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ANNUAL REVIEW OF CULTURAL RESOURCE INVESTIGATIONS BY THE SAVANNAH RIVER ARCHAEOLOGICAL RESEARCH PROGRAM

FISCAL YEAR 1994

SAVANNAH RIVER ARCHAEOLOGICAL RESEARCH PROGRAM
SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA

October 1994

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Prepared by
the staff of the

SAVANNAH RIVER
ARCHAEOLOGICAL RESEARCH PROGRAM

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MANAGEMENT SUMMARY

The Savannah River Archaeological Research Program (SRARP) continued through FY94 with the United States Department of Energy to fulfill a threefold mission of cultural resource management, research, and public education at the Savannah River Site.

Over 5,000 acres of land on the SRS came under cultural resources review in FY94. This activity entailed 47 field surveys, resulting in the recording of 64 new sites. Twenty-four existing sites within survey tract boundaries were revisited to update site file records.

Research conducted by SRARP was reported in eight journal articles/book chapters and five monographs/reports published during FY94. SRARP staff also presented research results in 13 papers at professional meetings, and organized three symposia.

In the area of heritage education, the SRARP intensified its activities in FY94 with a full schedule of classroom education, public outreach, and on-site tours. Volunteer excavations at the Tinker Creek site were continued with the Augusta Archaeological Society and other avocational groups, and other off-site excavations provided a variety of opportunities for field experience. Some 78 presentations, displays and tours were provided for schools, historical societies, civic groups, and environmental and historical awareness day celebrations. Additionally, SRARP staff taught three anthropology courses at an area college.

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INTRODUCTION

A cooperative agreement with the United States Department of Energy provides the necessary funding for the Savannah River Archaeological Research Program (SRARP) of the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, to render services required under federal law for the protection and management of archaeological resources on the Savannah River Site (SRS). Because the significance of archaeological resources is usually determined by research potential, the SRARP is guided by research objectives. An ongoing research program provides the theoretical, methodological, and empirical basis for assessing site significance within the compliance process specified by law. In accordance with the spirit of the law, the SRARP maintains an active public education program for disseminating knowledge about prehistory and history, and for enhancing awareness of historic preservation. This report summarizes the management, research, and public education activities of the SRARP during Fiscal Year 1994.

SRARP management procedures were modified in FY90 for the implementation in FY91 of a Programmatic Memorandum of Agreement (PMOA) among the United States Department of Energy-Savannah River Operations Office, the South Carolina State Historic Preservation Office and the Advisory Council on Historic Preservation. The SRARP is required under the PMOA to produce an annual review of all cultural resource activities conducted during the year. The reader is referred to the SRARP FY90 Annual Review for a detailed discussion of the current procedures and databases.

The following section (Part I) on Cultural Resource Management contains the results of the FY94 surveys and an update on curation activities. Research activities of the SRARP are summarized in Part II and include prehistoric, historic, and geoarchaeologic studies conducted on the SRS and in the surrounding region. An extralocal perspective is necessary for understanding the effects of regional processes on local conditions and, hence, enables the more effective management of the cultural resources of the SRS.

Public education activities of the SRARP are summarized in Part III, which highlights the heritage education program, volunteer excavations, involvement with avocational archaeology groups, and the community history project. An appendix at the end of the report lists the FY94 professional and public service activities of the SRARP staff.

PART I. CULTURAL RESOURCE MANAGEMENT

RESULTS OF FY94 SITE USE, TIMBER COMPARTMENT, AND CLEARCUT SURVEYS

Survey Coverage

Archaeological survey of Site Use Application and Timber Compartment Prescription land tracts by SRARP staff continued through the FY94 period according to procedures outlined and implemented in 1990 (SRARP 1990:7-17). In addition, clearcut surveys have continued this year as an important means of improving survey recovery from timber compartments. The results of "opportunistic," non-compliance related investigations are also included in this report. Altogether, 47 survey and testing projects were conducted in FY94. During this period 5,261 acres were surveyed, resulting in the location of 64 new sites and revisitation of 24 previously recorded sites. This report summarizes all Site Use, Timber Compartment, and Clearcut Survey coverage and results.

Site Use Applications. A total of 93 Site Use Applications were received by the SRARP during FY94. SRARP staff screened each of these applications for proposed land alteration, and found that 21 required detailed review of existing archaeological documentation. These projects comprise 50 percent or 2,606 acres of the total land surveyed in FY94. The fieldwork for one additional project, the 1000+ acre E-Area survey initiated in the summer of 1993, was completed this year and is summarized below. A full report of the E-Area survey is currently in preparation.

The Site Use surveys conducted in FY94 included one large-scale project designated the Three Rivers Landfill Site 1. Following the completion of this project, a full report was prepared and submitted to the Savannah River Operations Office, U. S. Department of Energy (Cabak 1994). The remaining Site Use projects involved land use

Table 1. FY94 SR-88 Site Use Projects.

Project	Size (acres)	Distance (feet)
E-Area Survey	1,000.0	
Three Rivers Landfill Site 1	1,158.0	
83-43-O Amend. 12 Groundwater Well Sites Access Roads		----
84-30-O Amend. 3 SATA Range Expansion	0.1	
91-89-C Amend. 1 SREL Utility Line Extension		10,500
92-31-O Amend. 1 Creosote Treated Wood Storage Area	3.0	
94-35-O Industrial Waste Site for Asbestos Burial	16.0	
94-35-O Amend. 1 Industrial Waste Site for Asbestos Burial	27.0	
93-48-F Amend. 1 Construct Natural Trail	1	
D-Area Borrow Pit Expansion	---	
SU Log No. 775 Sanitary Landfill Groundwater Characterization/ SU Log No. 776 Sanitary Landfill Wetlands Characterization	298.0	
SU Log No. 834 SRTC Groundwater Remediation Project	70.0	
SU Log No. 850 Split Spoon and Shelby Tube Soil Sampling/ SU Log No. 860 TNX Groundwater Characterization	0.9	
SU Log No. 862 Access Road to Groundwater Monitoring Wells		2,400
SU Log No. 864 Savannah River Research Campus Access Easement		6,000
SU Log No. 865/866/867 Replacement of Bridges	---	
SU Log No. 875 Modify and Enlarge Boat Ramp by Clearing and Grading	---	
SU Log No. 886 *In Situ* Inorganic Remediation of Groundwater Demonstration	19.0	
SU Log No. 904 Access Road to Monitoring Well MSB-19		985

activities on a more modest scale. These included construction of ground water well sites and access roads, limited expansion of several existing SRS facilities, bridge replacements, and the development of a burial site for asbestos. Each Site Use project is summarized in Table 1, and described in further detail below.

Timber Compartment Prescriptions. Most of the compliance related activities receiving archaeological review in FY94 involved timber compartment stands slated for thinning or regeneration. Due to the reconfiguration of many timber compartment stands by the Savannah River Forest Service during the last three years, the pre-planned schedule of timber harvesting was offset until late in FY93 when twelve prescription maps were received by the SRARP in a two-month period. As a result, survey of six of the 12 prescription projects was completed in FY94. Additionally, 14 new prescription maps were received by the SRARP in FY94. Only 9 of the 14 new prescription projects were surveyed in FY94, leaving five prescription projects to be completed in FY95. Table 2 inventories the compartment prescriptions reviewed in FY94 along with the survey area covered and sites located.

Table 2. Tabulation of Timber Compartment Prescriptions and Results, FY94.

	PRESCRIBED THINNING			PRESCRIBED REGENERATION		
	Area Reviewed (acres)	Area Surveyed (acres)	Site	Area Reviewed (acres)	Area Surveyed (acres)	Site
Compartment maps received in FY93 and completed in FY94:						
Timber Comp. 27	916	241	38AK583 38BR717			
Timber Comp. 30	1,259	157	38BR719 38BR720	40	40	38BR718
Timber Comp. 35	665	195	38BR726 38BR727 38BR217	222		
Timber Comp. 43	115	115		33	33	
Timber Comp. 65	280			365	249	38BR721 38BR730
Timber Comp. 84	477	230	38AK731			
Compartment maps received and completed in FY94:						
Timber Comp. 3			38AK127[a]			
Timber Comp. 16	1,033			131	68	38AK308 38AK587
Timber Comp. 25	484	98	38AK584			
Timber Comp. 29[b]	1,036	255	38BR18 38BR521 38BR524[a]			
Timber Comp. 34	911	75	38BR728 38BR729	256		
Timber Comp. 40	571	6		36	36	
Timber Comp. 54	1,294	65	38BR722	63		
Timber Comp. 70	804			348	188	
Timber Comp. 76	304	16	38BR723 38BR724 38BR725			
Timber Comp. 82	1,649	102	38BR734 38BR735 38BR736			
TOTALS	11,798	1,555	22	1,494	614	5

[a] Purposive survey; this existing site was revisited in FY94 to update site file data.

[b] The timber prescription for Compartment 29 was actually issued in FY92 but underwent reconfiguration in FY94 as the "Laura Weeks Road Timber Sale."

Of the 13,292 acres implicated in the 16 Timber Compartment prescriptions reviewed in FY94, 2,169 acres were surveyed. The majority of this area (1,555 acres) involved compartment stands slated for thinning, a land-use activity with minimal site impact. Twenty-two sites were located in these areas. Stands slated for regeneration (614 acres) yielded an additional five sites. Because of the high number of timber compartments under review in FY94, survey methods in both thinning and regeneration stands primarily involved pedestrian reconnaissance of exposed surfaces to cover as much area as possible. Subsurface testing was usually employed to delineate site boundaries although shovel test pits (n = 351) were excavated along site discovery transects when surface visibility was poor.

Additional survey within timber compartments during FY94 involved subsurface testing along the perimeter of several Carolina Bays. The significance of these upland wetlands lies in their potential to add to our understanding of prehistoric habitiations at interfluvial locations. Previous settlement models on the SRS were designed with data regarding site densitites and proximity to the Savannah River and its tributaries. Recent geoarchaeological investigations at bay locations (Brooks et al. 1993:27-37) have shown that these small wetland resources were not ignored by prehistoric peoples but instead exploited rather intensively on a seasonal if not multi-seasonal basis. This evidence for bay occupations must be considered in future regional settlement studies by focusing on such questions as chronology, site formation, structure and function, and how bay sites relate in time and space to those along major tributaries. The FY94 Carolina Bay investigations are inventoried in Table 3 and the following summaries describe work conducted at each bay.

Table 3. Carolina Bay Survey.

Timber Comp. #	Stand (Bay) #	# Transect STPs	New Site
40	89	27	
54	39	71	38BR722
76	31	31	38BR724
			38BR725
76	32	26	38BR723
76	35	9	

Stand (Bay) 89, TC 40. Survey of this six-acre bay was conducted on April 20, 1994. Fieldwork was initiated by excavating 20 shovel test pits (STPs) at 30 m intervals clockwise around the entire bay rim beginning on the eastern edge. No artifacts were encountered in any test with the exception of a single chert flake from the plowzone in STP 8 on the northwestern edge. To further investigate this area, seven shovel tests were dug in a cruciform pattern with STP 8 serving as the datum. All tests were negative and the isolated artifact was designated an occurrence.

Stand (Bay) 39, TC 54. Survey of this sixty-five acre bay was conducted on Feburary 16-17, 1994. Fieldwork was initiated by excavating 71 STPs at 30 m intervals around the entire bay rim. Recovered were several sherds and flakes from a depth of 20-50 cm BS in STPs 53 and 54 on the eastern edge. To further investigate this area, additional shovel tests were dug in a cruciform pattern with STP 53 serving as the datum. This work resulted in the delineation of a small site designated 38BR722.

Stand (Bay) 31, TC 76. Survey of this small bay (size not indicated on Timber Compartment 76 map) was conducted on Feburary 18, 1994. Bay 31 is located adjacent to Bay 32, a small wetland immediately to the south. Fieldwork at Bay 31 was initiated by excavating 31 STPs at 30 m intervals around the entire edge. Seven of these tests were positive yielding debitage and one crumb sherd. Further subsurface investigations at the locations of positive transect tests consisted of shovel tests dug in a cruciform pattern. This work resulted in the delineation of sites 38BR724 on a small eastern spur ridge and 38BR725 on a southwestern terrace saddle separating Bays 31 and 32.

Stand (Bay) 32, TC 76. Survey of this small bay (size not indicated on Timber Compartment 76 map) was conducted on Feburary 23, 1994. Fieldwork was initiated by excavating 26 STPs at 30 m intervals around the entire bay rim. Two of these tests were positive yielding an isolated historic period whiteware sherd and a single chert flake from STP 25 on the southeastern edge of the bay. Additional shovel tests dug in a cruciform pattern resulted in the delineation of a small site designated 38AK723.

Stand (Bay) 35, TC 76. Survey of this small bay (size not indicated on Timber Compartment 76 map) was conducted on Feburary 17, 1994. A total of nine shovel tests were excavated at 30 m intervals along the bay rim. None of these tests revealed evidence of buried cultural deposits.

Clearcut Survey. Additional archaeological coverage in timber compartments consisted of pedestrian survey in timber compartment stands that had recently been clearcut. As shown in Table 4, ten stands, totaling 486 acres, in nine timber compartments underwent surface reconnaissance in FY94. This effort resulted in the location of one new site and six existing sites. As noted in the FY93 report (SRARP 1993:7-8), replanting activities in clearcut stands seldom involve shearing and raking of detritus into windrows, a common practice in the past. Instead debris usually is allowed to decompose in place. This management procedure, although much more environmentally sound and protective of buried cultural deposits than mechanized site preparation, reduces ground surface visibility. In fact, it is becoming increasingly more difficult to find clearcuts on the SRS with enough surface exposure to conduct reliable surveys. Also, because of the recent installation of Savannah River Ecology set-asides, which protect the transitional vegetative zones along drainage margins, timber is no longer harvested in areas that are particularly sensitive to prehistoric archaeological sites. These factors may play a part in the dramatic decrease of new sites discovered in FY94 (n = 1) as compared to FY93 (n = 27).

Table 4. Tabulation of Existing Sites and New Sites by Clearcut Survey, FY94.

Timber Compartment	Timber Stand	Size (acres)	Existing Sites	New Sites
1	27	63		
6	8	40		38AK585
32	10	105		
33	16	31	38AK379	
39	8	32		
39	13	20	38BR313	
44	12	37	38BR37	
			38BR53	
			38BR364	
57	21	45		
63	17	70	38BR87	
64	19	43		

Opportunistic Site Investigations. Periodically, SRARP personnel record sites on land tracts not undergoing compliance-related survey. Categorized as "Opportunistic," these sites were located either fortuitously or brought to our attention by non-SRARP personnel. The following summaries describe three opportunistic site investigations conducted in FY94.

During the E-Area survey, a scatter of historic debris from a twentieth-century home place was observed outside the project footprint. Although the site will not be impacted during E-Area construction, it was recorded as 38AK545 and subjected to limited testing.

In October of 1993, Darrin Newman of SREL reported finding a fiber-tempered sherd in McQueen Branch, a tributary of Upper Three Runs. To further investigate the prospect of an upland Late Archaic ceramic component, 12 shovel tests were dug along a 330 m transect following the eastern terrace edge of McQueen Branch in the vicinity of the fiber-tempered sherd find. Artifacts were encountered in two tests excavated on a small ridge nose. The site was designated 38AK556 and 21 STPs were excavated in a cruciform pattern to delineate its boundaries. No other fiber-tempered sherds were encountered at this prehistoric, multicomponent site.

In April of 1994, Environmental Engineer Don Morris contacted the SRARP regarding a potential HAZMAT cleanup site north of D-Area along SRS Road A-4.6-1. As part of the Old Ellenton Historic District, the cleanup site is the location of the former Cassels Dairy Company, Inc., whose pre-SRS holdings comprised 1,079 acres depicted as parcel D-310, segment D on the SRS property acquisition records. The immediate area of concern for HAZMAT categorization and potential selective removal was a massive scatter of building foundations, wall segments, and miscellaneous debris including about 6 unlabelled 25 and 55-gallon steel drums and drum remnants. The drums were in a severely rusted and disintegrating condition. Although most of the drums were empty, one was leaking roofing tar, and the soil adjacent to the other drums showed evidence of petroleum product leakage. Also present at the site was an empty, unlabelled welded steel tank, ca. 1,000-gallon capacity, that most likely functioned as a well-water storage container when the dairy was operating. Although no major land alteration will occur during the HAZMAT cleanup, SRARP personnel visited the project area on April 29 and 30, 1994 to record the site subsequently designated 38BR732.

Descriptions of SR-88 Site Use Archaeological Surveys, FY94

The following project descriptions review the various survey methods used, circumstances that dictated these methods, and the results. Certain aspects of archaeological work were standardized for all projects and these are outlined here to avoid unnecessary repetition. Prior to all field work, a review of mid-twentieth century aerial photographs was conducted to identify standing historic structures that existed within project areas. The SRARP site files were consulted to identify previously recorded cultural resources. All shovel tests were 35 x 35-cm square, and were excavated to a depth of at least 80 cm BS unless clay substratum was encountered first. The soil from shovel tests was passed through a 0.25-inch wire mesh and artifacts were collected and bagged by provenience.

