregg, like his father, was actively involved in the South Carolina textile industry. Therefore, he most likely maintained his residence in Charleston and apparently used the property only as a summer retreat (Hellmich 1982:7). There are no structures on nor modifications to the property that are attributed to the Gregg period.

ELLISON ADGER SMYTH AND CONNEMARA

By 1900, the Flat Rock area was beginning to recover from the Civil War. The new century brought growth and prosperity from new business enterprises. The next owner of the Rock Hill property was Captain Ellison Adger Smyth of Charleston, South Carolina. The land reminded Smyth of his native Ireland, so, on purchasing Rock Hill, he

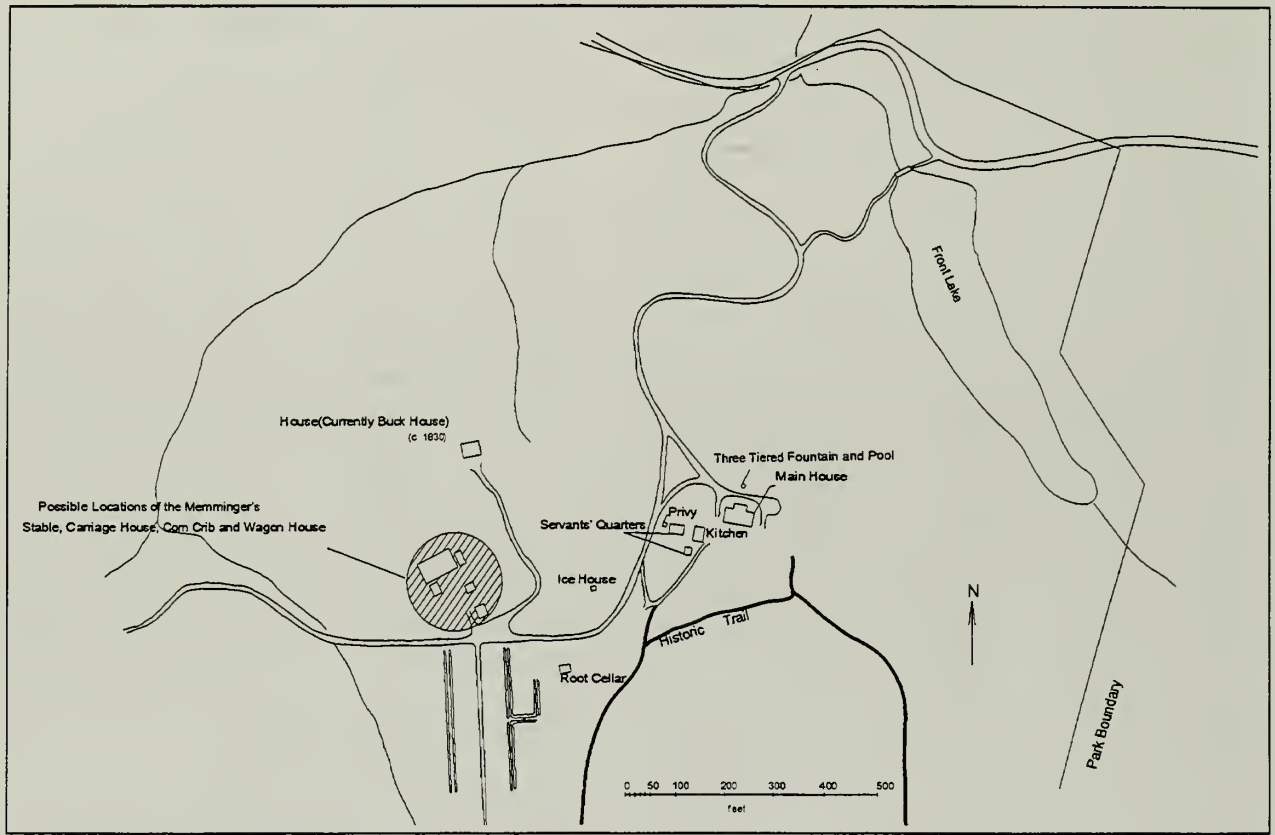


Figure 10 — Memminger period base map.

renamed it Connemara after a district on the west coast of Ireland across an inlet from Galway (Grimshaw 1970:20). Smyth and his family took over in 1900 and used the property as a seasonal residence until 1925, when Smyth sold his Greenville home and made Connemara his permanent residence (Bailey 1980:38). Smyth resided at Connemara until his death on August 3, 1942.

After the Civil War, Smyth had become involved in the reconstruction of the South's industries. He was influenced by William Gregg Sr., the father of Colonel William Gregg, the previous owner of Rock Hill. William Gregg Sr. was a wealthy owner of a textile mill that made cloth from cotton grown in the South. Before and during the Civil War, he was a proponent of using poor white tenant class workers instead of slaves as laborers at his Graniteville Mill in South Carolina, which was built around 1845. Although his choice of a labor force was criticized, his mill was successful (Grimshaw 1970:12). In 1881, follow-

ing Gregg's example, Smyth and F. J. Pelzer built a cotton mill in the South Carolina Piedmont.

After Smyth retired to Connemara and was in permanent residence there (1925–1942), he made a number of significant changes to the landscape and structures. In the pasture north of the barn complex, he built a second lake, called Side Lake, as a water supply for animals, and then stocked it with largemouth bass and perch (Bailey 1980:40). He also built a golf course adjacent to the lake. Smyth stocked the farm with hogs, cattle, sheep, ducks, and chickens, and laid out bordered flower gardens. In addition, he extensively remodeled the Main House (Grimshaw 1970:20). He converted the structure previously used as a nurse's house into a wash house; added two rooms to the Buck House, so it could hold a family of farm workers; moved the Tenant House (Boys' House or Chauffeur's Quarters) to the back of the garden and then to its present location; and built a structure called the Woodshed (Figure 11) (Brown 1976).

CARL SANDBURG

In 1945, Lillian “Paula” Sandburg, Carl Sandburg’s wife, left their Michigan home in search of a new residence that would be better suited for Carl to write and for her to raise dairy goats. On seeing Connemara, she believed she found the perfect home. Paula asked Carl to visit the property. After seeing it, he agreed that the residence would be ideal for their needs. On October 18, 1945, the property was deeded to the Sandburgs.

Carl Sandburg spent many productive years at Connemara, during which he wrote his epic novel *Remembrance Rock* (1948), his Pulitzer Prize winning *Complete Poems* (1951), and his autobi-

ography *Always the Young Strangers* (1953). The Main House and the property were perfectly suited to Carl Sandburg’s easy, informal lifestyle. The Main House was where he kept his library of over 10,000 volumes. He also used the structure called the Swedish House to store his other publications and research notes.

Numerous changes were made to the landscape and structures to meet the needs of Paula Sandburg’s goat herd and other agricultural needs (Figure 12). The Servant House of the Memminger period, which was subsequently the Nurse’s Quarters and the Wash House in the Smyth period, became the Chicken House. The structure that Smyth used initially as a wash house and later enlarged

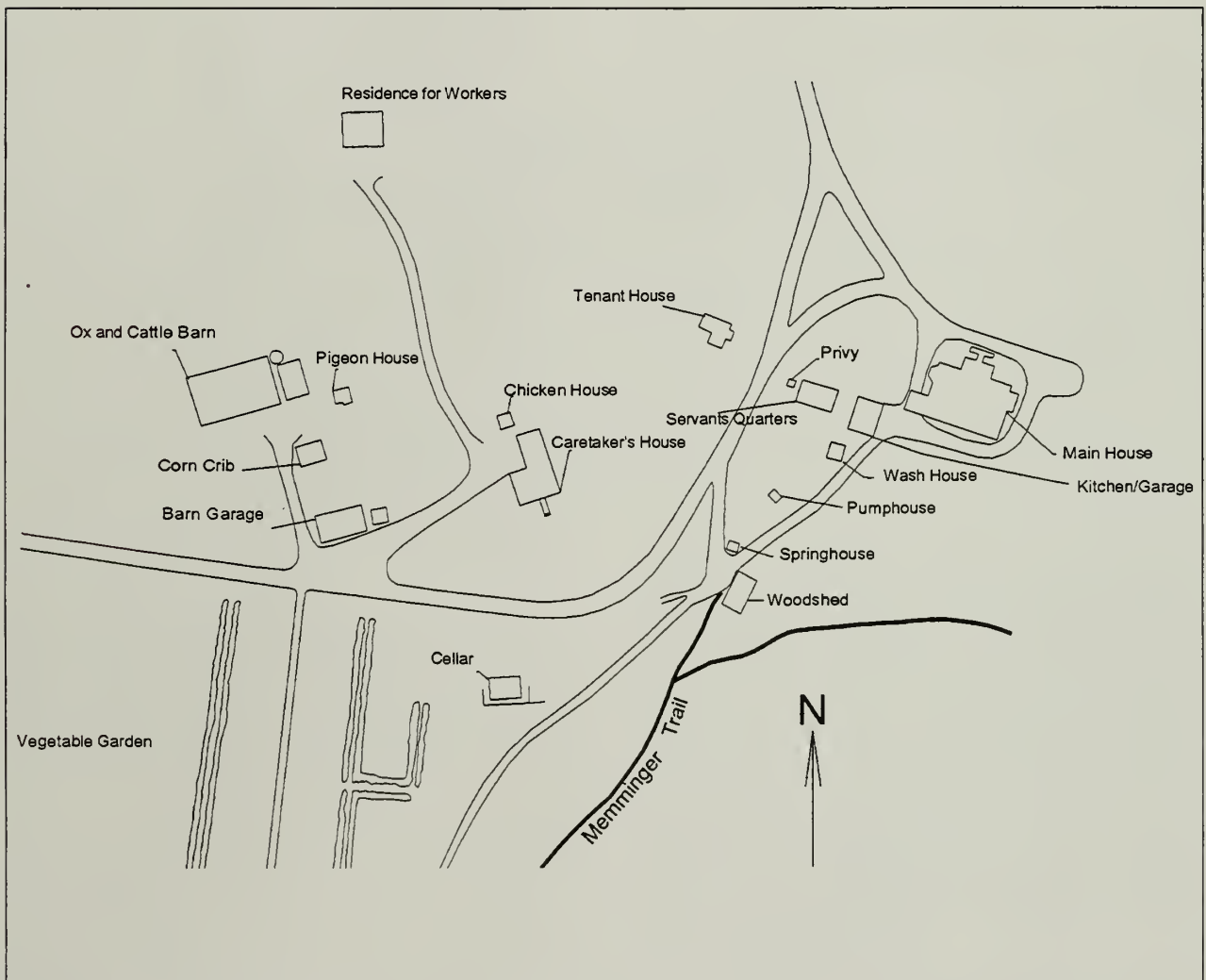


Figure 11 — Smyth period base map.

to be a farm worker's house, became the Buck House. The Smyth's Boys' House, which later became the Chauffeur's Quarters, became the Tenant House where Sandburg's farm employees occasionally resided. Also, the detached kitchen of the Memminger period was remodeled into a Family Garage (Figure 13).

The Sandburgs also changed some of the natural settings on the property. For example, they gave permission for the Little River Road to be widened and straightened. This greatly affected the northern boundary of the property because it re-

routed the portion of the road that was closest to the Front Lake Dam so that it followed the north-east property line and closely paralleled the long abandoned Crab Creek Road (NPS 1981:17).

The Sandburgs also removed the portion of the Ice House that was exposed above ground and the bridge across the Front Lake Dam, both of which had significantly deteriorated. The Sandburgs lived and worked at Connemara until Carl Sandburg's death on July 22, 1967. Following his death, the property was suggested as a National Historic Site.

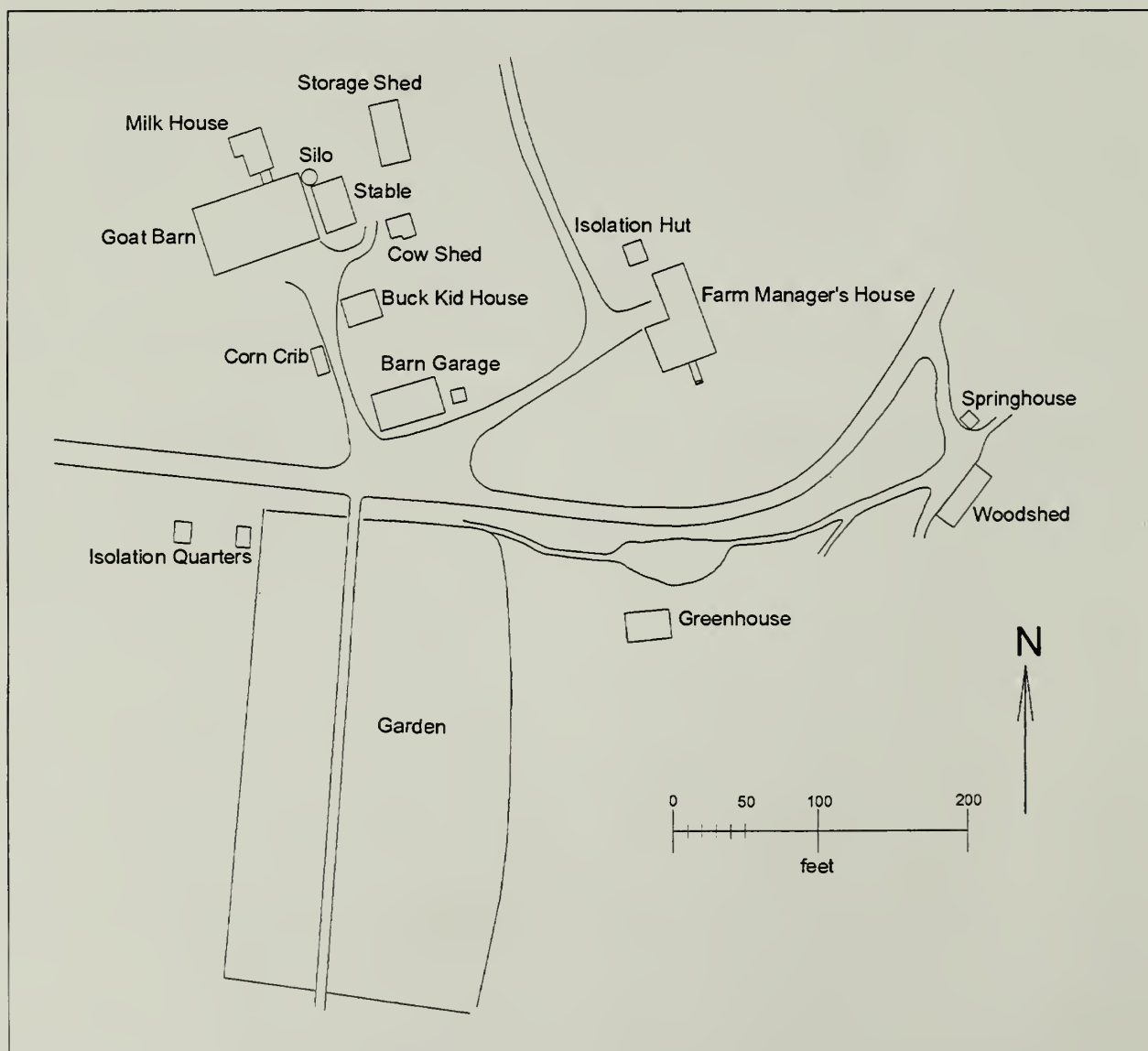


Figure 12 — Sandburg farm area structures.

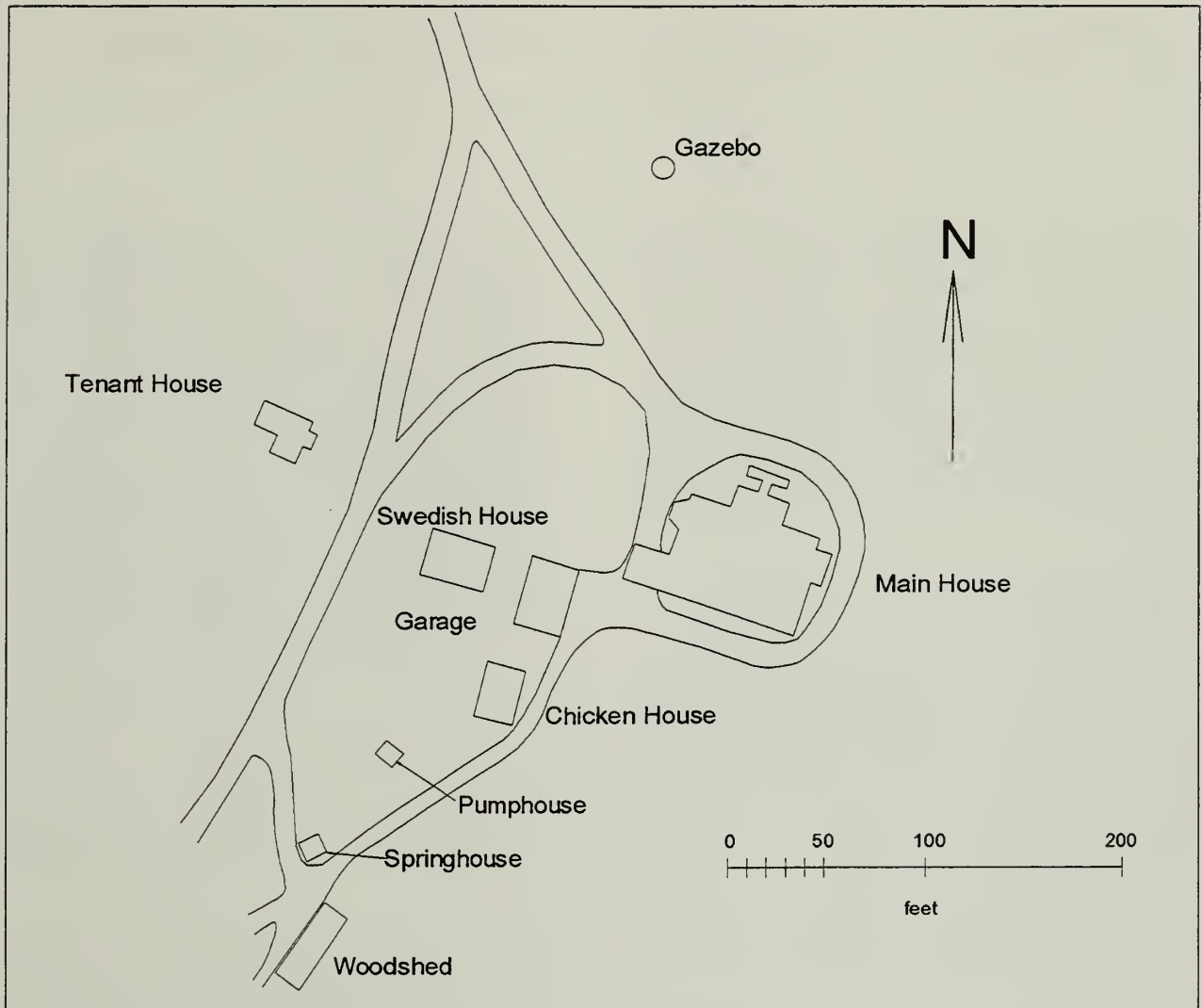


Figure 13 — Sandburg residence area structures.

NATIONAL PARK SERVICE

When the National Park Service took over Conne-mara, the goal was to preserve the general character of the property as it was when the Sandburgs occupied it. However, some maintenance concerns had to be addressed. The site was dedicated on October 27, 1972, and the park opened for visitors on May 11, 1974. In 1974, in preparation for the opening, the Park Service began to photo document all the cultural elements of the Sandburg property. This project was completed in 1975. The park

also performed some routine maintenance, including cleaning both dams, which were overgrown with weeds and vegetation. The only major work was conducted in 1976, when park maintenance built a forty-five-foot wooden bridge over the Front Lake Dam Spillway. This replica of the original bridge gave access to the Main House from the visitor parking area, which is located across the road from the Flat Rock Theater. At the same time this work was completed, the workers also repaired some of the east wing wall of the Front Lake Dam Spillway (NPS 1981:18).

Chapter 3

OVERVIEW OF PREVIOUS ARCHEOLOGICAL RESEARCH

A total of six archeological projects have been conducted at Carl Sandburg Home NHS. All of the excavations were Section 106 projects undertaken because of proposed maintenance and development within the park. This overview summarizes the projects by principal investigator(s) in chronological order. More detailed information on archeological work conducted at specific sites is provided in *Chapter 4, Description of Archeological Sites*.

JOHN T. DORWIN, 1975

Archeological testing was conducted under contract with the National Park Service by Dr. John T. Dorwin of Western Carolina University from

April 19 to May 3, 1975. Dorwin, assisted by James J. Shrive, conducted archeological testing at four historic structures within Carl Sandburg Home NHS. The areas tested were the Springhouse, the Tenant House, the Farm Manager's House, and the Buck House. Archeological testing at the Springhouse consisted of one one-meter-square excavation placed directly left of the entrance to the structure (Figure 14). A one-meter-square test excavation was placed near the Tenant House (Figure 15), and four one-meter-square test units were placed around the Farm Manager's House (Figure 16). Archeological testing at the Buck House con-

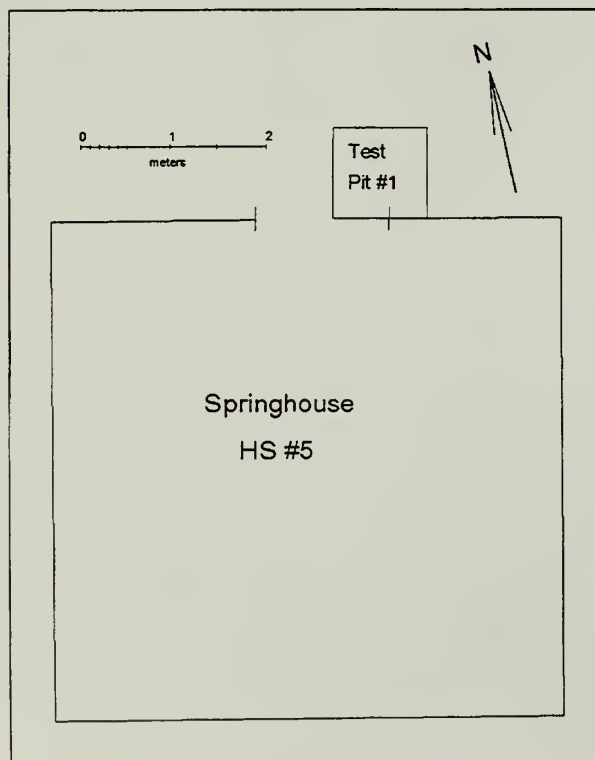


Figure 14 — Dorwin's Springhouse excavations.

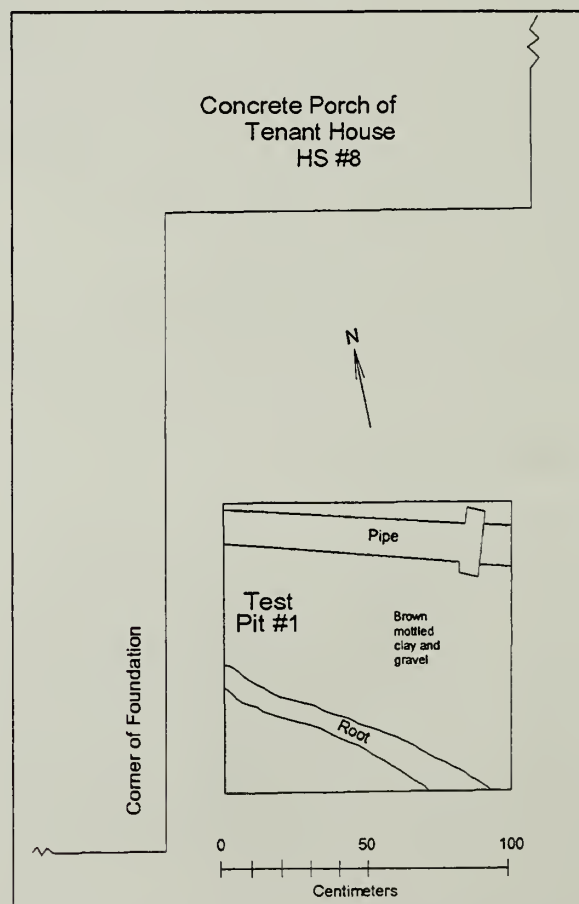


Figure 15 — Dorwin's Tenant House excavations.

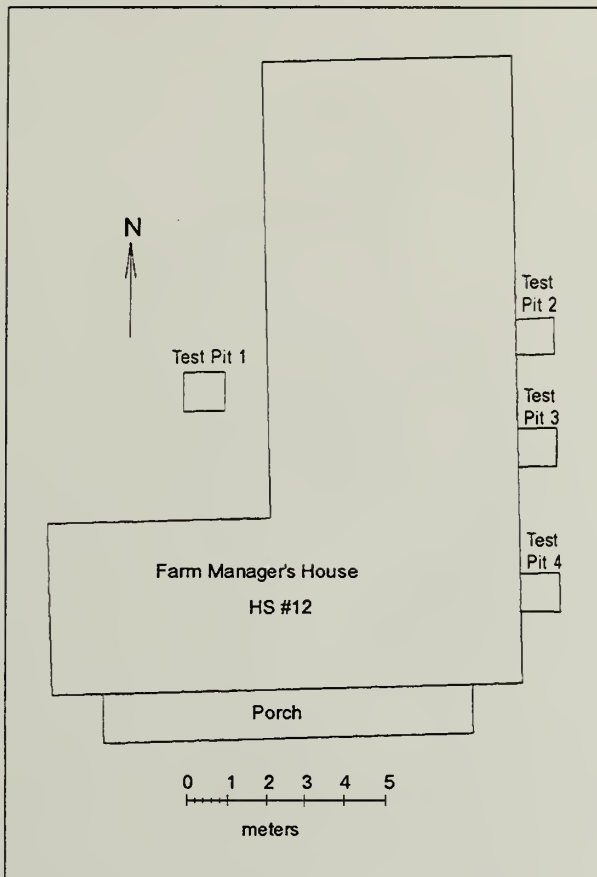


Figure 16 — Dorwin's Farm Manager's House excavations.

sisted of two one-by-two-meter test excavations (Figure 17). Larger excavations were used to test this structure because the Buck House was considered to be one of the original structures on the property (Dorwin and Shrive 1975).

JOHN W. WALKER, 1976

Testing was conducted at Carl Sandburg Home NHS by John W. Walker from January 6 to February 10, 1976. Walker directed the project and Steven Shephard assisted.

Extensive archeological reconnaissance testing was conducted at the Buck House because the proposed installation of a drainage system would severely disturb the soil adjacent to the structure and thus destroy any archeological evidence it might contain. All excavations were done manu-

ally using shovels, picks, and trowels, and all dirt was screened using quarter-inch mesh. Excavations at the Buck House consisted of a series of two-foot-wide trenches placed along the interior and exterior walls of the foundation (Figure 18).

Excavations at the Woodshed were conducted in preparation for the proposed repair to the foundation and for the installation of a drainage tile. Six trenches were dug at this location on the exterior and interior of the structure.

Additional archeological investigations were conducted to test possible alternate areas of construction for a proposed parking area/visitor contact station, residential area, maintenance area, and administrative area (Figure 19). Walker stated the following:

It was decided that the most effective method for locating sites would be a non-exclusive surface survey supplemented with subsurface sampling. The sampling scheme selected was systematic sampling with 2-by-2-foot units which were placed at 100 foot intervals (or, rather, as near to that as topography and vegetation would allow). Additional test units were excavated around areas of artifact concentration in order to delimit site boundaries. A total of 87 units were excavated within nine alternative locations. (Walker et al. 1980:53)

PARKING AREA AND VISITOR CONTACT STATION

One of the objectives during Walker's January-February 1976 survey was to test alternative areas for a proposed parking lot. A total of four alternative areas were tested. The proposed parking and visitor contact station locations were designated Area A (Figures 20 and 21).

▪ Alternative Area A-1

There were thirteen two-by-two-foot test units excavated in the alternative location A-1. Unit S106W298 produced an artifact concentration that was assigned a site designation of NPS-CASS-51. All of the other test units were negative. Three nails were recovered in an old abandoned roadbed adjacent to units S198W298 and S219W350.

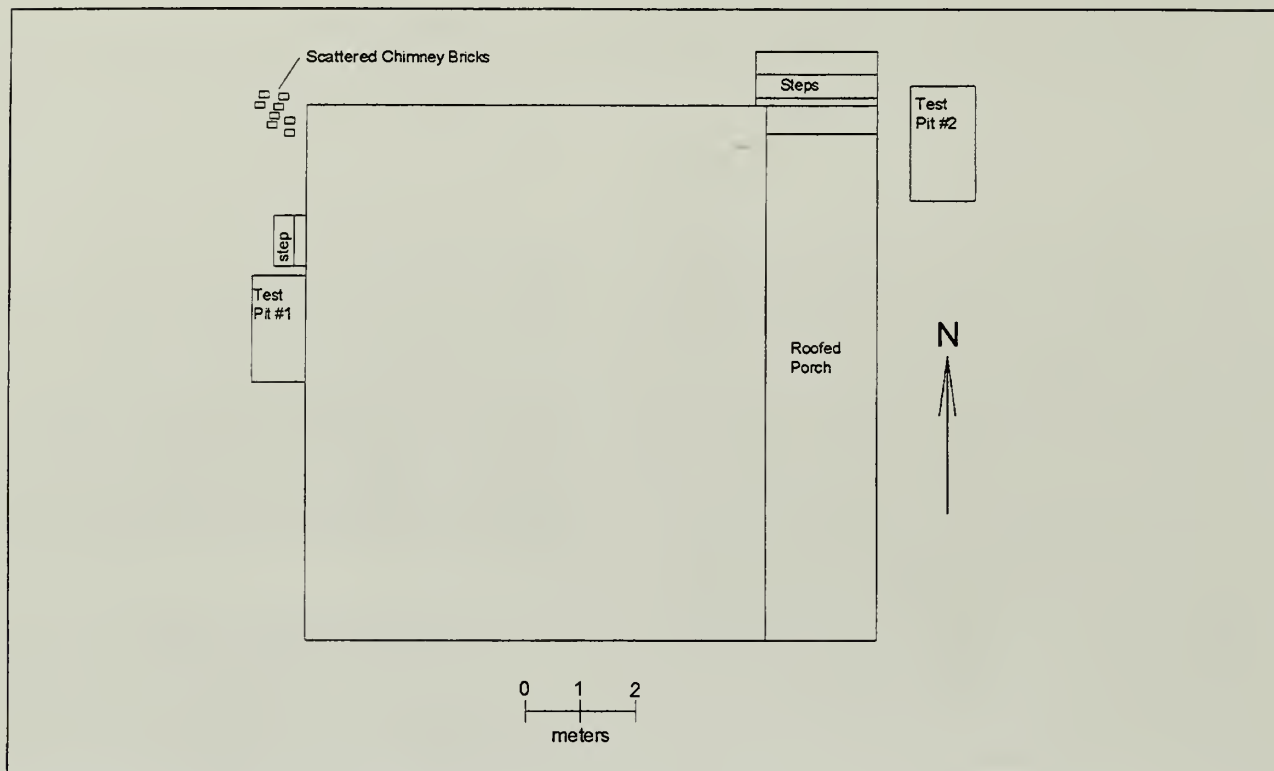


Figure 17 — Dorwin's Buck House excavations.

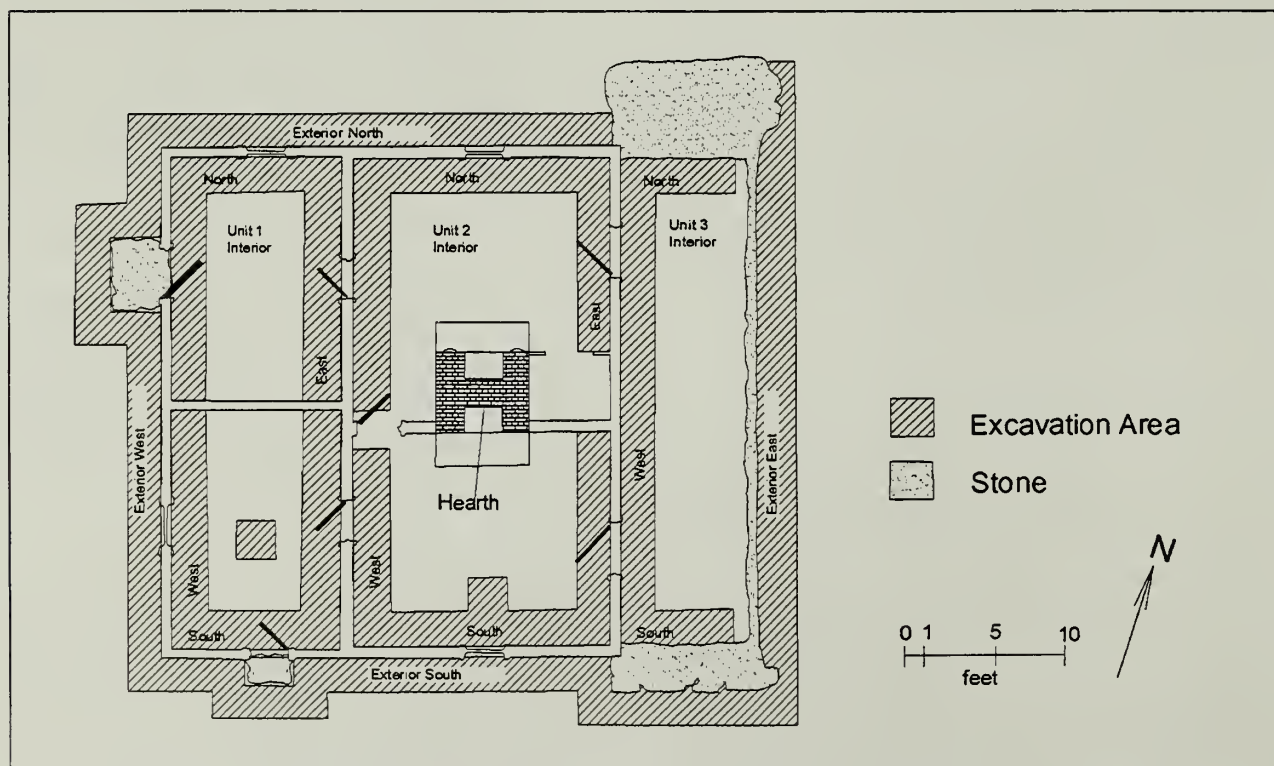


Figure 18 — Walker's Buck House excavations.

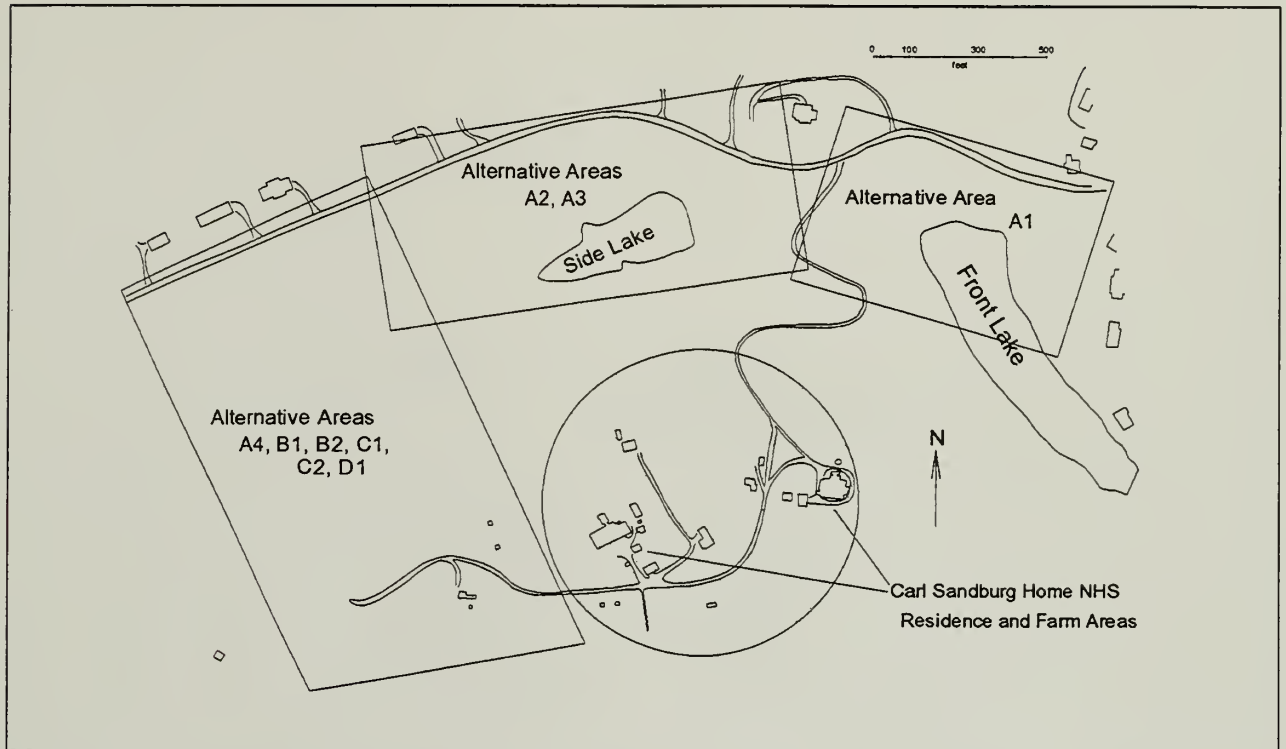


Figure 19 — Alternative areas of investigation in 1976.

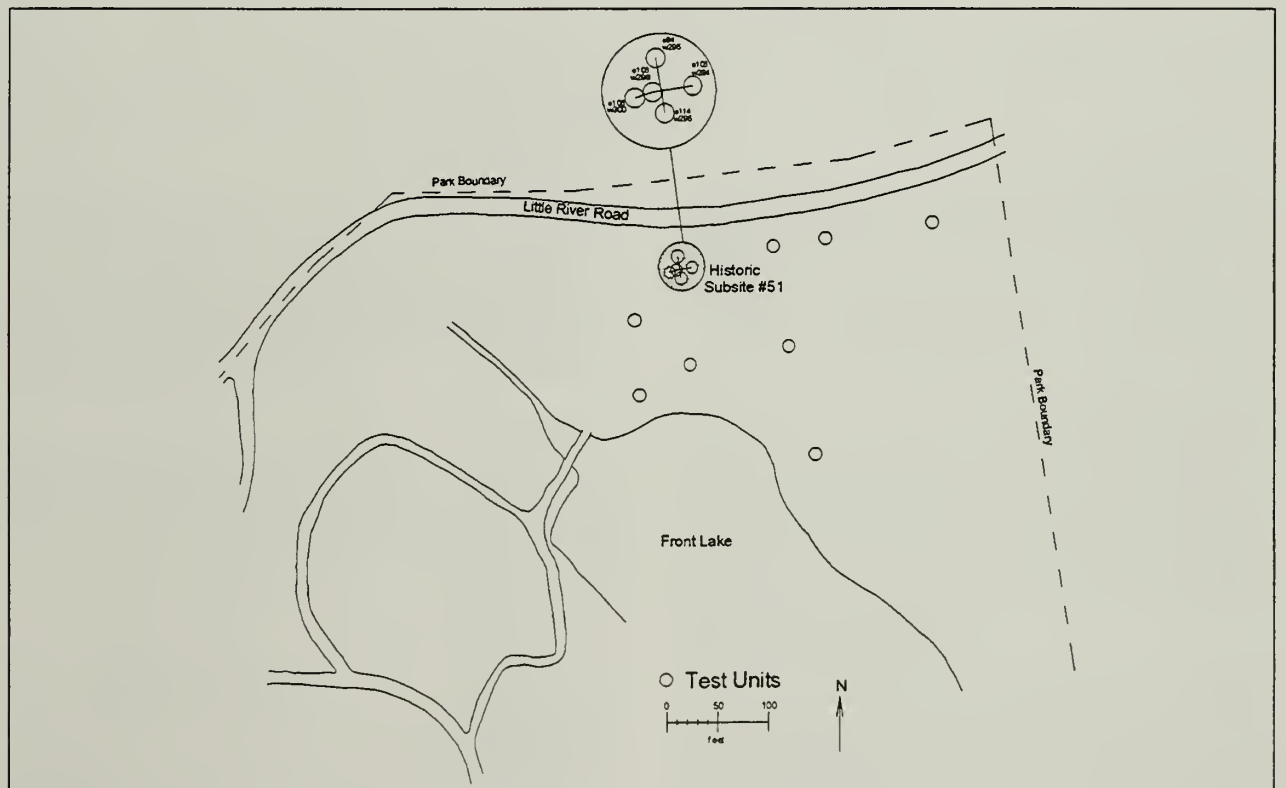


Figure 20 — Archeological tests in area A-1.

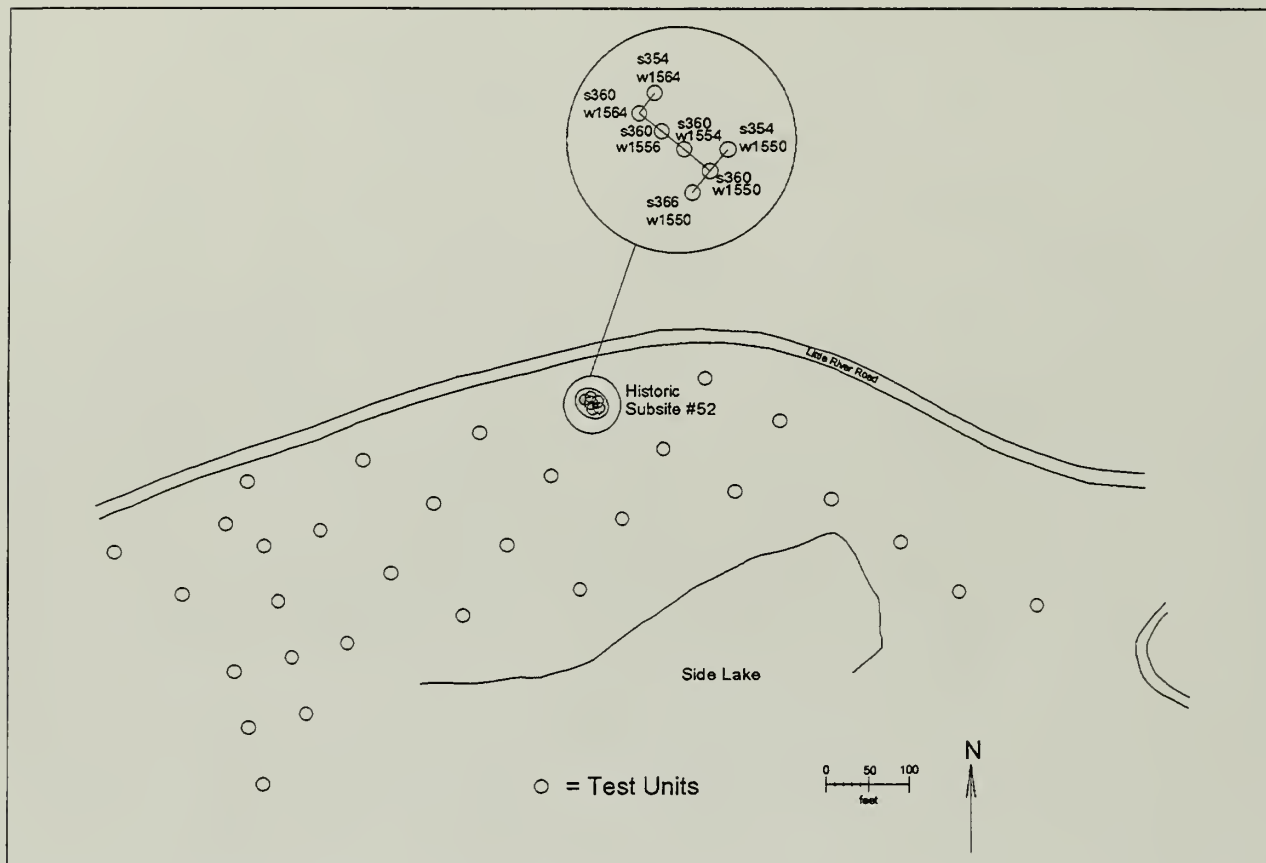


Figure 21 — Archeological tests in alternative areas A-2 and A-3.

▪ **Alternative Area A-2**

There were sixteen two-by-two-foot units excavated at alternative location A-2. Unit S360W1550 (site designation NPS-CASS-52) was the only unit to produce a concentration of historic artifacts. Isolated artifacts recovered from the other units included two historic sherds and one cut nail.

▪ **Alternative Area A-3**

Twenty units were excavated at alternative area A-3. Unit S1111W1850 produced one glass bottle fragment, but all the other units were negative. Based on the archeological survey and testing of the area, no archeological sites were designated.

▪ **Alternative Area A-4**

Eighteen two-by-two-foot units were excavated at alternative area A-4. No artifacts were recovered from any of the units, and no sites were designated in the area.

RESIDENTIAL AREA

During the 1976 field season, two areas were investigated for the proposed development of a residential area. Survey and subsurface testing were conducted at these areas designated B-1 and B-2 (Figure 22).

▪ **Alternative Area B-1**

Two two-by-two-foot test units were excavated in alternative location B-1. No artifacts were found, nor were any sites designated in the area.

▪ **Alternative Area B-2**

Six two-by-two-foot test units were excavated at alternative location B-2. A historic artifact concentration was defined from artifacts recovered in three out of the six units. The concentration was assigned the site number NPS-CASS-53.

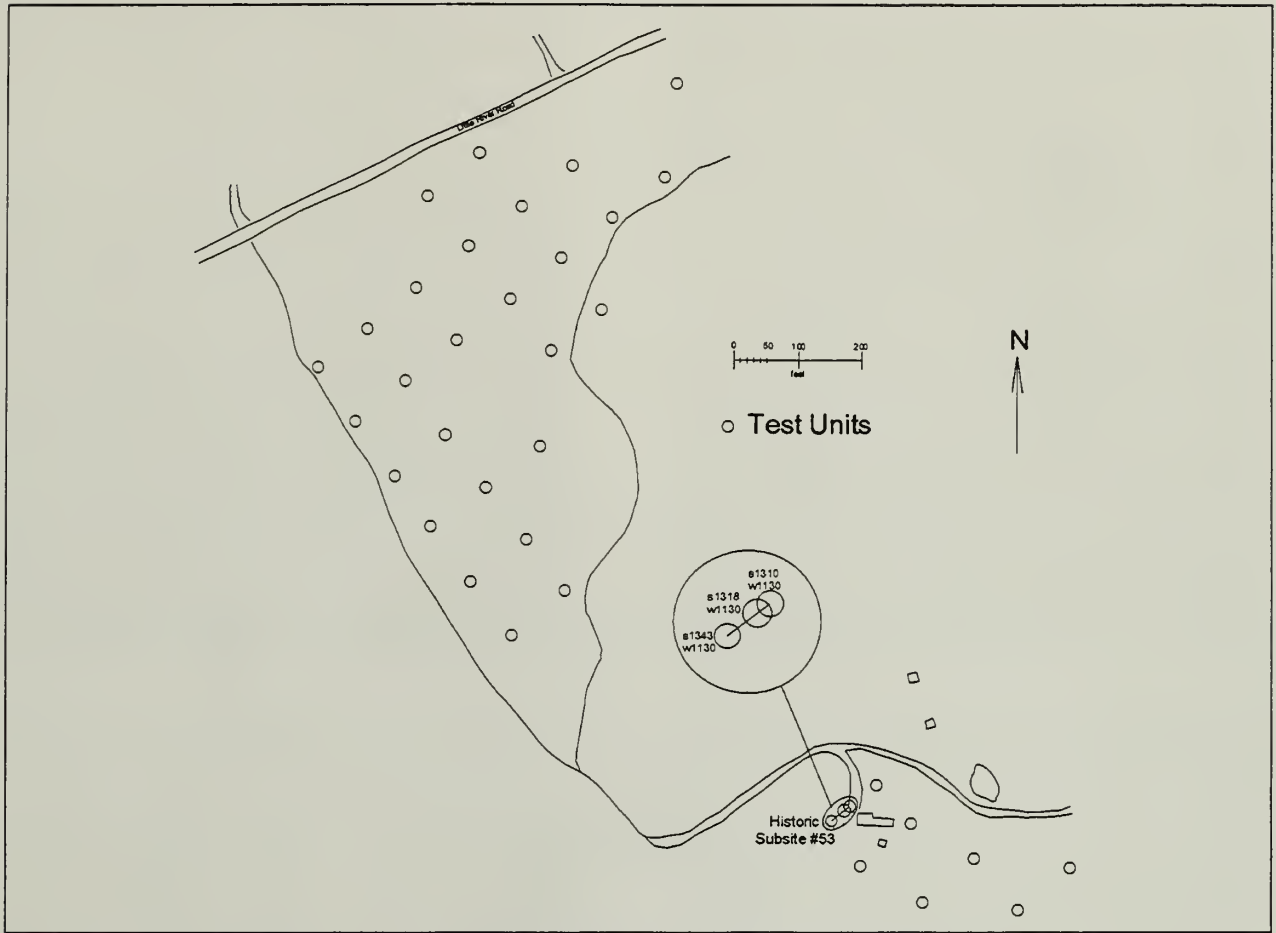


Figure 22 — Archeological tests in alternative areas A-4, B-1, B-2, C-1, C-2, and D-1.

MAINTENANCE AREA

Two alternative areas, designated C-1 and C-2, were tested for the proposed development of a maintenance area during the 1976 January and February field season.

▪ *Alternative Area C-1*

Seven two-by-two-foot test units were excavated in alternative area C-1. All of the test units were negative. No archeological sites were discovered during the survey.

▪ *Alternative Area C-2*

Four two-by-two-foot test units were excavated in alternative area C-2. Only unit S119W1314 produced an artifact, a blue transfer-printed ironstone fragment. Since all the other units tested negative

for the presence of cultural material, no archeological site designations were assigned in the area.

ADMINISTRATIVE AREA

Four two-by-two-foot test units were placed at alternative area D-1, the one proposed location for the development of the administrative area. Tested during the 1976 field season, no artifacts were recovered, therefore, no sites were designated.

**JOHN W. WALKER/
STEVEN SHEPHARD, 1976**

Excavations were conducted between November 10 and 27, 1976, by John W. Walker and Steven Shephard at the Swedish House, the Chicken/Wash

House, the Tenant House, the Farm Manager's House, and sections west and northwest of the barn. The Swedish House (Figure 23) and Chicken/Wash House (Figure 24) excavations were conducted prior to maintenance repairs and the installation of drainage systems. The Section 106 statement for the installation of the drainage systems also called for a survey of the Greenhouse structure. Following an inspection by the superintendent and the chief of maintenance at the park, it was decided that a drainage system around the Greenhouse was not necessary; therefore, no archeological work was conducted there (Shephard 1980b:85). Archeological tests at the Farm Manager's House and Tenant House were conducted in response to the proposed installation of an oil tank. Testing was also conducted between the Farm Manager's House and the Barn Garage prior to the installation of an electric cable line. Archeological test-

ing at the Goat Barn was prompted by a septic tank installation.

BURIED ELECTRIC LINE SURVEY

Archeological testing was conducted in the area between the Farm Manager's House and the Barn Garage because a previously aboveground electric cable was scheduled to be buried. The proposed electric line would cross a road and continue up a washed out slope into a goat yard. The line was to be laid out in a trench approximately one foot wide by one foot deep according to the chief of maintenance at the park. Excavation consisted of three fifty-centimeter-square test pits that were set up on a transit line aligned at an eighty-three-degree angle with the west wall of the Farm Manager's House. The southeast stakes of the three test pits were placed at the following distances west

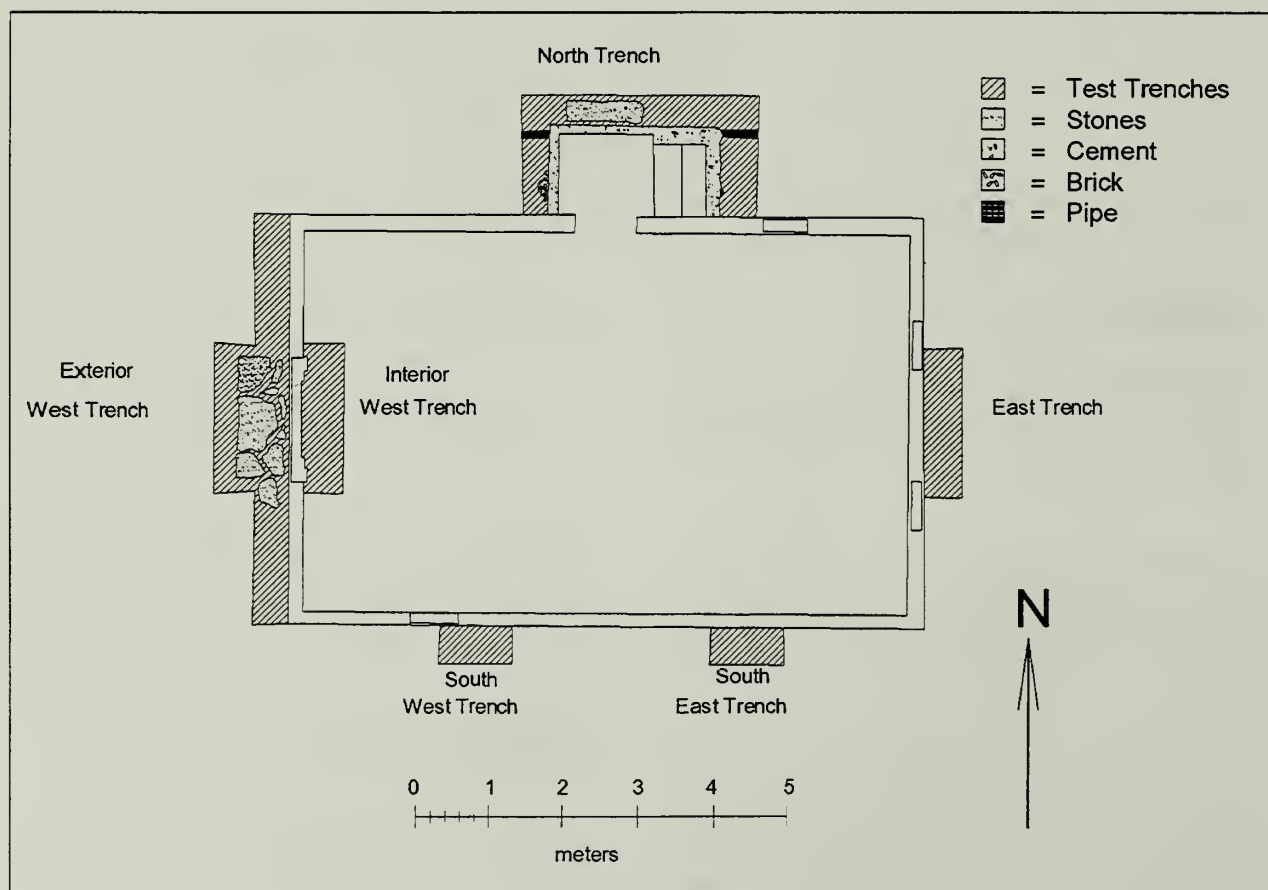


Figure 23 — Swedish House excavations conducted by Walker and Shephard in 1976.

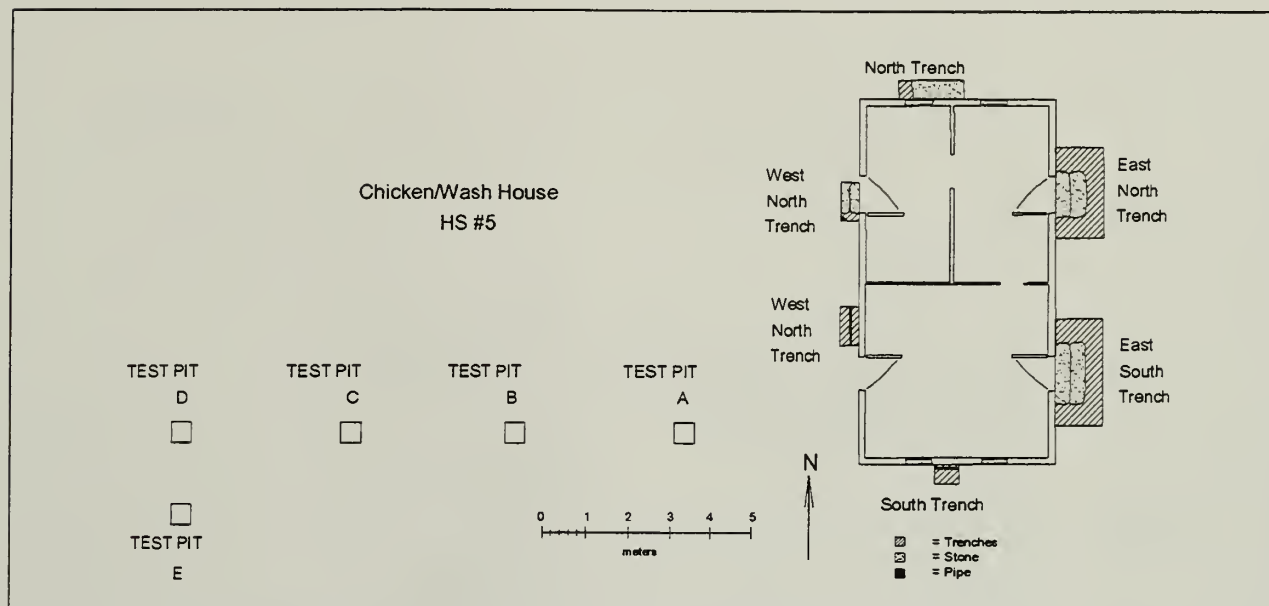


Figure 24 — Chicken/Wash House excavations conducted by Walker and Shephard in 1976.

of the datum point: Test Pit 1, seven meters; Test Pit 2, thirty meters; and Test Pit 3, fifty-one meters.

Test Pit 1 was excavated to a depth of fifty centimeters below ground surface when a strata of orange-tan soil was reached. A trash pit of modern artifacts with evidence of burning was discovered in the northwest corner of the excavation. Test Pit 2 was excavated to sterile soil at a depth of forty centimeters below ground surface. Test Pit 3 contained disturbed stratigraphy resulting from an iron water pipe, which was discovered at eighteen centimeters below ground surface. This excavation was discontinued when sterile soil was encountered at a depth of twenty-eight centimeters below ground surface (Shephard 1980b:102–103).

JOHN W. WALKER/DENNIS FINCH, 1979

In response to the proposed stabilization of nine historic structures at the Carl Sandburg Home NHS, archeological excavations were conducted by SEAC between April 16 and May 25, 1979. John W. Walker and Dennis Finch conducted test excavations around extant building footings to determine the nature and extent of the archeological resources around the nine historic buildings. The structures investigated were the Main House, Fam-

ily Garage, Isolation Quarters, Barn Garage, Buck Kid Quarters, Goat Barn, Milk House, Horse Barn, and Cow Shed. A total of twenty-two excavation units were dug during the project. Five test units were placed adjacent to the exterior north, east, west, and south sides of the Main House foundation. Seven units designated Trenches 1 through 7 were excavated in the cellar of the Family Garage structure (Figure 25). Two two-by-two-foot units were excavated on the exterior north and west walls of the Isolation Quarters. Similarly, two two-by-two-foot units were excavated on the exterior north and east walls of the Barn Garage. One two-by-four-foot unit was excavated adjacent to the south wall of the Buck Kid Quarters. A total of four units were excavated at the Goat Barn. Three of these units were excavated on the exterior, two of which were adjacent to the north foundation, one to the west foundation. The fourth excavation unit, a three-by-four-foot unit, was placed in the interior of the structure. Excavations at the Milk House consisted of two two-by-four-foot units on the north and west sides of the structure. Two two-by-four-foot units were excavated at the Horse Barn, and two two-by-four-foot units were excavated along the exterior north and west walls of the Cow Shed. Excavation units were laid out and excavated in feet and tenths of feet. Pit locations

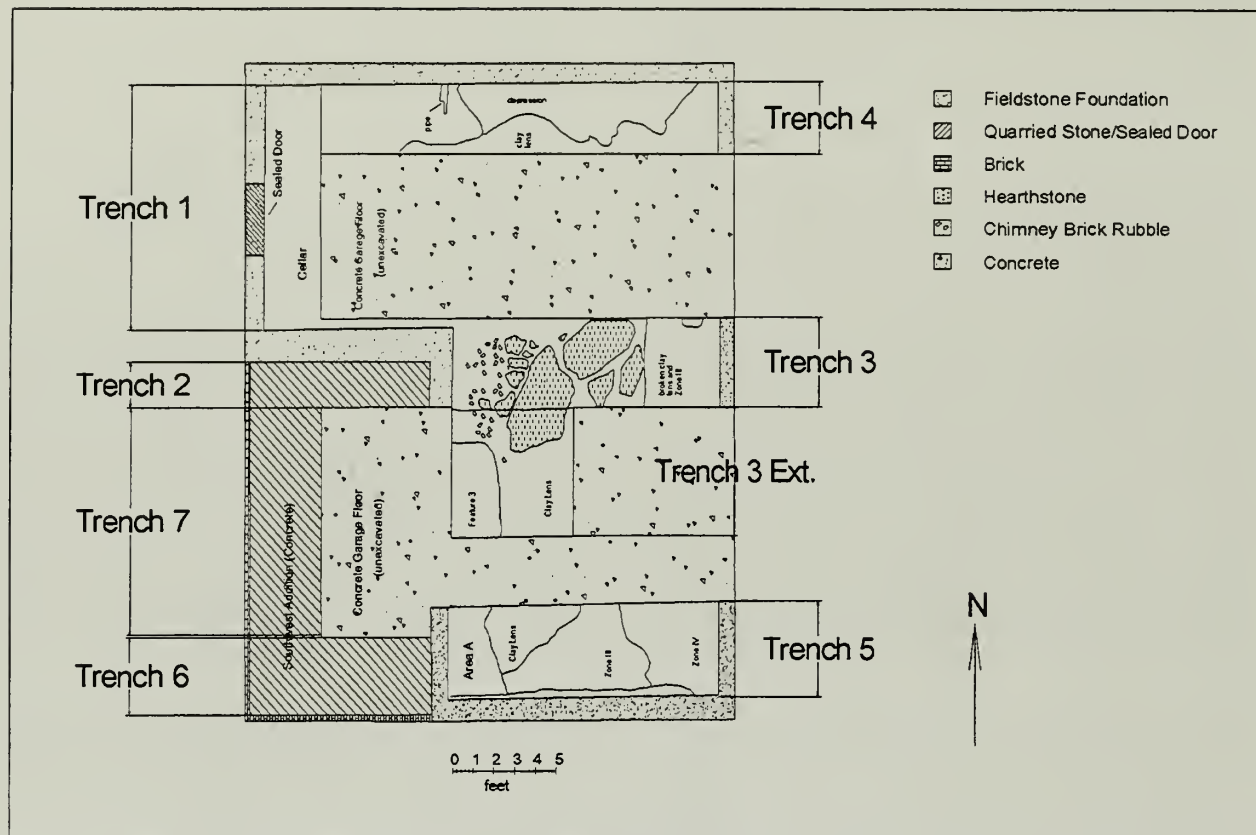


Figure 25 — Family Garage excavations conducted by Walker and Finch in 1979.

were recorded by taking measurements from corners of the buildings, while vertical control was maintained through the use of line levels and arbitrary datum points (Finch 1980).