E-Area Survey. The following description of archeological investigations for the proposed E-Area construction site is summarized from a report currently being prepared by SRARP staff. The project footprint encompasses a 1,000+ acre tract along the eastern margin of Upper Three Runs Creek in Aiken County, South Carolina. Fieldwork was conducted between June 24, 1993 and May 13, 1994, and included both pedestrian

coverage of exposed surfaces and extensive subsurface testing. Excavations consisted of 444 shovel tests along transects, 87 shovel tests at artifact occurrences, 82 judgmental shovel tests, and 842 shovel tests and 33 1 x 2-m test units at recorded sites. Twenty-five new archaeological sites (38AK546, 38AK547, 38AK548, 38AK549, 38AK550, 38AK551, 38AK552, 38AK553, 38AK554, 38AK555, 38AK557, 38AK558, 38AK559, 38AK560, 38AK561, 38AK562, 38AK563, 38AK564, 38AK565, 38AK566, 38AK579, 38AK580, 38AK581, 38AK582, 38AK586), seven previously recorded sites (38AK106, 38AK151, 38AK153, 38AK154, 38AK155, 38AK330, 38AK373), and 17 artifact occurrences were located by the reconnaissance survey. One previously recorded site (38AK152) in the project area could not be relocated. Although sites were defined through traditional archaeological practices, a nonsite or distributional archaeology analytical approach will be undertaken rather than a site-unit study in an attempt to document the full range of prehistoric land use and its archaeological consequences across the project area.

Three Rivers Landfill Site 1. This description of archeological investigations for the proposed Three Rivers Landfill is summarized from a report recently prepared by Cabak (1994). Site 1 for the Three Rivers Landfill encompasses a 1,158-acre tract on the northern periphery of the Savannah River Site in Aiken County, South Carolina. Fieldwork was conducted between November 29, 1993 and January 14, 1994 and included surface reconnaissance of 10.8 linear kilometers, 236 shovel tests along 6.45 linear kilometers of transects, and an additional 341 shovel tests at sites and occurrences. Twelve new archaeological sites (38AK567, 38AK568, 38AK569, 38AK570, 38AK571, 38AK572, 38AK573, 38AK574, 38AK575, 38AK576, 38AK577, 38AK578), one previously recorded site (38AK413), and two artifact occurrences were located during the reconnaissance survey. One previously recorded site (38AK174) in the project area could not be relocated. All of the sites contained artifacts of the historic era and one contained a surface prehistoric lithic scatter. Eight of the sites (38AK413, 38AK569, 38AK570, 38AK571, 38AK572, 38AK574, 38AK576, 38AK578) consist of limited and/or disturbed contexts of archaeological deposits that have little research potential. Site 38AK567, Fairfield Cemetery and Church, has sufficient content and integrity and is important to the local community. The remaining four sites (38AK568, 38AK573, 38AK575, 38AK577) may contain sufficient artifactual content and archaeological integrity to yield information important to the history of the region. Because of the uncertainty surrounding the selection of a site for the Three Rivers Landfill, additional testing will be postponed until site selection plans are finalized.

D-Area Borrow Pit Expansion. On October 9, 1993, SRARP personnel responded to a Site Use requesting the expansion of a borrow pit in D-Area. A surface reconnaissance revealed several chert flakes along an existing road through the area. Seven shovel tests excavated in the project area produced negative results. The project area has suffered previous disturbance from past construction activities on the SRS.

SU 83-43-O Amendment No. 12 (Groundwater Well Sites Access Roads). This Site Use amendment involves the construction of five access roads to groundwater remediation well sites located on SRS waste disposal locations along Silverton Road (C-1.1). The access roads will be installed along a 50 ft wide right-of-way and will vary in length. Road construction will involve some timber removal and mechanical grading. In response to this Site Use, SRARP personnel conducted subsurface testing along each of the proposed access right-of-way on March 3, 1994. Altogether, 17 shovel test pits were excavated with no artifact recovery.

SU 84-30-O Amendment No. 3 (SATA Range Expansion). This Site Use, issued on April 8, 1994, requested the 3141 ft^2 expansion of the existing Wackenhut Security

small arms firing range along the northern portion of the 115 KV Transmission Line. Personnel responded on April 22, 1994 by revisiting site 38AK108 in the proposed impact area to assess site integrity. Located in 1974, 38AK108 consisted of a small lithic scatter exposed in an active borrow pit estimated at 10 x 60 m. Continued removal of sand has increased borrow pit size to 80 x 250 m and completely destroyed all evidence of 38AK108.

SU 91-89-C Amendment No. 1 (SREL Utility Line Extension). This Site Use amendment calls for the extension of an electrical power utility easement to the proposed Savannah River Ecology Laboratory Conference Center along Upper Three Runs Creek (UTR). The extended easement parallels the northern SRS property boundary where utility poles will be erected along the shoulder of an existing dirt road. SRARP personnel responded to this Site Use on November 1, 1993 by investigating two specific locations along the proposed easement with potential for cultural deposits: 1) the area where the utility extension originated near UTR, and 2) the area where the easement crossed Johnsons Fork, a tributary of UTR. Surface inspections of the boundary road and a total of nine shovel tests in these locations produced no evidence of past occupation.

SU 92-31-O Amendment No. 1 (Creosote Treated Wood Storage Area). This Site Use amendment requests the addition of a fence around the storage area of creosote treated wood products. SRARP personnel responded on November 11, 1993 by conducting pedestrian survey along the perimeter of the existing storage area where the proposed fence will be erected. Although surface exposure was good, no artifacts were observed.

SU 93-48-F Amendment No. 1 (Construct Nature Trail). This Site Use amendment involves the construction of a nature trail and work stations. Personnel responded on August 31, 1994 by revisiting site 38BR86 in the proposed impact area to assess site integrity. Located in 1975, 38AK86 consisted of a surface lithic and ceramic scatter. Personnel from SRARP on August 31, 1994 dug 13 shovel test pits in a cruciform pattern, four of which yielded artifacts. A surface reconnaissance was also conducted; this effort yielded five artifacts.

SU 94-35-O (Industrial Waste Site for Asbestos Burial). On March 17, 1994, a Site Use was issued requesting approximately 16 acres north of Road 9 along the 115 KV Transmission Line for the burial of asbestos removed from buildings on the Savannah River Site. Construction of access roads to the burial site is not required. The area is presently planted in mature pines, most of which will be cleared in preparation for asbestos burial. Past land altering activities within the Site Use footprint resulted in a 50 x 140-m borrow pit, access road, and bulldozed push-piles.

In 1974, the 115 KV Transmission Line was inspected archaeologically during the Initial SRS Reconnaissance Survey. This work resulted in the discovery of a prehistoric site in the current project area. Designated 38BR64, the site consisted of a single chert flake observed in the borrow pit access road. On March 22, 1994, SRARP personnel responded to the Site Use by attempting to relocate 38BR64. Pedestrian coverage of all exposed surfaces, however, revealed only scattered twentieth-century historic material extending 200 m north-south along the transmission line and 100 m east into the pine plantation. To detect the presence of subsurface deposits, a single transect of five shovel tests was excavated northwest of the borrow pit with only one test yielding metal and glass fragments. Although the historic artifact scatter was most likely observed during the 1974 survey, twentieth-century sites were not routinely recorded at that time. Therefore, this historic occupation is now considered a component of site. The integrity

of the historic occupation apparently has been compromised due to major land disturbance in the past.

SU 94-35-O Amendment No. 1 (Industrial Waste Site for Asbestos Burial). On July 27, 1994, the SRARP received an amended Site Use requesting an additional 27 acres around the approved asbestos burial site (SU 94-35-O) to accommodate implementation of a proposed storm water runoff plan and the resulting spoil pile accumulation. Previous investigation of the proposed 16-acre burial site during March, 1994 (see discussion of SU 94-35-O above) revealed that much of the area, including the remains of an historic period site (38BR64), was badly disturbed from past land alteration. The only relatively undisturbed area within the expanded footprint was a pine plantation located in the southeast quadrant of the project area. SRARP personnel responded to the Site Use request on August 2, 1994 by excavating four judgmental shovel tests in this location. No artifacts were recovered in any of the tests.

SU Log #775 (Sanitary Landfill Groundwater Characterization) and SU Log #776 (Sanitary Landfill Wetlands Characterization). These Site Use requests proposed the construction of thirteen groundwater remediation well clusters and associated access roads along the northwest margin of Upper Three Runs Creek. Installation of the well clusters will serve to monitor possible contaminant discharge through subsurface aquifers from an existing sanitary landfill. Present vegetation in the project area consists of pine tree stands and a mixed forest of pines and hardwoods in the floodplain. Due to poor ground surface visibility, subsurface testing was employed. On January 15 and 16, 1994, SRARP personnel dug shovel tests along five transects paralleling 1,365 m of proposed access roads and well cluster locations. Of the forty-eight STPs excavated, only six produced artifacts. This work resulted in the discovery of two artifacts occurrences (one flake each) and the relocation of one previously recorded site, 38AK144. Shovel tests were excavated in a cruciform pattern at each single flake occurrence resulting in a total of 16 negative tests.

SU Log #834 (SRTC Groundwater Remediation Project). This Site Use requested a 50-acre tract for the treatment and containment of groundwater contaminated with toxic chemicals during past operations of A&M-Area seepage basins and surface water discharges. The project footprint lies within a low probability zone for prehistoric archaeological resources and much of the area has been previously disturbed due to road and building construction. No artifacts were observed during pedestrian coverage of the area on March 1, 1990.

SU Log #850 (Split Spoon and Shelby Tube Soil Sampling) and SU Log #860 (TNX Groundwater Characterization). Site Use Log #850 requests about 40,000 ft^2 along the Savannah River to obtain soil samples for study to support the groundwater characterization. Site Use Log #860 requests use of the same area for the placement of five temporary wells for groundwater characterization. The majority of the project area is river floodplain with heavy disturbance (ditching and road construction) on the higher ground. SRARP personnel responded on June 9, 1994 by excavating seven shovel tests within the footprint. All test were negative and revealed an impenetrable clay/silt at 35 cm BS.

SU Log #862 (Access Road to Groundwater Monitoring Wells). This Site Use request, issued on May 16, 1994, calls for the construction of an 2,400 ft access road by the Savannah River Forest Service to existing groundwater monitoring wells AC1A and AC1B located north of Silverton Road (C-1.1) along the transmission line. Frequent use of the transmission line right-of-way as an access road to the wells has resulted in erosion along the slope of an intermittent drainage immediately north of the well cluster. SRARP

personnel responded to this Site Use on June 16, 1994 by conducting pedestrian survey of the proposed location for the access road and about 1,000 ft along the transmission line adjacent to the project area. No artifacts were observed in either survey location.

SU Log #864 (Savannah River Research Campus Access Easement). A request for an access easement from the State Highway 278 to the Savannah River Research Center was issued May 26, 1994. No documented sites were located within the proposed 40-50 m wide easement. However, a 1951 aerial photograph of the project area showed a portion of mid-twentieth century home place partially located within the corridor. On May 31, 1994, SRARP personnel conducted pedestrian and subsurface survey along a portion of the easement and an existing dirt road that closely followed an unnamed Rank 1 drainage of Upper Three Runs Creek. Although the easement was recently clearcut, surface visibility was poor due to timbering detritus. A scatter of historic artifacts was exposed along the road for about 120 m. Additional historic debris was noted in a wooded area between the road and drainage. This early twentieth century site was designated 38AK588. One artifact occurrence consisting of a chert flake was observed in the road approximately 250 m south of 38AK588. Subsurface testing consisted of 44 STPs excavated along the eastern margin of the drainage for a distance of 1,180 m beginning at the stream head and ending at the SRS Boundary. Pedestrian coverage of the easement between the SRS Boundary and SRS Road 1 resulted in the discover of a second historic scatter of debris subsequently recorded as 38AK589.

SU Log #865/866/867 (Replacement of Bridges). On July 13, 1994, three Site Use Applications proposing the replacement two bridges along Road 8-1 (603-13G spanning Tinker Creek and 603-14G spanning Upper Three Runs) and one bridge along Road 2-1 (603-15G spanning Upper Three Runs) were received by the SRARP. Archaeological investigation of the proposed construction sites was conducted on July 20, 1994. No artifacts were observed during a pedestrian survey of surfaces exposed from previous land alteration and erosion.

SU Log #875 (Modify and Enlarge Boat Ramp by Clearing and Grading). This Site Use proposes modifications to the SRS boat ramp on the Savannah River by clearing and grading about 20 ft on each side of the existing ramp from the edge of the water to the access road. On July 21, 1994, SRARP personnel responded by surveying areas exposed during the original construction of the ramp. No artifactual material was observed.

SU Log #886 (In Situ Inorganic Remediation of Groundwater Demonstration). This Site Use involves the installation of groundwater monitoring wells and soil core collection to conduct treatability studies of various inorganic technologies. Pedestrian survey on July 21, 1994 of the 19-acre tract revealed heavily eroded areas flanking a deep drainage ditch. No artifacts were noted.

SU Log No. 904 (Access Road to Monitoring Well MSB-19). This Site Use involves the installation of a road for access to a monitoring well cluster. SRARP personnel responded on September 23, 1994 by excavating 11 shovel test pits within the footprint. This effort yielded no cultural material.

Survey Results

Sixty-four new archaeological sites were located and documented in FY94. Twenty-four existing sites within survey tract boundaries were revisited to update site file records. A tabulation of existing and new sites by project type is provided in Table 5. Summary data on new and existing sites are provided in Tables 6 and 7.

Table 5. Tabulation of Existing Sites and New Sites by Survey Project Type, FY94.

	EXISTING SITES			NEW SITES		
	Prehistoric	Historic	Both	Prehistoric	Historic	Both
SITE-USE	38AK106	38AK330	38AK155	38AK546	38AK567	38AK553
	38AK108		38AK373	38AK547	38AK568	38AK555
	38AK144		38AK413	38AK548	38AK569	38AK558
	38AK151		38BR64	38AK549	38AK570	38AK566
	38AK153			38AK550	38AK571	
	38AK154			38AK551	38AK572	
	38BR86			38AK552	38AK573	
				38AK554	38AK574	
				38AK557	38AK575	
				38AK559	38AK576	
				38AK560	38AK577	
				38AK561	38AK578	
				38AK562	38AK588	
				38AK563	38AK589	
				38AK564		
				38AK565		
				38AK579		
				38AK580		
				38AK581		
				38AK582		
				38AK586		
TIMBER COMP.	38BR18	38AK308	38AK127	38AK584	38AK587	38AK583
	38BR521		38AK524	38BR719	38BR717	
			38BR217	38BR720	38BR718	
				38BR721	38BR726	
				38BR722	38BR729	
				38BR723	38BR731	
				38BR724	38BR735	
				38BR725		
				38BR727		
				38BR728		
				38BR730		
				38BR734		
				38BR736		
CLEARCUT	38BR53		38AK379	38AK585		
	38BR87		38BR37			
	38BR364		38BR313			
OPPORTUNISTIC				38AK545	38BR732	
				38AK556		
TOTAL	12	2	10	37	22	5

Table 6. Data on the Extent, Depth, and Content of New Sites Located in FY94 Surveys.

Site	Project	Size (m)	Depth (cm BS)	Methods	Surface Visibility	# STPs	# TU	Components
38AK545	Opportunistic	100x160	40	Surf., STP	51-75%	12	0	20th c.
38AK546	E-Area	250x290	80	Surf., STP, TU	1-25	86	2	MA, MW, LW
38AK547	E-Area	90x110	80	STP, TU	0	32	1	EW, LW
38AK548	E-Area	15x95	PZ	Surf., STP	1-25	6	0	LA, EW
38AK549	E-Area	10x50	50	STP	0	17	0	Unk. Prehist.
38AK550	E-Area	7x30	80	STP	0	22	0	Unk. Prehist.
38AK551	E-Area	15x20	70	STP, TU	0	14	1	Unk. Prehist.
38AK552	E-Area	70x190	90	Surf., STP, TU	1-25	50	1	MW
38AK553	E-Area	35x50	80	STP, TU	1-25	25	1	Unk. Prehist,. 20th c.
38AK554	E-Area	15x20	40	STP, TU	0	15	1	Unk. Prehist.
38AK555	E-Area	15x50	70	STP, TU	0	14	1	LW, Miss., Unk. Hist.
38AK556	Opportunistic	30x110	75	STP	1-25	21	0	LA, LW
38AK557	E-Area	40x40	70	STP, TU	0	18	1	EA, MW, LW
38AK558	E-Area	20x70	70	STP, TU	0	21	1	LA, 19th c.
38AK559	E-Area	15x30	85	Surf., STP	26-50	12	0	Unk. Prehist.
38AK560	E-Area	40x110	100	STP, TU	1-25	38	1	LW
38AK561	E-Area	60x80	100	STP, TU	0	33	1	Unk. Prehist.
38AK562	E-Area	5x20	80	STP	0	11	0	Unk. Prehist.
38AK563	E-Area	100x130	95	STP, TU	0	41	2	LA, EW, MW, LW
38AK564	E-Area	30x60	70	STP, TU	0	19	1	LA, EW, MW
38AK565	E-Area	30x40	60	STP, TU	0	16	1	MW, LW, Miss.
38AK566	E-Area	60x120	60	STP, TU	0	25	1	MW, LW, Unk. Hist.
38AK567	TRL	90x135	30	Surf., STP	26-50	33	0	19/20th c.
38AK568	TRL	70x90	30	Surf., STP	26-50	29	0	19/20th c.
38AK569	TRL	40x55	20	Surf., STP	26-50	26	0	19/20th c.
38AK570	TRL	75x110	30	Surf., STP	1-25	33	0	19/20th c.
38AK571	TRL	65x140	30	Surf., STP	26-50	21	0	19/0th c.
38AK572	TRL	20x20	25	Surf., STP	1-25	20	0	Unk. Hist.
38AK573	TRL	70x140	30	Surf., STP	1-25	40	0	19/20th c.
38AK574	TRL	110x140	30	Surf., STP	1-25	28	0	20th c.
38AK575	TRL	70x110	40	Surf., STP	1-25	22	0	19/20th c.
38AK576	TRL	75x110	40	Surf., STP	26-50	31	0	19/20th c.
38AK577	TRL	85x90	40	Surf., STP	26-50	21	0	19/20th c.
38AK578	TRL	30x55	PZ	Surf., STP	51-75	20	0	19/20th c.
38AK579	E-Area	60x120	110	Surf., STP	0	31	2	MA, LA, EA
38AK580	E-Area	50X120	105	STP, TU	0	20	1	LA, EW, MW, LW
38AK581	E-Area	25x75	70	STP, TU	0	19	1	EW, MW, LW
38AK582	E-Area	35x40	60	STP, TU	0	17	1	Miss.
38AK583	TC Survey	50x110	60	Surf., STP	1-25	11	0	MW, Unk. Hist.
38AK584	TC Survey	30x35	40	Surf., STP	26-50	11	0	Unk. Prehist.
38AK585	Clearcut Survey	160x240	85	Surf., STP	76-100	8	0	EA, MA, EW, MW
38AK586	E-Area	35x67	75	Surf., STP	1-25	17	0	EW, MW, LW
38AK587	TC Survey	80x160	Unk.	Surf.	1-25	0	0	20th c.
38AK588	Log #864	50x120	30	Surf., STP	26-50	5	0	20th c.
38AK589	Log #864	Unk	Unk.	Surf.	26-50	0	0	20th c.
38BR717	TC Survey	25x40	30	Surf., STP	1-25	9	0	Unk. Hist.
38BR718	TC Survey	55x60	45	Surf., STP	1-25	18	0	19/20th c.
38BR719	TC Survey	40x70	50	Surf., STP	1-25	16	0	Unk. Prehist.
38BR720	TC Survey	60x125	60	Surf., STP	1-25	17	0	MW, LW
38BR721	TC Survey	30x50	30	Surf., STP	1-25	14	0	19/20th c.
38BR722	TC Survey	35x40	40	STP	0	14	0	Unk. Prehist.
38BR723	TC Survey	15x20	50	STP	0	10	0	Unk. Prehist.
38BR724	TC Survey	15x40	30	STP	0	10	0	LW
38BR725	TC Survey	20x110	35	STP	0	25	0	EW, MW
38BR726	TC Survey	50x80	20	Surf., STP	1-25	8	0	19/20th c.
38BR727	TC Survey	40x130	40	Surf., STP	0	12	0	Unk. Prehist.
38BR728	TC Survey	80x210	70	STP	0	34	0	MW

Table 6. continued.