JOHN W. WALKER, 1979

On August 11, 1979, John W. Walker surveyed an area that was proposed for a water storage tank. Because this site was on an extremely steep slope and had been previously disturbed, only a simple pedestrian survey was conducted. The survey encompassed a five-meter-wide area surrounding the proposed pit. No artifacts were recovered. Walker determined that, since the area would have been extremely steep for habitation and the installation would only cause disturbance to the existing road-bed, no further archeological investigation was necessary, and that installation could progress without hindrance (Walker 1979).

JOHN CORNELISON, 1997

Between February 24 and 27, 1997, archeologist John Cornelison and archeological technician Regina Meyer conducted investigations at Carl Sandburg Home NHS prior to the construction of a new segment of the Memminger Trail—an eight hundred-foot-long trail heavily utilized by hikers. The trail—four hundred feet of which was on private land—was being rerouted at the request of the private property owners. The new trail segment would be placed inside park boundaries on a slope located above the private property. A pedestrian walk-over of the proposed rerouted segment noted no obvious evidence of historic structures or sites. Shovel tests were then placed along the new portion at twenty-meter intervals, except where rock outcroppings prevented digging (Figure 26). Seventeen shovel tests were excavated. All were negative, producing no cultural material.

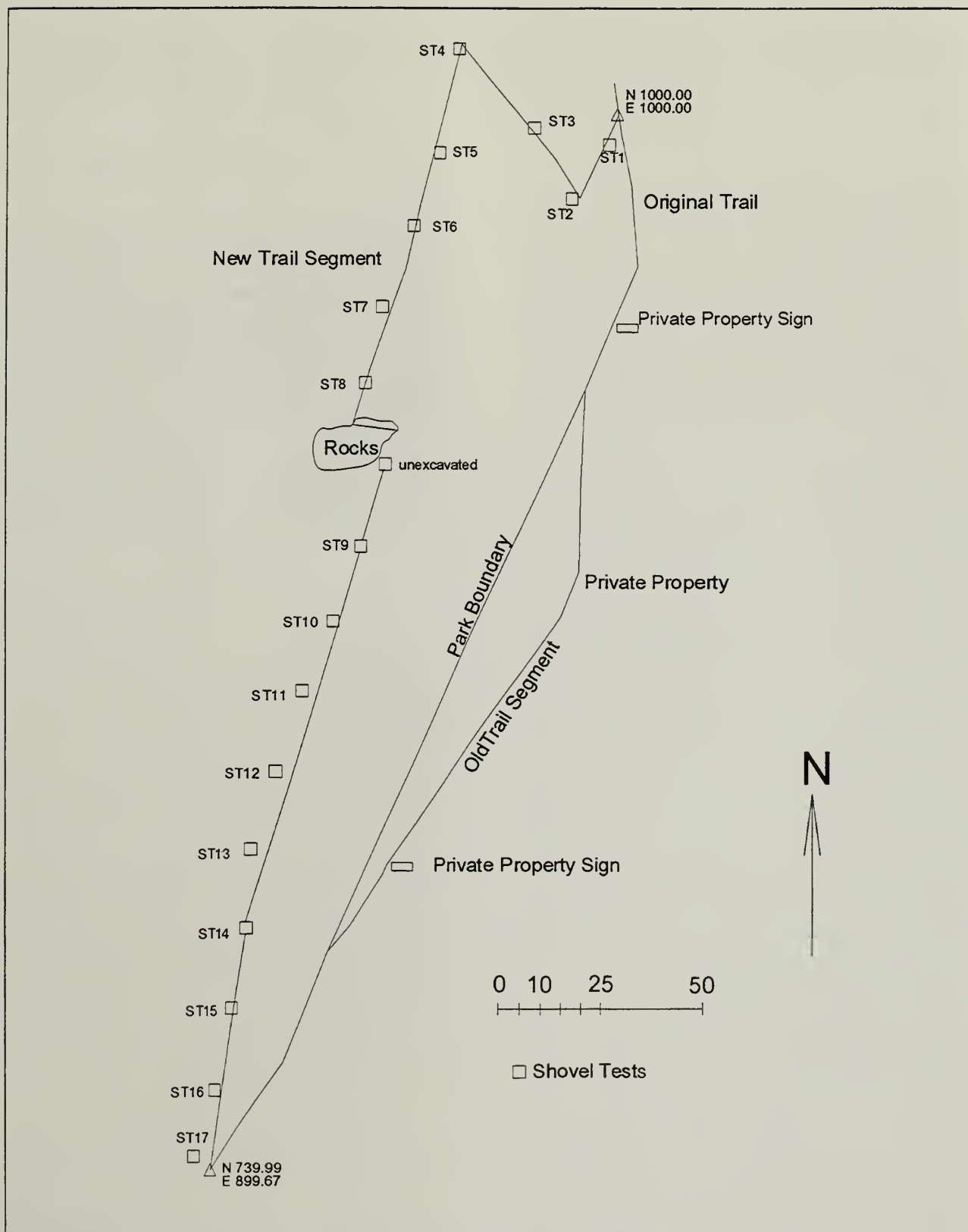


Figure 26 — Archeological testing of the new Memminger Trail segment conducted by Cornelison and Meyer in 1997.

While at the park, Cornelison was asked to give an archeological assessment of the structure called the Family Garage. The park expressed interest in using it as an indoor interpretative center for school classes during the winter season. SEAC archeologists John W. Walker and Dennis Finch had previously conducted excavations at the Family Garage in 1979. Walker and Finch had excavated a total of seven trenches in order to expose field foundations for restoration and to obtain architectural information about the original foundation. Finch noted that extensive architectural modification to the structure had destroyed the integrity of the archeological remains. The trenches they excavated were still open when the site was investi-

gated by Cornelison. The park's plan was to remove remaining pieces of concrete from the original flooring, fill the trenches with soil, and re-pour the concrete floor. All soil for the trenches was to be obtained from outside of the structure. Cornelison concluded that the Family Garage needed no further testing and the park was cleared to carry out the work.

Cornelison also conducted an assessment of the proposed installation of a new water spigot. Since the proposed area had been previously disturbed by the installation of a water fountain and water hydrant, Cornelison recommended that no further archeological testing was required (Cornelison and Meyer 1997).

DESCRIPTION OF ARCHEOLOGICAL SITES

This section summarizes the structures and subsites within Carl Sandburg Home NHS. Many of the names given to structures relate to their function during Sandburg's ownership of the property. However, many of the structures served various other functions during previous ownerships. Table 8 provides the names and/or known uses of the various structures during the Memminger (ca. 1838–1889), Smyth (1900–1942), and Sandburg (1945–1962) ownerships. Only these three periods are listed because we have little to no information about the history of the property prior to the Memminger occupation or during the Gregg ownership (1889–1900).

MAIN HOUSE, HS 1

The Main House is a sixty-five-by-sixty-three-foot, one and a half story, four-bay frame Greek Revival house with a rear shed addition (NPS 1995). There is considerable debate as to when the Main House was built. North Callahan, a Sandburg biographer, stated that it was built in 1833 (1987:188). J. T. Fain Jr., a local historian in Flat Rock, wrote that it was constructed around 1851 (1975:17). George Svejda (1971:28), a National Park Service historian, and local historians Leeming Grimshaw (1970:5) and Sadie Smathers Patton (1961:39) have all said that the house was constructed in 1838. Edward Memminger, son of Christopher Memminger, stated that the house was built by at least the year 1839 because there is a record of a thermometer reading at Rock Hill for the summer of 1839. However, this does not conclusively prove that the house was built by this date, since Memminger could have been present at Flat Rock before the construction of the Main House. In fact, there is limited evidence that Memminger may have used the Buck House as his residence during the year 1839. A brief historical sketch in the His-

toric American Buildings Survey drawings of the Buck House states that the Buck House was built around 1835 by C. G. Memminger and that it served as a summer retreat and later as an interim residence while his large mansion was under construction (Burgin and Jones 1974, sheet 1). However, there is also evidence, which will be discussed in the Buck House site description, that the Buck House may have been built before Memminger bought the property.

Following Memminger's death in 1889, the Flat Rock estate was sold to Colonel William Gregg and his wife Mary A. F. Gregg. There is no historical documentation for the 1889 to 1900 period during which the Gregg family owned the property. It is assumed that this was the Greggs' summer residence since during the same period they also maintained a home in Charleston, South Carolina (Bailey 1980:32).

The next occupant, Captain E. A. Smyth, apparently purchased the estate around 1900 and owned the property until his death in August 1942. During the Smyth occupation, numerous changes were made to the Main House. Little historical documentation exists as to what those changes were. However, it is known that the Smyths painted the house a darker color around 1900 and later had it repainted white. The wooden steps leading to the front porch were replaced with concrete steps by 1921. The porch on the east side of the house was enclosed to become a greenhouse and Smyth also enclosed the back porch with a brick foundation as support (Hart 1993:22–23). The basement was remodeled to add a concrete floor, and one of the first floor bedrooms at the southwest corner was removed (Hellmich 1982).

The Sandburgs also made numerous changes to the Main House structure when they bought the property. They lowered the ceilings, added two bathrooms, and constructed built-in closets (Callahan 1987:184).

Table 8 — Historic sites and structures in the park.

Historic Structure or Site Number	Structure/Site Name	ASMIS #	Association: Memminger = M Smyth = SM Sandburg = SA	Date of Construction
HS 1	Main House	CARL-1.27	M, SM, SA	c. 1838
HS 2	Family Garage	CARL-1.16	M, SM, SA	c. 1839
HS 3	Swedish House	CARL-1.39	M, SM, SA	c. 1838
HS 4	Tenant House	CARL-1.41	M,SM, SA	c.1888–1900
HS 5	Chicken/Wash House	CARL-1.33	M, SM, SA	c. 1838–1840
HS 6	Woodshed	CARL-1.35	SM, SA	c. 1900–1945
HS 7	Springhouse	CARL-1.32	M, SM, SA	c. 1853
HS 8	Pump House	CARL-1.30	SM, SA	c. 1900–1925
HS 9	Greenhouse	CARL-1.20	M, SM, SA	c. 1850
HS 10	Barn Pump House	CARL-1.34	SM, SA	c. 1900–1945
HS 11	Farm Manager's House	CARL-1.10	SM, SA	c.1912
HS 12	Isolation Quarters (Buck House-Bull Barn)	Not Assigned	SM, SA	c. 1900–1925
HS 13	Barn Garage	CARL-1.08	SM, SA	c. 1925
HS 14	Corn Crib	CARL-1.03	SM, SA	c.1900–1925
HS 15	Buck Kid Quarters (Stock Barn 1)	CARL-1.36	SM, SA	c. 1900–1925
HS 16	Goat Barn (Main Barn)	CARL-1.44	SM, SA	c. 1900–1925
HS 16a	Milk House	CARL-1.28	SA	c. 1947
HS 17	Horse Barn	CARL-1.45	SM, SA	c. 1900–1925
HS 18	Cow Shed (Feed House)	CARL-1.25	SA	c. 1945
HS 19	Wood Shaving Shed (Hay Equipment Storage)	CARL-1.09	SA	c. 1960–1963
HS 20	Silo	CARL-1.02	SM, SA	c. 1900–1925
HS 21	Buck House	CARL-1.41	M, SM, SA	c. 1838
HS 22	Gazebo	CARL-1.23	SM, SA	c. 1900–1945
HS 23	Donkey House (Goat House)	CARL-1.24	SA	c. 1945–1960
HS 24	Isolation Hut 1 (Jennifer's House)	CARL-1.19	SA	c. 1945–1948
HS 25	Isolation Hut 2	CARL-1.17	SA	c. 1945–1948
HS 26	Isolation Hut 3	CARL-1.15	SA	c. 1945–1948
HS 27	Isolation Hut 4	CARL-1.21	SA	c. 1945–1948
HS 28	Ice House ruins	CARL-1.13	M, SM, SA	c. 1848
HS 29	Caretaker's (Farm Manager's) Chicken House	CARL-1.01	SM, SA	c. 1912–1925

Table 8 (cont.) — Historic sites and structures in the park.

Historic Structure or Site Number	Structure/Site Name	ASMIS #	Association: Memminger = M Smyth = SM Sandburg = SA	Date of Construction
HS 30	Caretaker's (Farm Managers) Woodshed	CARL-1.37	NPS	c.1989–1991
HS 31	Cow Shed	CARL-1.04	SA	c. 1945–1950
HS 32	Fountain Pool	CARL-1.22	M, SM, SA	c. 1853
HS 33	Hog Pen	CARL-1.11	SA	c. 1950–1967
HS 34	Duck Cage	CARL-1.06	SA	c. 1945
HS 35	Front Lake Dam	CARL-1.29	NPS	1980–1981
HS 36	Serpentine Drive Retaining Walls	CARL-1.46	SM, SA	c. 1900–1925
HS 37	Duck Pond and Dam	Not Assigned	SM, SA	c. 1900–1945
HS 38	Elm Tree Wall	CARL-1.07	SM, SA	c. 1900–1945
HS 39	Front Lake Bridge	CARL-1.26	M, SM, SA	c. 1855
HS 40	Side Lake and Dam	CARL-1.31	SM, SA	c. 1925
HS 41	Trout Pond and Dam	CARL-1.43	SM, SA	c. 1925
HS 42	Big Glassy Mountain Reservoir	Not Assigned	SM, SA	c. 1900–1925
HS 43	Not assigned	Not Assigned		
HS 44	Stone Drains	CARL-1.38	M, SM, SA	c. 1845–1856
HS 45	Serpentine Entrance Drive	CARL-1.05	M, SM, SA	c. 1838–1853
HS 46	Big Glassy Mountain Trail and Memminger Trail	CARL-1.42	M SM	c. 1848 c. 1925–1942
HS 47	Fences and Gates	CARL-1.12	SA	c. 1945
HS 48	Main Entrance Gate	CARL-1.14	M, SM, SA	c. 1853
HS 49	Back Drive and Entrance Gate	Not Assigned	M, SM, SA	c. 1853
HS 50	Not assigned	Not Assigned		
HS 51	Historic site	CARL-1.47		
HS 52	Historic site	CARL-1.48		
HS 53	Historic site	CARL-1.49		

WALKER AND FINCH EXCAVATIONS, 1979

Archeological investigations were conducted in the area of the Main House due to the proposed maintenance and preservation work scheduled to be conducted on its exterior stone foundations. There were three main goals for the excavations:

1. to determine the extent and nature of the archeological resources at the site;
2. to determine, if possible, the construction date of the building; and
3. to provide relevant data on the physical condition of the foundation below grade for use by the historical architects (Finch 1980:131).

Test unit designations were assigned using the classified structure number for the building being tested, followed by the letters A, B, C, and D to represent the north, east, south, and west sides, respectively, of the structure. Multiple test units excavated on the same side of a structure were numbered consecutively in the order of excavation. This 1979 project was carried out before the four letter acronym for the park was converted from CASS to CARL. Therefore, site unit designations use the earlier acronym.

A total of five two-by-four-foot test units were excavated. The units were placed adjacent to the exterior foundation on the north, east, west and south sides of the structures. Two of the five test units, NPS-CASS-1B2 and NPS-CASS-1D, were excavated for the sole purpose of exposing architectural features of the foundation for the architects, since both of the areas had been previously disturbed. Unit NPS-CASS-1B2, located at the intersection of the fieldstone foundation and a brick wall, was constructed during Captain Smyth's ownership. The area had been previously disturbed due to digging, which had intruded into a historic terra-cotta drain pipe connected to the roof gutters (Finch 1980:136).

The second excavation unit, NPS-CASS-1D, was placed in front of a window thought to have originally been a door used to bring food into the house from the detached kitchen. This was discovered from Smyth period photographs that showed a stone pathway leading from the northern door on the east side of the kitchen to what is now the window area of the Main House. However, the area had been disturbed by an earlier repair to the foundation beneath the window (Finch 1980:136). Remains of the stone path were exposed in the west profile of unit NPS-CASS-1D, and large stones were present in the disturbed matrix. However, no evidence clearly defining the path or the doorway was found (Finch 1980:136).

There were three remaining test units excavated, NPS-CASS-1A, NPS-CASS-1B1, and NPS-CASS-1B3. NPS-CASS-1A was located on the north side of the structure. The only artifacts recovered were found in Zone I and the humus zone. Recovered historic ceramics included ironstone

and unglazed coarse earthenware. Other artifacts included fragments of polished marble (possibly from a sink), a slate pencil, and many container and plate glass fragments. Window glass fragments ranged between 3/64 and 1/8 of an inch in thickness. In the report of the excavations, Finch (1980:143) states that the presence of window glass 3/64 of an inch thick indicates a construction date prior to 1845. Other recovered artifacts included metal artifacts, construction material, and floral and faunal material.

Test unit NPS-CASS-1B1 contained artifacts in Zones I and II only. Both zones were composed of a yellowish brown soil designated as 10YR 5/2 on the Munsell soil color chart. Zone II was excavated in half-foot levels and only the first two levels of Zone II produced artifacts. These included unglazed coarse earthenware, varieties of pearlware, container and window glass, metal artifacts, and construction material.

Excavation unit NPS-CASS-1B3 also produced artifacts in the humus zone and Zone II. Zone II was comprised of a yellowish brown soil with a Munsell color of 10YR 5/2, which increased in clay consistency until it terminated into bedrock. Artifacts recovered in the humus zone included wire and cut nails, wood, window glass, and an unidentified bone fragment. Artifacts recovered in Zone II were similar to those from the humus zone, except for a fragment of terra-cotta drainpipe and a fragment of 3/64 of an inch window glass (Finch 1980:140–143).

FAMILY GARAGE, HS 2

The Family Garage is currently a one-story, three-bay, thirty-by-twenty-five-by-nineteen-foot frame garage with a side gable roof, concrete floor, and plaster interior walls (NPS 1995). There is little written historical background regarding the Family Garage structure. It has, however, undergone substantial architectural modifications. Apparently, the original building was an L-shaped structure. This has been determined from an area demarked by a foundation composed of fieldstones. The structure was used as a three-car garage during

the Sandburg occupation. It has been suggested that the original structure dates back to the Memminger period (Svejda 1972). This supposition is supported by artifacts recovered from excavations at the structure. Some of these artifacts include ceramic wares and window glass fragments, which suggest a post-1838 and pre-1845 construction date for the building (Walker et al. 1980).

The first documentation on the structure is from an undated drawing that depicts buildings in the locations now occupied by the Main House, the Swedish House, the Chicken/Wash House, the Fountain Pool, and the Family Garage. The structure in the present area of the Family Garage is labeled "Kitchen." The drawing dates to the construction of the Fountain Pool in 1852, therefore, it can be assumed that the Family Garage/Kitchen dates to before 1852. In *From "Rock Hill" to "Connemara"* (1980), Bailey writes that the kitchen was a separate structure from the Main House during the Memminger and Smyth periods, although she gives no reference for this assertion. She continues to say that "...this was partly for safety measure, partly [due to] the fact that propriety did not condone kitchen odors drifting into parlors" (1980:45).

Historic data available from a taped interview with three of the Smyth granddaughters (Mrs. Haynie, Mrs. McKay, and Mrs. Rogers) provide some additional documentation for the detached kitchen during the Smyth period. At that time, the structure, which is now one room, contained two rooms—the kitchen and the servant's dining room. Two doors were located on the east side of the structure, one opening into each room. (Finch 1980:147)

Photographs from the Smyth period show two entrances on the east side of the Family Garage. The doors were apparently located on the extreme northern and southern ends of the wall. Pictures also show that wooden steps led to both raised doorways, and that two wooden shuttered windows were located between the doors. "Although the interior wood floor of this building had been sawed

off flush with the interior walls when the structure was modified to a garage, the ends of the tongue-and-groove flooring are still present in the structure above the wood foundation sleeper" (Finch 1980:148). Historic photographs also show there was a stone pathway leading from the northernmost door to the Main House. This door and the steps were covered by the eaves of a small shed roof supported by two wooden pillars. The presence of this stone path and the roof suggests that the kitchen was once located in the north room of what was to become the Family Garage, with the servants' dining hall located in the south room (Finch 1980).

Various sources suggest that the major modifications to the structure were undertaken either by Smyth or Sandburg. Archeological investigations at the Family Garage attempted to delineate architectural changes to the structure. Finch (1980) discusses a southwest addition to the building, cellar area changes, and the remains of the hearthstone and chimney. However, the two major structural changes to the building were the addition of a concrete floor that changed the L-shape of the structure to a rectangle and the transition of the structure to a three-car garage (Walker et al. 1980).

THE FIRST ADDITION

Evidence relating to the first addition to the Family Garage/Detached Kitchen was found in 1979 when a second concrete floor was discovered underneath construction fill. This concrete floor had on it a raised concrete pad with four threaded mounting bolts.

The presence of the floor and of the foundation pad clearly indicates that the southwest addition to the structure preceded and was not related to later garage modifications. Its construction also suggests that it was undertaken with a specific function in mind. Although definitely not confirmed, it has been said that prior to the availability of commercial electric power, Smyth installed a Delco electrical generating system for the estate. If correct, this addition might well have been made by Smyth

to house this system. The poured concrete mounting pad would have supported the generator while storage batteries would have been placed elsewhere within the room. (Finch 1980:150)

THE GARAGE CONVERSION

The most extensive architectural changes to the building occurred when it was converted into a three-car garage. Architectural changes included the removal of the fireplace, chimney, wooden floor, two exterior doorways on the east wall of the house, and most of the east wall. Most likely, the conversion of the structure into a garage was carried out during the Sandburg ownership of the estate (Walker et al. 1980).

WALKER AND FINCH EXCAVATIONS, 1979

Archeological excavations were conducted in the area of the Family Garage due to proposed stabilization work on the exterior stone foundations of the structure. Designation of the units in this area differs from that of the other areas excavated in 1979. Since test units were placed inside and outside the structure, excavations were designated by area and trench number. Seven test trenches (see Figure 25) were placed to “expose the field stone foundations for restoration, obtain archeological data on the original structure, and recover a sample of archeological data from both rooms of the original kitchen structure” (Finch 1980:143). The excavation units were placed adjacent to the north, south, and west walls. Another trench was placed to expose an interior stone foundation, which had been partially removed when the structure was converted to a garage. This trench was expanded when remains of a hearth and chimney base were uncovered. Finch wrote in the unpublished 1980 report that “although these investigations provided additional data relating to the construction date and architectural evolution of the building, it should be noted that the extensive interior structural modification of this building throughout the years has, for all practical purposes, destroyed the integrity of the archeological remains” (1980:145).

▪ The Cellar Area, Trench 1 and Trench 4 West

Trench 1 was placed adjacent to the west foundation near the cellar door and Trench 4 West was located on the north side of the foundation. The stratigraphy in both of these trenches consisted of a dark soil zone directly beneath Zone I, which was composed of construction fill material. The dark soil zone, or Zone II, was a shallow midden accumulation that had built up over the years from use of the cellar area. The midden ranged in thickness from four to six inches. Zone III was a natural yellow brown soil zone that was located beneath the cellar midden (Finch 1980:155). Artifacts recovered in Trench 1, Zone II, consisted of iron nail fragments, window glass, container glass, historic ceramics, lead shot, buttons, and fragments of brick, mortar, and plaster. Artifacts recovered from Trench 4, Zone II, were similar to those recovered from Trench 1. The artifacts also included a fragment of a wooden button and one-half of a pearlware plate.

▪ Hearthstone and Chimney Debris, Trench 3 and Trench 3 Extension

The central portion of the Family Garage contained a pile of kitchen hearthstone and brick chimney debris. Photographs from the Smyth period clearly show a chimney on the structure. Finch notes that the hearthstone and chimney were probably removed when the building was remodeled. Walker and Finch also attempted to locate the position of the interior wall that separated the previous L-shaped structure into two rooms. It was assumed that the wall ran directly eastward from the cellar stone wall. If this was the case, then the brick and chimney rubble was located in the south room. Finch notes that these suppositions are highly conjectural since the debris is located in a highly disturbed context (Finch 1980:159).

Trench 3 and an extension of Trench 3 were excavated in this area. Trench 3 was placed running east-west through the central portion of the building. This trench uncovered evidence of a hearth and associated brick rubble. Finch notes that there were no closed context finds in the excavation due to the disturbance caused by the extensive construction to the area when it was converted

from a kitchen to a three-car garage. After excavation and removal of Zone 1, which was fill, a thin clay floor similar to the one found in Trench 4 was uncovered along the east quarter of the trench. Finch writes that the central section of Trench 3 contained:

...portions of the hearthstone, a light brown granular soil between and slightly over the fragments of the hearthstone, and a small area of dark greasy soil. The hearthstone was designated Feature 1 while the light brown soil which surrounded it was designated Zone 2. The dark greasy soil was found to be partially underlain by modern fill and is thus associated with the garage conversion. This area was designated Area A. The entire west quarter of the trench contained a mixture of brick rubble, charcoal flecking, and faunal material. This was initially designated Area B but was later re-designated Feature 2 when it became evident that the deposit represented the remains of a chimney. A dark soil area representing a possible refuse pit was present adjacent to the east foundation along the north end of the trench. This was designated Area C, the profiles clearly show this area to underlie and thus temporally precede the clay lens. (1980:160)

After the hearth area was uncovered, a six-by-six-foot extension was excavated to expose more of the chimney/hearth area.

When the Zone I fill was removed, Areas A and B, Zone II, and portions of the thin clay floor were present. In addition, a lens of cinder was located along the west quarter of the extension and extended south into the profile. This cinder area was designated Feature 3. Adjacent to this cinder deposition and underlying it was a thin lens of yellow mottled soil. (Finch 1980:161)

Artifacts in Trench 3 and the Trench 3 extension included pearlwares, metal, plaster, brick, and glass. Interestingly, the Trench 3 extension excavation

produced the only prehistoric ceramics ever discovered at Carl Sandburg.

Five undecorated sherds of fine sand and mica tempered pottery were recovered. This pottery matches the description for Pisgah Plain (Dickens 1976:185–186) which is often found in the western North Carolina area. Chronologically, Pisgah Plain represents a Mississippian period ware manufactured between ca. A.D. 1000–1450 (Dickens 1976:195–198). Although these sherds were found in disturbed contexts beneath the building, their presence points out the need for a comprehensive archeological survey to assess the extent of prehistoric archeological resources on the park. (Finch 1980:163)

Feature 2, or the area of the chimney debris, contained fragments of plain, annular, and transfer printed pearlware, nails, coal, charcoal, brick, mortar, and one fragment of window glass 3/64 of an inch thick. In addition, one black chert, Late Woodland/Early Mississippian projectile point was found in Feature 2. It has been subsequently identified as a Jack's Reef Pentagonal point (Justice 1987:215).

▪ **North Foundation, Trench 4 East**

Trench 4 was placed adjacent to the north fieldstone foundation. The surface area adjacent to the foundation was a depression that sloped toward the foundation, giving the impression the area had been previously dug out. Artifacts found in the east half of Trench 4 included fragments of the plate found in the west half of Trench 4, Zone II. Finch noted:

As the depression cut through a thin clay lens present in the south edge of the trench, it may have been associated with the installation of a water pipe which was once connected with the valve assembly which passes through the north foundation of the building just east of the cellar. Since all interior plumbing was removed when the kitchen was modified to a garage, this interpretation is conjectural; however, the

absence of a similar dug out area adjacent to the south foundation of this building argues against this feature being associated with the initial construction of this building. (1980:164)

An undisturbed zone, designated Zone III, was uncovered beneath the clay floor. Artifacts recovered from Zone III included pearlware, plain porcelain, window glass fragments, container glass fragments, complete nails and nail fragments, brick, mortar, and plaster. Beneath Zone III was an undisturbed sterile zone. Area A, a trash pit, was discovered in the east quarter of Trench 4 East. Only one section of the pit was exposed in the trench, the rest of it extended into the south wall. Due to time constraints, only the portion present in Trench 4 East was excavated. Artifacts recovered from the trash pit included the following:

...iron nail fragments, one dark green mold blown wine bottle base, a porcelain button, a mother-of-pearl button, window glass, container glass fragments, a complete .32-caliber shortrim fire bullet with the 'H' (e.g., Henry—[which is] a Winchester brand) logo, and various mid-nineteenth-century ceramic material. (Finch 1980:165)

Due to the presence of the .32-caliber bullet, which was not manufactured until after 1860 (Lewis 1956), the artifacts were most likely deposited after the construction of the building.

▪ **South Foundation, Trench 5**

Trench 5 was placed adjacent to the interior south foundation of the Family Garage/Kitchen. The trench extended from the east foundation to the west stone foundation, which was lowered when the building was modified into a garage. After the excavation of Zone I, it was determined that the east third of the trench was composed of sterile clay. The middle section of the trench contained a thin layer of clay and beneath it was a sterile level designated Zone III. A dark soil area that was present in the southwest corner of the trench was designated Area A. This area produced one pearlware fragment, one two-holed mother-of-

pearl button, nails, window glass, container glass, mortar, and brick. The area underneath Area A was also sterile Zone III (Finch 1980:166).

▪ **Southwest Addition, Trenches 2, 6, and 7**

Trenches 2, 6, and 7 were excavated in the southwest addition of the garage. A previously unknown second concrete floor was discovered beneath the main garage floor. Resting on top of this floor was a raised concrete pad, possibly indicating the presence of an electrical generating system. A brick foundation, different from the fieldstone foundation around the rest of the structure, encloses the west and south sides of the southwest addition (Finch 1980:150).

SWEDISH HOUSE, HS 3

The Swedish House is a 26½-by-19-by-28-foot, one-and-a-half-story, five-room wood-frame structure with a steeply pitched, side gable roof (NPS 1995). There is no information on the exact date of construction of the house, although it is considered to date to the Memminger period (Svejda 1972:9). The only documentary evidence regarding the use of the structure during the Memminger period comes from a drawing related to the construction of a fountain that was installed in front of the Main House in 1852 (Figure 27). In this drawing, a structure that corresponds in orientation and location to the present Swedish House is labeled the "Servants House." Most likely, the structures labeled as servants' houses on the map were used as slave quarters prior to the end of the Civil War since the 1850 slave schedules for the Charleston district of South Carolina showed Memminger owning twelve slaves (NPS 1977b).

Although there is no information on the use of the structure during the Gregg period, some information is available for the period when Captain E. A. Smyth occupied the estate. During Smyth's ownership, the structure was called the "The Hall" and was occupied by James Fisher and his wife. Fisher was the butler/valet, and his wife was a chambermaid for the Smyths (Brown 1976). Although there are no specific dates for occupancy

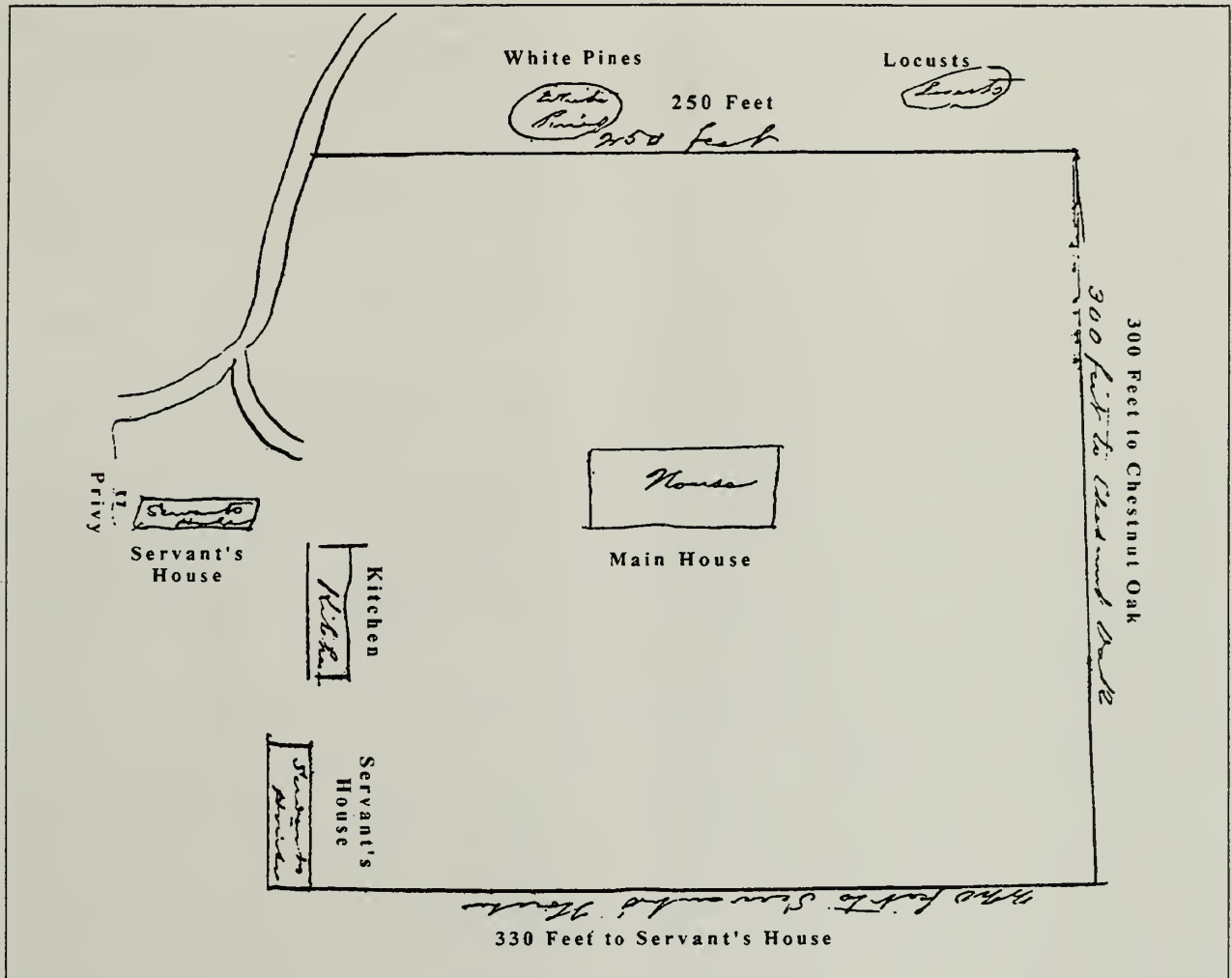


Figure 27 — Historical sketch of the Memminger property (from Pitts 1966).

of the house during this time period, it seems likely that the structure was used as a living facility.

During the Sandburg ownership of the Connemara estate, the Swedish House was used as a guest house and later as a storage area for Carl Sandburg's numerous writing materials (Svejda 1972).

WALKER AND SHEPHARD EXCAVATIONS, 1976

Because the Swedish House is believed to be an original Memminger period structure, testing was conducted around its exterior walls to (1) minimize impact from the proposed installation of a drainage system; (2) locate the chimney foundation prior to reconstruction of the fireplace and

chimney; and (3) investigate the effects of slope wash on the east side.

A trench was opened along the west wall measuring the length of the wall and fifty centimeters in width (see Figure 23). Part of a chimney feature was exposed near the center of the trench just beneath ground surface. An additional fifty-centimeter extension to the trench uncovered the rest of the feature. The numerous red and yellow brick fragments, although not found in situ, were assumed to be from the chimney. Other artifacts recovered here included historic ceramics and a small amount of faunal material.

Following the removal of the house's interior flooring, another small trench was opened adjacent to the chimney inside the structure. The unit

was excavated to ten centimeters below surface to determine if architectural features were present. None were encountered. The artifacts recovered were similar to those from the exterior west trench (Shephard 1980b:119).

Along the south side of the structure, two one-by-one-half-meter units were dug to sterile soil at a depth of twenty-five centimeters below surface. Although some historic ceramics were recovered, no architectural or cultural features were found.

One two-by-one-half-meter unit was opened along the east side of the house because park staff had expressed concern that slope wash was being deposited here. The unit was excavated to sterile soil at a depth of twenty-five centimeters below ground surface. The ceramics recovered were similar to those found in previous units, and no architectural features were encountered. An additional fifty-by-fifty-centimeter test unit was placed between the Swedish House and the Family Garage to determine if the previously mentioned layer of wash was present. No soil evidence of this was uncovered (Shephard 1980b:120).

Archeological tests on the north side of the structure were located next to the entranceway to the building around the step foundation. Excavations determined that the area had been previously disturbed by a pipe running east-west below ground surface. Maintenance personnel present at the excavation identified it as the sewage pipe from the Main House (NPS-CASS-1). Two features were also encountered during the excavations. The first was a concentration of red brick fragments similar to those found near the chimney foundation. The bricks protruded from beneath the concrete step foundation. The second feature was a natural stone step located directly in front of the door to the structure. Shephard noted that the step, which is located on top of a layer of sterile mottled clay, probably represented an original architectural feature (Shephard 1980b:121).

Shephard wrote that the artifacts recovered from the site included various glass fragments, nail fragments, and several varieties of historic ceramics. Shephard, using the correlate that window glass can be attributed to certain time periods based on its thickness, deduced from window glass frag-

ments recovered from the interior west excavation unit that the structure was constructed prior to 1845. A mean ceramic date calculated from the ceramic assemblage from the various excavation units around the building produced a date of 1830. Included among the other artifacts collected were building materials, faunal material, and a 1900 Indian Head penny found in the east trench (Shephard 1980b).

TENANT HOUSE, HS 4

The Tenant House measures 28½ by 28 by 16 feet. It is an L-plan frame cottage with a side gable roof, a central chimney, and a shed roofed front porch extension. Based on oral history and construction materials, it appears that the Tenant House was probably built by Captain Smyth in the early twentieth century. During a 1975 interview, Mrs. Emily Jane Ballard, described the Tenant House as a “little white house” located in the back of the garden. According to Ballard, she and her husband lived in the small house when her husband was an assistant to Captain Smyth’s farm manager, Will Slattery. Following Slattery’s retirement, the Ballards moved to the “green (painted) house,” which is now known as the Farm Manager’s House. After the Ballards moved out of the Tenant House, it was used as a guest residence for Smyth’s grandsons. During this time, the Smyth family often referred to the Tenant House as “the boys’ house” (Brown 1976). After the retirement of Captain Smyth, the Tenant House was moved from the garden area to its current location. The structure was used by Smyth’s personal chauffeur, Jim Robinson (Bailey 1980; Brown 1976). During the Sandburg period at Connemara, the Tenant House was occasionally used as a residence for farm employees.

DORWIN EXCAVATIONS, 1975

A one-meter-square test pit was excavated directly to the left of the concrete porch of the Tenant House (see Figure 15). During the excavation, a five-inch-diameter pipe was uncovered at twenty centime-

ters below ground surface on the northwest side of the unit and at twenty-three centimeters on the southwest side. The excavation was abandoned on reaching a depth of thirty-five centimeters when it was determined that the area had been heavily disturbed in recent years. No artifacts of diagnostic significance were recovered (Dorwin and Shrive 1975:3).

WALKER AND SHEPHARD EXCAVATIONS, 1976

Archeological testing conducted near the Tenant House in 1976 consisted of two test units that were excavated approximately seven meters west of the northwest corner of the building. The units were excavated to a depth of fifteen centimeters below surface. No artifacts were recovered except for some modern materials that were recorded as surface finds (Shephard 1980b:90).

CHICKEN/WASH HOUSE, HS 5

The Chicken/Wash House is a 30½-by-16½-by-19½-foot, two-story, four-room, wood-frame structure that is reported to have been built in the mid-nineteenth century (NPS 1995). The earliest known documentary evidence for the structure comes from an undated drawing related to the construction of a fountain in 1852 (see Figure 27). In this drawing, a structure labeled “Servant’s House” is in the exact location and orientation of the present-day Chicken/Wash House. Consequently, it can be assumed that this structure existed by 1852 and was part of the original Memminger estate. Much like the previously mentioned Swedish House, this structure was most likely slave quarters prior to the end of the Civil War since Memminger was a documented slave owner.

As with all the other structures, there is no information about this building during the Gregg period. Apparently, from approximately 1900 to 1922, the structure housed the many nurses employed to look after the Smyths’ twenty-one grandchildren (Brown 1976). When Smyth retired and moved to Connemara full time, he made a number of changes to the structures on the property. The

nurses’ house was renovated into a combination smoke house and laundry/wash house (Brown 1976).

During Sandburg’s ownership, the structure was first converted into a chicken house and then renovated into a wash house, which is how it derived its present name of the Chicken/Wash House.

WALKER AND SHEPHARD EXCAVATIONS, 1976

Shephard conducted excavations at the Chicken/Wash House prior to installation of a drainage system around the structure. In all, six excavation units were placed around the exterior of the structure. Initial excavations were conducted around the pair of stone steps on the east side of the house. Two half-meter-wide trenches were dug, one around each of the two steps (see Figure 24). Shepherd stated that no features were found in either trench, but remarked that the stratigraphy varied between the two. The stratigraphy in the north trench was a black humus from zero to between two and three centimeters below ground surface, and beneath that was a layer of dark brown to light tan soil approximately ten centimeters thick with an orange tan soil below. The north trench excavation was discontinued at ten centimeters below ground surface. The south trench was excavated to eighteen centimeters below ground surface in sterile soil. The stratigraphy of the south trench was “black humus 0-2 centimeters, dark brown 2-4 centimeters, ashy gray wash 4-5 centimeters, black wash 5-7 centimeters, tan wash 7-12 centimeters, and orange tan sterile below 12 centimeters measured from ground surface” (Shephard 1980b:108). Shephard wrote that the thin strata of washes probably originated on the slope just east of the Chicken/Wash House. In both excavations, red brick was found embedded below the natural stone steps. Shephard also noted that the bricks appeared identical to those found at the Swedish House (1980b:108).

Other work at the Chicken/Wash House included a half-meter-square test pit excavated against the south wall of the structure at a point midway along the length of the wall. According to Shephard the chief of maintenance stated that “the area had been disturbed by the installation of a

drain pipe. The black one-inch-diameter plastic pipe was found 20 centimeters below ground surface parallel to the wall and lying on orange tan sterile [soil]. [We] closed the pit out 30 centimeters below ground surface" (1980b:108).

Following the south trench excavation, a one-meter trench was excavated a half meter out from the north wall of the structure. The west end of the trench was located one meter east of the northwest corner of the structure. During excavation, bedrock that covered the eastern two-thirds of the trench was uncovered fifteen centimeters below ground surface. To determine the size of the rock, the excavation was extended one-half meter to the east. The bedrock covered the area of the extension from eight to twenty centimeters below ground surface. The remainder of the trench was excavated to sterile soil at thirty centimeters below ground surface (Shephard 1980b:109).

The next two trenches were excavated along the west wall of the Chicken/Wash House. The northern trench on the west wall measured one by one-half meters, and the north end was located two meters south of the northwest corner of the structure. Bedrock was encountered throughout the excavation, and, at a depth of twenty-five centimeters below surface, rock covered the northern three-quarters of the trench. In addition, a section of a one-inch-diameter black plastic pipe was partially uncovered in the southwest corner of the trench.

The southern trench along the west wall measured one by one-half meters, with the south end of the trench located three meters north of the southwest corner of the structure. The stratigraphy of the trench was disturbed due to the prior installation of a length of one-inch-diameter black plastic pipe, which ran parallel to the west wall and divided the trench in half at twenty-five centimeters below ground surface (just above sterile soil). Because of this, excavation was discontinued at a depth of twenty-five centimeters below ground surface (Shephard 1980b).

Excavations at the Chicken/Wash House also included testing the area where a drain pipe was to be buried extending westward from the west wall of the structure (see Figure 24). Four half-meter-square test pits were excavated along a

baseline orientated perpendicular to the west wall of the house and beginning one meter north of the southwest corner of the structure. The locations of the test pits were recorded by measuring the distance from the baseline's starting point to the northeast stake of each pit. The pits were located at the following distances: Test Pit A, three meters; Test Pit B, seven meters; Test Pit C, eleven meters; and Test Pit D, fifteen meters. Test excavations A, B, and C all showed the same stratigraphy as that of previous excavations conducted at the structure. They were excavated to an average depth of twenty-two centimeters below ground surface where a sterile orange/tan strata was encountered. However, the stratigraphy in Test Pit D was as follows: zero to four centimeters, black humus; four to thirty centimeters, dark brown soil; thirty to forty-five centimeters, mottled orange tan clay; and below forty-five centimeters, dark brown soil. Artifacts were encountered throughout this excavation, and it was hypothesized that this was probably a trash pit feature. Test Pit D was excavated to a depth of sixty centimeters below ground surface.

To determine the extent of the apparent trash pit deposit, an additional half-meter-square test excavation, designated Test Pit E, was placed with its northeast stake two meters directly south of the northeast stake of Test Pit D. Test Pit E was excavated to a depth of fifty-two centimeters below ground surface. Very few artifacts were recovered from this test pit, and the stratigraphy appeared identical to that of test pits A, B, and C (Shephard 1980b:111–113). Only four fragments of historic ceramics were recovered from the excavations at the Chicken/Wash House. Other artifacts recovered included window glass, container glass, wire nails, and fragments of construction materials.

WOODSHED, HS 6

The Woodshed is a 45½-by-16½-by-11½-foot, rectangular frame shed with a side gable roof and dirt floor (NPS 1995). There are several conflicting statements about its origin and construction. A Section 106 statement, prepared in 1975 to cover proposed repairs, described it as a rectangular,

frame, open-front structure built by Memminger in the nineteenth century and used for a number of purposes (NPS 1975b). However, in an interview conducted at the park in 1976, Sadie Blake Rogers stated that the structure was built by her grandfather, Captain Smyth, following his retirement to Connemara in 1924 (Brown 1976). According to Rogers, the structure was used to store stove wood. Shephard stated that architectural evidence supports her information. The internal architectural support columns of the Woodshed's east wall appear to be those that were removed during a reconstruction of a first-floor porch on the east side of the house. This porch and an additional room on the southwest corner of the house were removed and replaced by a Greenhouse, which was also subsequently removed. These architectural features were identified from historic photographs of the porch and the room. Since these alterations were made by Smyth in his extensive remodeling of the Main House, it is reasonable to assume that the Woodshed was constructed by Smyth after 1924 (Shephard 1980a:82).

WALKER AND SHEPHARD EXCAVATIONS, 1976

Six trenches were dug on the exterior and interior of the Woodshed prior to proposed foundation maintenance and the installation of a drainage tile.

On the interior two foot wide trenches were dug along three walls, with a trench of similar size excavated in the center of the shed running north-south. On the exterior a two foot wide trench was dug along the east and west walls. General stratigraphy consisted of: brown topsoil; then a light gray zone; under which was a gray-brown zone followed by tan sterile soil. The thickness of these zones varied, with sterile ranging from three inches below surface along the south and east walls to fifteen and one-half inches below surface in the northwest corner. (Shephard 1980a:81)

Artifacts recovered from the Woodshed included a salt-glazed stoneware fragment, window and container glass fragments, nails, and other metal objects.

SPRINGHOUSE, HS 7

The Springhouse is a one-room log structure clad with board-and-batten siding (NPS 1995). Presumably, the structure was a springhouse built during the Memminger period. During the Smyth period, the structure was used as a springhouse and smokehouse, but the Sandburgs used the structure as a cheese house (NPS 1979).

DORWIN EXCAVATIONS, 1975

A one-meter-square test excavation was placed directly to the left of the entrance to the Springhouse (see Figure 14). The test was excavated to bedrock, located at a depth of seventy-two centimeters. Recovered artifacts included plaster fragments, badly corroded nails and bolts, two cartridge casings, twenty-six fragments of window glass, one ceramic teacup handle, and one glazed ceramic sherd. None were determined to be of diagnostic importance (Dorwin and Shrive 1975). The pipe that originally carried water to the Springhouse from the spring on the hill was uncovered at depths of between twenty and twenty-two centimeters below ground surface (Dorwin and Shrive 1975). Dorwin and Shrive stated that the construction date cannot be derived from either the construction features or the archeological evidence. "It seems unlikely that additional archeological work outside the building will add substantially to this account. However, should there ever be a need to disturb the concrete floor, there might be additional information obtained from beneath it, about the original function of the structure" (1975:2).

PUMP HOUSE, HS 8

This building is a thirteen-by-eight-by-six-foot, rectangular structure with a shed roof, weather-board walls, and a continuous concrete foundation. A concrete block addition on the northeast elevation houses the pump from which the structure derives its name. One fixed light faces north towards the Wash House. Smyth probably constructed this building prior to 1925, and the addi-

tion was most likely made by the Sandburgs when they added a new pump in the 1940s during modifications to the house. No archeological work has been conducted at this site.

GREENHOUSE, HS 9

This low, rectangular wood-frame structure with composition and metal shingle roofing was used by the Sandburgs as a greenhouse and potting shed (NPS 1979). The structure's age is unknown, although a base map prepared for the cultural landscape report indicated that a root cellar was built by Memminger around 1880 (Hart 1993). The orientation and position of the root cellar is similar to that of the Greenhouse. Thus, the Greenhouse may be a Memminger period structure. Additionally, the date 1873 is carved into the interior stone wall of this structure (Warren Weber, personal communication 1997). No archeological testing has been conducted at the Greenhouse.

BARN PUMP HOUSE, HS 10

The Barn Pump House was erected by Smyth to provide water to the barn area sometime around 1925. The Sandburgs used the pump house for the same purpose. The structure is a seven-by-twelve-by-four-foot, rectangular, concrete pump house and reservoir located south of the root cellar. The structure has a slightly convex roof, a bolted steel opening, and a concrete block addition with a wooden roof. Three 1,500-gallon reservoirs are located below grade. These were added by the NPS in the 1970s (NPS 1995). To date, no archeological testing has been conducted at this structure.

FARM MANAGER'S HOUSE, HS 11

The Farm Manager's House is a thirty-five-by-fifty-five-by-twenty-six-foot, one-and-a-half-story, eight-room wood-frame structure that was built by Captain Ellison Adger Smyth during his ownership of the property (NPS 1995). In their

report, Dorwin and Shrive (1975:3) stated that the structure is reported to have been built around 1910. However, three of Captain Smyth's granddaughters, Mary McKay, Nancy Haynie, and Sadie Blake Rogers, stated that "the green (painted) house" was built by Smyth "around 1912 or 1915" (Brown 1976). The house was the residence of Will Slattery and his family.

Slattery was a former overseer of Colonel Gregg and was also employed as overseer by Smyth with Ulysses Ballard as his assistant (Bailey 1980:44). When Slattery retired, Ballard became the farm manager. He and his family moved from the Tenant House, which at that time was still located south of the garden, into the Farm Manager's House. The Ballards resided there until the Sandburgs purchased the property in 1945 (Walker et al. 1980:93). During the Sandburgs' ownership of Connemara, the Farm Manager's House was used as a residence for their goat herdsman.

DORWIN EXCAVATIONS, 1975

Excavations at the Farm Manager's House included four one-meter-square test pits. Unfortunately, the description of site locations in the report did not correspond with the accompanying map. (The map references are referred to herein.)

Test Pit 1 was located on the north side of the structure behind the back porch (see Figure 16). Level 1 of Test Pit 1 yielded the only diagnostic artifact from the excavation—a Lincoln Head Penny that was minted in 1909. The penny is of diagnostic importance since the Farm Manager's House is reported to have been constructed in 1910 (Dorwin and Shrive 1975:3). Level 2 was excavated from ten to twenty centimeters below surface. Features 1 and 2 were discovered at the base of Level 2. It was determined that Feature 1, which was located in approximately the center of the west wall profile, was the post mold from a child's swing that had been constructed by the farm manager in 1962. Feature 2, which extended over one-half of the excavation floor, was determined to be a rubble heap that had been burned. No other diagnostic artifacts were recovered from the excavation (Dorwin and Shrive 1975:3).

Test Pit 2 was located on the east side of the structure approximately four and one-half meters from the northeast corner of the house. Test Pit 2 was excavated to a depth of forty centimeters below ground surface. No artifacts of diagnostic importance were discovered.

Test Pit 3 was also located on the east wall of the structure approximately six and one-half meters from the northeast corner. The unit was excavated in two twenty-centimeter levels to a depth of forty centimeters below ground surface. Very little material was recovered from Test Pit 3, and none of the artifacts were determined to be important in interpreting the structure.

Test Pit 4, located approximately eleven meters from the northeast corner of the structure, was the third excavation on the east wall of the Farm Manager's House. The unit was excavated in one level of twenty centimeters. Two fragments of one-half-by-one-half-inch iron rods were discovered protruding from the base of the excavation and were determined to be grounding rods (Dorwin and Shrive 1975:4).

WALKER AND SHEPHARD EXCAVATIONS, 1976

One one-by-one-half-meter test excavation was placed three meters east of the northeast corner of the building within the area where the proposed oil tank was to be installed. The test pit was excavated to a depth of fifty centimeters below ground surface. Shephard observed that the soil appeared to be disturbed from zero to twelve centimeters below ground surface, and sterile soil was reached at twenty-two centimeters below ground surface. Since all the artifacts recovered were modern, no additional testing was conducted around the building (Shephard 1980b:94).

ISOLATION QUARTERS (BUCK HOUSE 2, BULL BARN), HS 12

The Isolation Quarters is a wood-frame structure supported by wooden posts. The 14-by-15-by-14½-foot structure has a steeply pitched, front gable roof and a continuous, coursed granite founda-

tion. Sheathed in weatherboard and wide-gauge planks, the barn has a hayloft opening above the main entry and a cut-out goat door on the north elevation. A wire and plank fence encloses a pen north of the building. The structure was probably built by Smyth between 1900 and 1925 and was modified by the Sandburgs for use in Mrs. Sandburg's goat raising operation (NPS 1995).

WALKER AND FINCH EXCAVATIONS, 1979

Archeological investigations conducted at the Isolation Quarters consisted of the excavation of two two-by-four-foot test units designated NPS-CASS-12A and NPS-CASS-12D. The test units were placed adjacent to the north and west exterior walls of the structure. Unit NPS-CASS-12A produced modern roofing nails, wire nails, cut nails, a fence staple, brick and cinder fragments, 5/64-inch-thick window glass, and several pieces of unidentified window glass. Excavation unit NPS-CASS-12D produced fragments of an annular ware bowl decorated with blue and white bands around the rim, modern roofing nails, wire nails, iron fragments, cinder, brick fragments, coal, various window glass fragments, and a variety of modern debris, including a camera flash and an electric plug.

Because the materials from the excavation units were mostly construction materials and modern debris, no further archeological investigations were conducted. Investigators determined that no other archeological work would be needed adjacent to the foundation (Finch 1980:167–169).

BARN GARAGE, HS 13

The Barn Garage is a forty-five-by-twenty-one-by-twenty-one-foot, simple wood-frame structure that rests on a stone foundation. It is reported to have been built by Captain E. A. Smyth circa 1925 to house his many automobiles (NPS 1995).

WALKER AND FINCH EXCAVATIONS, 1979

Archeological investigations at the Barn Garage were conducted adjacent to the exterior founda-

tion of the structure. Two two-by-four-foot units were excavated: one on the north side, the other on the east side. Many disturbances were noted in the area before and during the excavations. On the west side of the structure, there was a 220-volt underground power line that ran along the north-south wall of the building and terminated at the southeast corner of the Goat Barn. Telephone and power line trenches were cut along the north side. A water pipe, which runs approximately north-south from the northeast corner of the building through the wooden gate between the Isolation Quarters and the Barn Garage, disrupted the integrity of the east side of the structure. A concrete slab was also present along the south side of the building. Excavation units NPS-CASS-13A and NPS-CASS-13B produced a number of modern materials, such as nails, brick, mortar, charcoal, wood, and window glass (Finch 1980:169–172).

CORN CRIB, HS 14

The Corn Crib was constructed by Smyth sometime between 1900 and 1925. It is a 5½-by-13-by-14½-foot, open-lath, wood-frame building raised off the ground on four locust-wood posts. The Corn Crib walls are slightly canted and lined with chicken wire. The front gable roof is steeply pitched. The structure is located within the center of the main barnyard (NPS 1995). No excavations have been conducted at the Corn Crib.

BUCK KID QUARTERS (STOCK BARN 1), HS 15

The Buck Kid Quarters was constructed by Smyth between 1900 and 1925. The structure is a 16½-by-20-by-19½-foot, one-story, two-bay barn with a front gable roof, weatherboard and board-and-batten walls, and a rear shed addition. A hayloft opening, accessed by an exterior ladder, is located in the steeply pitched gable. The continuous foundation is made of coursed granite rubble. There is a rear shed addition, which has two porch posts and two vertical board endwalls (NPS 1995).

WALKER AND FINCH EXCAVATIONS, 1979

Archeological investigations at the Buck Kid Quarters consisted of one two-by-four-foot test unit that was placed adjacent to the south wall of the structure. Because of several ground disturbances near the exterior wall of the structure, only one test unit was excavated. During the field season, a stone foundation was placed on the north side of the building. A concrete slab was present along the east wall, and a wooden fence and 220-volt power line were located only a few inches from the side of the west wall. Excavation unit NPS-CASS-15C produced only modern materials, such as modern roofing nails, cinder, and window glass. No further investigations were carried out at the site (Finch 1980:172–174).

GOAT BARN (MAIN BARN), HS 16

This structure, constructed by Smyth between 1900 and 1925, is a large eighty-by-forty-four-foot rectangular, side-gabled, frame barn with a central paired-door entry, a gabled cupola, a hayloft hood, and side and rear shed additions. The side shed, described as the oxen shed, has a continuous, coursed rubble wall, approximately three feet high, and a dirt floor. The rear shed served as a milking barn and office space for Paula Sandburg. The Goat Barn structure has undergone several architectural renovations. The original structure was built on a fieldstone foundation. The barn floor is concrete. The hayloft collapsed during the Sandburg period and was replaced by them. Currently, the NPS raises approximately thirty goats in the barn area and uses the barn to orientate visitors to the goat-raising practices of the Sandburgs (NPS 1995).

WALKER AND SHEPHARD EXCAVATIONS, 1976

Excavations were conducted at the Goat Barn prior to the proposed installation of a sewer system and drain field on the west side of the structure. Seven one-half-meter-square pits were excavated in an area staked out by the park's chief of maintenance.

Test Pits 1 and 2 were located on a line perpendicular to the west wall of the barn, in line with a point located three meters south of the northwest corner of the structure (Figure 28). The southeast stakes of the test pits were located approximately four and eight meters, respectively, from the point on the west wall. Test Pit 3 was located so that its southeast stake was eight meters south of the southeast stake of Test Pit 2 on a line parallel with the west wall. The southeast stake of Test Pit 4 was eight meters north of the southeast stake of Test Pit 2, on a line parallel to the west wall. The southeast stake of Test Pit 5 was located five meters north of the north wall of the barn on a line perpendicular from a point on that wall two meters east of the barn's northwest corner. The southeast stake of Test Pit 6 was located six meters north of the barn's north wall on a perpendicular line extending from a point nine meters east of the barn's northwest corner. The northeast stake of Test Pit 7 was one meter north of the northwest corner of the Milk House (HS 16A). No artifacts were recovered from any of these test excavations, and

all the units were closed out at thirty to forty centimeters below ground surface (Shephard 1980b:104).