Site	Project	Size (m)	Depth (cm BS)	Methods	Surface Visibility	# STPs	# TU	Components
38BR729	TC Survey	75x80	Unk.	Surf.	1-25	0	0	20th c.
38BR730	TC Survey	10x10	30	Surf., STP	1-25	5	0	Unk. Prehist.
38BR731	TC Survey	55x60	30	Surf., STP	1-25	11	0	19/20th c.
38BR732	Opportunistic	150x225	Unk.	Surf.	1-25	0	0	19/20th c.
38BR734	TC Survey	70x110	50	STP	1-25	11	0	LW
38BR735	TC Survey	30x45	Unk.	Surf.	1-25	0	0	19th/20th c.
38BR736	TC Survey	90x100	60	STP	1-25	11	0	Unk. Prehist.

TRL - Three Rivers Landfill
TC Survey - Timber Compartment
PZ - Plowzone
STP - Shovel Test Pit
Surf. - Surface Reconnaissance
TU - Test Unit
EA - Early Archaic
MA - Middle Archaic
LA - Late Archaic
EW - Early Woodland
MW - Middle Woodland
LW - Late Woodland
Miss. - Mississippian
Unk. Prehist. - Prehistoric
Unk. Hist. - Historic

Table 7. Data on the Extent, Depth, and Content of Existing Sites Revisited in FY94 Surveys.

Site	Project	Size (m)	Depth (cm BS)	Methods	Surface Visibility	# STPs	# TU	Components
38AK106	E-Area	35x110	95	STP, TU	1-25	38	1	EW, LW
38AK108	84-30-O Am. #3	destroyed	-	Surf.	100	—	0	Unk. Prehist.
38AK127	TC Survey	40x60	40	Surf., STP	1-25	11	0	Unk. Prehist, 20th c.
38AK144	Log #775/776	150x340	70	STP	1-25	66	0	EW, LW
38AK151	E-Area	80x110	70	STP, TU	0	35	1	EW, LW
38AK153	E-Area	20x40	80	STP	1-25	16	0	EA, EW, LW
38AK154	E-Area	35x60	40	STP, TU	1-25	9	1	EW
38AK155	E-Area	115x180	90	STP, TU	1-25	55	5	EW, MW, LW, 20th c.
38AK308	TC Survey	80x130	Unk.	Surf.	1-25	0	0	19th/20th c.
38AK330	E-Area	25x90	60	STP	26-50	9	0	Unk. Prehist.
38AK373	E-Area	130x210	115	STP, TU	0	71	3	EA, MW, LW, 20th c.
38AK379	Clearcut Survey	50x100	70	Surf.	76-100	0	0	EW, MW, 18th c.
38AK413	TRL	10x20	PZ	Surf., STP	51-75	9	0	Unk. Prehist/Hist.
38BR18	TC Survey	Unk.	40	Surf., STP	26-50	8	0	EA, EW, MW
38BR37	Clearcut Survey	160x180	90	Surf.	76-100	0	0	Unk. Prehist.
38BR53	Clearcut Survey	100x120	80	Surf.	76-100	0	0	EW, LW
38BR64	89-20-F	100x200	Unk.	Surf., STP	51-75	5	0	Unk. Prehist, 20th c.
38BR86	93-48-F	10x40	30	Surf., STP	0-20	13		LA
38BR87	Clearcut Survey	60x60	30	Surf., STP	76-100	0	0	Unk. Prehist.
38BR217	TC Survey	40x80	Unk.	Surf.	76-100	0	0	LA, 20th c.
38BR313	Clearcut Survey	320x480	Unk.	Surf.	51-75	0	0	Unk. Prehist, 20th c.
38BR364	Clearcut Survey	120x225	70	Surf.	76-100	0	0	MA, LA, EW ,LW
38BR521	TC Survey	30x60	40	Surf., STP	1-25	10	0	EW, MW, LW
38BR524	TC Survey	50x70	40	Surf., STP	1-25	9	0	EW, 19/20th c.

TRL - Three Rivers Landfill
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PZ - Plowzone
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TU - Test Unit
EA - Early Archaic
MA - Middle Archaic
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Miss. - Mississippian
Unk. Prehist. - Prehistoric
Unk. Hist. - Historic

A total of 5,261 acres was surveyed by the SRARP in FY94 for 21 Site Use Applications, 16 Timber Compartment Prescriptions, and 10 clearcut stands. In addition to surface reconnaissance, 2,792 shovel tests were excavated to locate and define sites. Thirty-three controlled test units were excavated to assess subsurface integrity at 24 sites.

The volume of survey work in FY94 represents a 170 percent increase over survey volume in FY93. The increase is largely attributed to two large projects conducted in FY94: the E Area survey, and the Three Rivers Landfill survey. Five of 14 timber compartment prescriptions issued in FY94 could not be surveyed before the end of the fiscal year. These will be carried-over to FY95 and form a substantial portion of the survey activity in the next several months. A large volume of clearcut surveys and other site use activities is also anticipated for FY95. In addition, the report for the E Area survey will completed in FY95.

CURATION COMPLIANCE ACTIVITIES

SRARP recuration of existing collections continued in FY94, as did curation of incoming collections from ongoing field activities. The Master Baseline Database now contains over 4,400 individual records. Each of these records characterizes the artifacts from one provenience and level at one site. Over 519,204 artifacts have been recurated by Mr. Bruce Penner and Ms. Tammy Forehand since December of 1993, an increase of over 100 percent since the SRARP FY93 Annual Report (Figure 1). In addition, planning is underway to merge records of incoming collections with the recurated collections. FY94 also saw the development of a computerized site file system, designed by Bruce Penner of the curation staff. This system allows quick access to site records for field compliance activities, and is readily up-dateable.

In addition to artifact recuration, Forehand and Penner conducted a comprehensive inventory of all state site files housed at SRARP, and are currently updating the duplicate acid-free site files housed in Columbia at SCIAA. An inventory was conducted of all maps and aerial photographs in the SRARP collections and entered on a new database as well. Finally, historic artifact type collections were assembled for ceramic and glass objects.

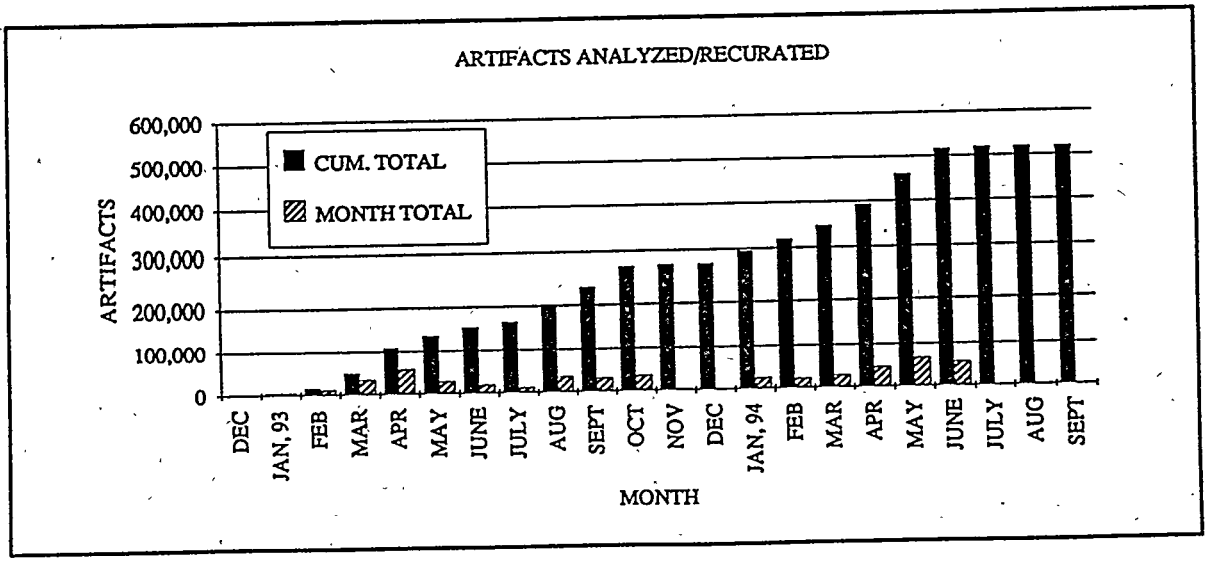

Figure 1. Monthly and cumulative rates of artifact analysis/recuration.

Several curation personnel changes occurred in FY94. Mr. Steve McKettrick left the staff to pursue other career opportunities. Mr. John Huffman, who had worked on several volunteer efforts before coming to work for SRARP, left the staff to pursue his graduate education in historical archaeology at the University of Idaho. Several new volunteers joined the staff. Lois and Larry Potter moved to the Aiken area from northern Virginia, where they had worked on Civil War-era sites. Joann Lowery is retired from the Savannah River Ecology Laboratory, and volunteered for the United States Forest Service in the *Passports in Time* program before she began working at SRARP as a field volunteer.

As was reported in the SRARP Annual Report for FY93 (Savannah River Archaeological Research Program 1993), building 760-11G, which houses SRARP, fails to comply with 36 Code of Federal Regulations Part 79 ("Curation of Federally-Owned and Administered Archeological Collections"). Areas of DOE non-compliance include dedicated curation space, security, fire detection and suppression, and humidity and temperature control. These areas of non-compliance were also reported in the *Savannah River Archaeological Research Program Appraisal, Final Appraisal Report* (U. S. Department of Energy Savannah River Field Office Environmental and Laboratory Programs Division, Environmental Programs Branch 1994:1-3).

PART II. RESEARCH

RESEARCH ABSTRACTS

Exploring Turn of the Century African-American Healthways: Results of Excavation at the Wayman African Methodist Episcopal Church in Bloomington, Illinois

Melanie A. Cabak, Mark D. Groover, and Scott J. Wagers

Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia
(A version of this paper has been accepted for publication in *Historical Archaeology).*

Excavation at the Wayman African Methodist Episcopal Church in Bloomington, Illinois, continuously occupied since the 1840s, produced a large assemblage of artifacts related to the health care practiced by the church congregation during the late 19th and early 20th centuries. Pharmaceutical bottles, patent medicine bottles, and other medical care artifacts were recovered from a privy pit and sheet midden located in the backyard of the church. The recovered artifacts illustrate two important historical trends at the turn of the twentieth century. First, the artifacts emphasize the prominent and active role that the church played in providing health care to the congregation and community. Second, the artifacts temporally correspond to a series of epidemics that spread through central Illinois between 1890 and the early 1900s.

The "Lost City" That Never Was: Preliminary Excavations at New Windsor Township, South Carolina

David Colin Crass

Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

New Windsor Township was originally planned to serve as a buffer between the Low Country settlements and the Indians of South Carolina's colonial frontier, as well as a trade center. Peopled largely by Switzers and Germans, the township furnishes a unique opportunity to study the material correlates of European adaptation to a new and hostile environment. This perspective is applied in an examination of results derived from the first season's excavations at a New Windsor home site overlooking the Savannah River dating from ca. 1740-ca. 1820. The results of this pilot study are used as a springboard to discuss further avenues of research in which a cross-disciplinary approach may be used to more fully explicate cultural adaptation in frontier and backcountry settings.

Archaeology at the Woodrow Wilson House: An Overview

David Colin Crass

Paper presented at the Woodrow Wilson Symposium, Augusta, GA.

Results of archaeological testing and small block excavations are reviewed. Findings are presented in a context that emphasizes the Wilson family as representatives of the upper-middle class in Augusta, Georgia. Conclusions and recommendations are presented for future interpretation at the site.

The Southern Colonial Backcountry: Beginning an Interdisciplinary Dialogue

David Colin Crass and Richard D. Brooks

Conference sponsored by the Savannah River Archaeological Research Program, held at University of South Carolina, Columbia, October 1993.

Recent scholarship in several disciplines has focused on the emergence of new societies in frontier settings. Historians, geographers, and archaeologists have all pursued research in which emphasis is placed on social and economic perspectives, ethnicity, community formation, environmental history, and a multitude of broad topics. The conference format allows historians, geographers, archaeologists, museum interpreters, and scholars from other disciplines to explore the potential of interdisciplinary studies for their own specialties. Emphasis is placed on presentations which offer opportunities for contributions from other areas of scholarship.

The Interdisciplinary Frontier Research Project at New Windsor Township: Report on the First Season

David Colin Crass, Tammy Forehand, Bruce Penner, and Bennie Bartley

Paper presented at the annual meeting of the Archaeological Society of South Carolina, Columbia, SC.

This paper offers a preliminary assessment of the first season's work by the Interdisciplinary Frontier Research Project in New Windsor township (modern Beech Island). Findings are presented in light of recent studies of acculturation and assimilation in the colonial southeast. Plans for future research and general areas of inquiry conclude the presentation.

Archaeological Considerations

David Colin Crass and George Lewis

In *Research Study: The Woodrow Wilson Boyhood Home*, edited by Norman Askins, Historic Augusta, Inc.

Archaeological excavations in the yard and under the kitchen and servant's quarters at the ca. 1859 home of Woodrow Wilson are detailed in this chapter. Recommendations for further research and interpretation are offered to aid in site development planning.

"The English Do Be Idle:" Switzers and Ulstermen on the South Carolina Frontier

David Colin Crass and Bruce Penner

Paper presented at the 10th Ulster-American Heritage Symposium, Staunton, VA

The southeastern frontier during the colonial period was dominated by Irish, Scots, and English colonists, many of whom had come to the region after landing at Philadelphia and making their way up the Shenandoah Valley. Contemporary accounts and some recent historians place great emphasis on the role of the Anglo-Irish in shaping the customs and the institutions of the backcountry. However, although Borderers from

Ireland, Scotland, and the north counties were perhaps the dominant cultural group on the southern frontier, they were far from being the sole influence on the backcountry culture, and did not live their lives in a cultural vacuum.

Interactions between the Anglo-Irish and other cultural groups were critical to the formation of colonial frontier culture. This paper reviews the results of a preliminary study of interactions between Anglo-Irish and the Swiss of New Windsor Township, South Carolina. New Windsor, originally planned by the Royal government as a buffer settlement, was inhabited by a truly multicultural population. Archaeological and historical data from the initial stages of a multi-year project sponsored by the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, are used to illustrate some of the pathways of interaction between these groups, and plans for further research are presented.

The Struggle For The South Carolina Frontier: History And Archaeology At New Windsor Township

David Colin Crass
Bruce Penner

South Carolina Antiquities 24:37-57.

The early- to mid-eighteenth century backcountry landscape in South Carolina was a place of rapid and multi-dimensional change. Ethnic groups including Cherokee, Creek, and Chickasaw Indians, Englishmen, Ulster Scots, Germans, Swiss, and French met, sometimes peacefully, sometimes not. This mingling of people from different parts of the world makes the backcountry a fascinating backdrop against which to view processes of culture change. Here we offer a preliminary assessment of the first season's excavations at frontier sites located in the eighteenth century township of New Windsor, and designated 38AK615. After presenting a historic context for New Windsor and a survey of historiographical studies of German-speakers in the colonial backcountry, we proceed to an examination of pertinent archaeological studies in the area. Finally, we summarize results of our first season of excavations, and offer some inferences about economic processes in the township of New Windsor.

Economics, Defense and the Use of the Frontier: Towards an Historic Context for New Windsor Township

Bruce R. Penner

Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

Between 1716 and 1732, the South Carolina government attempted to institute a series of defensive buffers on its southwestern frontier. This paper briefly reviews these attempts, including the final defensive buffer called "Johnson's Township Scheme," within a defensive and economic context. Next, the various factors that led to the decline of the township system, and in particular the Swiss frontier township of New Windsor, will be addressed from both an emic and etic perspective. Lastly, the necessity for developing a cultural framework within which to place the settlement of German-speaking peoples in America will be discussed as well as its potential for elucidating the causes of New Windsor's decline.