WALKER AND FINCH EXCAVATIONS, 1979

Four archeological test units were opened along the foundation of the Goat Barn. Two units, NPS-CASS-16A and NPS-CASS-16A2, were placed adjacent to the exterior north wall of the barn in addition. NPS-CASS-16D was placed along the exterior west wall foundation of the original barn, and a three-by-four-foot test unit, designated Test Pit 1, was excavated near the interior north wall of the original barn. NPS-CASS-16A contained artifacts in the humus zone only. These included modern construction materials, window glass, coal, and a peach pit. Artifacts were recovered from humus Zones I and II in NPS-CASS-16A2. These included building material and window and container glass. Very few artifacts were recovered from NPS-CASS-16D. Construction material, such as brick and mortar, coal, nail fragments, one stone-

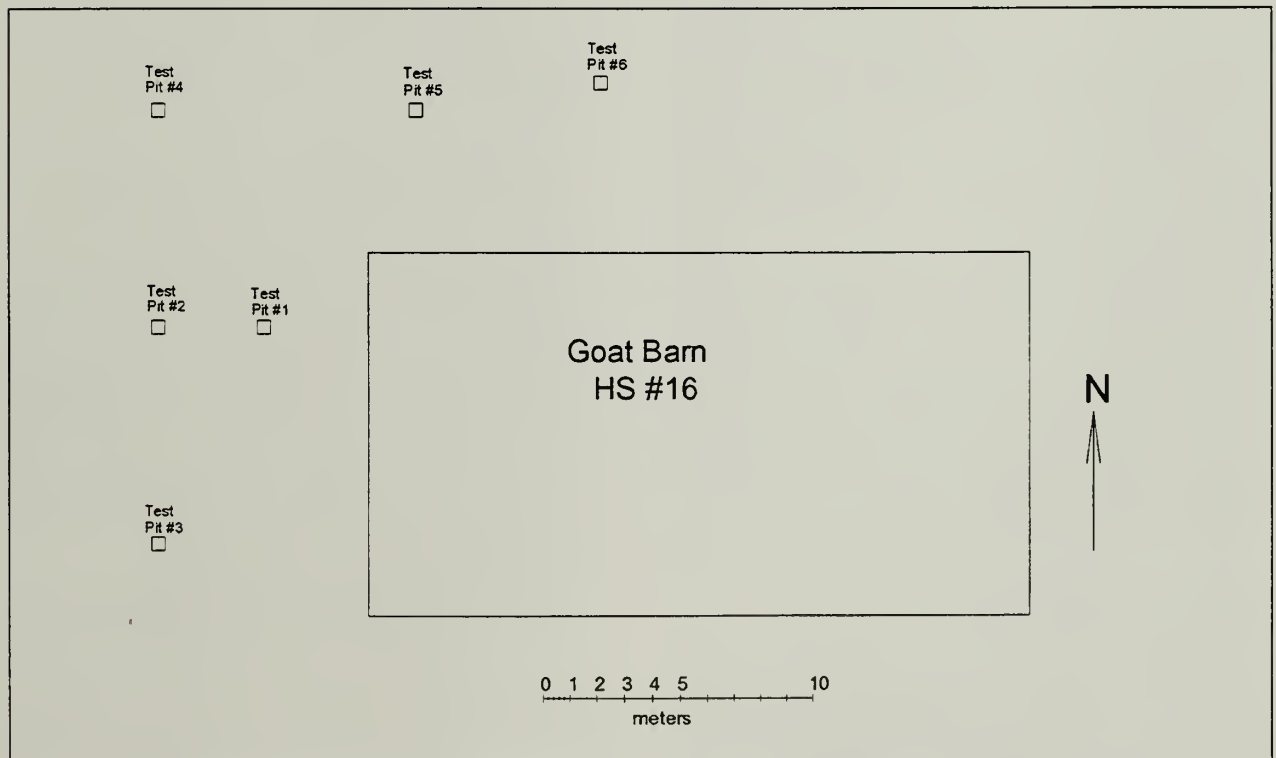


Figure 28 — Archeological tests at the Goat Barn conducted by Walker and Shephard, 1976.

were sherd, and one window glass fragment were recovered from the humus zone only. Test Pit 1, placed in the interior of the structure, did not produce any artifacts. In light of the artifacts recovered from the four units, no further archeological work was conducted at the Goat Barn (Finch 1980:175–180).

MILK HOUSE, HS 16A

The Milk House is a 14½-by-17½-by-16½-foot, T-plan, rough-faced concrete block building with a cross-gabled roof and exposed rafter ends. The structure was constructed by the Sandburgs for goat dairy operations. The building has a gabled, covered pathway connected to the milking barn and two entries on the east facade. A third entry faces north and opens onto a pasture. Interior material is concrete, and a staircase provides access to the half-story. Only half of the building is currently open to the public (NPS 1995).

WALKER AND FINCH EXCAVATIONS, 1979

Because of proposed maintenance plans, archeological testing was conducted at the Milk House in 1979. The excavations consisted of opening two two-by-four-foot test units adjacent to the north and west walls of the structure. Unit NPS-CASS-16AB contained artifacts in the humus zone only. These included nails, coal, brick, and a peach pit. The excavation of NPS-CASS-16AD uncovered a terra-cotta sewer pipe. The pipe connected to a restroom in the southwest corner of the building. The artifacts recovered in the construction trench included roof shingles, nails, mortar, container glass, and construction glass (Finch 1980:180–182).

HORSE BARN, HS 17

Although the exact date of the construction of this structure is not known, Smyth apparently built the barn between 1900 and 1925. The building is a 20½-by-31-by-19-foot, rectangular, one-and-one-

half story, wood-frame, front gable barn with a steeply pitched, aluminum roof and a full-size entry for the hayloft, which is accessed by an exterior ladder. The barn is clad in weatherboard and has an aluminum roof vent. There is a Dutch door on the main facade. Another entry on the west facade leads to an enclosed passage to the main barn. An earthen ramp supported by coursed stone walls is located on the east elevation. The stone silo (HS 20) abuts the north elevation. The interior of the structure contains three animal stalls on the west wall. The NPS has stabilized this building (NPS 1995).

WALKER AND FINCH EXCAVATIONS, 1979

The archeological tests conducted by Walker and Finch at the Horse Barn provided no additional information on the structure's construction date. Two two-by-four-foot excavation units were placed adjacent to the exterior. Artifacts from NPS-CASS-17A included brick fragments, nails, wire window glass, and container glass. Excavation unit NPS-CASS-17B produced brick, mortar nails, and window glass. From these excavations, Finch determined that no other archeological work was needed around the foundations of this structure (1980:182–184).

COW SHED (FEED HOUSE), HS 18

Smyth built this structure between 1900 and 1925. It is a twelve-by-twelve-by-ten-foot wood-frame, single-bay, side gable structure. The rear shed addition serves as a hay manger. The main part of the structure has weatherboard siding with a plank door and a concrete floor. The rear shed addition has vertical plank siding. Enclosed by a wire pen, the building currently houses chickens (NPS 1995). Used by the Sandburgs as a chicken roost, the structure has undergone several architectural changes. A concrete floor was added to the interior. Modifications to the exterior included a poured concrete drain just below ground surface on the west side and a concrete slab along the entire south side of the structure.

WALKER AND FINCH EXCAVATIONS, 1979

Two two-by-four-foot test units were excavated along the exterior north and west walls of the Cow Shed. Unit NPS-CASS-18D, located along the structure's west side, was excavated until a concrete drain was encountered. Subsequent probing indicated that the drain probably extended along the entire west wall. The recovered artifacts included plastic, brick, wire nails, and window glass.

Unit NPS-CASS-18A was excavated to expose the connection between the Cow Barn and the addition. The only artifacts recovered were found in the upper humus zone. They included terra-cotta pipe fragments, brick, mortar, wire nails, and window glass. A dark soil feature that extended underneath the structure and addition wall was designated Area A. No artifacts were recovered from this area, and the soil feature was assumed to be a tree stain. Investigators concluded that no further work was needed around the foundation of the Cow Shed (Finch 1980:184–186).

WOOD SHAVING SHED (HAY EQUIPMENT STORAGE), HS 19

This structure appears to have been constructed between 1960 and 1963. It is a 41½-by-18-by-18½-foot rectangular, five-bay frame shed with vertical board siding, asphalt roll roofing, and a dirt floor. The shed has two sliding doors on casters. A carpenter bee infestation is affecting the structural integrity of this outbuilding (NPS 1995). No archeological work has been conducted at this structure.

SILLO, HS 20

The Silo was apparently constructed by Smyth between 1900 and 1925. It measures 17½ feet high and 14 feet in diameter. It is constructed of coursed, squared-off granite blocks. The Silo has no roof and the west entry is sealed. A seven-rung iron ladder on the north elevation has been altered to prevent access. Smyth might have stored grain in

this silo to feed the animals in the adjacent Horse Barn (NPS 1995). No archeological testing has been performed at this structure.

BUCK HOUSE, HS 21

The Buck House is a 30-by-34½-by-17-foot frame structure with post and beam construction (NPS 1995). In 1974, architectural drawings were made of the Buck House for the Historic American Buildings Survey. These drawings label the Buck House as the Memminger House and are accompanied by a brief narrative on the house's history. This narrative states that the Buck House structure was built around 1835 by Memminger, who used it as a summer retreat and later as a temporary residence while the Main House was being built. The survey also states that the original two-room house was made into a four-room house sometime between Memminger's ownership and the acquisition of the property by Carl Sandburg (Burgin and Jones 1974, sheet 1). However, conflicting information suggests that the house was not constructed by Memminger. For instance, Memminger's first visit to Flat Rock is recorded as being in October 1836 (Bailey 1980:11). Little is known about his activities on the property between 1836 and 1838. Apparently he occupied the property by 1838 because records report that his small child drowned that year on the property (Bailey 1980:11). In fact, the tract of land that the Buck House is located on was not part of the original purchase by Memminger. Instead, the tract was an additional purchase made in March 1842. Memminger bought the property on which the Buck House was located from A. S. Willington, who was publisher of the *Charleston Courier*. Willington owned the property as early as 1838 and he is assumed to have been the occupant until 1840, when he purchased Saluda Cottages from Count de Choiseul (Memminger 1954:13–14). All the above information casts considerable doubt on the assumption that the Buck House was constructed by Memminger.

It is not known if the Buck House was used during the Gregg period, but the Smyths used it

as a wash house prior to 1925. After 1926, Smyth added two more rooms to the west side of the original structure and used it as a residence for farm laborers in the 1930s; the residence for the nurses taking care of the Smyth grandchildren was converted to a wash house (Brown 1976). The Buck House was so named because Mrs. Sandburg eventually housed her prize bucks in the structure.

DORWIN EXCAVATIONS, 1975

Two one-by-two-meter excavation units were placed in the vicinity of the Buck House (see Figure 17). Due to the estimated age of the structure and its relative historical significance, these units were made larger than Dorwin and Shrive's other 1975 excavations so as to give a clearer view of the stratigraphy and any features that might be present (Dorwin and Shrive 1975:4). Test Pit 1 was located against the west foundation directly south of the rear steps of the structure. A cast-iron stove support was found just beneath the grass surface of the excavation. A similar support was located approximately three meters north, near a pile of bricks from a collapsed chimney (Dorwin and Shrive 1975:4). The unit was excavated in twenty-five-centimeter levels. In Level 1 (0 to 25 cmbs), a stove vent cover, nails, wire, a porcelain doorknob, and pieces of opaque white ceramics were discovered. Recovered artifacts included a porcelain doorknob, fragments of plain ceramics, nails, and bolts. Level 2 (25 to 50 cmbs) produced fragments of a stove lid, a large number of nails and small bolts, and a United States dime minted in 1892. Level 3 (50 to 75 cmbs) was sterile. The excavation was consequently discontinued at seventy-five centimeters below ground surface (Dorwin and Shrive 1975:4).

Test Pit 2, on the east side of the structure near the north end of the porch, was excavated in twenty-centimeter levels. Level 1 (0 to 20 cmbs) produced several artifacts including broken bottle glass, window pane glass, a ceramic doll arm, a hand-faceted glass ornament, ceramic fragments, and many pieces of heavily corroded metal. A one-inch-diameter pipe was discovered in the north end of the test pit at eleven centimeters below surface

at the west wall and thirteen centimeters below surface at the east wall. The archeologists observed a shallow trench that had been dug to install the pipe (Dorwin and Shrive 1975:5)

WALKER AND SHEPHARD EXCAVATIONS, 1976

Archeological reconnaissance testing was again conducted at the Buck House in response to the proposed installation of a drainage system, which would severely disturb the soil adjacent to the structure and thus destroy any archeological evidence it might contain. All excavations were done manually using shovels, picks, and trowels. All the dirt was screened using quarter-inch mesh.

Excavations consisted of a series of two-foot-wide trenches placed along the interior and exterior walls of the foundation (see Figure 18). The exterior trenches were given directional designations. Thus, the trench paralleling the west foundation was designated the "west" trench, and so on. The interior excavations were given "unit" designations. The inside of the structure was separated into three units. Unit 1 encompassed the western section of the building, which was a two-room addition to the original house. Unit 2, the central section of the house, was the original two-room structure. Unit 3 comprised the eastern section, which was a porch. Additionally, within each of these unit designations, the perimeter trenches were given directional designations. Excavations demonstrate that the stratigraphy on the exterior and interior of the building was similar. Shephard stated that stratigraphy consisted of a

thin dark brown humus layer [that] overlaid a gray zone which rested on an orange-tan sterile soil. However, the thickness of these strata varied considerably from area to area with sterile soil ranging from one to sixteen inches below ground surface. In general, sterile soil was nearer the surface toward the interior of the structure and sloped downward under the exterior wall foundations. (1980a:79)

A large number of ceramics were recovered from the Buck House excavations. The assemblage

was made up of fragments of ironstone, pearlware, stoneware, earthenware, and porcelain.

GAZEBO, HS 22

The Gazebo, constructed during the Smyth period between 1900 and 1945, is situated just south of the flower garden. This octagonal structure measures ten feet high and thirteen feet in diameter. The wood post and lattice gazebo had an eight-sided pyramidal shingle roof and a tongue-and-groove floor elevated on granite piers. A wood bench lines the interior walls on seven sides. Although the original structure fell into disrepair during the Sandburg period, it was later rehabilitated by the NPS (NPS 1995). No archeological investigations have been conducted here.

DONKEY HOUSE (GOAT HOUSE), HS 23

The Donkey House was constructed by the Sandburgs sometime between 1945 and 1960. It is an 11-by-14½-by-8½-foot, wood-frame shed with one bay and two interior stalls. The shed has an asphalt roll roof, dirt floor, board-and-batten partition, paneled door, several unglazed clerestory openings, and two feed troughs. It is located south of the front pasture and is enclosed by wire fencing (NPS 1995). No archeological investigations have been conducted at this structure.

ISOLATION HUT 1 (JENNIFER'S HOUSE), HS 24

HS 24, an eleven-by-ten-by-eight-foot front gable, single bay building, is crudely framed with vertical plank, board-and-batten, and weatherboard sheathing. The roof has red asphalt rolled over boards. A covered manger sits in the northeast corner of the wide-gauge wire fence enclosure. One of two huts located south of the main drive just east of the vegetable garden, it was constructed by the Sandburgs between 1945 and 1948 (NPS 1995). No archeological investigations have been conducted here.

ISOLATION HUT 2, HS 25

This eight-by-ten-by-ten-foot, front gable, crudely framed hut is built into a wire fence line with an earthfast foundation. The exterior is clad in split logs with intact bark. The doors are plank, and the north gable end has one fixed, six-light window. Constructed by the Sandburgs between 1945 and 1948, the hut is currently listing and may have deteriorated sills (NPS 1995). The male goats kept in the building have been causing structural damage. Archeological investigations have not been conducted at this structure.

ISOLATION HUT 3, HS 26

Isolation Hut 3 was constructed between 1945 and 1948 during the Sandburg period. It is an 11½-by-11-by-6½-foot, wood-frame shed, with an earthfast foundation, aluminum shed roof, vertical board sheathing, and wire mesh and plank shutters over the openings. It is located west of the barn in the Milk House pasture (NPS 1995). No archeological investigations have been carried out at this site.

ISOLATION HUT 4, HS 27

This structure was also constructed by the Sandburgs sometime between 1945 and 1948. It is a 10-by-9-by-8½-foot, front gable, single-bay, wood-frame building with vertical plank siding and an earthfast foundation. This structure is located north of Isolation Hut 3 and is adjacent to the Milk House pasture (NPS 1995). Archeological testing has not been conducted at this structure.

ICE HOUSE RUINS, HS 28

The Ice House might have been constructed as early as 1848. It is currently a fifteen-foot-diameter, three- to four-foot-deep, below-grade, stone-lined pit filled with debris and soil and partially covered with turf. Several courses of granite block are exposed along the rim because the pit is sunken

in the center (NPS 1995). These exposed courses represent the remains of a deep, stone-lined pit that stored ice gathered from frozen lakes on the property. According to historic photographs, the above-ground structure had a gable roof and decorative bargeboards and siding. The Sandburgs allowed the structure to deteriorate so much that the above-ground structure had to be removed. The NPS filled the pit in the 1970s. No archeological investigations have been conducted at the Ice House.

CARETAKER'S (FARM MANAGER'S) CHICKEN HOUSE, HS 29

This structure was built between 1912 and 1925. It is a ten-foot-square, board-and-batten building with a weatherboard foundation skirt and a dry-laid, granite foundation. This front gable building has a single bay with a wire-mesh screen door and beveled rafter ends. The interior has roosts and a dirt floor (NPS 1995). No archeological work has been conducted at this structure.

CARETAKER'S (FARM MANAGER'S) WOODSHED, HS 30

This partially enclosed woodshed was apparently constructed sometime between 1945 and 1950. The 18-by-11-by-8½-foot rectangular building sits on six earthfast locust-wood posts. It has a shed roof and vertical plank siding on the northeast, east, and southeast elevations. The Woodshed was reconstructed by the NPS in the 1980s (NPS 1995). No archeological work has been conducted here.

COW SHED, HS 31

The Cow Shed was constructed between 1945 and 1950 by the Sandburgs. This fourteen-by-sixteen-foot, front gable, two-bay shed has vertical-board sheathing and an earthfast foundation. It is located southwest of the side lake, approximately five hundred feet south of Little River Road. The shed is built into a wide-gauge wire fence enclosure on

the south and east. A gate leads to the Main House pasture. Currently, the NPS uses the structure for storage (NPS 1995). No archeological testing has been conducted in this area.

FOUNTAIN POOL, HS 32

Historic records and maps indicate the presence of the Fountain Pool by at least 1853. Centered on a grassy lawn directly in front of the Main House, this shallow, concave, concrete pool measures fifteen feet in diameter and about two feet deep. Heavily silted, the pool houses goldfish. There is a drain pipe on the pool's north side toward the front terraces and pasture. The Sandburgs removed a three-part, cast-iron fountain piece from the pool shortly after purchasing the estate (NPS 1995). No archeological testing has been done here.

HOG PEN, HS 33

This structure was built between 1945 and 1967. It is a ten-foot-square, single pen, frame, front gable outbuilding with one off-center entry, half-log sheathing, a wood shingle roof, a rear ramp that leads to a fenced pasture, and a plank floor. It is located southwest of the isolation huts. This pen may have been used by the Sandburgs to house hogs. Since the structure is in an isolated field south of the main drive, it suffers from moisture and invasive vegetation (NPS 1995). No archeological investigations have been conducted here.

DUCK CAGE, HS 34

The Duck Cage was built in 1945 to protect the flock of ducks introduced to the lake by Helga Sandburg, Carl's daughter. This six-by-twelve-by-six-foot post and wire mesh, earthfast cage is on the south side of the lake. Currently, the cage is overgrown with weeds and grass, but the vegetation is occasionally cut back to preserve the structure (NPS 1995). No archeological investigations have been conducted here.

CONTRIBUTING HISTORIC RESOURCES

The following historic structures are part of the built environment of the park. Although little archeological merit is expected with regard to these resources, they must be maintained to preserve the cultural heritage in the park. None have been investigated archeologically.

FRONT LAKE DAM, HS 35

The Front Lake Dam, which creates Front Lake, was constructed around 1855. The dam consists of a 170-foot-long, crescent-shaped, earthen embankment, which crests at thirteen to twenty feet, with a forty-seven-foot, coursed granite spillway. Two wing walls, twenty and twenty-seven feet long respectively, support the earthen dam and serve as abutments for the footbridge. Although rehabilitated by the NPS in 1981 (NPS 1995), the spillway wall exhibited some leakage. Major repair work was conducted on the Front Lake Dam in 1995.

SERPENTINE DRIVE RETAINING WALLS, HS 36

There are 4,149 linear feet of three- to four-foot-high dry-laid and mortared square block walls and fieldstone curbing, which served as retaining walls, culvert walls, and driveway trim. Most walls line the main drive, but some are located on walkways between the buildings and correct grade changes throughout the property. The NPS has stabilized or restored most of the historic walls within the property. Although no archeological work has been conducted around these walls, during the restoration several objects classified as archeological were recovered as field finds and are currently curated at the park. These include historic ceramics, nails, various other fragments of building materials, and miscellaneous items. Appendix 2 provides a complete listing of the objects.

DUCK POND AND DAM, HS 37

The Duck Pond and Dam were constructed between 1900 and 1945 by Smyth. The pond, which

is fed by a spring channeled through a concrete pipe culvert under the back drive, is created by a crescent-shaped, earthen and coursed granite dam. The berm is on the east side of the pond, the dam and spillway on the west. The spillway has a concrete splash apron and a drain pipe. A retaining wall, located west of the barn complex on the north-east side of the back drive, was rebuilt by the NPS (NPS 1995).

ELM TREE WALL, HS 38

The Elm Tree Wall is a 50-by-1½-by-1½-foot, coursed, dry-laid granite wall erected to protect a mature American elm (*Ulmus americana*) in the barnyard. The granite blocks may have come from the Memminger era, but the wall was built between 1900 and 1945, during the Smyth period. The diseased elm was felled in a storm in 1985. An elm sapling has been planted in its place (NPS 1995).

FRONT LAKE BRIDGE, HS 39

The Front Lake Bridge was created by Smyth between 1900 and 1925. The original bridge deteriorated and was removed by the Sandburgs sometime between 1950 and 1962. The NPS created a replica of the original in 1981 (NPS 1995).

SIDE LAKE AND DAM, HS 40

Smyth constructed Side Lake in 1925. It is a 132-foot-long-by-12-foot-high, coursed granite dam with rubble fill built on top of granite bedrock. The cement coping is in fair condition, and the splash apron is stabilized with riprap. The triangular lake edge is grassed. Lake siltation is evident on the north and south banks. The Sandburgs constructed a wire gate on the dam to keep the goats in side pastures off the dam. The NPS stabilized the dam in 1981 (NPS 1995).

TROUT POND AND DAM, HS 41

In 1925, Smyth constructed the Trout Pond and Dam, which are located south of the back drive and vegetable garden. The pond is created by a sixty-two-

by-two-by-seven-foot stone and concrete dam built into a rock outcropping with a rock-faced spillway wall on the north. The dam abuts a rock outcropping on the west. The NPS stabilized the dam in 1980 and 1981 after treefalls, excessive siltation, and structural damage to the dam caused the pond to drain (NPS 1995). The dam was repaired, and the pond now serves as a reserve water supply for fighting fires that ignite on park property.

BIG GLASSY MOUNTAIN RESERVOIR, HS 42

Between 1900 and 1925, Big Glassy Mountain Reservoir was created when a thirty-foot-long and four-foot-high concrete dam was built. Located approximately 1,200 feet south along the Big Glassy Mountain Trail, the dam gravity feeds Big Glassy spring water to the pump house behind the Main House and the barn area. The Sandburgs maintained this water source in case of fire, and had the reservoir periodically dredged. Currently, the reservoir is silted, and there appears to be some leakage at the base of the dam (NPS 1995).

STONE DRAINS, HS 44A-E

The Stone Drains consist of 1,200 linear feet of stone-lined drains, measuring about eighteen inches wide and one foot deep. Apparently installed between 1845 and 1856 (during the Memminger period), they run along the entrance drive and emanate from high areas near the house, continuing past the farm buildings to the pastures. Some have been restored by the NPS (1995).

SERPENTINE ENTRANCE DRIVE, HS 45

The Serpentine Entrance Drive is the primary access to the site. It consists of a front and back drive. Beginning at the front gates, this drive and a carriage drive in front of the Main House comprise the approximately 6,000 linear feet of gravel- and asphalt-surfaced roads within the park that link the house and farm buildings to the Little River Road. The front drive was created as early as 1838, during the Memminger period, to access the Main House. The Serpentine Entrance Drive was origi-

nally aligned with white pines. The shape was later formalized with the introduction of rock wall sections, stone gutters, and boxwoods along the upper drive. The hemlocks were planted by the Sandburgs to supplement the loss of the aging white pines. Rhododendrons and dogwoods can also be found gracing the drive (NPS 1995).

BIG GLASSY MOUNTAIN TRAIL AND MEMMINGER TRAIL, HS 46

These two trails were built before the Sandburg period. They share a trace for approximately 1,200 feet and then diverge. The Memminger Trail, which is the oldest and was created around 1848, loops south and east of the Main House. The Big Glassy Mountain Trail, created sometime between 1925 and 1942, proceeds in a southwesterly direction to the Big Glassy Mountain overlook. Both trails have a mixed rock and dirt surface, wood erosional stops, and below-grade drainage pipe culverts (NPS 1995).

MAIN ENTRANCE GATE, HS 48

Memminger constructed the main entrance gate in 1853. The entrance consists of two coarsed granite retaining walls, thirteen and forty-seven feet long respectively. These flank the front entrance drive. The walls are three feet high on the road elevation and drop down to approximately ten feet to a box culvert that crosses under the driveway for a length of thirty-two feet. The culvert drains the runoff from Little River Road directing it under the driveway. The ivy-covered walls terminate at two two-by-two-by-six-foot, coarsed granite pedestals, also ivy covered, connected by a wood and steel slatted swing gate. The coping on the walls and gate post is granite (NPS 1995).

BACK DRIVE AND ENTRANCE GATE, HS 49

The back drive entrance gate was also constructed by Memminger in 1853. The entrance consists of two three-foot-square, six-foot-high coarsed granite pedestals, approximately fourteen feet apart, with a three-part granite capstone. The east post

has been moved to accommodate tour buses and park vehicles. The gate enclosure is a modern, chain-link swing gate (NPS 1995).

SUBSITES IDENTIFIED BY 1976 SUBSURFACE TESTING

HS 51

This subsite was designated based on an artifact concentration discovered during Walker's 1976 excavation of unit S106W298 in alternative area A-1. The subsite area, measuring twenty by fourteen feet, was delineated by excavation units S106W300, S106W284, and S094W295. Also, one additional test unit was placed to the south-east of the area, but it contained no artifacts. Artifacts recovered from the units included various types of pearlwares, stonewares, glass, metal, wood, and bricks. Walker calculated a mean ceramic date of 1806 based on the eighty-five ceramic sherds that were recovered. He stated:

The Mean Ceramic Date of 1806 which was calculated for the site seems to agree very well with the terminus post quem (the date after which the object must have found its way into the ground) of 1800 for the Sponged Ware. If, as it appears, the use of the site occurred at, or near, the beginning of the nineteenth century, NPS-CASS-51 represents a pre-Memminger occupation of lands now included in Carl Sandburg Home National Historic Site. At that time Flat Rock area was occupied by settlers of Scotch-Irish descent. (Walker et al. 1980:59)

HS 52

Because of an artifact concentration found in unit S360W1550 during the 1976 excavations of alternative areas for proposed development, six additional units were excavated to delineate subsite limits. The subsite was classified as an artifact concentration measuring about twelve by twenty feet. The units were labeled S366W1550, S360W1556,

S354W1550, S360W1554, S360W1564, and S354W1564. Unit S354W1564 produced no artifacts. Only twenty-four historic ceramic fragments were found, consisting mostly of various pearlwares.

The terminus post quem for this assemblage is transfer printed pearlware with a date of 1795. The sample size (n+24) is not large enough to calculate a mean ceramic date for this site. Window glass fragments of 3/64" thickness were recovered and indicate this site was utilized prior to 1845....This ceramic assemblage from this site is similar to NPS-CASS-51 and appears to represent an early historic occupation of the Flat Rock area. This site probably represents cultural debris from early settlers of Scotch-Irish descent. (Walker et al. 1980:65)

HS 53

NPS-CASS-53 was delineated by three test units, S1310W1130, S1318W1130, and S1343W1130. The subsite lies in a level area adjacent to a trailer residence. Because of the small amount of ceramics found at the subsite (n = 7), no mean ceramic date could be calculated. The *terminus post quem* of the site was determined to be 1813 based on a recovered sherd of ironstone. However, Walker writes that the date is suspect

...since this type of ceramic ware was not widely used until the middle of the nineteenth century and is still being manufactured....It is known that this area was used as a hog pen site as recently as 15 years ago (Leroy Levi 1976; personal communication). However, it could not be determined if the material recovered represents cultural debris from this activity, an earlier era, or both. (Walker et al. 1980:69)

OTHER CONTRIBUTING RESOURCES

MAIN HOUSE LANDSCAPE

Planted between 1900 and 1967, during the Smyth and Sandburg periods, the flower beds and foun-

dition plantings are found on all elevations of the Main House grounds. The Sandburg era vegetation on the north and east elevations, the lily garden, the dahlia and zinnia bed, and the bird feeder area are the best preserved examples. Several specimens of trees, including the ginkgo, magnolia, and American elm, are attributable to the Smyth occupation and contribute to the overall setting of the Sandburg era landscape (NPS 1995).

SUMMER FLOWER GARDEN

The Summer Flower Garden was established by Smyth and maintained by Paula Sandburg. Enclosed by a chainlink fence, the garden measures 150 feet long by 50 feet wide. A path divides the area into four sections. The latticed gazebo is located southeast of the garden (NPS 1995).

APPLE ORCHARD

The Apple Orchard dates to around 1840. The V-shaped orchard measures about 300 feet long and 150 feet wide. It is located south of the veg-

etable garden and north of the Trout Pond. It is characterized by about a dozen untended apple trees, the exact species of which are unknown (NPS 1995).

VEGETABLE GARDEN

The Vegetable Garden, measuring about 350 feet long and 125 feet wide, has a north-south path that runs along the central axis. One boxwood remains in the southwest corner of the garden, a remnant of a perimeter boxwood hedge that at one time enclosed the entire garden. The garden dates to the Memminger period, around 1840 (NPS 1995).

FRONT PASTURE

The Front Pasture was cleared of forest before the Front Lake Dam was built, which was probably as early as 1839. The rectangular pasture measures about 400 by 500 feet. It is sited north of the Main House between the Serpentine Drive and Front Lake. It has been maintained as a pasture, or open area, throughout the estate's history (NPS 1995).

ASSESSMENT OF RESEARCH AND RECOMMENDATIONS

This section assesses the previous archeological research conducted at Carl Sandburg NHS and makes recommendations for future archeological research based on deficiencies in previous work. Projects are assessed with regard to field methods, documentation, analysis and interpretation of artifacts, and information dissemination. It should be noted from the outset that the major deficiency in archeological work at Carl Sandburg Home NHS is the lack of a complete, systematic survey of the park grounds. The focus has been on the area that encompasses the Main House and farm complex because all of the previous archeological research has been in response to Section 106 compliance projects.

ASSESSMENT OF PREVIOUS RESEARCH

DORWIN'S 1975 EXCAVATIONS

John Dorwin excavated various areas of Carl Sandburg Home NHS under contract with the NPS. Excavations focused on four historic structures within the park, including the Springhouse, the Tenant House, the Farm Manager's House, and the Buck House. Assessment of the archeological work is difficult because of the deficiencies and limitations of the project. Dorwin's test excavations at the Tenant House, the Farm Manager's House, and the Springhouse structure produced little artifactual material. Dorwin noted that no future work was necessary at the Tenant House and Farm Manager's House, but if excavation under the concrete floor of the Springhouse is ever possible, it should be undertaken. The final structure excavated was the Buck House, or what was considered by Dorwin to be the original Memminger house where Memminger allegedly stayed before the Main House was built. This now appears not to be the case since the Buck House was

constructed before Memminger acquired the property in 1842. However, since the structure was believed to be the oldest structure at the site, and because Dorwin excavated a large amount of historic artifacts from the area, additional testing was strongly suggested. Archeological excavations by Dorwin and his crew were limited in scope, and he acknowledged this by stating that further work, if possible, should be conducted at the Springhouse and the Buck House.

Dorwin and Shrive assessed the research potential for the sites that were tested at Carl Sandburg as follows. From the excavations, it was determined that the sites of the Tenant House and the Farm Manager's House needed no further testing. Springhouse excavations were recommended only if the concrete floor should ever be dug up. However, further excavation was considered essential at the Buck House since it was considered to be the oldest structure on the site and because of the density of artifacts recovered from the excavations.

Materials collected from this project were originally stored at Western Carolina University. In 1994, these were transferred to the Southeast Archeological Center (SEAC) in Tallahassee, Florida. On arrival at SEAC, the artifacts were stored in paper bags, and there was no indication of artifact identification. During the preparation of this Overview and Assessment, the artifacts from this and all the other CARL accessions at SEAC were analyzed (Appendix 2) and curated according to NPS standards.

A more serious deficiency is the lack of documentation. No original field notes are available for these excavations. And, although Dorwin and Shrive produced a report on the investigations at the park, the report also lacks detail. Recovered artifacts from the excavations are referred to only in general terms. For example, ceramics are noted as historic ceramics with no mention of the spe-

cific type. Maps depicting the test excavations at the park were included in Dorwin and Shrive's report along with maps of some of the excavation profiles. These maps show that the locations of the test units were orientated relative to the structure being tested. Although north is clearly marked, no scale appears on the maps of the Farm Manager's House and the Buck House. However, some measurements are present on the maps of the Tenant House and Springhouse excavations. One major discrepancy is apparent in the section of the report dealing with the testing at the Farm Manager's House. The report map illustrates three test units located immediately adjacent to the east wall of the structure and a fourth approximately one meter from the west wall. However, the excavation report states that the three tests were located on the north side of the structure and the fourth on the south side. The report also makes no mention of the field procedures employed during the investigations. There is no mention of whether the units were excavated in arbitrary or stratigraphic levels or what screen size, if any, was used to sift dirt from the excavations.

WALKER'S 1976 EXCAVATIONS

In January and February 1976, John W. Walker, assisted by Steven Shephard, conducted archeological investigations at the Buck House, Woodshed, and several other sites for proposed development. Because all projects were conducted to comply with Section 106 requirements, they were limited in their objective and scope.

The Buck House project was initiated to determine the extent and nature of archeological resources around the structure that would be impacted by the proposed installation of a drainage system (NPS 1975a). The Woodshed excavations (NPS 1975b) were conducted prior to scheduled foundation repair and the installation of a drainage tile. Excavations at both these sites were limited to previously disturbed areas. Two-foot-wide trenches were opened along the sides of the structures' interior and exterior foundations. The trenches were manually dug using shovels, small picks, and trowels. The dirt was screened through quarter-inch

mesh. There is no documentation that indicates whether the units were excavated by natural strata or arbitrary levels. All artifacts were cleaned, cataloged, and analyzed. Artifact analysis was completed and entered onto index cards. Preliminary handwritten artifact analysis tables were included with the draft materials for the report.

Nine "alternative" locations within four main areas of proposed development were tested. A program of pedestrian surface survey was supplemented with systematic subsurface sampling. Two-by-two-foot units were placed at one hundred foot intervals (or as near as the topography and vegetation would allow). Additional tests were excavated around areas of artifact concentration in order to delimit site boundaries. Within the nine alternative locations, a total of eighty-seven units were opened to sterile soil or bedrock. The soil was excavated by natural strata and was screened through quarter-inch mesh. Artifacts and other cultural materials were placed in artifact bags labeled with the provenience information. Materials collected during this fieldwork were curated in this condition at SEAC. The materials were analyzed so that the results of the project could be reported. The analysis information, however, was only available on handwritten tables and index cards, which are located in the accession files. Maps indicating the test locations in the areas of proposed development are very unclear. There is no indication of any datum or benchmarks used during the project. However, the excavations at the development sites are important because, to date, they are the only ones in the park conducted outside the main residence area.

Walker was to write up the testing results for the alternative areas; Shephard, the results for the Buck House and the Woodshed. Unfortunately, no final reports were ever written, although draft versions can be found in the project accession files.

WALKER AND SHEPHARD'S 1976 EXCAVATIONS

In November 1976, because of proposed maintenance, excavations were conducted in previously disturbed areas around the foundations of the Swedish House, Tenant House, and Farm Man-

ager's House. Some archeological tests at the Chicken/Wash House were also conducted away from the structure's foundation, and one excavation revealed a trash pit feature.

Soil was screened through quarter-inch mesh. All units were excavated by natural strata using shovels, trowels, and picks. Trenches, one to two meters long and a half meter wide, were dug to investigate areas adjacent to walls or foundations. All the other excavation units were test pits measuring fifty by fifty centimeters. All the artifacts recovered from this project were analyzed and subsequently stored at SEAC.

Although Steven Shephard was responsible for writing up the project results, he never produced a final report. His incomplete draft is found in the project's accession files. Maps of the Chicken/Wash House and Swedish House excavations were produced, but none exist for the Tenant House and Farm Manager's House excavations.

WALKER AND FINCH'S 1979 EXCAVATIONS

Between April 16 and May 25, 1979, archeological excavations were conducted by Walker and Finch in and around nine historic structures. The initial reason for the excavations was to expose the foundations for stabilization repairs and to allow architectural historians to observe foundation features (Finch, personal communication 1997). Consequently, it was determined that the best method of investigation would be to open two-by-four-foot test units adjacent to all the foundations to be affected. All units were excavated in feet or tenths of feet to sterile soil or bedrock. Measurements were taken from the building corners to establish pit locations horizontally. Vertical control was maintained through the use of line levels and arbitrary datum stakes. Stratigraphic zones were excavated in levels to provide greater control on the provenience of recovered artifacts. Excavations at the Family Garage were also carried out in the basement of the structure, where part of a concrete floor was removed.

In the draft report on these excavations, Finch wrote that the material underneath the concrete flooring appeared to be fill. However, per the re-

port, the artifacts found here were used to interpret the structure. Although the artifacts recovered from this project were analyzed and the information recorded on index cards during the preparation of this document, all were reanalyzed and the data was entered in a computer database. Results of the analysis are presented in Appendix 2.

The authors intended to incorporate their draft report for the 1979 excavations (SEAC Acc. 1317) (Walker et al. 1980) into a comprehensive final report detailing all of Walker's archeological excavations at the park between 1976 and 1979. The final report, however, was never completed.

WALKER'S 1979 ARCHEOLOGICAL SURVEY

On August 11, 1979, John W. Walker conducted a pedestrian survey of an area slated for installation of a water tank. He concluded that no subsurface testing was needed since the area was too steep for habitation and had been previously disturbed by the existing roadbed. The pedestrian survey covered a five-meter-wide area, and no artifacts were recovered. A brief trip report on the survey is located in the accession file for this project.

CORNELISON'S 1997 INVESTIGATIONS

Archeological investigations conducted by Cornelison in February 1997 consisted of seventeen shovel tests placed along the new segment of the Memminger Trail. No artifacts were recovered and the trail was cleared for rerouting. Cornelison also assessed the proposed remodeling of the Family Garage, which still contained open excavations from the 1979 Walker and Finch excavation. Due to Finch's findings in 1979, which stated that the Family Garage had undergone too many renovations to have maintained archeological integrity, Cornelison cleared the remodeling of the structure. A water spigot was also cleared for installation due to the disturbed nature of the area.

No artifacts were collected. Cornelison and Meyer described the excavations and the other archeological determinations in a trip report (SEAC Acc. 1288). It included an AutoCAD map of the shovel tests conducted at the new Mem-

minger Trail segment. No permanent datum was used or established during the project. Therefore, it is not possible to ascertain the exact locations of the archeological tests. But this is fairly inconsequential since their approximate location is known and all of the tests were negative.

RECOMMENDATIONS FOR FUTURE RESEARCH

SYSTEMATIC SURVEY

To date, all of the archeological projects carried out at Carl Sandburg Home NHS have been in association with the proposed maintenance, stabilization, and/or development of structures within the park. Walker's excavations of alternative areas for proposed development were the only ones conducted away from the main residence area. Since this one survey produced three historic subsites, it is evident that the need for a survey of the undeveloped areas of the park is imperative.

Because the main goal of SAIP is to "conduct systematic, scientific research to locate, evaluate, and document archeological resources on National Park System lands" (Aubry et al. 1992:2), SEAC will conduct a survey according to the standards provided in the *Regionwide Archeological Survey Plan* (Keel et al. 1996).

POSSIBLE PREHISTORIC SITES

The only documented prehistoric materials from Carl Sandburg NHS were recovered from a disturbed context in the cellar of the Family Garage by Walker and Finch in 1979. Regardless, the possibility for prehistoric archeological sites within the park is strong. Cyrus Thomas and the Smithsonian Institution investigated several Indian mounds in the general area of the park (Thomas 1894:333–350). Apparently, projectile points have also been recovered within park boundaries by park staff (Warren Weber, personal communication 1997). Although park topography consists mainly of steep to very steep elevations, the possibility exists for finding temporary hunting camps and

other evidence of prehistoric use of the landscape. Additionally, there are several natural springs on the park property. Since humans and animals have traditionally congregated around freshwater sources, there is a strong possibility that prehistoric sites might be encountered in the general vicinity of the springs.

▪ *Methodology*

Because most of the park has never been archeologically tested, the recommended survey methodology would be systematic shovel testing in selected areas at twenty-meter intervals. Shovel tests should be excavated until sterile soil is encountered. If sites are encountered, site limits should be determined and the sites should be assessed for the possibility of further investigation with larger excavation units. Any sites that are located should be evaluated for eligibility for listing on the National Register of Historic Places.

POSSIBLE HISTORIC RESOURCES

Historic records indicate that the Flat Rock area was occupied by early settlers of Scottish and Irish descent. As such, there is potential for the discovery of historic resources in the park that date to a period (circa 1807 to 1830) before Memminger owned the property. As previously stated, Walker's 1976 excavations identified three historic subsites. Therefore, archeological survey of undeveloped areas within the park will likely produce more historic deposits.

▪ *Methodology*

Locating historic resources should be accomplished in conjunction with locating prehistoric sites following the program of systematic shovel testing described in the previous *Methodology* section.

TESTING OF PARK STRUCTURES AND AREAS

▪ *Buck House*

Given the historical significance of the Buck House (see Chapter 4), limited testing is recommended to help determine the date of the structure. Previous excavations at the Buck House have produced

large amounts of historic artifacts, including ceramics, glass, and other materials. Since all the excavations at the structure have focused on the foundations, and the material excavated was found in disturbed contexts, a test excavation unit should be placed in the center of the structure.

▪ *Swedish House and Privy*

One of the structures credited to Memminger was a privy located on the west side of the Swedish House. Although no documentation is available for the construction date of the privy, it is assumed that it was built around 1840 (Hart 1993:16). The

earliest map of the property—a drawing relating to the installation of the fountain in 1852—shows a small structure on the west side of the Swedish House. The park has expressed interest in finding the remains of the privy and excavating the area (Warren Weber, personal communication 1997). Since the location of the privy has already been determined, an excavation unit should be placed in this area in order to expose any features that might be related to the privy. Excavations should utilize arbitrary levels of ten centimeters or less, and all materials should be screened through quarter-inch or finer mesh.

Chapter 6

ACCESSIONS AND ARCHIVAL MATERIALS

This chapter provides information on the nature, content, condition, and location of the accessions and archival materials that are present in the collections from Carl Sandburg Home NHS. At the time of this report, two institutions housed archival materials and collections from the park—the Southeast Archeological Center (SEAC) in Tallahassee, Florida, and the Carl Sandburg Home NHS in Flat Rock, North Carolina. The following sections briefly describe these accessions.

SOUTHEAST ARCHEOLOGICAL CENTER

▪ SEAC Acc. 195, CARL Acc. 211

This accession contains documents and artifacts recovered by John W. Walker and Steven Shephard following survey and testing in the park from January through February 1976. Documents include: Section 106 compliance material, correspondence, the scope of work and procedures, and other miscellaneous data. Also included are seven maps (Nos. 445-82,000–445-82,005, and No. 445-82,011). No final report was written. At one point, Walker planned to include the results of this investigation in a report combining his three projects at the park: Walker and Shephard, 1976 (SEAC Acc. 195); Walker and Shephard, 1976 (SEAC Acc. 205); and Walker and Finch, 1979 (SEAC Acc. 333). This overarching final report, however, was never completed.

▪ SEAC Acc. 205, CARL Acc. 212

This accession consists of items collected from John W. Walker and Steven Shephard's November 1976 excavations at the park. Documents include correspondence, a research design, a draft report, field notes, and maps (Nos. 445-82,006–445-82,010). Artifacts from this project are also included under this accession. Again, no final report was published since the project results were

eventually to be included in the earlier mentioned comprehensive report for Walker's three park projects.

▪ SEAC Acc. 333, CARL Acc. 213

SEAC Acc. 333 contains documents and artifacts from Walker and Finch's 1979 excavations. These include artifacts, sections of the unfinished "comprehensive" report on archeological excavations at the park (Walker et al. 1980), correspondence, the project scope and procedures report, research notes, a field specimen provenience inventory, photo logs, and artifact analysis tables. The accession also contains photographic negatives (Nos. 05-019-2189 through 05-019-2234); slides (Nos. 07-019-2413 through 07-019-2510; and microfilm (No. 06-019-1321). Although there are no series indexed maps from this project, there is one map detailing excavations conducted at the Family Garage.

▪ SEAC Acc. 394, CARL Acc. 214

This accession contains material pertaining to the 1975 archeological investigations conducted by John T. Dorwin of Western Carolina University under NPS Purchase Order PX516050222. Documents and all artifacts were initially curated at Western Carolina University and were returned to SEAC on November 15, 1994. The accession documents include correspondence, research materials for the final project report, a copy of the final report, and microfilm 06-019-967, which contains the project report.

▪ SEAC Acc. 985, CARL Acc. 216

Materials in this accession are from the pedestrian survey conducted in 1979 by John W. Walker in which no artifacts were recovered. Documentation consists of a brief report by Walker titled *Archeological Survey of the Area Which Would Be Affected by Installation of the Proposed Water Stor-*

age Tank, Carl Sandburg Home National Historic Site, Henderson County, North Carolina (1979).

▪ **SEAC Acc. 1218, CARL Acc. 239**

This accession contains materials from investigations conducted by John Cornelison and Regina Meyer from February 24 to 27, 1997. No artifacts were collected, therefore, the only document in this accession is a trip report regarding the work performed. Included in this accession is an AutoCAD map depicting the locations of the shovel tests conducted during the project.

CARL SANDBURG HOME NHS

There are numerous accessions relating to the collection of archeological items curated at Carl Sandburg Home NHS. These contain artifacts found mostly during maintenance projects. CARL accession files relating to SEAC projects contain loan forms for materials housed at SEAC. See Appendix 2 for a table detailing the accession numbers, catalog numbers, dates, proveniences, and collectors for every CARL accession classified as archeological.

Chapter 7

CULTURAL RESOURCE MANAGEMENT ISSUES

NPS-28: Cultural Resource Management Guideline (NPS 1994) outlines the National Park System program to protect cultural resources in the nation's parks. The overall goal in cultural resource management (CRM) is to preserve the original integrity of the resource. CRM is a three-step process that involves research, planning, and stewardship.

The first step in managing cultural resources is the identification, evaluation, and documentation of cultural resources within the park. *NPS-28* outlines the types of cultural resources as follows: (1) archeological resources, (2) cultural landscapes, (3) structures, (4) museum objects, and (5) ethnographic resources.

The second step in CRM is the planning process. Once cultural resources are identified, the park can then use the information to develop strategies to protect and interpret them.

The third and final step is stewardship, which involves making decisions about how to treat cultural resources. Evaluating the best strategy for resource management stewardship—whether preservation, restoration, data recovery, rehabilitation, or reconstruction—is fundamental.

DOCUMENTATION ISSUES

The following describes the baseline research reports for the park, their current status, and, in a few cases, recommendations for their completion before more in-depth work is undertaken.

ARCHEOLOGICAL OVERVIEW AND ASSESSMENT

An Archeological Overview and Assessment describes the known archeological resources in a park and assesses the potential for new archeological resources. The document also assesses previous archeological work and determines the need

for future archeological research in the park. The present document satisfies the Archeological Overview and Assessment requirement for the park.

ARCHEOLOGICAL IDENTIFICATION STUDIES

Archeological identification and evaluation studies are conducted to determine the extent of and the characteristics of archeological resources within a particular area. These studies are often conducted in conjunction with other evaluation studies that determine the eligibility of archeological properties for inclusion on the National Register of Historic Places.

To date, no comprehensive archeological projects at the park have satisfied the requirements for this documentation, although the park as a whole has been included on the National Register of Historic Places. Most of the park has never been archeologically tested, therefore, future archeological identification and evaluation studies should be undertaken in unsurveyed areas of the park.

ETHNOGRAPHIC OVERVIEW AND ASSESSMENT

This document reports on the ethnic groups traditionally associated with the park as well as the natural and cultural areas in the park that are associated with particular ethnic groups. Although the review and analysis of accessible archival material and documentary data is emphasized, limited interviews and discussions are conducted with traditionally associated groups to supplement the documentary evidence and assess any deficiencies in the available data. The park has no Ethnographic Overview and Assessment.

CULTURAL AFFILIATION STUDIES

Cultural Affiliation Studies are ethnographic studies that identify cultural ties among past and

present ethnic groups that occupied or used, and may still use park resources, both natural and cultural, including collections. Currently, the park has no document that qualifies as a cultural affiliation study.

HISTORIC RESOURCE STUDY (HRS)

A Historic Resources Study identifies and evaluates a park's cultural resources within historic contexts and provides a historical overview of a park or region. An HRS should take into account all available information on the history of the park and area. The study should include archival and field research to determine and describe the integrity, authenticity, associative values, and significance of park resources so as to determine steps for resource management and interpretation. The study should also include the preparation of National Register nominations for all eligible resources and should determine the need for special history studies, cultural landscape reports, and other more detailed studies. An HRS is the principal tool for completing the Cultural Landscapes Inventory and the List of Classified Structures. The park has a very complete National Register Nomination prepared in 1995. Two historic structure reports have also been completed for the park. A historic structure report for the Front Lake and Dam, Side Lake and Dam, Pond Bridge, and Duck Cage was completed in 1981. A historic structure report for the Main House, Family Garage, and Swedish House was completed in 1976 (NPS 1976); however, the park feels that this document provides inadequate information regarding the historic structures (Warren Weber, personal communication 1997).

CULTURAL RESOURCE BASE MAP

A Cultural Resource Base Map depicts all the known historic sites and structures, cultural landscapes, long-distance trails and roads, and archeological and ethnographic resources. Battlefield parks may include documented troop movements. The Cultural Resource Base Map should be updated as additional resources are discovered. Carl Sandburg Home NHS has adequate base maps

depicting historic sites and structures. There were three base maps produced in conjunction with the preparation of the Cultural Landscape Plan. These depict the cultural landscape and historic structures present during the three main occupations of the property by Memminger, Smyth, and Sandburg. An AutoCAD version of these maps has been prepared as part of the present Archeological Overview and Assessment.

PARK ADMINISTRATIVE HISTORY

This report documents how and why the park was conceived and established and should include the park's management history. Emphasis should be placed on the park's legislative history and important issues in planning, land acquisition, development, public relations, and other topics of ongoing management concern. There is currently no park administrative history.

RAPID ETHNOGRAPHIC ASSESSMENT PROCEDURES (REAP)

Rapid Ethnographic Assessment Procedures should be produced before or as part of park general management plans or other planning documents. Traditionally, an ethnographer organizes a research team composed of NPS employees and community representatives to collect and analyze data to provide basic planning and program evaluation information. These studies should be completed in four months and do not substitute for an Ethnographic Overview and Assessment. No REAPs have been produced for the park.

SCOPE OF COLLECTIONS STATEMENT

A required planning document, this statement guides park staff in acquiring and preserving museum objects and archival materials. It describes the purpose, significance, and possible uses of the park's collections. This document also addresses limits on collection size, subject matter, geographic origin, and time period with regard to collection additions. A Collection Management Plan was prepared for the park in 1992 (NPS 1992).

TREATMENT ISSUES

NPS-28 (NPS 1994) states that archeological resources in National Parks are to be left undisturbed unless intervention can be justified based on compelling research, interpretation, site protection, or park development needs. All resources are to be protected against natural and human agents of destruction and deterioration whenever practicable. Resources are to also be preserved in a manner that will maintain the archeological integrity of the resources.

Preservation techniques will include methods of arresting or retarding deterioration through a program of ongoing maintenance. Deteriorated areas—for example, depressions created through erosion, slumping, subsidence, and other natural causes—will be backfilled or otherwise stabilized. The use of excavation and other destructive techniques should only be employed when necessary to provide sufficient information for research, interpretation, and management. Excavated areas, including looted areas, will be backfilled or otherwise stabilized. Stabilization to arrest and inhibit deterioration will be done in such a way as to detract as little as possible from its appearance and significance and not adversely affect its research potential unless adequate data recovery has occurred. Stabilization by vegetation, installation of riprap or landscape netting, burial, or other alteration will be undertaken only after sufficient re-

search or experimentation is completed to determine the probable efficacy of the action and only after existing conditions are fully documented. A complete record of stabilization work will be kept. Archeological sites and structures will not be rehabilitated, restored, or reconstructed. At present, there are no treatment issues that need to be addressed at Carl Sandburg Home NHS.

MONITORING ISSUES

Archeological resources are to be protected from vandalism and looting. Protective measures can include patrols, fencing, warning signs, or remote sensing alarms. Park staff should be aware of resource protection concerns and trained in resource protection methods. Monitoring also includes providing interpretive programs that emphasize the value of archeological site protection, and establishing stewardship programs that enlist the aid of local inhabitants in monitoring resources.

No violations of the Archeological Resources Protection Act (ARPA) have been recorded in the park since the act's inception in 1979. The major threat to archeological resources at Carl Sandburg Home NHS is a lack of identification. Unless properly identified, archeological resources cannot be adequately protected. It is, therefore, recommended that a parkwide systematic survey to identify archeological resources be undertaken.

THEMATIC FRAMEWORK

In 1936, the National Park Service Advisory Board officially approved an outline of historical and cultural themes designed to offer a framework for classifying the resources contained within the National Park System. This “thematic framework,” as it has come to be known, has been revised several times since its original formulation, the most recent version appearing in 1996. The 1996 revision provides only eight, broad-based themes that may be used to categorize National Park resources. These are:

- I. Peopling Places
- II. Creating Social Institutions and Movements
- III. Expressing Cultural Values
- IV. Shaping the Political Landscape
- V. Developing the American Economy
- VI. Expanding Science and Technology
- VII. Transforming the Environment
- VIII. Changing Role of the United States in the World Community

These themes are designed to guide the National Park Service in:

1. evaluating the significance of resources for listing in the National Register of Historic Places, for designation as National Historic Landmarks, or for potential addition to the National Park System;
2. assessing how well the themes are currently represented in existing units of the National Park System and in other protected areas; and,
3. expanding and enhancing the interpretive programs at existing units of the National Park System to provide a fuller understanding of our nation’s past (NPS 1996:2).

The documented prehistoric, historic, and cultural resources at Carl Sandburg Home NHS had

previously been assessed in the park’s *Statement for Management and Basic Operations Statement* (NPS 1993) using the 1982 thematic framework (NPS 1982) (Table 9). However, these resources have not yet been evaluated using the 1996 version. Because the two versions differ considerably, a brief reassessment of the park’s sites based on the 1996 criteria is included in this chapter.

Table 10 places documented sites at the park within the 1996 thematic framework. It should be noted that these sites have all been listed on the

Table 9 – Thematic framework based on 1982 revision.

<i>District: Carl Sandburg Home NHS</i>	
IV.	Major American Wars
	D. The Civil War
	5. Political and Diplomatic Scene
VII.	America at Work
	A. Agriculture
	4. Era of Specialized Agriculture, since 1860
	E. Architecture
	6. Other Specialized
	7. Landscape Architecture
VIII.	The Contemplative Society
	A. Literature, Drama, and Music
	1. Literature
	C. Education,
	5. Museums and Libraries
	D. Intellectual Currents
	1. Creative Thought
	2. Criticism and Commentary
IX.	Society and Social Conscience
	B. Social and Humanitarian Movements
	1. Social Movements
	2. Humanitarian Movements

Table 10 — Themes applying to CARL structures and sites based on 1996 thematic framework.

	I	II	III	IV	V	VI	VII	VIII
HS 1	X	X	X	X			X	
HS 2			X	X			X	
HS 3	X	X	X	X	X		X	
HS 4							X	
HS 5	X	X		X	X		X	
HS 6							X	
HS 7							X	
HS 8							X	
HS 9				X			X	
HS 10							X	
HS 11							X	
HS 12							X	
HS 13							X	
HS 14							X	
HS 15							X	
HS 16							X	
HS 16A							X	
HS 17							X	
HS 18							X	
HS 19							X	
HS 20							X	
HS 21				X			X	
HS 22							X	
HS 23							X	
HS 24							X	
HS 25							X	
HS 26							X	
HS 27							X	
HS 28				X			X	
HS 29							X	
HS 30							X	
HS 31							X	
HS 32				X			X	
HS 33							X	
HS 34							X	
HS 35							X	
HS 36							X	
HS 37							X	
HS 38							X	
HS 39				X			X	
HS 40							X	
HS 42							X	
HS 44				X			X	
HS 45				X			X	
HS 46							X	
HS 47							X	
HS 48				X			X	
HS 49				X			X	
HS 51	X							
HS 52	X							
HS 53	X							

National Register of Historic Places as individual components of the Carl Sandburg Home NHS. Many of the structures and subsites have multiple themes because of their multiple uses throughout the history of the property. The 1996 themes suggested in this document are recommendations only. The superintendent of the park must evaluate the park's cultural resources to establish new official themes.

I. Peopling Places

Theme I examines “human population movement and change through prehistoric and historic times” (NPS 1996). It also encompasses gender and race roles. Carl Sandburg Home NHS structures and subsites assigned to this theme relate to the Scottish, Irish, and English settlers that came to the area in the early 1800s. Therefore, structures or subsites dating to the historic period before Memminger occupied the property (pre-1838) have been put into this category. The lives of the white, black, male, and female inhabitants of the property also fall under this theme. Therefore, structures associated with slavery and living quarters have also been assigned to Theme I.

II. Creating Social Institutions and Movements

Theme II refers to “the diverse formal and informal structures...through which people express values and live their lives” (NPS 1996). Park structures and subsites placed under this theme relate to the social institution of slavery. Therefore, the structures and subsites utilized as slaves quarters and the Main House have been assigned this theme.

III. Expressing Cultural Values

Theme III refers to “people’s beliefs about themselves and the world they inhabit....This theme also encompasses the ways that people communicate their moral and aesthetic values” (NPS 1996). Structures associated with the poet and writer Carl Sandburg have been assigned to this theme. However, because cultural values can be expressed in

subtler ways, structures associated with the expression of cultural values through architecture are also included. For example, the distinct architecture of the Main House, different from the other structures at the site, is an expression of a cultural value.

IV. Shaping the Political Landscape

Theme IV “encompasses tribal, local, state, and federal political and governmental institutions that create public policy and those groups that seek to shape both policies and institutions” (NPS 1996). Structures listed under this theme relate to Christopher Memminger, and, therefore, they have historical association with the Civil War.

V. Developing the American Economy

Theme V “reflects the ways Americans have worked, including slavery, servitude, and non-wage as well as paid labor” (NPS 1996). Structures listed under this theme are associated with slaves, farm laborers, and other persons responsible for unpaid and paid labor conducted on the property.

VI. Expanding Science and Technology

Theme VI “focuses on science, which is modern civilization’s way of organizing and conceptualizing knowledge about the world and the universe beyond” (NPS 1996). No park structures or subsites are listed under this theme.

VII. Transforming the Environment

Theme VII “examines the variable and changing relationships between people and their environment, which continuously interact”(NPS 1996). Under this theme are listed the structures associated with activities related to the Sandburg farm, as well as the structures and resources that are part of the cultural landscape.

VIII. Changing Role of the United States in the World Community

No park structures have been placed under Theme VIII.

Appendix 1

ENABLING LEGISLATION

Public Law 90-592

An Act

To Authorize the establishment of the Carl Sandburg Home National Historic Site
in the State of North Carolina and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the Secretary of the Interior is authorized to acquire, by donation or purchase with donated or appropriated funds, all or any part of the property and improvements thereon at Flat Rock, North Carolina, where Carl Sandburg lived and worked during the last twenty years of his life, comprising approximately two hundred and forty-two acres, together with approximately six acres of adjacent or related property which the Secretary may deem necessary for establishment of the Carl Sandburg Home National Historic Site.

Sec. 2. The national historic site established pursuant to this Act shall be administered by the Secretary of the Interior in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented (16 U.S.C. 1 et seq.), and the Act of August 21, 1935 (49 Stat. 666; 16 U.S.C. 461-467).

Sec. 3. There are authorized to be appropriated the sums of \$225,000 for the acquisition of lands and interests in lands and \$952,000 for development expenses incurred pursuant to the provisions of this Act.

Approved October 17, 1968

ACCESSIONS AND ARTIFACT TOTALS

Table 11 — Archeological accessions located at CARL.

CARL Acc. #	CARL Cat. #	Artifact	Date	Provenience	Collector
97	23282	Insulator	25 Mar 1982	Swedish House grounds	Maintenance crew, field collection
98	23279	Bottle, Bromo-Seltzer	7 May 1980	Swedish House grounds	Maintenance crew, field collection
98	23280	Bottle, patent medicine	7 May 1980	Swedish House grounds	Maintenance crew, field collection
99	23288	Sherd	14 Jul 1982	Front Lake bed	Maintenance crew, field collection
100	23289	Bottle, iodine	12 Jun 1980	Chicken lot behind Main House	Maintenance crew, field collection
101	23278	Bottle, ginger beer	10 Nov 1981	Front Lake dredging	Contractor Brammett and Waddell, field collection
104	27551	Bit	1977	Farm Manager's House area	Maintenance crew, field collection
104	27552	Hinge pin	1977	Farm Manager's House area	Maintenance crew, field collection
104	27553	Bolt	1977	Farm Manager's House area	Maintenance crew, field collection
104	27733	Problematical	1977	Farm Manager's House area	Maintenance crew, field collection
104	27734	Shutter (part-hinge pin)	1977	Farm Manager's House area	Maintenance crew, field collection
104	27735	Shutter (part-hinge pin)	1977	Farm Manager's House area	Maintenance crew, field collection
105	27554	Bottle, flavoring	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27555	Spoon, table	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27556	Doorknob	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27557	Doorknob	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27558	Doorknob	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27559	Bottle	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27560	Bottle	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27561	Sherd	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27562	Sherd	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27563	Sherd	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
105	27564	Sherd, handle	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection

Table 11 (cont.) — Archeological accessions located at CARL.