Hunter-Gatherer Site Structure at Upland Sites in the South Atlantic Coastal Plain

Kenneth E. Sassaman

Southeastern Archaeology 12:117-136.

Most archaeological sites in the South Atlantic Coastal Plain consist of shallow, sandy deposits that are well-drained and acidic and thus lack organic traces of prehistoric human activities. Upland, or interriverine sites are especially notorious for the lack of preserved organics, and because they often consist of low-density "scatters" of mundane artifacts, many such sites are neglected by professional archaeologists. However, through a combination of large-scale hand excavation involving artifact plotting and an interpretive framework that includes data from ethnoarchaeological research, patterns to the distribution of stone debris and pottery at small, upland sites afford ample opportunity to investigate hunter-gatherer site structure. An example from the Aiken Plateau of South Carolina illustrates not only how site-specific patterns can be recognized, but also how the development of intrasite spatial data is important to interpretations of sociopolitical and economic organization among regional populations.

Production for Exchange in the Mid-Holocene Southeast: A Savannah River Valley Example

Kenneth E. Sassaman

Lithic Technology 19(1):42-51

At various places across the American Southeast during the mid-Holocene, bifaces were produced for nonsubsistence purposes, including mortuary offerings and exchange. Examples of biface caches and oversized forms are not uncommon at sites in the Midsouth, and locations of biface production have been noted at numerous sites near sources of high-quality chert. Unfortunately, analyses of production debris have not been conducted, so there exists no information of the scale and intensity of production for exchange. In contrast, discrete concentrations of debitage and production failures at sites in the middle Savannah River valley lend themselves to analysis of scale of production. At the Pen Point site, for instance, 200-300 preforms were manufactured and transported from the site in what appears to be a single production event. Alternative explanations for this scale of production are examined. Given emerging evidence for nonsubsistence uses of bifaces in the Savannah River valley, and its probable historical connection to the Midsouth, it is likely that production at Pen Point was geared toward exchange.

Technological Innovations in the Economic and Social Lives of Mid-Holocene Southeast Populations

Kenneth E. Sassaman

Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

A variety of novel technologies were used by mid-Holocene societies in the Southeast and these innovations are useful today for time-space systematics. Beyond this, the significance of innovations has not been seriously contemplated. Most archaeologists would agree that innovations reflect new opportunities or constraints in the economic

organization of mid-Holocene populations, but little thought is given to the social constitution of economy and how social organization affected the demand and spread of innovations. A political-economic examination of mid-Holocene innovations brings to the fore aspects of production and distribution that reproduced the social conditions of Middle and Late Archaic economies.

The Products and Precedents of Southeastern Mid-Holocene Archaeology

Kenneth E. Sassaman and David G. Anderson

Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

The mid-Holocene archaeological record of the Southeastern United States is characterized by material products and precedents that distinguish it from other Archaic Period records in the eastern Woodlands. Deciduous forests and Hypsithermal climate are the environmental precedents often invoked to explain mid-Holocene adaptations, but important too from a regional perspective are sea-level rise, fluvial dynamics, and human impacts. Likewise, hafted bifaces are the primary products by which mid-Holocene prehistory is organized, but new insights into material culture, resource selection, and biocultural response are showing that mid-Holocene populations were much more diverse than the design of their lithic tools would suggest.

Middle and Late Archaic Architecture

R. Jerald Ledbetter and Kenneth E. Sassaman

Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

Habitation structures and other architecture are important archaeological measures of settlement organization, coresident group size, and social complexity. Unfortunately, evidence for architecture in the mid-Holocene archaeological record of the Southeast has been elusive and thus our knowledge of other aspects of Middle and Late Archaic life suffers. At a regional scale of analysis, however, a sufficient body of data on architecture is available to offer tentative conclusions about regional variation in the design and permanence of habitation structures. An important aspect of this growing database are efforts to identify structures from indirect evidence such as artifact and feature distributions.

RESEARCH NOTES

New Windsor Township

Since March 1993 the SCIAA/SRARP has been engaged in an intensive research effort in New Windsor Township (now Beech Island), directly across the Savannah River from Augusta, Georgia. This effort, part of SRARP's Interdisciplinary Frontier Research Project, is a multi-year effort aimed at recreating, insofar as possible, the eighteenth century landscape of this frontier community. We are focusing particular attention on processes of acculturation and assimilation.

The project consists of several components. These include analysis of materials excavated from the trading post of Fort Moore in the 1970s, reconnaissance and further subsurface investigations of the area of Ft. Moore and the contact-period Native American Savanno Town, survey of other sites including properties owned by the potter Andrew Duché, community leader John Tobler, and traders such as George Galphin, generation of cadastral maps, public outreach efforts in the Beech Island community, and data sharing with other interested parties. The first phase of the project, the excavation of a ca. 1737 homestead (38AK615), is currently underway by David Crass, Bruce Penner, Tammy Forehand, and SRARP volunteers.

New Windsor was a multi-ethnic community in the truest sense of the word. It included Switzers, Ulstermen, English, French, Indians, and African-Americans. Of the 56 surveyed plats that have been located for New Windsor township, thirty one, or 55 percent, were surveyed for people with German or Swiss surnames. English surnames account for 25 percent (n = 14) of the total, Ulstermen for 11 percent (n = 6), and French 9 percent (n = 5). Germans and Swiss held approximately 60 percent of the 13,519 acres surveyed, with Englishmen holding about 26 percent, Ulstermen holding 11 percent and those of French surnames holding 5 percent. It seems evident that New Windsor was a polyglot settlement, but that German-speakers held the majority of acreage. Most importantly, the average size of surveyed plots is relatively high—282 acres for German speaking landholders, vs. 263 for English landholders. The French noted may have been either French-speaking Swiss, or Huguenots.

A preliminary search located 10 probate inventories for New Windsor residents, of which seven are for German-speaking residents. Of the seven inventories examined, only one appears to be for a trader. The others are for planters, who owned mahogany dressers, tables, beds and feather mattresses, silver flatware, china, earthenware, and clocks and watches. Three decedents listed extensive libraries, and one owned a chamber organ. Most decedents owned slaves.

Archaeological survey and excavation at 38AK615 have been in progress since May 1993. The site is located on a bluff facing west over the Savannah River Swamp. Initial primary documents research indicates that the land belonged to three Swiss brothers—Leonard, Ulrich, and Michael Meyer. The three arrived in New Windsor in 1737, with the initial group of settlers. The eldest brother Michael's 1784 will records that his household goods included feather beds, furniture, and books. Michael described himself as a planter. His capital included 440 acres of land, four slaves, cattle, hogs, two horses, various tools, and gardens.

Field work at the site has included surface reconnaissance of the site area, systematic shovel testing to determine site boundaries, machine stripping, and hand-excavations of features. These investigations at the site have revealed seven discrete middens, a firepit, and remains of three structures including two outbuildings and an earthfast structure measuring between 500-700 square feet. Over 10,000 artifacts, floral, and faunal specimens have been recovered.

The middens appear to have been used for relatively brief and discrete time periods over the life span of the occupation. Ceramics recovered include salt-glazed stoneware plates, slip-decorated earthenwares, delft, British Brown stoneware, creamware, and several sherds of pearlware. Several alkaline-glazed earthenware sherds, which appear to be precursors to Edgefield alkaline glazed stonewares, were recovered from a late eighteenth century context dating to approximately the time of site abandonment. Other artifacts recovered include bone-handled table knives, sewing pins, hooks and eyes, buttons, and personal items. Interestingly, very few nails, window glass

shards, or heavy iron articles have been recovered. Fauna represented include elk, deer, cattle, hog, turtle, and birds. While macrobotanical samples have not yet been analyzed, black walnut, corn, and peach pits have been recovered from post-Revolutionary War contexts.

The evidence recovered from 38AK615 and from the limited archival evidence examined to date is at odds with our perhaps stereotypical portrait of an austere backcountry sub-culture. Far from a home life characterized by a relatively poor material culture inventory, archaeological work to date indicates that the Meyer brothers lived a life similar in its material aspects to that of successful English speaking yeoman planters in the Chesapeake Tidewater or Carolina Lowcountry. Further, traditions of folk culture seem to have existed side-by-side with participation in the international market economy.

A review of historiographical studies of German-speakers, juxtaposed against the preliminary material culture data that we are beginning to compile at New Windsor, strongly suggests that there is much more variability both within and between the German-speaking communities of the backcountry than is commonly acknowledged. Future research will focus on folk culture from hearth areas in Europe. We also hope to identify processes of individual and household experimentation, community continuity, and culturally acceptable behavior by combining data from fields including the decorative arts, linguistics, and history.

National Science Foundation Gifted Scholars Program

SRARP continued participation in the National Science Foundation's Young Scholars Program. Under the day-to-day supervision of Tammy Forehand and overall supervision of David Crass, Julie Chu, a high school senior, analyzed materials recovered from several colonial sites in New Windsor Township. Her findings were reported in a presented paper.

Woodrow Wilson Boyhood Home (9RI432)

David Crass and George Lewis continued their involvement with the restoration of Woodrow Wilson's boyhood home in Augusta, Georgia under SRARP's public outreach efforts. A report of their excavations was published as part of the overall study of restoration alternatives for the home. Future excavation is planned under the kitchen of the house.

Research in Northern Ireland

Many of the colonists who came to the English colonies in the eighteenth century were Scots-Irish. This ethnic group, which originated largely in the Lowlands of Scotland, had emigrated to Ulster (modern Northern Ireland) during the Plantation of James I in the early seventeenth century. This process has been interpreted as a kind of rehearsal for the colonization of North America. A century later the Ulster Scots began moving in large numbers to the middle and southern colonies. Here they formed a powerful social and political force in the colonial backcountry, giving rise in the nineteenth century to leaders like Andrew Jackson. Even more important than the individual leaders that arose from the Scots-Irish Ascendancy were the impacts the group had on cultural development in the southeast, including the Savannah River valley. David Crass began a research project in Northern Ireland in June 1994 under the sponsorship of the British Council aimed at the comparison of Ulster archaeological collections and those recovered from eighteenth century contexts in North America. This project is aimed at elucidating processes of adaptation in Scots-Irish culture and

understanding the relationships between various ethnic groups in eighteenth-century America.

Augusta Arsenal

In the early 1950s when Augusta College was founded, it moved into a decommissioned U. S. Army arsenal that had been located outside the town since the early nineteenth century. Prior to the founding of the arsenal, the area had been a plantation. The ca. 1800 plantation house and many of the antebellum arsenal buildings and their associated archaeological deposits still exist. The old arsenal grounds offer the opportunity to conduct research on a period that is not well documented archaeologically. From the close of the War of 1812 through the mid-1840s, the U. S. Army made the transition from a small, ill-equipped and ill-trained force to a professional organization capable of carrying out extended campaigns in the furtherance of U. S. policy. In addition to the examination of technological change, work at the arsenal offers the opportunity to examine issues such as status within the ranks of a changing army and the relationships between the military and a surrounding civilian community. David Crass, Christopher Murphy (Augusta College), and Edward Cashin (Augusta College) have formed a research team that will coordinate these research concerns with expansion plans at the university. A preliminary documents search and surface reconnaissance of the university grounds have led to the identification of several locations to be investigated through archaeological testing and small-block excavations in the fall of 1994 and spring of 1995.

Genealogical Training

Genealogical research often leads to primary documents that are extremely useful in interpreting historical archaeological sites. In an effort to better understand and interpret primary documents as well as to gain further insight into the location of such documents, Tammy Forehand attended genealogical workshops and seminars in Abbeville, South Carolina, and at the Augusta Genealogical Society and Augusta College, in Augusta, Georgia. Wills and inventories found as a result of this training and research are entered into a database designed by Bruce Penner.

Mims Point Project

Sorting and preliminary analyses of materials from the second season of excavation at Mims Point (38ED9) continued through FY94 with funding by the United States Department of Agriculture Forest Service. Monica Beck of the Department of Anthropology, University of South Carolina was employed under the grant to sort the large volume of feature fill from the September 1993 excavation. With sorting now completed, specialized analyses of animal bone and charcoal samples, and the detailed analysis of artifacts are underway. A report of the second season of investigations is anticipated in early 1995; additional Forest Service funding will be provided to conduct a third phase of excavation in March 1995.

Victor Mills Site Project

In late 1993 George Lewis was contacted about a small shell midden site in Columbia County, Georgia that was soon to be sold on the residential market. Lewis and Sassaman made arrangements with the developer to conduct limited testing at what came to be known as the Victor Mills site (9CB138). This small shell midden lies on a west-facing slope of a ridge bordering the Savannah River approximately 1 km south of Stallings Island. It was apparently the site William Claflin designated Site 7, and

described as a "small shell bed less than a tenth of an acre in area" (Claflin 1931:41). Since the time of this report, Victor Mills was surveyed and tested by Steve Webb (1992) for a sewer line, who found it to extend well beyond the limits of the small midden, and it has been looted.

On two trips to the site in early 1994, Sassaman led a crew in opening 65 m^2 of the site in a series of trenches. A portion of intact shell midden was sampled to collect subsistence remains, charcoal for dating, and diagnostic artifacts. The assemblage of plain fiber-tempered pottery and soapstone slabs indicated a single component site dating to about 4500-4200 B.P. Especially interesting was the upslope assemblage of over two dozen pits. Many of these were 75-100 cm in diameter and up to 110 cm deep. They contained an organic fill with artifacts consistent with the shell-midden assemblage. A cross-section of one of the largest features shows a layer of burned clay and charcoal at its base, overlain by two thick layers of organic fill. Soapstone cooking stones and fire-cracked rock were dispersed throughout the fill. A soil column for thin-section and trace element analysis was collected from the feature's profile. These and other analyses, including radiocarbon dating, will be funding by a grant from the Robert L. Stephenson Research Fund of the South Carolina Institute of Archaeology and Anthropology. Irrespective of the results and the final disposition of this site, the observations made to date are sufficient to suggest that Victor Mills was an intensively occupied, virtually single component site involving large-scale food processing activities. Storage and/or feasting activities may be indicated.

Axes and Atlatls Project

The polished stone grooved axes and atlatl weights (a.k.a. bannerstones) of the Middle and Late Archaic periods are among the technological innovations that accompanied southeastern hunter-gatherer societies into increasingly sedentary lifestyles. What is more, axes and bannerstones appear to have been valued trade items, which, in some circumstances, were interred with the dead. Given these social and ceremonial roles, patterns to the production and distribution of these items across the region may inform us about group definition and integration. A project to collect these data was initiated by Sassaman in FY94. Preliminary examination of collections at the Universities of Tennesse, Kentucky, and North Carolina shows that bannerstones have clustered distributions spaced at about 200 km intevals, perhaps corresponding with nodes of group integration. Axes assume more limited distributions that are not isomorphic with other, independent lines of evidence for sedentary settlement. More detailed analyses of collections throughout the Southeast will continued in years ahead to further explore distributional patterns and relate these to technofunctional data. The long-term goal is a monograph-length treatment tentatively entitled *Axes and Atlatls: Production and Reproduction in Hunter-Gatherer Society*, which will illustrate the role of material culture in reproducing social relations at the regional scale.

RESEARCH REPORTS

HOLOCENE CLIMATE AND UPLAND LANDSCAPE EVOLUTION IN THE UPPER COASTAL PLAIN OF SOUTH CAROLINA

Mark J. Brooks
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and
Donald J. Colquhoun[2]

Whereas non-fluvial, upland wetlands (e.g., Carolina bays) in the Sandhills region of the Upper Coastal Plain of South Carolina appear to be sensitive barometers of paleoenvironmental conditions (Brooks et al. 1993, 1994), this is not the case for most upland, interfluvial areas where the surficial sands are typically well to excessively well-drained. The latter circumstance is independently documented by extant vegetational communities, which indicate that the effective moisture is low, even with comparatively moist climate. Thus, in inherently dry, upland areas where most Sandhills archaeological sites occur, does non-fluvial (colluvial/alluvial and eolian) deposition indicate dry climatic conditions and correspondingly sparse vegetation cover that would promote accelerated rates of erosion and deposition, or, are the Holocene depositional patterns observed in fact due more to locally available sediment supplies/sources resulting from: 1) intrinsically sparse or patchy vegetation cover; 2) stochastic variation in fire frequency (climate-related lightning fires); 3) denudation from human activity; and 4) natural geologic processes (e.g., upper shoreface sands of Carolina bays)? Either possibility would involve strong winds for eolian deposition (many or most upland sands are coarse-grained) and rapid, probably flashy, run-off for colluvial/alluvial deposition on the interfluvial slopes. The fact that both of these possibilities (competing hypotheses) can be presented as reasonable explanations for the observed data serves as a warning that environmental inferences should not be derived from sedimentological data alone. Unfortunately, while siliceous microfossils (sponge spicules, diatoms, and phytoliths), indicative of local variation in hydrology and vegetation, are preserved in sand-dominated, basin fill sequences of upland wetlands, the regional-level paleoenvironmental indicator, pollen, is typically not well preserved in upland sands, and neither are materials suitable for radiocarbon dating. In some respects, the dating problem is the worst. For example, do patterns of Holocene deposition in the upland landscape correlate with climatic change, or do they merely represent amalgamations of stochastic events spread over the landscape and over several thousand years for which we have very poor chronological control?