CARL Acc. #	CARL Cat. #	Artifact	Date	Provenience	Collector
105	27565	Cap, grease	Aug 1977	Stone wall outside of Farm Manager's House	Maintenance crew, field collection
108	27021	Hammer, cobbler's	1978	South side of Springhouse	Maintenance crew, field collection
109	27566	Box	6 Jun 1980	South side of Springhouse	Maintenance crew, field collection
110	27567	Bracket, bell	Oct 1979	Goat pasture	Maintenance crew, field collection
111	27019	Fence, (part-brace)	1981	Side Lake	Maintenance crew, field collection
112	27483	Bottle	18 Nov 1981	Side Lake	Maintenance crew, field collection
113	27482	Bottle, soft drink	2 Dec 1981	Side Lake	Maintenance crew, field collection
114	27568	Plug, drain	Summer 1982	Side Lake Dam	Maintenance crew, field collection
115	27569	Mower (part-blade guard)	6 May 1983	Barn Garage area	Maintenance crew, field collection
115	27570	Club, golf	6 May 1983	Barn Garage area	Maintenance crew, field collection
115	27571	Horseshoe	6 May 1983	Barn Garage area	Maintenance crew, field collection
116	27572	Harness, farm	26 May 1983	Cow Shed lot	Maintenance crew, field collection
118	27573	Fixture, ceiling	June 1983	Stone wall	Maintenance crew, field collection
119	27574	Nail	21 Jul 1983	Stone wall	Maintenance crew, field collection
120	27575	Bottle, soft drink	25 Jul 1983	Stone wall	Maintenance crew, field collection
121	27576	Gate hinge	8 Aug 1983	Stone wall	Maintenance crew, field collection
122	27577	Sherd	9 Aug 1983	Stone wall	Maintenance crew, field collection
122	27578	Sherd	9 Aug 1983	Stone wall	Maintenance crew, field collection
122	27579	Sherd	9 Aug 1983	Stone wall	Maintenance crew, field collection
123	27580	Pipe	1983	Barnyard	Maintenance crew, field collection
124	27581	Hinge pin, gate	Summer 1983	Stone wall	Maintenance crew, field collection
124	27582	Hammer, claw	Summer 1983	Stone wall	Maintenance crew, field collection
124	27583	Padlock	Summer 1983	Stone wall	Maintenance crew, field collection
124	27584	Chisel, cold	Summer 1983	Stone wall	Maintenance crew, field collection
124	27585	Insulator	Summer 1983	Stone wall	Maintenance crew, field collection
124	27586	Nail	Summer 1983	Stone wall	Maintenance crew, field collection
124	27587	Knife, pocket	Summer 1983	Stone wall	Maintenance crew, field collection
124	27588	Doorknob	Summer 1983	Stone wall	Maintenance crew, field collection
124	27589	Problematical	Summer 1983	Stone wall	Maintenance crew, field collection
124	27590	Latch, gate	Summer 1983	Stone wall	Maintenance crew, field collection
124	27591	Bottle, flavoring	Summer 1983	Stone wall	Maintenance crew, field collection
124	27592	Latch, shutter	Summer 1983	Stone wall	Maintenance crew, field collection
125	27593	Problematical	19 Sep 1983	Stone wall	Maintenance crew, field collection
125	27594	Problematical	19 Sep 1983	Stone wall	Maintenance crew, field collection
125	27595	Slate shingle	19 Sep 1983	Stone wall	Maintenance crew, field collection

Table 11 (cont.) — Archeological accessions located at CARL.

CARL Acc. #	CARL Cat. #	Artifact	Date	Provenience	Collector
126	27596	Nail	20 Sep 1983	Stone wall	Maintenance crew, field collection
127	27597	Bottle, ginger beer	18 Oct 1983	Duck Pond	Maintenance crew, field collection
128	27598	Horseshoe	Feb 1984	Springhouse	Maintenance crew, field collection
128	27599	Fork, dinner	Feb 1984	Springhouse	Maintenance crew, field collection
128	27600	Insulator	Feb 1984	Springhouse	Maintenance crew, field collection
129	30501	License plate	Feb 1984	Springhouse	Maintenance crew, field collection
130	30502	Sign, traffic	Feb 1984	Contact station area	Maintenance crew, field collection
131	30503	Nail	22 Feb 1984	Barnyard	Maintenance crew, field collection
132	30504	Tablespoon	22 Feb 1984	Cow Shed field	Maintenance crew, field collection
133	27020	Valve, pressure	9 Jul 1984	No provenience	Park staff, field collection
133	27023	Bottle, spring water	9 Jul 1984	No provenience	Park staff, field collection
133	27024	Bottle, soft drink	9 Jul 1984	No provenience	Park staff, field collection
133	27025	Bottle, medicine	9 Jul 1984	No provenience	Park staff, field collection
133	27484	Bottle	9 Jul 1984	No provenience	Park staff, field collection
133	30505	Bottle, medicine	9 Jul 1984	No provenience	Park staff, field collection
133	30506	Bottle, soft drink	9 Jul 1984	No provenience	Park staff, field collection
133	30507	Bottle, soft drink	9 Jul 1984	No provenience	Park staff, field collection
133	30508	Bottle	9 Jul 1984	No provenience	Park staff, field collection
133	30509	Bottle	9 Jul 1984	No provenience	Park staff, field collection
133	30510	Bottle	9 Jul 1984	No provenience	Park staff, field collection
133	30511	Bottle, medicine	9 Jul 1984	No provenience	Park staff, field collection
133	30512	Insulator	9 Jul 1984	No provenience	Park staff, field collection
133	30513	Pipe	9 Jul 1984	No provenience	Park staff, field collection
140	32078	Wrench, wagon hub	Aug 1984	Gate to goat pasture	Park staff, field collection
140	32079	Plate, jack	Aug 1984	Gate to Goat pasture	Park staff, field collection
150	38274	Sprinkler	27 Jun 1985	Field near Buck House	Maintenance crew, field collection
151	38275	Bottle	27 Jun 1985	Main pasture	Park staff, field collection
151	38276	Problematical	27 Jun 1985	Main pasture	Park staff, field collection
152	39307	Fence section	12 Aug 1985	Behind Main House	Park staff, field collection
156	39900	Dish, baking	28 Aug 1985	Behind HS3, near fence	Maintenance crew, field collection
162	45400	Sherd, ceramic	21 Mar 1986	West of Main House	Museum Technician, field collection
163	45937	Pistol	28 Mar 1986	Dripline, Isolation Quarters	Maintenance crew, field collection
166	50500	Plow, blade	28 Jul 1986	Buck House area	Maintenance crew, field collection
168	50497	Bottle	28 Jul 1986	Little Glassy	Maintenance crew, field collection
168	50498	Can, spice	28 Jul 1986	Little Glassy	Maintenance crew, field collection

Table 11 (cont.) — Archeological accessions located at CARL.

CARL Acc. #	CARL Cat. #	Artifact	Date	Provenience	Collector
169	51734	Bottle, medicine	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51735	Bottle	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51736	Bottle, medicine	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51737	File	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51738	Crock lid	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51739	Jar	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51740	Cup	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51741	Sherd	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51742	Sherd	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51743	Sherd	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51744	Sherd	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51745	Sherd	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51746	Bottle	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51747	Bottle	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51748	Problematical	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
169	51749	Finial	28 Jul 1986	Buried sprinkler line between HS 1, 3, 4	Maintenance crew, field collection
171	27016	Insulator	Mar 1982	Front Lake	Maintenance crew, field collection
181	55518	Jar, peanut butter	18 Jul 1988	No provenience	Park staff, field collection
181	55519	Bottle, liquor	18 Jul 1988	No provenience	Park staff, field collection
181	55520	Fence [part-finial]	18 Jul 1988	No provenience	Park staff, field collection
210	105096	Wedge	10 Jul 1992	Field west of garden, near stone steps	Maintenance crew, field collection
210	105097	Horseshoe	10 Jul 1992	Field west of garden, near stone steps	Maintenance crew, field collection
236	106556	Sherd	17 Jul 1995	No provenience	Eastern National, field collection
236	106557	Sherd	17 Jul 1995	No provenience	Eastern National, field collection
237	106545	Bottle, toilet [part-cap]	17 Jul 1995	No provenience	Eastern National, field collection

Table 12 — SEAC Acc. 195 artifact summary (see Tables 13–17 for summaries by structure).

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Annularware	2	0.9
Brick	4	117.5
Button, 4-hole	1	0.3
Button, bone, 2-hole	1	0.9
Button, glass, milk, 4-hole	2	1.4
Button, glass, white, 4-hole	1	0.2
Button, mother-of-pearl, 2-hole	2	1.4
Button, mother-of-pearl, 4-hole	1	0.7
Button, plastic, 2-hole	1	1.9
Clay, fired	2	12.5
Comb, plastic	1	6.9
Daub	1	13.4
Earthenware	2	29.7
Earthenware, refined	36	33.3
Fauna, Animalia	21	31.5
Fauna, Aves	15	45.1
Fauna, <i>Didelphis virginiana</i>	2	7.2
Fauna, Mammalia	33	221.3
Fauna, Osteichthyes	1	0.4
Fauna, <i>Sus scrofa</i>	1	4.8
Fauna, Testudines	10	28.2
Flower pot	5	150.7
Flower pot, base	1	6.9
Glass, clear, melted	1	1.1
Glass, container, amber	1	2.8
Glass, container, amber, bottle, neck	1	74.7
Glass, container, amethyst	2	5.1
Glass, container, black	8	22.4
Glass, container, blue	1	4.8
Glass, container, blue, bottle, complete	1	48.4
Glass, container, blue, bottle, miniature	1	14.9
Glass, container, brown	10	31.1
Glass, container, brown, bottle, case	10	193.7
Glass, container, clear	85	564.9
Glass, container, clear, bottle	1	6.0
Glass, container, clear, bottle, case	4	14.7
Glass, container, clear, jar	8	199.9
Glass, container, dark green	2	11.3
Glass, container, green	15	48.5
Glass, container, green bottle	1	5.3
Glass, container, green, bottle, beer	1	400.0
Glass, container, light blue	9	31.1

Table 12 (cont.) — SEAC Acc. 195 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, container, light blue, bottle, case	5	41.3
Glass, container, light green	1	0.6
Glass, container, milk, lid liner	7	14.9
Glass, container, milk, lid liner, metal lid	1	42.1
Glass, container, olive	2	11.0
Glass, container, pink with white stripe	1	0.8
Glass, container, yellow	1	6.8
Glass, flat, aqua	8	53.1
Glass, flat, clear	111	354.7
Glass, flat, light blue	79	438.8
Glass, flat, light green	8	77.6
Glass, lighting, light bulb	8	3.2
Insulator, ceramic	1	27.8
Ironstone	15	199.6
Lithic	1	0.9
Metal, unid.	1	1.0
Mortar	2	190.4
Mortar and plaster, composite	1	51.6
Paint, dried encrustation	1	12.1
Pearlware	35	82.8
Pencil, wood, 8-sided	1	4.8
Plastic, unid.	1	2.8
Porcelain	28	147.1
Redware	1	24.4
Redware, coarse	1	4.5
Shoe, sole, heel, rubber	1	47.0
Shoe, upper, heel, leather	1	16.3
Slate	1	1.3
Stone	3	83.2
Stoneware	42	471.2
Toothbrush, plastic, orange	1	7.6
Toothbrush, plastic, red	1	10.6
Toothbrush, wooden	1	22.2
Toy, marble, ceramic	2	7.5
Toy, marble, glass	2	9.4
Toy, marble, glass, white	1	5.5
Whiteware	109	619.2
Wood, carbonized	1	0.3
Yellow ware	4	13.8
TOTAL	799	5,507.6

Table 13 — SEAC Acc. 195, Structure 6, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Fauna, Mammalia	1	2.8
Glass, container, black	2	3.8
Glass, container, clear	1	22.8
Glass, container, clear, bottle, case	3	12.9
Glass, container, clear, jar	1	47.7
Glass, flat, clear	1	3.4
Glass, flat, light blue	4	52.7
Redware, coarse	1	4.5
Shoe, sole, heel, rubber	1	47.0
TOTAL	15	197.6

Table 14 — SEAC Acc. 195, Structure 21, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Brick	2	11.8
Button, 4-hole	1	0.3
Button, bone, 2-hole	1	0.9
Button, glass, milk glass, 4-hole	2	1.4
Button, mother-of-pearl, 2-hole	2	1.4
Button, mother-of-pearl, 4-hole	1	0.7
Button, plastic, 2-hole	1	1.9
Clay, fired	1	6.7
Comb, plastic	1	6.9
Earthenware	2	29.7
Earthenware, refined	4	5.8
Fauna, Animalia	14	24.0
Fauna, Aves	15	45.1
Fauna, <i>Didelphis virginiana</i>	2	7.2
Fauna, Mammalia	29	200.5
Fauna, Osteichthyes	1	0.4
Fauna, Testudines	10	28.2
Flower pot	5	150.7
Flower pot, base	1	6.9
Glass, clear, melted	1	1.1
Glass, container, amber	1	2.8
Glass, container, amber, bottle, neck	1	74.7
Glass, container, amethyst	2	5.1

Table 14 (cont.) — SEAC Acc. 195, Structure 21, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, container, black	3	6.1
Glass, container, blue	1	4.8
Glass, container, blue, bottle, complete	1	48.4
Glass, container, blue, bottle, miniature	1	14.9
Glass, container, brown	10	31.1
Glass, container, brown, bottle, case	10	193.7
Glass, container, clear	77	518.3
Glass, container, clear, bottle	1	6.0
Glass, container, clear, bottle, case	1	1.8
Glass, container, clear, jar	7	152.2
Glass, container, dark green	2	11.3
Glass, container, green	15	48.5
Glass, container, green bottle	1	5.3
Glass, container, green, bottle, beer	1	400.0
Glass, container, light blue	8	29.5
Glass, container, light blue, bottle, case	5	41.3
Glass, container, milk glass, lid liner	7	14.9
Glass, container, milk glass, lid liner, metal lid	1	42.1
Glass, container, pink with white stripe	1	0.8
Glass, container, yellow	1	6.8
Glass, flat, aqua	8	53.1
Glass, flat, clear	98	340.5
Glass, flat, light blue	75	386.1
Glass, flat, light green	8	77.6
Glass, lighting, light bulb	7	3.0
Insulator, ceramic	1	27.8
Ironstone	15	199.6
Metal, unid.	1	1.0
Mortar	2	190.4
Mortar and plaster, composite	1	51.6
Paint, dried encrustation	1	12.1
Pearlware	7	20.9
Pencil, wood, 8-sided	1	4.8
Plastic, unid.	1	2.8
Porcelain	26	140.5
Redware	1	24.4
Shoe, upper, heel, leather	1	16.3
Slate	1	1.3
Stone	3	83.2
Stoneware	32	419.6
Toothbrush, plastic, orange	1	7.6
Toothbrush, plastic, red	1	10.6

Table 14 (cont.) — SEAC Acc. 195, Structure 21, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Toothbrush, wooden	1	22.2
Toy, marble, ceramic	2	7.5
Toy, marble, glass	2	9.4
Toy, marble, glass, container, white	1	5.5
Whiteware	76	503.8
Yellow ware	4	13.8
TOTAL	632	4,829.0

Table 15 — SEAC Acc. 195, Structure 51, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Annularware	2	0.9
Daub	1	13.4
Earthenware, refined	21	20.3
Glass, container, clear	3	5.1
Glass, container, olive	1	9.8
Glass, flat, clear	4	1.4
Lithic	1	0.9
Pearlware	23	36.6
Stoneware	8	28.0
Whiteware	23	34.2
Wood, carbonized	1	0.3
TOTAL	88	150.9

Table 16 — SEAC Acc. 195, Structure 52, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Brick	2	105.7
Clay, fired	1	5.8
Earthenware, refined	11	7.2
Fauna, Animalia	7	7.5
Glass, container, black	3	12.5
Glass, container, clear	1	1.6
Glass, container, light green	1	0.6
Glass, container, olive	1	1.2
Glass, flat, clear	3	1.7
Glass, lighting, light bulb	1	0.2
Pearlware	4	9.5
Porcelain	2	6.6
Stoneware	1	9.4
Whiteware	5	4.2
TOTAL	43	173.7

Table 17 — SEAC Acc. 195, Structure 53, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Button, glass, white, 4-hole	1	0.2
Fauna, Mammalia	3	18.0
Fauna, <i>Sus scrofa</i>	1	4.8
Glass, container, clear	3	17.1
Glass, container, light blue	1	1.6
Glass, flat, clear	5	7.7
Pearlware	1	15.8
Stoneware	1	14.2
Whiteware	5	77.0
TOTAL	21	156.4

Table 18 — SEAC Acc. 205 artifact summary (see Tables 19–20 for summaries by structure).

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Earthenware	1	24.7
Earthenware, coarse	1	33.2
Earthenware, refined	23	796.2
Fauna, Animalia	18	18.9
Fauna, Aves	32	43.3
Fauna, Leporidae	1	2.3
Fauna, Mammalia	46	427.7
Fauna, Rodentia	2	3.5
Fauna, <i>Sus scrofa</i>	1	2.1
Fauna, <i>Sylvilagus</i> sp.	1	1.1
Fauna, Testudines	1	0.6
Flower pot, base	1	49.7
Glass, container, amber	1	1.9
Glass, container, amber/brown, bottle base	2	87.8
Glass, container, clear	6	70.4
Glass, container, clear, bottle	1	154.7
Glass, container, clear, bottle plug	1	12.3
Glass, container, clear, jar	1	34.6
Glass, container, clear, lid	1	25.2
Glass, container, olive	2	28.2
Glass, flat, clear	5	10.5
Hairpin	1	0.3
Insulator, ceramic	1	40.4
Ironstone	1	1.8
Pearlware	5	62.7
Pipe, bowl	1	8.8
Porcelain	6	176.7
Slate	1	19.6
Stoneware	7	165.2
Tile	1	28.9
Whiteware	2	22.7
Yellow ware	2	21.9
TOTAL	176	2,377.9

Table 19 — SEAC Acc. 205, Structure 3, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Earthenware	1	24.7
Earthenware, refined	15	194.5
Fauna, Animalia	18	18.9
Fauna, Aves	22	23.7
Fauna, Leporidae	1	2.3
Fauna, Mammalia	43	314.4
Fauna, Rodentia	2	3.5
Fauna, <i>Sus Scrofa</i>	1	2.1
Fauna, <i>Sylvilagus</i> sp.	1	1.1
Fauna, Testudines	1	0.6
Glass, container, amber	1	1.9
Glass, container, clear	4	29.1
Glass, container, clear, bottle plug	1	12.3
Glass, container, clear, jar	1	34.6
Glass, container, clear, lid	1	25.2
Glass, container, olive	2	28.2
Glass, flat, clear	4	9.7
Hairpin	1	0.3
Pearlware	4	58.1
Porcelain	4	126.9
Stoneware	7	165.2
Tile	1	28.9
Whiteware	1	1.2
Yellow ware	2	21.9
TOTAL	139	1,129.3

Table 20 — SEAC Acc. 205, Structure 5, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Earthenware, coarse	1	33.2
Earthenware, refined	8	601.7
Fauna, Aves	10	19.6
Fauna, Mammalia	3	113.3
Flower pot, base	1	49.7
Glass, container, amber/brown, bottle base	2	87.8
Glass, container, clear	2	41.3
Glass, container, clear, bottle	1	154.7
Glass, flat, clear	1	0.8
Insulator, ceramic	1	40.4
Ironstone	1	1.8
Pearlware	1	4.6
Pipe, bowl	1	8.8
Porcelain	2	49.8
Slate	1	19.6
Whiteware	1	21.5
TOTAL	37	1,248.6

Table 21 — SEAC Acc. 333 artifact summary (see Tables 22–29 for summaries by structure).

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Aluminum foil	1	0.2
Ammunition, bullet (.22-caliber lead shot)	1	1.8
Ammunition, bullet, unspent	1	6.3
Ammunition, shot, buck.....	2	0.8
Asphalt	6	16.8
Bone, unid.	1	0.4
Bone, unid., burnt	2	0.4
Bone, worked	1	0.3
Brackets, flexible conduit, nails, slag	n/c	727.4
Brick	29	511.0
Button, encrusted, 4-hole	1	1.9
Button, milk glass, 4-hole	2	0.9
Button, mother-of-pearl, 2-hole	1	0.2
Button, mother-of-pearl, 4-hole	2	0.6
Button, wood, 4-hole	1	0.3
Button/snap, milk glass	1	0.1
Cap, bottle.....	1	4.6
Cap/lid	1	2.3
Caulking.....	25	15.2
Caulking, latex	1	0.5
Cigarette filter	1	0.1
Clay, brick mortar	29	101.7
Clay, fired	172	782.4
Coal.....	29	38.7
Concrete	51	665.7
Concrete, brick, mortar	102	3,216.3
Concrete, cardboard, treated wood, plastic, wire insulation	n/c	559.0
Concrete, mortar	8	205.5
Concrete, mortar, brick	14	165.7
Concrete, mortar, clay, fired, brick	46	2,223.4
Concretion	1	2.4
Concretions, ferrous	1	19.2
Construction material.....	62	3,296.8
Copper, unid.	1	0.4
Doorknob, ceramic	1	143.4
Earthenware	1	0.7
Earthenware, coarse	1	34.5
Earthenware, refined	33	508.9
Electrical conduit, ceramic	8	174.2
Electrical conduit, tar strip/seal, composite	2	8.4

Table 21 (cont.) — SEAC Acc. 333 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Eye dropper, glass and rubber	1	5.4
Fauna, Animalia	304	75.5
Fauna, Animalia, burnt	1	0.3
Fauna, antler	1	1.3
Fauna, Aves	112	64.4
Fauna, <i>Dinocardium robustum</i>	5	2.3
Fauna, eggshell	78	3.6
Fauna, Gastropoda	10	1.1
Fauna, Mammalia	59	295.2
Fauna, Osteichthyes	14	0.8
Fauna, Rodentia	2	0.2
Fauna, Serpentes	1	0.1
Fauna, Testudines	9	2.2
Feather	1	0.1
Flora, <i>Juglans</i> sp.	2	2.3
Flora, nut, hickory	1	2.2
Flora, seed, peach pit	1	0.7
Flora, seed, sunflower	1	0.1
Flower pot, rim, clay, fired	1	13.9
Gasket/seal, rubber	5	20.8
Glass, clear, melted	2	7.8
Glass, container, amber	3	4.0
Glass, container, amber, bottle	1	206.1
Glass, container, amber/brown	7	14.1
Glass, container, amber/brown, bottle	1	418.4
Glass, container, amber/yellow	9	8.7
Glass, container, aqua	2	1.5
Glass, container, aqua, bottle	60	331.4
Glass, container, aqua, bottle, medicine	1	52.3
Glass, container, aqua, jar	5	107.4
Glass, container, clear, burnt	3	3.0
Glass, container, clear	192	437.1
Glass, container, clear, bottle	42	1,006.6
Glass, container, clear, bowl	4	74.2
Glass, container, clear, jar lid	1	102.3
Glass, container, clear, tumbler	10	222.0
Glass, container, clear, vial	1	5.1
Glass, container, cobalt blue	3	2.1
Glass, container, dark olive	1	2.6
Glass, container, green	7	5.9
Glass, container, green, bottle	4	309.6
Glass, container, light green	1	3.7

Table 21 (cont.) — SEAC Acc. 333 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, container, milk glass	75	197.9
Glass, container, mint green	2	13.4
Glass, container, olive	40	330.4
Glass, container, pale olive	10	29.0
Glass, container, purple	1	0.6
Glass, container, violet	2	2.6
Glass, container, white	9	201.8
Glass, container, yellow	1	9.1
Glass, flat, aqua	838	689.3
Glass, flat, bilaminate, green and white	1	1.0
Glass, flat, blue	1	1.0
Glass, flat, clear	625	1,344.0
Glass, flat, clear, bull's eye	5	93.9
Glass, flat, clear and aqua	11	10.4
Glass, flat, clear, incised decorative lines	26	64.4
Glass, flat, cobalt blue	3	0.6
Glass, flat, modified	1	6.9
Glass, flat, red	1	4.4
Glass, flat, violet	1	1.6
Glass, flat, violet, incised decorative lines	7	8.8
Glass, lighting, clear, lamp globe	6	144.2
Glass, lighting, light bulb	2	0.5
Glass, lighting, white, lamp fixture	46	632.5
Glass, misc.	8	6.3
Glass, unid., clear	1	0.3
Gravel	n/c	4,175.4
Grommet	1	0.1
Handle, brass	1	555.4
Hardware, fitting, brass, threaded	1	31.5
Hardware, retainer ring, plastic, yellowish-white	1	0.5
Hinge, iron	2	490.3
Hotelware	3	78.0
Insulation, fibrous	2	2.5
Insulator cap, ceramic	1	25.6
Insulators, ceramic	11	481.0
Insulators, ceramic, and mounting screws	2	119.7
Ironstone	1	1.1
Light bulb, base, metal	1	13.2
Lithic, projectile point	1	4.0
Metal, aluminum, unid.	2	69.7
Metal, container	9	58.7
Metal, decorative appliqué/peg	1	0.9

Table 21 (cont.) — SEAC Acc. 333 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Metal, stopper cover	2	1.9
Metal, unid.	154	986.6
Metal, unid., concretions	1	0.9
Metal, unid., ferrous	3	105.0
Mortar	47	467.4
Mortar, brick	2	2.5
Mortar, brick, clay, fired	12	29.8
Mortar, clay, fired	9	57.8
Nail, panel	1	0.6
Nails	190	1,001.6
Nails and construction material	n/c	365.7
Nails, ferrous	76	194.6
Nails, screw, wire	52	129.2
Nails, slag, metal	7	18.2
Nails, staple, hook latch	20	56.7
Nails, staple, tack	7	18.2
Nails, tacks, staples, wire	15	48.4
Nails, wire	24	129.9
Nails, wire, tacks	46	164.6
Paper	2	2.0
Paper, embossed	1	0.3
Paper, unid.	5	0.2
Paper, wrapper	1	0.2
Pearlware	9	38.2
Pen cap, plastic	1	0.4
Pencil lead, graphite	2	0.1
Pencil, slate	1	3.0
Pins, straight	2	0.1
Pipe bowl, molded	1	0.8
Pipe, clay	1	1.7
Pipe/conduit, metal, ferrous	1	22.0
Plaster	47	1,581.7
Plaster paper/cloth paper	2	1.5
Plaster and mortar, composite	7	27.1
Plastic, unid.	2	1.4
Plastic, unid., green	1	0.8
Plastic, unid., yellow	2	0.1
Porcelain	25	66.9
Prehistoric ceramics	5	15.8
Redware	10	17.9
Screw cap	1	10.8
Shell, unid.	14	4.1

Table 21 (cont.) — SEAC Acc. 333 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Shingle, roof, tar	73	71.8
Slag	75	290.7
Slate	3	20.6
Soil sample	1	743.8
Stone	1	0.8
Stoneware	6	89.0
Switch plate, plastic	1	12.5
Tacks	57	138.5
Tacks and lead	5	16.6
Tacks, nail	5	8.3
Tacks, wire, nails (cut, wire, panel), staples	16	26.6
Tar	12	65.7
Thermos cap	1	43.8
Tile, amber lead glaze, 3" x 3"	1	117.8
Tile, drainage	18	247.2
Tile, fireplace	1	1,018.4
Tile, floor, composite material	6	13.1
Tile, insulation, fibrous	1	5.0
Tin, tobacco	30	217.1
Toy, marble, glass	1	5.6
Whiteware	6	82.0
Wire	11	2.6
Wire, electrical	3	8.7
Wire insulator, rubber	1	0.5
Wire sheathing, plastic	1	0.2
Wood	24	210.0
Wood, carbonized	73	22.1
Wood, lumber	2	0.2
Wood, untreated	1	1.6
Wrapper, candy	1	0.2
Wrapper, cigarette	1	1.8
Wrapper, foil	2	0.2
Yellow ware	4	18.4
TOTAL	4,630	36,238.4

Table 22 — SEAC Acc. 333, Structure 1, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Asphalt	6.....	16.8
Bone, unid., burnt	2.....	0.4
Brick	11.....	97.7
Caulking.....	16.....	7.6
Caulking, latex	1.....	0.5
Clay, fired	10.....	26.2
Coal.....	2.....	0.7
Concrete	4.....	39.1
Construction material.....	62.....	186.7
Earthenware, coarse	1.....	34.5
Fauna, Animalia	3.....	1.4
Fauna, Aves	1.....	0.7
Fauna, Mammalia	4.....	52.6
Flora, seed, peach pit	1.....	0.7
Flora, seed, sunflower	1.....	0.1
Glass, clear, melted	2.....	7.8
Glass, container, clear	5.....	6.2
Glass, container, green	1.....	1.6
Glass, container, olive.....	1.....	1.0
Glass, flat, clear	60.....	186.6
Glass, flat, cobalt blue	3.....	0.6
Glass, flat, red	1.....	4.4
Metal, unid.	8.....	10.3
Metal, unid., concretions	1.....	0.9
Metal, unid., ferrous	2.....	0.3
Mortar	7.....	9.5
Mortar, brick	2.....	2.5
Nail, panel	1.....	0.6
Nails	8.....	7.5
Nails, ferrous	1.....	0.2
Nails, screw, wire	52.....	129.2
Paper	1.....	0.4
Pearlware	6.....	4.9
Pen cap, plastic	1.....	0.4
Pencil, slate	1.....	3.0
Plaster	4.....	1.0
Porcelain	1.....	5.5
Shell, unid.	14.....	4.1
Shingle, roof, tar	23.....	30.5
Slag	8.....	21.7
Slate	3.....	20.6
Stone	1.....	0.8

Table 22 (cont.) — SEAC Acc. 333, Structure 1, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Tacks, wire, nail (cut, wire, panel), staples	16.....	26.6
Tile, drainage	3.....	4.4
Tile, floor, composite material	6.....	13.1
Wire insulator, rubber	1.....	0.5
Wood, carbonized	18.....	3.0
Wood, untreated.....	1.....	1.6
Wrapper, foil.....	1.....	0.1
TOTAL	389.....	977.1

Table 23 — SEAC Acc. 333, Structure 2, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Ammunition, bullet	1.....	1.8
Ammunition, bullet, unspent	1.....	6.3
Ammunition, shot, buck.....	2.....	0.8
Bone, unid.	1.....	0.4
Bone, worked	1.....	0.3
Brackets, flexible conduit, nail, slag	n/c.....	727.4
Brick	11.....	384.6
Button, encrusted, 4-hole	1.....	1.9
Button, milk glass, 4-hole	2.....	0.9
Button, mother-of-pearl, 2-hole	1.....	0.2
Button, mother-of-pearl, 4-hole	2.....	0.6
Button, wood, 4-hole	1.....	0.3
Button/snap, milk glass.....	1.....	0.1
Cap, bottle.....	1.....	4.6
Clay, fired	149.....	739.0
Coal	18.....	19.2
Concrete	46.....	624.3
Concrete, brick, mortar	102.....	3,216.3
Concrete, cardboard, treated wood, plastic, wire insulation	n/c.....	559.0
Concrete, mortar	2.....	84.7
Concrete, mortar, brick	14.....	165.7
Concrete, mortar, clay, fired, brick	46.....	2,223.4
Concretion	1.....	2.4
Concretion, ferrous	1.....	19.2
Construction material	n/c.....	3,033.3
Copper, unid.	1.....	0.4
Doorknob, ceramic	1.....	143.4