UPLAND DATA FROM THE SRS

Granting a relationship between sedimentation and climatic conditions, whatever the nature of a specific relationship may be, care must be exercised in the interpretation of those conditions based on gross estimates of net sediment accumulation or sedimentation rates. On the United States Department of Energy's 803 km^2 Savannah River Site (SRS) in the Upper Coastal Plain of South Carolina, and the Coastal Plain in general, archaeological sites tend to be associated with sandy depositional environments, each with its somewhat unique slope/gradient, energy and sediment relationship and, correspondingly, depositional consequences. For Savannah River Terrace 1_a ($T1_a$) on the SRS, archaeological and sedimentological stratigraphic data indicate long periods of

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surface stability, punctuated by rapid, high energy depositional events on the order of 20-25 cm thick for the early to mid-Holocene (Brooks and Sassaman 1990). In contrast, the environment of deposition on $T1_a$ changed to that of incremental overbank sedimentation at about 4000 B.P. and there has been a net accumulation of only ~30 cm of sediment since that time (Brooks and Sassaman 1990). On the upper slopes of upland, interfluvial areas, archaeological sites are dominated by Late Archaic and Woodland components and exhibit periods of surface stability, punctuated by alluvial/colluvial depositional events on the order of 5-15 cm (Sassaman 1987, 1993). At one intensively studied Carolina bay (below), the upper, Holocene portion of the eolian-derived sand rim seems to have formed through slow, incremental surface accretion (Brooks et al. 1993, 1994).

There are several messages for climatic interpretation from this variability by depositional environment. First, under any given climatic regime, rates of sedimentation will vary by depositional environment. Clearly, 25 cm of sediment accumulation produced by a single, high-energy event of the Savannah River is not comparable to 25 cm of eolian sediment accumulation over several thousand years. Second, the other side of deposition and sediment accumulation is erosion. At most of the sandy sites we have examined, the upper, artifact-bearing portions are characterized by a color-graded, weakly developed, pedogenic profile with no visually observable depositional stratigraphy, much less direct evidence for stratigraphic hiatuses/truncations. The final message, which is derived from the first two, is that precise chronological controls and detailed sediment analyses (e. g., Brooks 1990; Brooks and Sassaman 1990; Sassaman 1993) are essential when dealing with sandy Coastal Plain sites if we are to determine accurately the environment of deposition and the timing of surface stability, accretion, and erosion that are so important for ascertaining the natural components of site formation that may or may not be linked to regional environment or climate (below).

While regional climate may well have been drier during the early Holocene than at present (Frey 1953; Whitehead 1965, 1981; Watts 1969, 1971, 1980a, 1980b; Watts and Hansen 1988; Watts et al. 1994; Delcourt 1985; Delcourt and Delcourt 1987), archaeological, sedimentological, stratigraphical and radiocarbon data from Carolina bays and colluvial/alluvial archaeological sites in the uplands of the SRS do not indicate significant differences between the early Holocene and the mid- to late Holocene in net sediment accumulation rates. At Flamingo Bay, net sediment accumulation, both in the infilled central basin and on the subaerial, eolian-derived sand rim, was at least as great during the mid- to late Holocene as in the early Holocene. Radiocarbon dates on a core (94 cm total depth) obtained from the central basin indicate that the upper 50 cm of sediments accumulated since 4500 B.P. On the sand rim, archaeological dates indicate that ~65 cm of sediment accumulated during the Holocene and that 35 cm of that was since ~4500-4000 B.P. Because the sand rim was plowed during historic/modern times, the modern surface was no doubt lowered somewhat, making the 35 cm estimate a minimum value.

Similar rates of mid- to late Holocene sedimentation have been recorded for SRS sites on the upper slopes of interfluvial areas. At archaeological site 38AK158, Middle Archaic, Morrow Mountain, and Guilford bifaces (7000-6000 B.P.) occur between 40-45 cm below surface, preceramic Late Archaic, Savannah River bifaces (~4500 B.P.) have a mean depth of 32.6 cm below surface, and Late Archaic-Early Woodland, Thom's Creek and Refuge artifacts (~3000-2500 B.P.) have a modal depth range of 25-28 cm below surface (Sassaman 1987). Archaeological and sedimentological stratigraphic data from 38AK157 (Sassaman 1993:93-98), South Block, indicate a buried Thom's Creek surface at ~40 cm below surface and a Middle Woodland, Deptford phase surface (~2500-1500 B.P.) at ~30 cm. The North Block at 38AK157 contained Refuge and Deptford phase surfaces at ~30 and ~23 cm below surface, respectively. At the Tinker Creek site

(38AK224), Early Archaic, Kirk phase artifacts (~9500-9000 B.P.) occur between 70-75 cm below surface, Middle Archaic, MALA phase artifacts (~5500 B.P.) occur between 45-50 cm below surface, and ceramic Late Archaic artifacts (~3500B.P.) occur between 30-35 cm below surface (K.E. Sassaman, personal communication 1994).

DISCUSSION

If the above data are taken at face value, and we assume that increases in sediment yield imply reduced ground cover under dry climatic conditions, then we must conclude that the mid- to late Holocene was drier than the early Holocene. The regional palynological data indicate otherwise (Frey 1953; Whitehead 1965, 1981; Watts 1969, 1971, 1980a, 1980b; Watts and Hansen 1988; Watts et al. 1994; Delcourt 1985; Delcourt and Delcourt 1987). Clearly, there must be reduced ground cover to free up sediments for transport. The question then becomes: Is dry climate necessary for reduced ground cover to occur? In view of the regional palynological data, our data indicate that the answer is no. The next question is: What mechanisms other than dry climate can cause a reduction in ground cover that is sufficient to free up large quantities of sediment? Although counterintuitive, the mid-Holocene shift from primarily deciduous to coniferous forests under generally wetter conditions may actually have been conducive to freeing up sediments (below). However, in terms of comparatively higher, accelerated rates of sedimentation, there are only two possible mechanisms that come to mind—anthropogenic and lightning fires. Both of these possibilities certainly occurred, so the issue becomes one of scale. Simply put, anthropogenic impacts would tend to have been localized (i.e., at and within the immediate vicinity of sites), whereas lightning fires, depending upon frequency, nature of the ground cover and wind strength and duration, could have potentially impacted the entire South Atlantic Coastal Plain over the course of a few centuries through stochastic events alone. The dominance of pine (fire-dependent or at least "fire-enhanced" from a successional standpoint) in the South Atlantic Coastal Plain since 7000-5000 B.P. (e.g., Frey, 1953; Watts, 1971, 1980; Watts et al. 1994; Delcourt 1985) is consistent with this notion.

During the early Holocene in the South Carolina Coastal Plain: 1) oak and herb-dominated vegetation was replaced by pine (*Pinus)* forest as early as 8000 B.P., 2) there were greater extemes of winter and summer temperature, 3) there was high summer precipitation accompanying frequent thunderstorms, and 4) the climate was apparently not as dry as that of Florida (Watts et al. 1994). An increased frequency of severe storms, and presumably associated lightning fires, during the early Holocene (Knox 1976, 1984; Brakenridge 1984) may have facilitated the rise to dominance of pine. Cold/cooler winters, and hot summers, but with abundant precipitation to counter the effects of evaporation, are in agreement with our upland wetlands data, which indicate that there were many more permanent or semi-permanent ponds during the late Pleistocene-early Holocene. The ponds assumed their modern seasonal character by ~4000 B.P. due to Holocene infilling (Brooks et al. 1993, 1994).

According to Delcourt (1985), increases in summer precipitation south of 33° N latitude (south of a line through central Georgia and the southeastern corner of South Carolina, and well south of our study area) resulted in increased water depths and sedimentation rates in Coastal Plain lakes after 8000 B.P. and favored the replacement of *Quercus* and *Carya* in upland forests by southern Diploxylon *Pinus*. The shift from primarily deciduous to coniferous forests facilitated an increased overland flow of surface water and higher sedimentation rates (Delcourt 1985). Presumably, this is because pine-dominated forests do not have extensive, near-surface root mats that are necessary for retarding the flow of surface runnoff and for binding surficial sediments (George S. Lewis, retired forester, personal communication 1994). Of particular relevance here is

the implication of the shift from primarily deciduous to coniferous forests for increased overland flow of surface water and higher sedimentation rates. Although we do not think that this alone can account for the comparatively high rates of mid- to late Holocene net sediment accumulation at the upland locales on the SRS, the possibility that the patterning observed reflects merely a pine-dominated forest cover can not be entirely ruled out at this point.

With reference to anthropogenic and lightning fire-induced mechanisms (above) for freeing up large quantities of sediment for transport, substantial elimination of the root mat is required. Anthropogenically, there are an infinite number and variety of contemporary examples that demonstrate the ease with which this is accomplished. For fire, the intensity of the fire and probably the nature of the sediments themselves determine whether or not, and to what degree, root mat penetration and elimination occur. Fire intensity depends on the nature of the ground cover (fuel) and wind (oxygen) strength and duration. Pine-dominated forests tend to burn hotter and faster than deciduous forests because of better air circulation, volatile oils, drier ambient fuel, and higher fuel loads (George S. Lewis, personal communication 1994). In terms of sediments, the surficial sands characteristic of the Coastal Plain are particularly susceptible to root mat penetration by fire because the grains exhibit loose packing, resulting in high porosity and permeability that enhances aeration (available oxygen to sustain subsurface burning) and reduces effective moisture (dry conditions to promote subsurface burning). In contrast, sediments dominated by silt-clay are more densely packed and would not promote or sustain burning in the subsurface. Further, when silt/clay-rich sediments are available, they are much less prone than sand to erosion and transport because of their cohesiveness.

Because all of our data are from archaeological sites, we can not independently evaluate the relative importance of the two scales (anthropogenic vs. lightning fires) in shaping the landscape or in assisting us in our efforts of paleoenvironmental reconstruction. It is conceivable from the archaeological site bias that the depositional patterns observed could be entirely anthropogenic with no environmental or climatic implications. Similar, non-archaeological site locations must be examined and the times and rates of net sediment accumulation determined in order to resolve this issue. Unfortunately, in the absence of the chronological controls provided by artifact assemblages, and because materials suitable for radiocarbon dating are seldom preserved in upland sands, determining the times and rates of net sediment accumulation in non-archaeological contexts will be difficult. Even the AMS technique is probably of limited utility for most non-wetland, upland contexts. Thus, the most fundamental challenge may be to find an alternative isotopic/chemical technique of more general applicability for dating highly leached, acidic, sandy deposits.

CONCLUSIONS

Non-fluvial deposition (colluvial/alluvial and eolian) in the upland landscape does not necessarily indicate sparse vegetation cover under dry climatic conditions. While climate may have been comparatively drier during the early Holocene than at present, data from the Sandhills region of the Upper Coastal Plain of South Carolina suggest that higher rates of net sediment accumulation do not necessarily require or indicate dry climate. Available sediments and an energy source sufficient for transport are all that is required. These conditions can be met by circumstances other than dry climate, which is somewhat counter to arguments by Brooks and Colquhoun (1991), who suggested that, in comparison with the mid- to late Holocene, the higher rate of early Holocene alluvial sediment accumulation on the first terrace above the active floodplain ($T1_a$) of the Savannah River may have been due to drier climatic conditions. With drier climate, it

was argued, reduced ground cover would promote rapid run-off with high rates of upland erosion. An abundant sediment yield, probably via flashy discharge in braided, sediment-choked streams, would be provided. The stormier conditions, with an associated increase in lightning fires, that may have existed during the early Holocene (Knox 1976, 1984) would have accelerated upland erosion and alluvial sedimentation. Following Brakenridge (1984) and Knox (1976, 1984), it was suggested that patterns of Holocene alluviation and floodplain stability may be linked to changes in upper-atmospheric circulation, such that alluviation increased under stormier conditions and floodplain stability prevailed when the frequency of frontal storms and flooding decreased. While this scenario for the comparatively higher rate of early Holocene alluvial sediment accumulation on $T1_a$ of the Savannah River may be largely correct, the upland data and arguments do not indicate that a drier climate is necessary to produce the patterning observed. An early Holocene increase in fire frequency, possibly coupled with the transition from a deciduous to a pine-dominated forest, and poor chronological controls could produce the same results.

MODERN CLIMATE AND WATER LEVEL PREDICTABILITY IN A CAROLINA BAY ON THE SRS: A BASELINE FOR INTERPRETING THE GEOARCHAEOLOGICAL RECORD

Barbara E. Taylor[3]
and
Mark J. Brooks

The composition and productivity of a pond community, and thus the resources that it may offer for human use, depend substantially on its hydrology. The communities of temporary ponds often differ from those of permanent ponds, due to direct and indirect effects of drying (Wiggins et al. 1980). For example, because most fish lack mechanisms to survive desiccation, fish populations are typically eliminated after a pond dries. Turtles may emigrate or become inactive, and reproductive activity is reduced in most species (Gibbons et al. 1983).

Here, we examine the modern hydrology of a Carolina bay to assess seasonal opportunities and constraints for its use by prehistoric human populations. Our work at Flamingo Bay and other Carolina bays on the dry upland interfluves of the SRS suggest that many were permanent or semipermanent ponds during the early Holocene and that they may have assumed their more modern character after 4000 B.P. due to infilling, which reduced surface area and potential water depth (Brooks et al. 1993, 1994). Further alterations occurred during the historic era. About 60 percent of the larger bays (area $\geq$0.8 ha) in South Carolina have been ditched, and about 80 percent have been converted to agricultural use for row crops (Bennett and Nelson 1991).

For Flamingo Bay, an extensive, but incomplete, record of fluctuations in water level was available from ecological studies over a 15-year period. The hydrologic budgets of most Carolina bays and similar isolated wetlands in the Upper Coastal Plain of South Carolina seem to be dominated by precipitation and evapotranspiration, although intermittent connections to shallow water tables have been documented (Richardson and Gibbons 1993). Results for two other shallow ponds on the Savannah River Site suggested that a model based on weather data might provide a useful basis for

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extrapolating this record of water level at Flamingo Bay to a longer interval of time (Thunder Bay: Lide 1991, Schalles and Shure 1989; Rainbow Bay: P. M. Dixon and K. Garrett, personal communication 1994). We were interested particularly in using this extended record to estimate the frequency of extreme events, such as drawdown or drying of the pond.

STUDY SITE

Flamingo Bay is situated in the sandhills region of the Upper Coastal Plain, on a low, dissected ridge between Upper Three Runs Creek (3.4 km distant from the pond) and Tims Branch (3 km distant). No streams enter or exit the pond. The catchment area is about 16 ha. Aerial photographs (1943: 1:20,000 series, Cartographic and Architectural Branch of the National Archives, Washington, D.C.; 1951: 1:12,000 series, U.S. Department of Agriculture, Salt Lake City, Utah) show that the rim was cultivated as late at 1951, just before the land was purchased by the Atomic Energy Commission, but that the pond was not ditched. Since 1951, most of the land surrounding the bay has been converted to pine plantation by the U.S. Forest Service.

Flamingo Bay consists of a central portion without emergent macrophytes surrounded by a grassy band dominated by maidencane (*Panicum* spp.) with buttonbush (*Cephalanthus occidentalis*) and blackgum (*Nyssa aquatic biflora*). The grassy band is surrounded by a ring of water tolerant hardwoods, including blackgum, red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), and water oak (*Quercus nigra*).

No fish have been reported by researchers at Savannah River Ecology Laboratory (SREL) who have made extensive collections of aquatic animals from the pond (R. D. Semlitsch, J. M. Aho, J. H. K. Pechmann, A. E. DeBiase, personal communication). The vertebrate assemblage is dominated by amphibians.

WEATHER

The National Oceanic and Atmospheric Administration maintains records for two weather stations in the vicinity of Flamingo Bay: Aiken, South Carolina (elevation 400 ft), about 29 km to the north; and Blackville, South Carolina (elevation 324 ft), about 33 km to the east. Although the distance from the Aiken station is slightly shorter, the elevation of Flamingo Bay (310 ft) is closer to that of the Blackville station. We obtained weather records for Blackville (1930-1994) and Aiken (1948-1994) from the National Climatic Data Center (Asheville, North Carolina). A record of daily rain gauge measurements at Flamingo Bay from August 1980 to July 1982 was provided by J. H. K. Pechmann and R. D. Semlitsch. Because monthly precipitation at Flamingo Bay correlated more strongly with monthly precipitation at Blackville ($r_S = 0.96$, $n = 23$) than at Aiken ($r_S = 0.78$, $n = 22$), we used the Blackville data for our analyses.

The climate at Blackville, South Carolina, is warm, moist, and seasonal (Figure 1). Summer temperatures are predictably hot, and winter temperatures are variable but generally mild. Average annual precipitation is 1,157 mm. On average, October and November are the driest months, but variation among years is wide in all months.

POND LEVEL

Data on water level at Flamingo Bay were compiled from studies at SREL. A staff gauge was installed near the edge of the central pool by R. D. Semlitsch in August

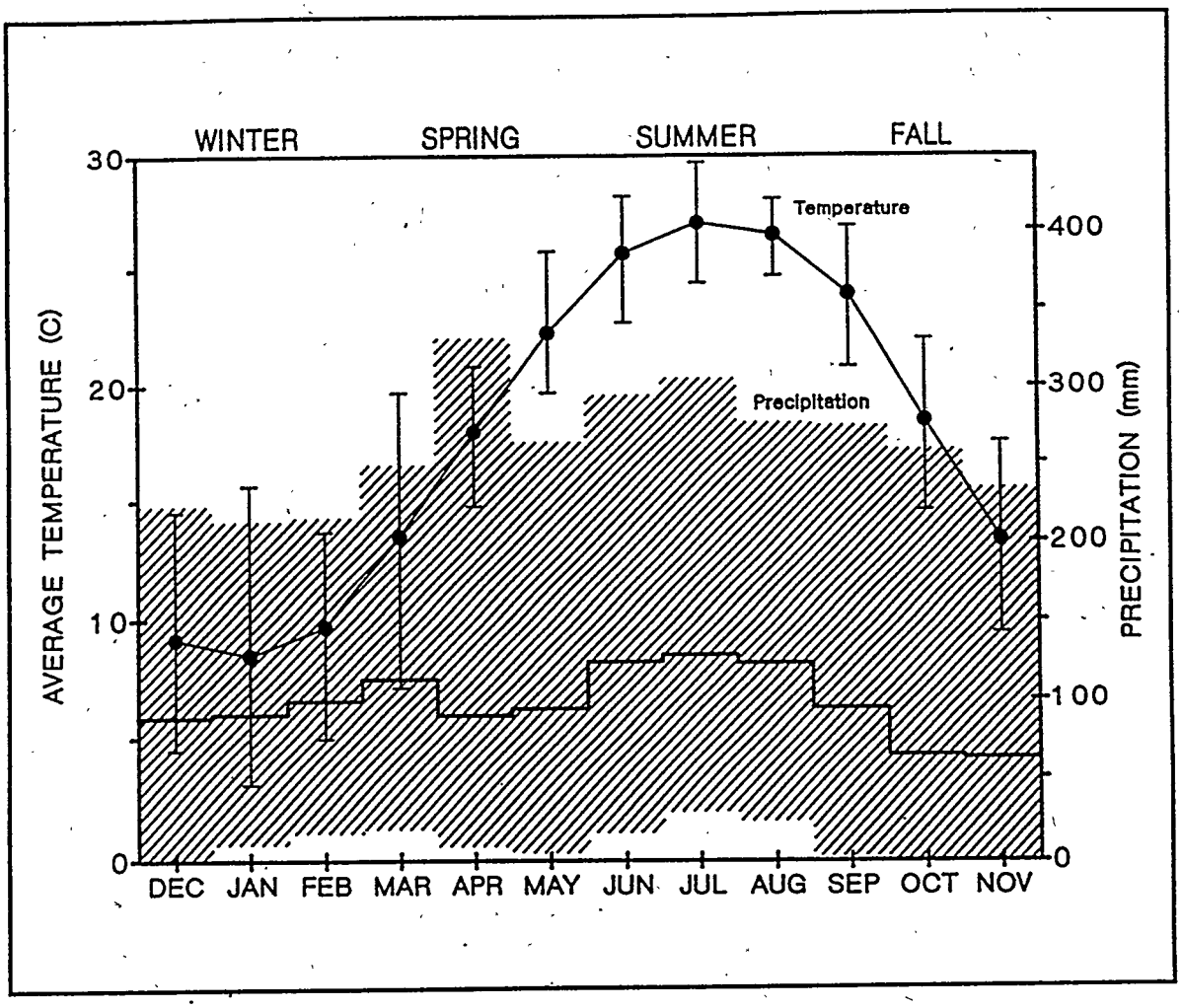


Figure 1. Temperature and precipitation at Blackville, South Carolina. Monthly means and extremes for years 1930-1989 are shown.

1980. At a water level of 45 cm in the central pool, the base of this gauge was dry, and the maximum water depth in the pool was measured with a meter stick. A gauge was installed at the center of the pond by J. E. Pinder in December 1988, and other gauges were added subsequently. All measurements are standardized to the gauge at the center of the pond. For several dates in July-October 1988, water levels were estimated from field notes on pool size by J. H. K. Pechmann.

Water level in Flamingo Bay (Figure 2) varied from a maximum of 164 cm in April 1993 to a minimum of 0 cm (completely dry) in July 1981, September-December 1981, and August 1988. Surface area of the pond was estimated from field measurements by the senior author and D. L. Mahoney or from aerial photographs.

In every year, the pond held water from January through June (Figure 3). The monthly median was typically above 100 cm except in June, and none of the extremes for January-June dropped below 50 cm. March and April showed the highest values and narrowest ranges among years for the monthly medians and for the extremes. From July

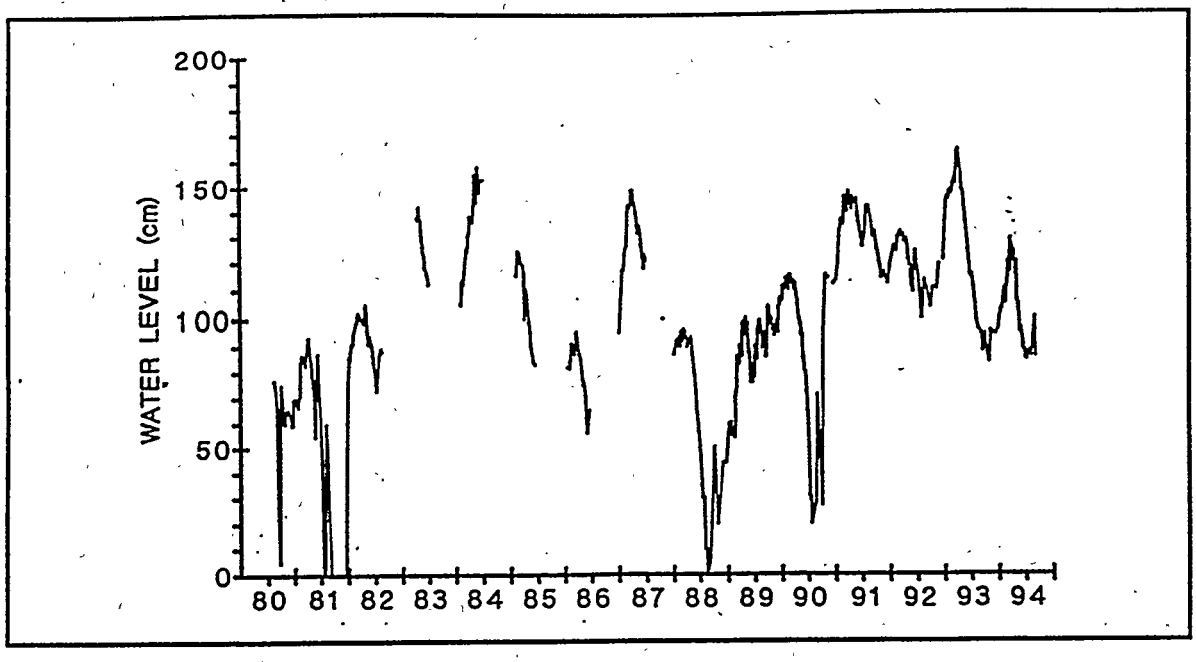


Figure 2. Water level at the center of Flamingo Bay for years 1980-1994.

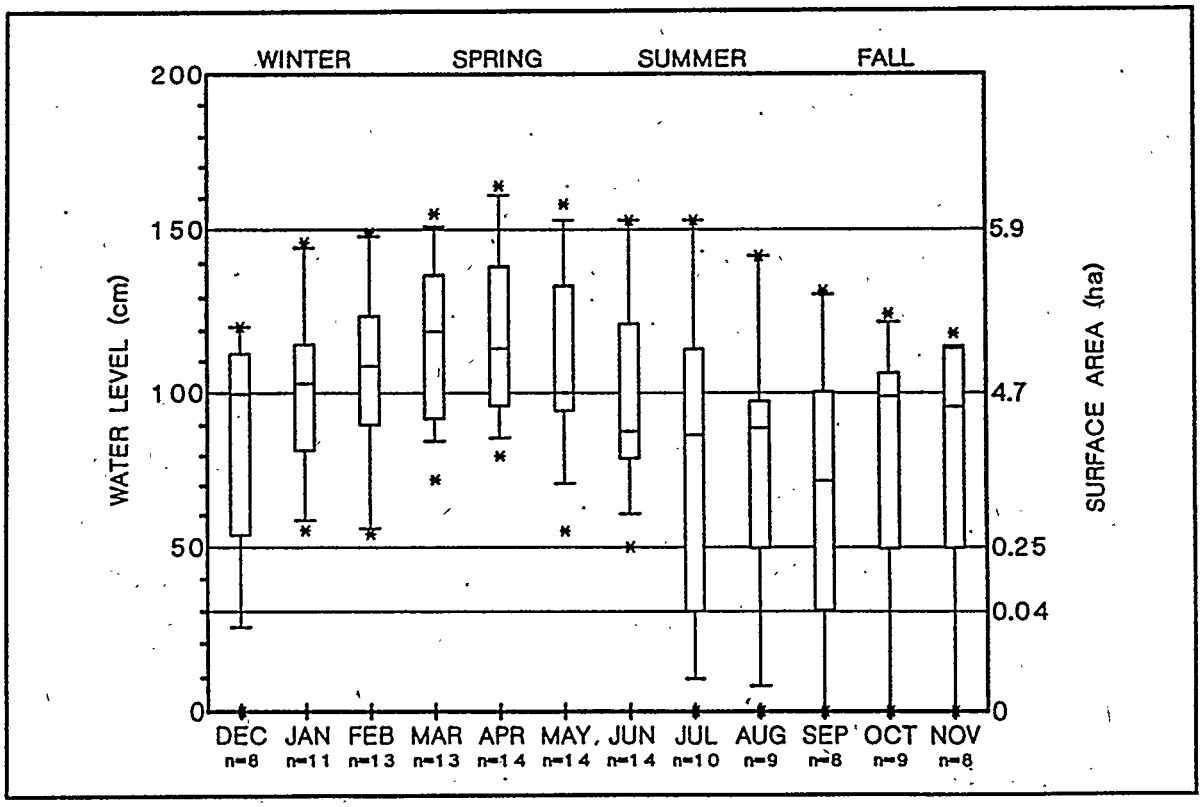


Figure 3. Monthly water level in Flamingo Bay. Boxplot figures show medians, quartiles, and ranges for monthly medians; asterisks show extremes among all values. Right axis shows surface areas corresponding to water levels.

through December, the monthly median was typically below 100 cm. Median water levels spanned the range from <30 cm (large puddle) to >100 cm.

ESTIMATING THE FREQUENCY OF POND DRYING

We divided the year into four seasons: spring (March-May); summer (June-August); fall (September-November); and winter (December-February). Water level at the beginning of the season was used as the basis for analysis. We explored various relationships between precipitation and seasonal pond level or change in pond level. Relations between change in water level and cumulative precipitation were strong for spring and summer. However, weak results for fall and winter gave us little confidence in long-term projections, because errors can accumulate or amplify with successive predictions of the change in water level. Instead, we estimate the frequency of pond drying from a direct relationship between water level and cumulative precipitation.

For all four seasons, water level correlated most strongly with cumulative precipitation since the beginning of winter (Figure 4). Other intervals also yielded strong correlations. The dependence on precipitation since the beginning of winter suggests that Flamingo Bay behaves like a basin that is empty each year at the end of November and refills over the next 12 months at a net rate depending on precipitation. The physical reality is obviously different, but winter inputs seem generally to overwhelm initial conditions. The outliers for fall 1981, spring 1982, and summer 1982 occurred before and after the 3-month dry period from September-December 1981.

We did not observe very low water on 1 March or 1 June, but the long-term record of precipitation (Figure 5) includes a few years drier than any during the period of hydrologic records for Flamingo Bay. Extrapolating from our data, we predict very low water levels at the beginning of spring with frequency <0.02 (<100 mm winter precipitation) and very low water levels at the beginning of summer with frequency <0.02 (<300 mm winter and spring precipitation).

Water levels on 1 September and 1 December were very low in two of the years of our record. For these dates, we consider the cumulative precipitation that separates years of very low water from other years: 700 mm from winter through summer for September and 1,000 mm from winter through fall for December. In the long-term record, each of these conditions occurred with frequency of 0.2. The long-term record predicts very low water levels on 1 September and 1 December of 1986, one of the years for which our records are incomplete. Water levels of 56 cm on 2 June and 65 cm on 16 June 1986 are not inconsistent with this prediction.

DISCUSSION

The observations over a 15-year period at Flamingo Bay include two years in which the pond dried completely (1981 and 1988). Analysis of the long-term precipitation record suggests that these events were not unusual, and that drying or reduction to a very small pool in summer or fall may occur fairly freqently: our estimate is one in five years under current conditions. The long-term record suggests that the episodes of pond drying that occurred at least twice during the 1980s are not unusual events. The long-term record also suggests that very low water levels may occur only rarely in winter or spring: our estimate is one in fifty years. Thus, as a source of water, Flamingo Bay is reliable in winter and spring. It is less reliable in summer and fall, but an observer with qualitative knowledge of the past year's rainfall could make a good prediction about the current condition of the pond.

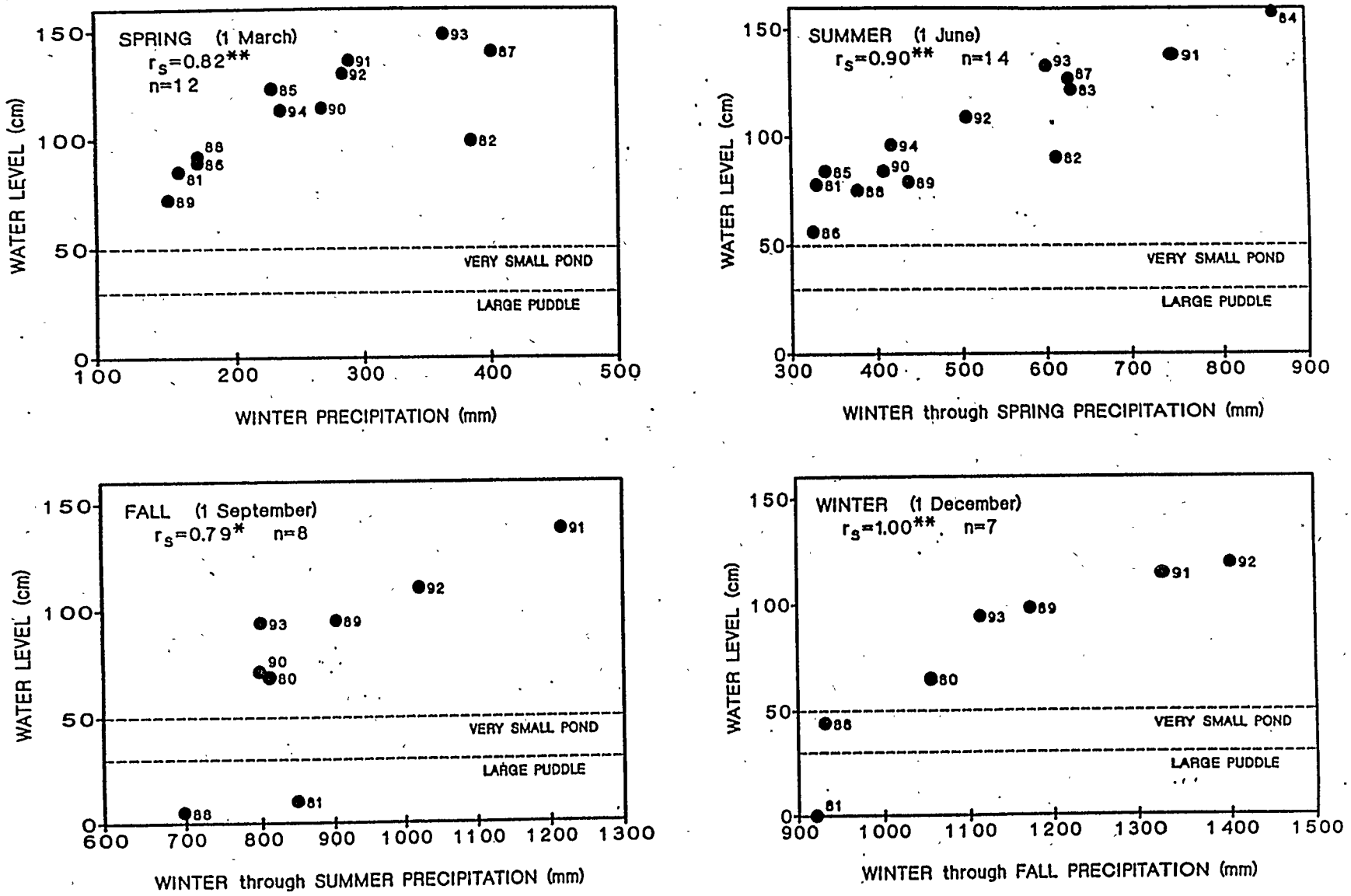


Figure 4. Dependence of water level by season on cumulative precipitation. If water level was not available for the first day of the season, the measurement for the nearest day within one week was used. Spearman rank correlations r_s are significant at $p<0.05$ (single asterisk) or $p<0.01$ (double asterisk).