Table 23 (cont.) — SEAC Acc. 333, Structure 2, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Earthenware	1	0.7
Earthenware, refined	27	458.7
Electrical conduit, ceramic	8	174.2
Eye dropper, glass and rubber	1	5.4
Fauna, Animalia	301	74.1
Fauna, Animalia, burnt	1	0.3
Fauna, antler	1	1.3
Fauna, Aves	111	63.7
Fauna, <i>Dinocardium robustum</i>	5	2.3
Fauna, eggshell	78	3.6
Fauna, Gastropoda	10	1.1
Fauna, Mammalia	55	242.6
Fauna, Osteichthyes	14	0.8
Fauna, Rodentia	2	0.2
Fauna, Serpentes	1	0.1
Fauna, Testudines	9	2.2
Gasket/seal, rubber	5	20.8
Glass, container, amber	2	3.8
Glass, container, amber, bottle	1	206.1
Glass, container, amber/brown, bottle	1	418.4
Glass, container, amber/yellow	9	8.7
Glass, container, aqua, bottle	60	331.4
Glass, container, aqua, bottle, medicine	1	52.3
Glass, container, aqua, jar	5	107.4
Glass, container, clear	144	371.1
Glass, container, clear, bottle	42	1,006.6
Glass, container, clear, bowl	4	74.2
Glass, container, clear, burnt	3	3.0
Glass, container, clear, jar lid	1	102.3
Glass, container, clear, tumbler	10	222.0
Glass, container, clear, vial	1	5.1
Glass, container, cobalt blue	2	1.4
Glass, container, green	6	4.3
Glass, container, green, bottle	4	309.6
Glass, container, milk glass	75	197.9
Glass, container, olive	39	329.4
Glass, container, purple	1	0.6
Glass, container, white	9	201.8
Glass, container, yellow	1	9.1
Glass, flat, aqua	2	10.6
Glass, flat, blue	1	1.0
Glass, flat, clear	128	313.1
Glass, flat, clear, bull's eye	5	93.9

Table 23 (cont.) — SEAC Acc. 333, Structure 2, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, flat, clear and aqua	11	10.4
Glass, flat, modified	1	6.9
Glass, lighting, clear, lamp globe	6	144.2
Glass, lighting, light bulb	2	0.5
Glass, lighting, white, lamp fixture	46	632.5
Glass, misc.	8	6.3
Glass, unid., clear	1	0.3
Gravel	n/c	4,175.4
Grommet	1	0.1
Handle, brass	1	555.4
Hardware, fitting, brass, threaded	1	31.5
Hinge, iron	1	232.7
Hotelware	2	66.3
Insulator cap, ceramic	1	25.6
Insulators, ceramic	11	481.0
Insulators, ceramic, and mounting screws	2	119.7
Ironstone	1	1.1
Light bulb, base, metal	1	13.2
Lithic, projectile point	1	4.0
Metal, aluminum, unid.	2	69.7
Metal, container	9	58.7
Metal, decorative appliqué/peg	1	0.9
Metal, stopper cover	2	1.9
Metal, unid.	59	552.8
Metal, unid., ferrous	1	104.7
Mortar	35	425.0
Nails	64	333.9
Nails and construction material	n/c	365.7
Nails, ferrous	75	194.4
Paper	1	1.6
Paper, unid.	5	0.2
Pearlware	3	33.3
Pins, straight	2	0.1
Pipe bowl, molded	1	0.8
Pipe, clay	1	1.7
Pipe/conduit, metal, ferrous	1	22.0
Plaster	43	1,580.7
Plaster and mortar, composite	7	27.1
Plaster paper/cloth paper	2	1.5
Porcelain	24	61.4
Prehistoric ceramics	5	15.8
Screw cap	1	10.8
Slag	29	82.9

Table 23 (cont.) — SEAC Acc. 333, Structure 2, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Soil, sample	1	743.8
Stoneware	4	70.5
Switch plate, plastic	1	12.5
Tack	1	0.3
Tar	1	2.3
Thermos cap	1	43.8
Tile, amber lead glaze, 3" x 3"	1	117.8
Tile, drainage	1	44.8
Tile, fireplace	1	1,018.4
Tin, tobacco	30	217.1
Toy, marble, glass	1	5.6
Whiteware	6	82.0
Wire	11	2.6
Wire, electrical	2	7.7
Wood	15	174.8
Wood, carbonized	54	18.9
Wrapper, cigarette	1	1.8
Yellow ware	4	18.4
TOTAL	2,201	30,435.5

Table 24 — SEAC Acc. 333, Structure 12, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Brick	5	11.5
Cigarette filter	1	0.1
Earthenware, refined	5	49.1
Electrical conduit, tar strip/seal, composite	2	8.4
Glass, container, clear	13	16.2
Glass, flat, aqua	11	11.4
Glass, flat, clear	8	7.7
Nails, slag, metal	7	18.2
Nails, staple, tack	7	18.2
Slag	4	7.7
Wrapper, candy	1	0.2
TOTAL	64	148.7

Table 25 — SEAC Acc. 333, Structure 13, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Brick	2	17.2
Cap/lid	1	2.3
Coal	2	3.4
Glass, container, clear	4	1.9
Glass, flat, aqua	7	10.1
Glass, flat, clear	12	12.5
Metal, unid.	1	16.2
Paper, wrapper	1	0.2
Shingle, roof, tar	8	2.8
Slag	31	166.5
Tacks	3	6.4
Tacks, nail	5	8.3
Wood, carbonized	1	0.2
Wood, lumber	2	0.2
Wrapper, foil	1	0.1
TOTAL	81	248.3

Table 26 — SEAC Acc. 333, Structure 15, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Earthenware, refined	1	1.1
Flora, <i>Juglans</i> sp.	2	2.3
Glass, container, clear	3	4.2
Glass, container, cobalt blue	1	0.7
Glass, flat, clear	7	32.3
Hinge, iron	1	257.6
Metal, unid.	n/c	110.9
Mortar	1	17.7
Nails	26	129.9
Tacks	7	11.7
Tacks and lead	5	16.6
Wood	3	30.4
TOTAL	57	615.4

Table 27 — SEAC Acc. 333, Structure 16, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Aluminum foil	1	0.2
Caulking	9	7.6
Clay, brick, mortar	29	101.7
Coal	6	14.2
Concrete, mortar	6	120.8
Construction material	n/c	76.8
Flora, nut, hickory	1	2.2
Glass, container, amber	1	0.2
Glass, container, amber/brown	4	9.8
Glass, container, clear	11	19.7
Glass, container, dark olive	1	2.6
Glass, container, mint green	2	13.4
Glass, container, pale olive	10	29.0
Glass, container, violet	2	2.6
Glass, flat, aqua	708	555.7
Glass, flat, clear	157	366.3
Glass, flat, clear, incised decorative lines	26	64.4
Glass, flat, bilaminate, green and white	1	1.0
Glass, flat, violet	1	1.6
Glass, flat, violet, incised decorative lines	7	8.8
Hardware, retainer ring, plastic, yellowish-white	1	0.5
Hotelware	1	11.7
Insulation, fibrous	2	2.5
Metal, unid.	5	56.1
Mortar	4	15.2
Mortar, brick, clay, fired	12	29.8
Mortar, clay, fired	9	57.8
Nails	91	517.8
Nails, staple, hook latch	20	56.7
Nails, wire	24	129.9
Paper, embossed	1	0.3
Pencil lead, graphite	2	0.1
Plastic, unid., green	1	0.8
Shingle, roof, tar	41	34.9
Slag	3	11.9
Stoneware	2	18.5
Tacks	46	120.1
Tar	10	21.8
Tile, drainage	4	41.6
Tile, insulation, fibrous	1	5.0
Wood	3	1.4
TOTAL	1,266	2,533.0

Table 28 — SEAC Acc. 333, Structure 17, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Coal	1	1.2
Concrete	1	2.3
Feather	1	0.1
Glass, container, aqua	2	1.5
Glass, container, clear	7	11.0
Glass, container, light green	1	3.7
Glass, flat, aqua	110	101.5
Glass, flat, clear	5	6.3
Metal, unid.	55	177.4
Nails	1	12.5
Plastic, unid., yellow	2	0.1
Tar	1	41.6
Tile, drainage	2	16.8
TOTAL	189	376.0

Table 29 — SEAC Acc. 333, Structure 18, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Clay, fired	13	17.2
Flower pot, rim, clay, fired	1	13.9
Glass, container, amber/brown	3	4.3
Glass, container, clear	5	6.8
Glass, flat, clear	248	419.2
Metal, unid.	26	62.9
Nails, tacks, staples, wire	15	48.4
Nails, wire, tacks.....	46	164.6
Plastic, unid.	2	1.4
Redware	10	17.9
Shingle, roof, tar	1	3.6
Tile, drainage	8	139.6
Wire sheathing, plastic	1	0.2
Wire, electrical	1	1.0
Wood	3	3.4
TOTAL	383	904.4

Table 30 — SEAC Acc. 394 artifact summary (see Tables 31–34 for summaries by structure).

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Ammunition, bullet	1	6.3
Ammunition, cartridge casing, brass	6	3.8
Bag, plastic	5	0.3
Bead, plastic, blue	1	2.3
Bell ringer	1	38.1
Bolt, ferrous	1	157.1
Bolts, anchor	2	59.7
Bone, worked	1	0.4
Bottle cap	1	2.1
Bottle cap, encrusted	1	8.5
Bottle cap, plastic	1	0.8
Brick	16	3,691.0
Button and bottle cap, encrusted	1	14.8
Button, gray, 2-hole	1	0.4
Button, metal	1	1.7
Button, off-white, 4-hole	1	0.3
Casing cartridge, brass	1	0.4
Chalk	1	5.9
Cigarette package	1	0.3
Clay, fired	47	984.7
Coal	23	130.8
Coin, dime	1	2.4
Coin, one cent	1	3.0
Concrete	10	268.9
Concrete, mortar	79	1,352.4
Concrete, mortar, clay, fired	6	32.2
Concretion	1	1,778.2
Concretion, ferrous	104	840.5
Concretions	10	70.8
Container lid, tin	1	2.6
Doorknob	1	151.6
Doorknob, ceramic	1	45.1
Earthenware, coarse	2	81.0
Earthenware, refined	15	26.7
Fauna, Mammalia	3	59.4
Flora, nut shell	4	1.7
Flower pot, rim	1	5.8
Flower pot, rim	1	42.5
Glass, container, amber/brown	8	48.3
Glass, container, amber/yellow	9	12.4
Glass, container, aqua	17	51.4

Table 30 (cont.) — SEAC Acc. 394 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, container, blue	1	2.6
Glass, container, brown	6	104.3
Glass, container, clear	131	643.8
Glass, container, cobalt blue	1	0.7
Glass, container, green	53	197.5
Glass, container, light green	1	6.4
Glass, container, light violet	1	0.8
Glass, container, milk	3	3.0
Glass, container, milk, lid liner	15	27.8
Glass, container, olive	5	20.7
Glass, container, white	1	0.4
Glass, container, yellow	1	1.4
Glass, flat, amber/yellow	1	1.9
Glass, flat, aqua	59	131.5
Glass, flat, clear	91	367.1
Glass, lighting, white, lamp fixture	2	2.9
Glass, ornamental, luster dangle	1	2.2
Glass, ornamental, white, decorative appliqué/peg ...	1	0.6
Glass, ornamental, yellow	4	11.3
Grommet snap, brass	1	0.6
Handle, cast iron	1	72.2
Handle, ferrous	1	35.6
Handle, with anchor bolt	1	53.9
Hardware, antenna connector	1	12.7
Hardware, anvil fixture, iron	2	6,386.4
Hardware, bracket, ferrous	1	23.1
Hardware, brackets, ferrous, white vinyl coating	2	74.6
Hardware, end cap ring, plastic, white	1	2.5
Hardware, ferrous, unid.	1	100.3
Hardware, hook, utility, with nail	1	11.8
Hardware, nut, screw	1	2.6
Hinge, iron	2	684.9
Insulator, ceramic	1	66.3
Iron oxide	n/c	171.9
Iron, unid.	2	332.6
Ironstone	1	3.8
Lead, molded	2	55.7
Lead, unid.	2	9.0
Magnet, bar	1	143.6
Metal, ferrous, unid.	6	76.6
Metal, paint can lid, encrusted	18	272.7
Metal, round plate, unid.	1	7.2

Table 30 (cont.) — SEAC Acc. 394 artifact summary.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Metal, unid.	56	162.1
Mirror	1	1.6
Mortar	8	96.2
Nail	78	384.9
Nail, ferrous	13	150.6
Nail, staple	5	24.7
Nail, staples, tacks	23	136.9
Nail, staples, tacks, screws	22	340.4
Nail, tacks, staples	26	166.9
Pearlware	1	3.0
Pintle, iron	1	193.3
Porcelain	7	12.1
Redware, coarse	4	5.7
Rock, quartzite	2	20.7
Screw cap, brass, industrial	1	7.2
Sheet metal, tin	n/c	54.8
Slag	5	30.8
Stone fixture, painted and glazed	1	0.8
Stoneware	9	69.4
Tile, cream colored	7	218.4
Tile, drainage	9	913.5
Tile, floor	8	1,275.1
Tile, roofing	1	2.3
Tin sheathing, decorative	1	6.8
Toy, cap grenade	1	35.6
Toy, doll's arm, ceramic	1	8.5
Toy, marble	2	10.4
Toy, marble, glass, white and yellow, melted	1	2.8
Toy, whistle	1	10.2
Wire	17	62.0
Wood, carbonized	9	0.9
Wood, lumber	1	24.7
Wood, lumber, pine	1	514.8
Wood, post with nail	1	76.4
Yellow ware	1	2.0
TOTAL	1,142	25,140.6

Table 31 — SEAC Acc. 394, Structure 7, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Ammunition, cartridge casing, brass	2	1.6
Bolts, anchor	2	59.7
Brick	8	207.2
Chalk	1	5.9
Cigarette package	1	0.3
Clay, fired	8	414.1
Coal	8	79.2
Concrete, mortar	79	1,352.4
Earthenware, refined	1	0.6
Fauna, Mammalia	1	5.1
Flora, nut shell	4	1.7
Glass, container, amber/yellow	2	6.3
Glass, container, aqua	2	6.9
Glass, container, clear	7	45.5
Glass, flat, clear	26	86.3
Handle, ferrous	1	35.6
Handle, with anchor bolt	1	53.9
Hardware, bracket, ferrous	1	23.1
Hardware, brackets, ferrous, white vinyl coating	2	74.6
Hardware, ferrous, unid.	1	100.3
Metal, ferrous, unid.	6	76.6
Metal, unid.	14	35.7
Mortar	6	43.9
Nail	57	231.8
Nail, ferrous	3	13.4
Porcelain	1	2.3
Slag	2	14.3
Stoneware	1	9.5
Wood, carbonized	1	0.1
TOTAL	249	2,987.9

Table 32 — SEAC Acc. 394, Structure 8, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Bag, plastic	1	0.1
Glass, container, clear	8	28.5
Glass, flat, clear	16	28.5
Hardware, antenna connector	1	12.7
Hardware, hook, utility, with nail	1	11.8
Hardware, nut, screw	1	2.6
Metal, unid.	3	29.5
Nail, tacks, staples	11	44.0
Toy, marble	1	5.3
TOTAL	43	163.0

Table 33 — SEAC Acc. 394, Structure 11, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Ammunition, cartridge casing, brass	1	0.4
Bag, plastic	3	0.1
Bead, plastic, blue	1	2.3
Bolt, ferrous	1	157.1
Bone, worked	1	0.4
Bottle cap	1	2.1
Bottle cap, encrusted	1	8.5
Bottle cap, plastic	1	0.8
Brick	6	3,370.9
Button and bottle cap, encrusted	1	14.8
Button, gray, 2-hole	1	0.4
Button, metal	1	1.7
Button, off-white, 4-hole	1	0.3
Casing cartridge, brass	1	0.4
Clay, fired	1	4.9
Coal	14	48.9
Coin, one cent	1	3.0
Concrete	6	214.3
Concrete, mortar, clay, fired	6	32.2
Concretion, ferrous	57	479.3
Doorknob	1	151.6
Earthenware, coarse	1	25.2
Earthenware, refined	1	1.2
Fauna, Mammalia	2	54.3
Flower pot, rim	1	5.8
Flower pot, rim	1	42.5

Table 33 (cont.) — SEAC Acc. 394, Structure 11, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Glass, container, amber/brown	5	38.1
Glass, container, aqua	5	10.6
Glass, container, clear	45	160.4
Glass, container, cobalt blue	1	0.7
Glass, container, light green	1	6.4
Glass, container, light violet	1	0.8
Glass, container, milk glass	2	2.5
Glass, container, olive	2	13.0
Glass, container, yellow	1	1.4
Glass, flat, amber/yellow	1	1.9
Glass, flat, aqua	5	8.9
Glass, flat, clear	23	115.7
Grommet snap, brass	1	0.6
Handle, cast iron	1	72.2
Hardware, end cap ring, plastic, white	1	2.5
Insulator, ceramic	1	66.3
Iron, unid.	2	332.6
Ironstone	1	3.8
Lead, molded	2	55.7
Metal, round plate, unid.	1	7.2
Metal, unid.	39	96.9
Mirror	1	1.6
Nail	21	153.1
Nail, ferrous	8	114.7
Nail, tacks, staples	15	122.9
Porcelain	1	1.6
Rock, quartzite	2	20.7
Screw cap, brass, industrial	1	7.2
Slag	3	16.5
Stone fixture, painted and glazed	1	0.8
Stoneware	1	1.6
Tile, cream colored	7	218.4
Tile, drainage	9	913.5
Tile, floor	8	1,275.1
Tile, roofing	1	2.3
Toy, cap grenade	1	35.6
Toy, marble	1	5.1
Toy, marble, glass, white and yellow, melted	1	2.8
Toy, whistle	1	10.2
Wood, lumber	1	24.7
TOTAL	338	8,550.0

Table 34 — SEAC Acc. 394, Structure 21, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Ammunition, bullet	1	6.3
Ammunition, cartridge casing, brass	3	1.8
Bag, plastic	1	0.1
Bell ringer	1	38.1
Brick	2	112.9
Clay, fired	38	565.7
Coal	1	2.7
Coin, dime	1	2.4
Concrete	4	54.6
Concretion	1	1,778.2
Concretion, ferrous	47	361.2
Concretions	10	70.8
Container lid, tin	1	2.6
Doorknob, ceramic	1	45.1
Earthenware, coarse	1	55.8
Earthenware, refined	13	24.9
Glass, container, amber/brown	3	10.2
Glass, container, amber/yellow	7	6.1
Glass, container, aqua	10	33.9
Glass, container, blue	1	2.6
Glass, container, brown	6	104.3
Glass, container, clear	71	409.4
Glass, container, green	53	197.5
Glass, container, milk glass	1	0.5
Glass, container, milk glass, lid liner	15	27.8
Glass, container, olive	3	7.7
Glass, container, white	1	0.4
Glass, flat, aqua	54	122.6
Glass, flat, clear	26	136.6
Glass, lighting, white, lamp fixture	2	2.9
Glass, ornamental, luster dangle	1	2.2
Glass, ornamental, white, decorative appliqué/peg	1	0.6
Glass, ornamental, yellow	4	11.3
Hardware, anvil fixture, iron	2	6,386.4
Hinge, iron	2	684.9
Iron oxide	n/c	171.9
Lead, unid.	2	9.0
Magnet, bar	1	143.6
Metal, paint can lid, encrusted	18	272.7
Mortar	2	52.3
Nail, ferrous	2	22.5
Nail, staple	5	24.7

Table 34 (cont.) — SEAC Acc. 394, Structure 21, artifact totals.

<i>Contents</i>	<i>Count</i>	<i>Weight (g)</i>
Nail, staples, tacks	23	136.9
Nail, staples, tacks, screws	22	340.4
Pearlware	1	3.0
Pintel, iron	1	193.3
Porcelain	5	8.2
Redware, coarse	4	5.7
Sheet metal, tin	n/c	54.8
Stoneware	7	58.3
Tin sheathing, decorative	1	6.8
Toy, doll's arm, ceramic	1	8.5
Wire	17	62.0
Wood, carbonized	8	0.8
Wood, lumber, pine	1	514.8
Wood, post with nail	1	76.4
Yellow ware	1	2.0
TOTAL	512	13,439.7

Anderson, David G.

- 1990 The Paleoindian Colonization of Eastern North America: A View from the Southeastern United States. In *Early Paleoindian Economies of Eastern North America*, edited by Kenneth B. Tankersley and Barry L. Isaac, pp.163–216. Research in Economic Anthropology, Supplement 5, JAI Press, Greenwich, Connecticut.

Anderson, David G., Lisa D. O'Steen, and Kenneth E. Sassaman

- 1996 Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 3–15. University of Alabama Press, Tuscaloosa.

Aubrey, Michele C., Dana Linck, Mark Lynott, Robert Mierendorf, and Kenneth Schoenberg

- 1992 *Systemwide Archeological Inventory Program*. Anthropology Division, National Park Service, Washington.

Bailey, Louise Howe

- 1980 *From "Rock Hill" to "Connemara": The Story before Carl Sandburg*. Eastern National Park and Monument Association.

Bass, George

- 1977 *Prehistoric Settlement and Subsistence Patterns in the Great Smoky Mountains*. Master's thesis, Department of Anthropology, University of Tennessee, Knoxville.

Bense, Judith A.

- 1994 *Archaeology in the Southeastern United States: Paleoindian to World War I*. Academic Press, New York.

Brown, Lenard E.

- 1976 Notes on an interview with Mrs. Sadie Blake Rogers, granddaughter of Capt. E. A. Smyth, conducted on December 3, 1976, by Warren Weber and Lenard Brown. On file, Southeast Regional Office, National Park Service, Atlanta.

Burgin, W. R., and D. T. Jones

- 1974 Memminger House, Carl Sandburg Home National Historic Site. Historic American Buildings Survey drawings (four sheets). Library of Congress, Washington.

Callahan, North

- 1987 *Carl Sandburg: His Life and Works*. Pennsylvania State University Press, London.

Coe, Joffre L.

- 1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54(5). Philadelphia.

Cornelison, John E., Jr., and Regina Meyer

- 1997 Trip Report on Archeological Testing at Carl Sandburg Home National Historic Site (CARL), SEAC Acc.1288, CARL Acc.239. Southeast Archeological Center, National Park Service, Tallahassee.

Delcourt, Paul A., and Hazel R. Delcourt

- 1981 Vegetation Maps for Eastern North America: 40,000 Yr. B.P. to the Present. In *Geobotany II*, edited by Robert C. Romans, pp. 123–166. Plenum Press, New York.

Dickens, Roy S., Jr.

- 1976 *Cherokee Prehistory: The Pisgah Phase in the Appalachian Summit Region*. University of Tennessee Press, Knoxville.

Dorwin, John T., and James J. Shrive

- 1975 *Archaeological Tests at the Carl Sandburg Home National Historic Site*. Department of Anthropology and Sociology, Western Carolina University.

Egloff, Brian John

- 1967 *An Analysis of Ceramics from Historic Cherokee Towns*. Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

Fain, J. T., Jr.

- 1975 *Henderson County...The Past 137 Years, Vol. 1*. The Times-News, Hendersonville, North Carolina.

Fennemen, Nevin M.

- 1938 *Physiography of Eastern United States*. McGraw-Hill, New York.

Ferguson, Leland G.

- 1971 *South Appalachian Mississippian*. Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.

Finch, Dennis

- 1980 Archeological Investigations Conducted in April–May 1979. In *Archeological Investigations Conducted at Carl Sandburg Home National Historic Site, North Carolina in 1976 and 1979*, by John W. Walker, Steven Shephard, and Dennis Finch, pp. 129–186. Draft report on file, Southeast Archeological Center, National Park Service, Tallahassee.

Goodyear, Albert C., III

- 1982 The Chronological Position of the Dalton Horizon in the Southeastern United States. *American Antiquity* 47:382–395.

Grimshaw, Leeming

- 1970 *Connemara, Formerly Called Rock Hill, and a Brief Discussion of Those Who Lived There, 1836–1967*. Self-published.

Hart, Susan

- 1993 *Carl Sandburg Home National Historic Site Cultural Landscape Report*. National Park Service, Atlanta.

Hellmich, Judy

- 1982 Archeological Data Section for the Cultural Resource Management Plan for Carl Sandburg Home National Historic Site. Southeast Archeological Center, National Park Service, Tallahassee.

Justice, Noel D.

- 1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States*. Indiana University Press, Bloomington.

Keel, Bennie C.

- 1976 *Cherokee Archaeology: A Study of the Appalachian Summit*. University of Tennessee Press, Knoxville.

Keel, Bennie C., John E. Cornelison Jr., and David M. Brewer

- 1996 *Regionwide Archeological Survey Plan*. Southeast Archeological Center, National Park Service, Tallahassee.

King, John M.

- 1980 *Soil Survey of Henderson County, North Carolina*. U.S. Department of Agriculture, Soil Conservation Service and Forest Service.

Kroeber, Alfred L.

- 1939 *Cultural and Natural Areas of Native North America*. University of California Press, Berkeley.

Lewis, Berkeley R.

- 1956 *Small Arms and Ammunition in the United States Service*. Smithsonian Institution Press, Washington.

Lewis, Thomas M. N.

- 1954 The Cumberland Point. *Bulletin of the Oklahoma Anthropological Society* 11:7-8.

Memminger, Edward Read

- 1954 *A Historical Sketch of Flat Rock*. The Stephens Press, Asheville.

National Park Service (NPS)

- 1971 *Master Plan: Carl Sandburg Home National Historic Site, North Carolina*. National Park Service, Washington.

- 1975a 106 Statement: Preservation of the Buck House, Historic Structure #27, Carl Sandburg Home National Historic Site, Flat Rock, North Carolina. Southeast Archeological Center, National Park Service, Tallahassee.

- 1975b 106 Statement: Preservation of the Woodshed (Main House) Historic Structure #6, Carl Sandburg Home National Historic Site, Flat Rock, North Carolina. Southeast Archeological Center, National Park Service, Tallahassee.
- 1976 *Historic Structure Report for the Home, Garage and Swedish House, Carl Sandburg Home National Historic Site*. Denver Service Center, National Park Service, Denver.
- 1977a Environmental Assessment for Development Concept Plan, Carl Sandburg Home National Historic Site. Denver Service Center, National Park Service, Denver.
- 1977b Memorandum from Edwin C. Bears, Supervisory Historian, Denver Service Center, to Jack [John W.] Walker, Archeologist, Southeast Archeological Center, regarding Memminger ownership of slaves. On file, Southeast Archeological Center, National Park Service, Tallahassee.
- 1979 Development Concept Plan, Carl Sandburg Home National Historic Site. Denver Service Center, National Park Service, Denver.
- 1981 *Historic Structure Report for the Front Lake and Dam, Side Lake and Dam, Pond Bridge and Duck Cage, Carl Sandburg Home National Historic Site*. Denver Service Center, National Park Service, Denver.
- 1982 *History and Prehistory in the National Park System and the National Historic Landmarks Program*. History Division, National Park Service, Washington.
- 1992 *Collections Management Plan for Carl Sandburg Home National Historic Site*. National Park Service, Washington.
- 1993 *Statement for Management and Basic Operations Statement, Carl Sandburg Home National Historic Site*. National Park Service, Washington.
- 1994 *Cultural Resource Management Guideline: NPS-28*. National Park Service, Washington.
- 1995 *National Register of Historic Places Update, Carl Sandburg Home National Historic Site*. National Park Service, Washington.
- 1996 *Revision of the National Park Service's Thematic Framework*. National Park Service, Washington.

Novick, Lee

- 1980 Prehistoric Lithic Material Sources and Types in South Carolina: A Preliminary Statement. In *The First Ten Years of South Carolina Antiquities*, edited by Wayne Neighbors, pp. 422–437. Archaeological Society of South Carolina, Columbia.

Patton, Sadie Smathers

- 1961 *A Condensed History of Flat Rock (The Little Charleston of the Mountains)*. Church Printing, Asheville.

- Pitts, Clyde Edward (editor)
1966 *The Christopher Gustavus Memminger Papers* in the Southern Historical Collection of the University of North Carolina Library. Microfilmed by the University of North Carolina Library Photographic Service, Chapel Hill.
- Purrington, Burton L.
1983 Ancient Mountaineers: An Overview of Prehistoric Archaeology of North Carolina's Western Mountain Region. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 83–160. North Carolina Division of Archives and History, Raleigh.
- Robinson, Kenneth W., Ruth Wetmore, and David G. Moore
1994 Connestee Chronology and Culture: New Evidence from Western North Carolina. Paper presented at the Southeastern Archaeology Conference, Lexington, Kentucky.
- Shephard, Steven
1980a Archeological Testing of Two Structures Scheduled for Repair. In *Archeological Investigations Conducted at Carl Sandburg Home National Historic Site, North Carolina in 1976 and 1979*, by John W. Walker, Steven Shephard, and Dennis Finch, pp. 71–84. Draft report on file, Southeast Archeological Center, National Park Service, Tallahassee.
1980b Archeological Investigations Conducted in November 1976. In *Archeological Investigations Conducted at Carl Sandburg Home National Historic Site, North Carolina in 1976 and 1979*, by John W. Walker, Steven Shephard, and Dennis Finch, pp. 85–128. Draft report on file, Southeast Archeological Center, National Park Service, Tallahassee.
- Steen, Carl, and Chad O. Braley
1994 *A Cultural Resources Survey of Selected (FY92) Timber Harvesting Areas on Fort Jackson, Richland County, South Carolina*. Southeastern Archaeological Services, Athens, Georgia. Report on file, U.S. Army Corps of Engineers, Savannah.
- Svejda, George J.
1971 *Carl Sandburg: Literary Liberty Bell, A Biography, Carl Sandburg Home National Historic Site*. National Park Service, Washington.
1972 *Historical Data on the Main House, Garage, and Swedish House*. National Park Service, Washington.
- Thomas, Cyrus
1894 *Report on the Mound Explorations of the Bureau of Ethnology*. Twelfth Annual Report of the Bureau of Ethnology, 1890–1891. Smithsonian Institution, Washington. (Reprinted 1985.)
- Walker, John W.
1979 Archeological Survey of the Area Which Would Be Affected by Installation of the Proposed Water Storage Tank, Carl Sandburg Home National Historic Site, Henderson County, North Carolina. On file, Southeast Archeological Center, National Park Service, Tallahassee.

Walker, John W., Steven Shephard, and Dennis Finch

- 1980 Archeological Investigations Conducted at Carl Sandburg Home National Historic Site, North Carolina in 1976 and 1979. Draft report on file, Southeast Archeological Center, National Park Service, Tallahassee.

Williams, Mark, and Gary Shapiro (editors)

- 1990 *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*. University of Alabama Press, Tuscaloosa.