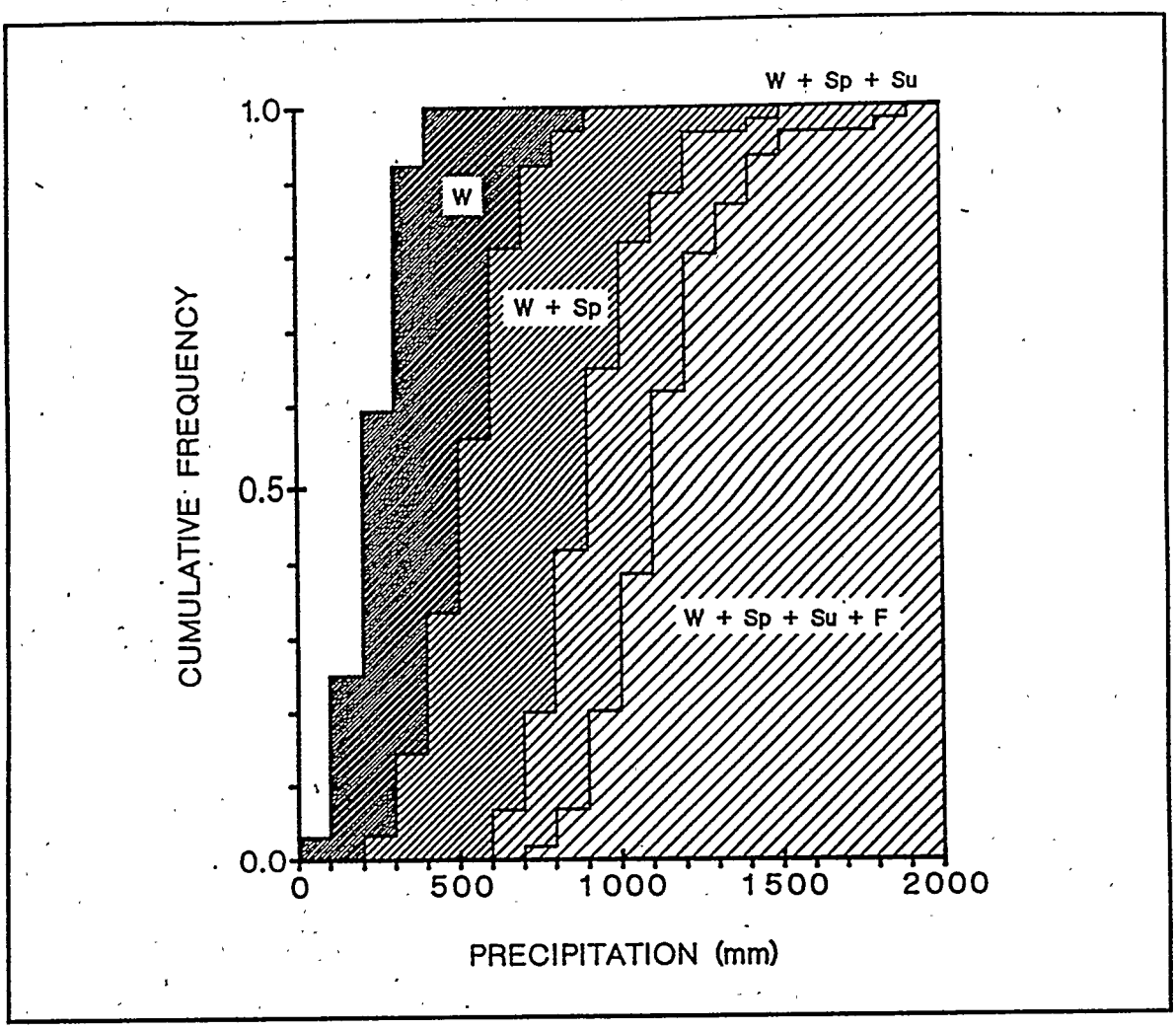


Figure 5. Frequency distribution for precipitation at Blackville, South Carolina. Seasons are winter (W), winter through spring (W + Sp), winter through summer (W + Sp + Su), and winter through fall (W + Sp + Su + F).

The archaeological record suggests that prehistoric use of Flamingo Bay was more intensive during the early Holocene than during the late Holocene. Radiocarbon dates from a sediment core at the center of the pond indicate that the pond was >0.5 m deeper, and we argue elsewhere (Brooks et al. 1994) that Flamingo Bay was a shallow permanent lake during the early Holocene. As well as the terrestrial resources, such as acorns, hickory nuts, squirrels, and deer, that are presently associated with mesic habitat surrounding the pond, Flamingo Bay would have supported a wider range of aquatic resources for human use during the early Holocene.

Because Flamingo Bay escaped ditching and other substantial hydrologic alterations during the historic era, we may reasonably assume that the modern conditions obtained during the late prehistoric era. The ephemeral, bay-associated Woodland occupations, characterized by tool use and maintenance activities, are consistent with other upland, interfluvial, non-bay contexts that conventional archaeological wisdom has relegated to fall nut collecting and deer hunting. Evidence for a fall pattern of mid- to late Holocene bay utilization comes from 38AL10, where Trinkley (1974) recovered

hickory nutshells and possibly deer bone from a Late Archaic non-shell midden (~3400-3200 B.P.; K. E. Sassaman, personal communication 1994) located on the interior slope of the northeast sand rim of a Carolina bay some 17 km southeast of the SRS.

The less intensive use of Carolina bays by Woodland populations may relate to a shift in resources. It may also relate to a comparatively shorter term (seasonal, rather than annual) predictability of bay conditions. If a bay, or bays, could not be used every year, institutionalization of bay-use activities comparable to the annual spring fish runs or fall hunts is highly unlikely. Woodland use of Carolina bays may have been embedded within the larger context of the fall upland deer hunt. Otherwise, due to the short-term predictability of bay conditions from the late mid-Holocene to present, they may not have been used at all.

When the transition from early Holocene to modern conditions and resources occurred at Flamingo Bay is a critical question. The transition no doubt relates to the interactive effects of climatic change and sedimentation in the basin. Continuing paleolimnological and archaeological work will, we hope, improve our estimate of the time of the transition and our understanding of the mechanisms.

Acknowledgments. We thank R. D. Semlitsch and J. H. K. Pechmann for water level data from the amphibian population study, R. A. Kennamer for data from the wood duck nesting study, and John E. Pinder for data from the comparative bay hydrology study. A. E. DeBiase, D. A. Leeper, and D. L. Mahoney collected much of the water level data for BET's ongoing zooplankton biology program. P. M. Dixon and J. M. Mobley facilitated access to the NOAA weather data.

PART III. PUBLIC EDUCATION

The public education program of the SRARP continued to expand in FY94 under the direction of Mary Inkrot, Curator of Heritage Education. With its proactive approach to public education, the SRARP is able to meet the needs of more school and civic groups than ever before. In addition to the long-standing on-site volunteer excavations at Tinker Creek, the SRARP program offered in FY94 programs of fieldwork at off-site locations, continuing involvement with South Carolina Archaeology Week, and a variety of heritage education programs. The Community History Project also continued in FY94, as did SRARP involvement with avocational archaeological societies.

Outreach to Children and Schools

SRARP outreach places a priority on teaching children directly about archaeology to promote understanding and to provide a sense of stewardship towards archaeological sites. Throughout FY 1994, SRARP outreach efforts towards school children continued. Mary Inkrot spoke to over 1,000 school children at various grade levels throughout the year. The majority of these presentations gave students an opportunity to examine prehistoric and historic artifacts from the area. Other activities emphasized scientific skills employed by archaeologists. Most requests for visits came from teachers of 4th-6th grades.

Participation in Aiken Elementary's Enrichment Program allowed children to learn about archaeology in a series of before-school classes. Ms. Inkrot taught a session on archaeology in October and January with approximately 15 children attending each time. Activities emphasized concepts archaeologists use, such as stratigraphy. During January, the session concluded with experimental archaeology through prehistoric pottery making.

Children learned about archaeology outside of schools also. Mary Inkrot and Melanie Cabak took a children's display to the Regency Mall in Augusta, Georgia for the local Girl Scout International Festival. Over 300 Girl Scouts viewed the display and made pottery as Indians did. Additionally, Ms. Inkrot spoke to students at the Girl Scout's Tanglewood Camp and at the Girl Scout Roundup in Augusta, Georgia. Both events featured prehistoric type pottery making.

SRARP and the Natural Resources Environmental Education Program (NREEP is a joint program of the US Forest Service and the Ruth Patrick Science Center at the University of South Carolina-Aiken) sponsored the first Digging for Data Archaeology Day Camp during July. Ms. Inkrot, with the assistance of Melanie Cabak, Tammy Forehand, Pam Graves (NREEP), Kristin Wilson, and Buddy Wingard, organized and taught the camp. Over a one-week period, seventeen local children excavated a mock prehistoric site, finding unprovenienced artifacts such as stone flakes, projectile points, and daub. They also discovered features that indicated stone hearths, trash pits, and post holes.

The Digging for Data Archaeology camp taught the children about scientific and mathematical skills needed to be an archaeologist. By digging at the mock site, visiting a historical site currently undergoing excavation, and analyzing artifacts, the campers completed the scientific process archaeologists' use. Camp concluded with an exhibit designed by the aspiring archaeologists. Their exhibit interpreted findings at the site and explained what they had learned during the week

SRARP education efforts also extended to teachers. Mary Inkrot conducted an in-service to teachers in Orangeburg School District.

As part of the Aiken-Barnwell-Bamberg-Edgefield Regional Library System Summer Reading Program, Mary Inkrot talked to approximately 400 children at eleven libraries throughout the summer. The library program emphasized how archaeologists learn about people by studying animal bones. Two additional library programs took place during South Carolina's Archaeology Week. These hour-long programs explained what archaeology is and included activities in either pottery making or pottery reconstruction.

Community Outreach

SRARP pursues broader audiences, composed of adults and children, by participating in events such as Heritage Day and South Carolina Archaeology Week. These events include a visual display. Order forms for SRARP publications are also made available. Frequently, artifacts are shown. SRARP participation included at least one staff member who talked to interested visitors, explaining the display and answering questions.

This year SRARP developed a new display, geared toward children. Featuring easy to read language and bright colors, the display explains the excavation process and looks at several types of artifacts. SRARP is beginning to offer children's activities in conjunction with these events. For example, by using a small screen as well as a bucket filled with sand and unprovenienced artifacts, small children screened the dirt, imitating one activity of professional archaeologists. The youngsters, typically seven years and under, enjoyed the experience of discovery.

At Smoky the Bear's 50th birthday celebration held at Daniel Field in Augusta, Georgia, hundreds of school children had the opportunity to learn about archaeology. Taking the children's display on archaeology, Mary Inkrot, Tonya Browder, and Tracy Hightower explained about archaeology and artifacts as well as helped children screen for artifacts. As part of the celebration, SRARP distributed over 8,000 copies of a hidden word worksheet on archaeology, artifacts, and ecofacts.

Initiatives to contact the public through more permanent exhibits began. In January, SRARP staff commenced work on redesigning the archaeology exhibit located at the Aiken County Historical Museum, Aiken, South Carolina. Rachel Bauer joined the staff as an intern in January. Her intern project centered on planning a new exhibit design. The new design contains many illustrations that demonstrate how people used the artifacts displayed. An eye-catching timeline will encircle the room showing changes in world as well as local prehistory and history. Physical changes to the exhibit room include a fresh coat of paint and improvements to the exhibit cases. The new exhibit should reopen in December 1994.

South Carolina Archaeology Week (SCAW) remains the largest cooperative outreach effort for the year. Preparations began months in advance. Several staff members served on working committees. As part of the Grant Writing Committee, Dave Crass wrote grants to publish the calendar of events and produce education materials on archaeology for state-wide education efforts. Ken Sassaman worked on the Archaeology Field Day and Calendar of Events Booklet committees.

During the actual week, September 24-October 1 1994, SRARP sponsored several events. At the Nancy Carson Library, visitors learned about the archaeological process

through a display. At Aiken Library, patrons viewed artifacts related to prehistoric foodways. At each library, Mary Inkrot conducted an after-school program. Dave Crass, Tammy Forehand, and Bruce Penner worked with volunteers and visitors to the New Windsor Township Site (the Meyer Farm), throughout the week.

To highlight the Community History project during SCAW, three posters focused on oral history and the former communities of the Savannah River Site. Designed by Mary Inkrot and Tonya Browder, the Westinghouse Illustration Department added the graphics and printed the posters. These posters featured pictures and quotes of former residents as well as appealing graphics and color (see examples, pages 44-45). Venues for the posters included Aiken, Barnwell, Jackson, New Ellenton, and North Augusta. Visitors at the South Carolina State Museum, Columbia also viewed the posters.

Community History Project

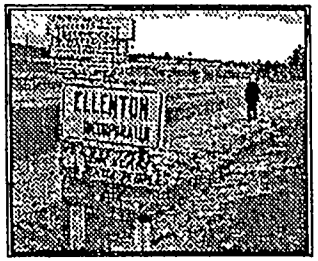
For the past three years, the SRARP Community History Project has collected both oral and written interviews from people who once lived on the Savannah River Site (SRS). Our efforts initially concentrated on Dunbarton and Meyers Mill, two of the communities that were in the area and were abandoned, in 1951, when the Atomic Energy Commission (AEC) acquired the land for the SRS in Aiken, Barnwell, and Allendale Counties, South Carolina. The collected data is presented in the SRARP Heritage Education Series Monograph Number 1, entitled *Memories of Home: Dunbarton and Meyers Mill Remembered*, which is now in circulation. The demand for the Dunbarton and Meyers Mill book was overwhelming. In February, Tonya Browder held two booksignings--one at the Aiken County Library in Aiken and the other, at the Nancy Carson Library in North Augusta. In March, Browder held another booksigning at the Barnwell County Library in Barnwell. One hundred and five books were given out in Aiken, 152 in North Augusta, and 315 in Barnwell. Because there was still such a large demand for the book, Browder held two more booksignings in April: one at the Barnwell County Library and the other, at the Nancy Carson Library. Three hundred and fifty-seven were given out in Barnwell and 92 in North Augusta. Overall, 1,021 books were distributed to the general public in only three months, and there is still such a demand for the book that 2,000 more books have been printed.

Following the Dunbarton/Meyers Mill volume, three further volumes will be prepared. The second volume, which focuses on the town of Ellenton, is under preparation now. A third volume will discuss other small communities within the bounds of the present-day SRS, such as Sleepy Hollow, Leigh, and Hawthorne, and a fourth volume will focus on the construction and impact of the AEC weapons complex on traditional lifeways in the area.

Seventy written and 43 oral interviews have been collected for the Ellenton volume, along with photographs, business records, church and family histories, as well as other memorabilia. An important discovery was made when one informant loaned us some old books she had kept in a storage shed. These books turned out to be the old Town Records of Ellenton, which included the town charter, all of the town ordinances, and some of the fine and tax records.

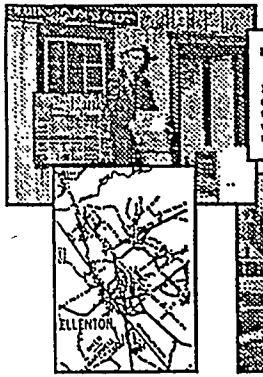
In addition to conducting interviews and collecting historical data, the SRARP has led numerous tours at SRS since the inception of the Community History Project. We have had 20 tours this year, permitting 300 people to visit their former homeplaces, church grounds, and old town sites. These tours help us to make the public aware of our Community History Project, and perhaps encourage involvement in our work. Also for

Remembering Ellenton

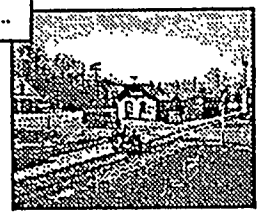


Archaeologists are currently studying the former communities which one stood on the Savannah River Site. Through oral history, the recording of spoken memories of individuals, archaeologists learn about past lifeways such as home, school, church, work, and entertainment.

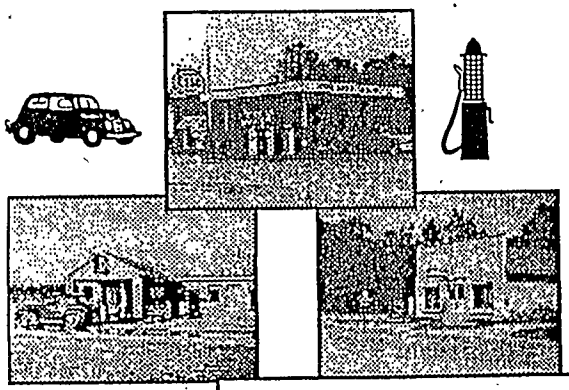
In 1951, approximately 6,000 residents were relocated from places with such names as Dunbarton, Leigh, Meyers Mill, and Robbins. Shown here are photographs and memories of former residents of Ellenton, the largest and most modern of the eight towns and hamlets.



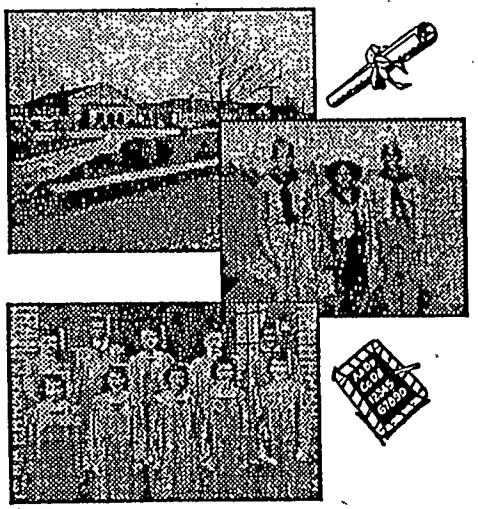
The town of Ellenton was located approximately 20 miles from Augusta, Georgia and in 1950, had a population of about 750 people. It was founded around 1870 when the Charleston & Western Carolina railroad came through the area. Ellenton acquired its name from the Dunbar family, who gave the railroad right-of-way when they came through the area and donated land when the streets were laid out in the town.

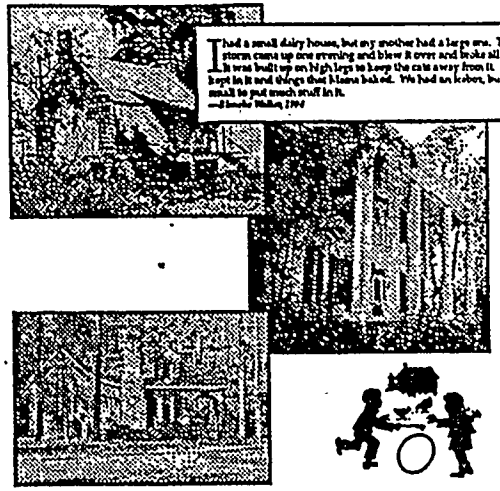


I used to work at the Long Store for Mr. Mike Cassels. I was in charge of the grocery department. See, the Long Store was set up in different sections. In the front on the left was the bank, then came clothing and shoes and dry goods, which was run by Lis. Blakely, and then the grocery and hardware in the middle of the store. I ran the grocery, while Horace Cassels ran hardware. In the back of the store was wholesale groceries and I ran that too.
—*T. L. Eaves, Jr., 1994*



We had a car dealership in the town of Ellenton and it was run by a Mr. Bigus, but we all called him Burgy.
—*Jack Hendrix, 1994*





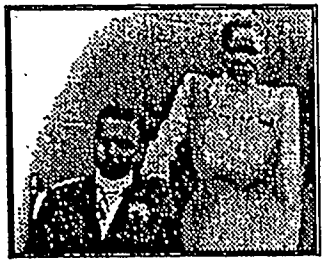
I had a small dairy house, but my mother had a large one. Then a storm came up one evening and blew it over and broke all her stuff. It was built up on high legs to keep the cats away from it. Milk was kept in it and things that it blame baked. We had an icebox, but it was too small to put much stuff in it.
—*Blanche Walker, 1994*

The Blue Goose was owned by Lorene Stark. It was a restaurant and a tavern, but mostly a restaurant. She served sandwiches at lunch and big meals at suppertime. It was a nice place to go and see your friends and get a good meal. I went there quite a bit for lunch.
—*T. L. Eaves, Jr., 1994*

Liked to listen to the radio, especially to comedian, like Jack Benny and Amos and Andy.
—*Basil Turner Brinkley, Jr., 1993*

Another thing that I remember as being a lot of fun, was going in swimming on hot afternoons in the creek above North Ellenton, after enjoying a picnic with our church group.
—*Louise Suttenne Bellamy, 1939*

Remembering DUNBARTON



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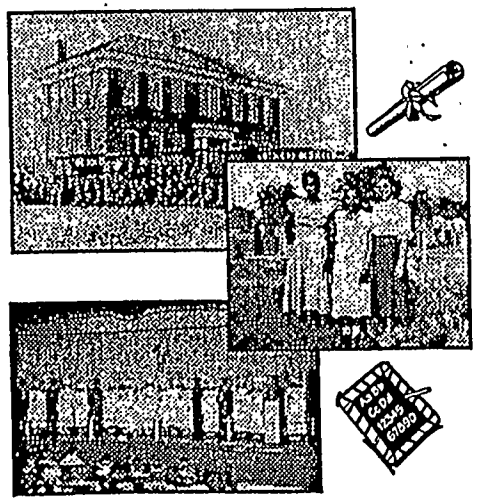
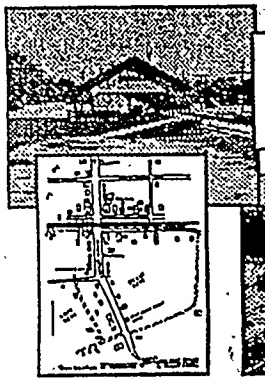
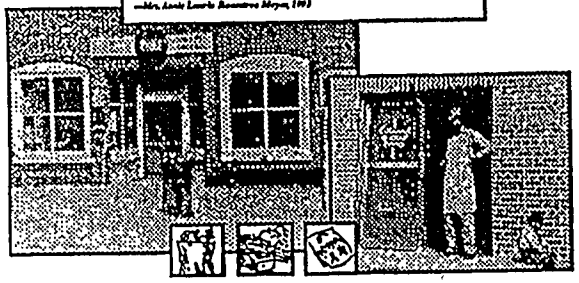
In 1951, approximately 6,000 residents were relocated from eight towns and hamlets, with such names as Ellenton, Leigh, Hawthorne, and Robbins. Shown here are photographs and memories of Dunbarton and Meyers Mill.



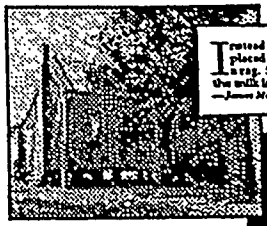


The Dunbarton Community was established in the early 19th century and was named for the Dunbar family. When incorporated on September 21, 1910, the town limits were set one mile from the Atlantic Coast Line railroad depot in all directions. The town of Meyers Mill was named after the Meyer family, who established a grist mill there in the late 19th century.

The only businesses I remember in Meyers Mill were the stores and the gin. Everybody hurried around there nearly. In Leon's (Hardwood) store, she sold everything in it. She sold small farm implements. She had grocery goods, clothes, and shoes. She sold a little of everything, you see, in a country store like that.
—Mrs. Annie Laurie Rountree Meyer, 1993



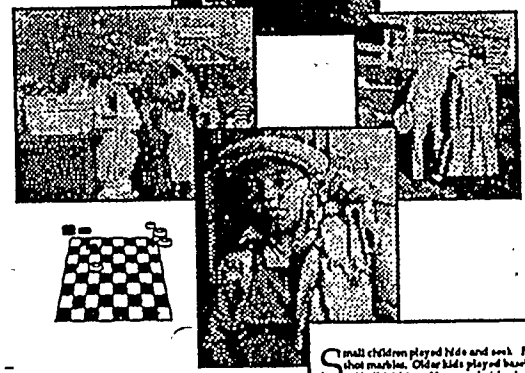
My father planted for one mule or what we called a one mule plantation. It would be about eight acres of cotton and about 30 acres in all. Thirty acres was all that one old mule could take. You would plant cotton, corn, and some other stuff, but that would be about all. You would figure about 30 acres to a mule. If you had 90 acres, you would have three mules.
—P. L. Leon, Jr., 1993



Instead of using an icebox, we dug a hole, lined it with sawdust, placed 100 pounds of ice (50 cents) in the hole, and covered it up with a rug. Sometimes we placed milk beside it to keep it cool or placed the milk in the well.
—James Monroe Greene, 1993

My Aunt Mamie (Bailey) meant a lot to me. She used to set hot tea out in her real china for me and her. She tried to teach me how to knit and crochet and just took up a lot of time with me.
—Martha Leon Hendrix, 1993

Went to Augusta to movies, Square dances in Ellenton, swimming—plenty of good creeks and ponds, and had cookouts on our own pond. We dated on the porch swing, and it didn't cost a dime. If one was "courting" on the porch swing, one's father could be heard clearing his throat at about 11:00 pm—the signal for everyone to go home and get to bed.
—Bible by Dibble Fennell, 1993



Small children played hide and seek. Preteens shot marbles. Older kids played baseball (boys), softball (girls), and boys and girls played basketball. People of all ages played checkers and card games. The men and older boys hunted and fished mostly for fun, but the meat was always eaten. The women visited each other more than and spent time just chatting.
—Eva Jacquelyn Hudson, 1993

public outreach, we set up displays at public events, and presented papers on the results of our ongoing research.

Volunteer Excavation Projects

The volunteer excavation program at the Tinker Creek site on the SRS continued through FY94 on a monthly basis. Participation by members of the Augusta Archaeological Society was supplemented by contingents of the University of Georgia's Ecology Lab, Westinghouse, Augusta College, USC-Aiken, and the Archaeological Society of South Carolina. Over 350 square meters of hand excavation has been accomplished since the Tinker Creek project recommenced in January 1990. Although much more work lies ahead to complete the excavation, analyze the artifacts, and to write a report, the work to date has shed much light on long-term use of a Aiken Plateau site by prehistoric households dating from 4000-2500 years ago. Concurrent cataloging of the Tinker Creek material is made possible by a graduate student assistants to Sarah Jo Evans and Kristin J. Wilson, Department of Anthropology, University of South Carolina.

Additional Involvement with Avocational Archaeology Groups

SRARP staff continue to maintain close ties with the Archaeological Society of South Carolina (ASSC) and the Augusta Archaeological Society (AAS). During FY94, Kenneth E. Sassaman continued in his role of journal editor for the society journal, *South Carolina Antiquities* (ASSC). D. Keith Stephenson continued in an active role with the South Georgia Archaeological Recovery Team (SOGART), a volunteer effort designed to salvage data threatened by land clearing and other terrain alteration. George Lewis completed a second term as president of the ASSC, and continued in his role on the Board of Directors of SGA, treasurer of AAS, and editor-publisher of the AAS bi-monthly newsletter, *Debitage*.

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Brooks, M. J., and K. E. Sassaman
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1991 *Guide to the Amphibians and Reptiles of the Savannah River Site.* University of Georgia Press, Athens.

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1991 *Hydrology of a Carolina Bay Located on the Upper Coastal Plain, Western South Carolina.* M.A. Thesis, Department of Geography, University of Georgia, Athens.

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1990 Species Richness of Calanoid Copepods, Cladocerans and Other Branchiopods in Carolina Bay Temporary Ponds. *American Midland Naturalist* 123:244-258.

Richardson, C. J., and J. W. Gibbons
1993 Pocosins, Carolina Bays, and Mountain Bogs. In *Biodiversity of the Southeastern United States: Lowland Terrestrial Communities*, edited by W. H. Martin, S. G. Boyce, and A. C. Echternacht, pp. 257-310. John Wiley and Sons, Inc.

Sassaman, K. E.
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Schalles, J. F., and D. J. Shure
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Watts, W. A., E. C. Grimm, and T. C. Hussey
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1980 Evolutionary and Ecological Strategies of Animals in Annual Temporary Ponds. *Archiv für Hydrobiologie/Supplementband* 58:97-206.

APPENDIX A

PUBLISHED PAPERS AND MONOGRAPHS

Colquhoun, D. J., M. J. Brooks, and P. A. Stone
1994 Sea Level Fluctuations: Emphasis on Temporal Correlations with Records from Areas with Strong Hydrologic Influences in the Southeastern United States. *Journal of Coastal Research* (in press).

Crass, David Colin, and George S. Lewis
1994 Archaeological Considerations. In *Research Study: The Boyhood Home of President Woodrow Wilson, Augusta, GA.*, edited by Norman Askins. Historic Augusta, Inc., Augusta, GA.

Crass, David Colin, and Bruce Penner
1994 The Struggle for the South Carolina Frontier: History and Archaeology at New Windsor Township. *South Carolina Antiquities* 24: 37-56.

Crass, David Colin, and C. Garth Sampson
1993 A Few Old Cloathes: 19th Century European Attire Adopted by the Seacow Valley River Bushmen. *Aantekeninge en Nuus* 30(6):219-234. Africana Museum, Johannesburg, Republic of South Africa.

Sassaman, Kenneth E.
1993 Hunter-Gatherer Site Structure at Upland Sites in the South Atlantic Coastal Plain. *Southeastern Archaeology* 12:117-136.

1993 The Second Fall of the Stallings Culture: Shellmidden Looting in South Carolina and Georgia. In *Site Destruction in Georgia and the Carolinas,* edited by D.G. Anderson and V. Horak, pp. 26-31. Readings in Archaeological Resource Protection 2. National Park Service, Interagency Archaeological Services Division, Atlanta.

1994 Changing Strategies of Biface Production in the South Carolina Coastal Plain. In *The Organization of Stone Tool Technologies*, edited by P. Carr, pp. 99-117. International Monographs in Prehistory, Ann Arbor.

1994 Production for Exchange in the Mid-Holocene Southeast: A Savannah River Valley Example. *Lithic Technology* 19:42-51.

Sassaman, Kenneth E., and David G. Anderson
1994 *Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management* Council of South Carolina Professional Archaeologists.

Sassaman, Kenneth E., with contributions by Mark J. Brooks, David Colin Crass, William Green, George S. Lewis, and Keith Stephenson
1993 *Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site, Aiken County, South Carolina.* Savannah River Archaeology Research Papers 3. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, Kenneth E., with contributions by Mark J. Brooks, Dean C. Foster, Jennifer A. Freer, Daniel A. Kysar, and Ted A. Rathbun
1993 *Mims Point 1992: Archaeological Invesitgations at a Prehistoric Habitation Site in the Sumter National Forest, South Carolina.* Savannah River Archaeology Research Papers 3. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

TECHNICAL REPORTS

Cabak, Melanie A.
1994 *Reconnaissance Survey of Site 1 of the Proposed Three Rivers Landfill, Savannah River Site, Aiken County, South Carolina.* Savannah River Archaeological Research Program, Technical Report Series 20.

Stephenson, D. Keith, and Kenneth E. Sassaman
1993 *Intensive Archaeological Survey of the Proposed Central Sanitary Wastewater Treatment Facility, Savannah River Site, Aiken and Barnwell Counties, South Carolina.* Savannah River Archaeological Research Program, Technical Report Series 19.

BOOK REVIEWS

Sassaman, Kenneth E.
1993 *The Archaeology of William Henry Holmes*, edited by David J. Meltzer and Robert C. Dunnell. *Southeastern Archaeology* 12:159-161.

SYMPOSIA ORGANIZED

Crass, David Colin, and Richard David Brooks
1993 *The Southern Colonial Backcountry: Beginning an Interdisciplinary Dialogue.* Conference sponsored by the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina. Held October 15-16, 1993 at the University of South Carolina, Columbia, South Carolina.

Crass, David Colin, and Steven Smith
1994 *Beyond Plantations: Recent Archaeological Contributions to the Economic History of South Carolina.* Symposium organized for the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

Sassaman, Kenneth E., and David G. Anderson
1993 *Archaeology of the Mid-Holocene Southeast.* Symposium organized for the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

PROFESSIONAL PAPERS PRESENTED

Cabak, Melanie A., Mark D. Groover, and Scott J. Wagers
1994 Exploring Turn of the Century African-American Healthways: Results of Excavation at the Wayman African Methodist Episcopal Church in Bloomington, Illinois. Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

Crass, David Colin
1994 "The English Do Be Idle:" Switzers and Ulstermen on the South Carolina Frontier. Paper presented at the 19th Annual Ulster-American Heritage Symposium, Staunton, VA.

Crass, David Colin
1994 Archaeology at the Woodrow Wilson House: An Overview. Paper presented at the annual Woodrow Wilson Symposium, Augusta, GA.

Crass, David Colin
1994 The Lost City That Never Was: Preliminary Excavations at New Windsor Township, South Carolina. Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

Crass, David Colin, Tammy Forehand, Bruce Penner, and Bennie Bartley
1994 The Interdisciplinary Frontier Research Project at New Windsor Township: Report on the First Season. Paper presented at the annual conference on South Carolina Archaeology, Columbia, SC.

Goodyear, A. C., S. Upchurch, and M. J. Brooks
1993 Turtlecrawl Point: An Inundated Prehistoric Site in Boca Ciega Bay, Florida. Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

Penner, Bruce
1994 Economics, Defense and the Use of the Frontier: Towards an Historic Context for New Windsor Township. Paper presented at the annual meeting of the Society for Historical Archaeology, Vancouver, British Columbia.

Sassaman, Kenneth E.
1993 Technological Innovations in the Economic and Social Lives of Mid-Holocene Southeast Populations. Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

1994 Greenspace, Use-Rights, and the Commons: Managing Environments the Hunter-Gatherer Way. The 1994 Cullum Program: *The Environment: Complexity and Conflict.* Augusta College, Augusta, GA.

1994 Alternative Solutions to Environmental Degradation in Prehistory. The 1994 Cullum Program: *The Environment: Complexity and Conflict.* Augusta College, Augusta, GA.

1994 The Last Twenty-Five Years of Middle and Late Archaic Archaeology in South Carolina. Paper presented at the annual conference on South Carolina Archaeology, Columbia, SC.

Sassaman, Kenneth E., and David G. Anderson
1993 The Products and Precedents of Southeastern Mid-Holocene Archaeology. Paper presented at the annual meeting of the Southeastern Archaeological Conference, Raleigh, NC.

Sassaman, Kenneth E., and R. Jerald Ledbetter
1993 Middle and Late Archaic Architecture. Paper presented at the annual meeting

CURRENT RESEARCH NOTES

Crass, David C., and Bruce Penner
1994 Current Research. Society for Historical Archaeology *Newsletter* 27 (2):24.

1994 Current Research. Council of South Carolina Professional Archaeologists *Newsletter* XX (1):6-7.

OFFICES/APPOINTMENTS HELD

Crass, David C.
Secretary; Council of South Carolina Professional Archaeologists.

Member, SCIAA Futures Committee

Member, Beech Island Heritage Corridor Committee

Member, Grants Committee, Archaeological Society of South Carolina

Associate Editor, *The Backcountry: A Multidisciplinary Forum on Early American Frontiers*

Forehand, Tammy
Member, Beech Island Heritage Corridor Committee

Lewis, G. S.
Editor, *Debitage* (bi-monthly newsletter of the Augusta Archaeological Society).

Board of Directors, Society for Georgia Archaeology.

President, Archaeological Society of South Carolina.

Treasurer, Augusta Chapter of the Society for Georgia Archaeology.

Sassaman, K. E.
President, Council of South Carolina Professional Archaeologists.

Editor, Archaeological Society of South Carolina (*South Carolina Antiquities*).

Editor, Southeastern Archaeological Conference (*Southeastern Archaeology*)

Member, South Carolina Review Board of the National Register of Historic Places.

Member, Cultural Resources Subcommittee, South Carolina Heritage Trust.

TEACHING

Sassaman, K. E.
Fall Quarter 1993 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 101 - Introduction to Anthropology.

Winter Quarter 1994 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 314 - Physical Anthropology.

Spring Quarter 1994 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 495a - Hunter-Gatherer Political Ecology

PUBLIC SERVICE ACTIVITIES

October 1993

Browder, T. A.
Lifeways: Oral history of the small towns and hamlets on the Savannah River Site. Presentation to the Beech Island Historical Society meeting, Jackson, SC.

Crass, D. C., B. Penner and T. Forehand.
Excavations at 38AK615, the Bartley Site. Paper delivered to the October meeting of the Beech Island Historical Society, Beech Island, SC.

Crass, D. C., B. Penner, and T. Forehand
Volunteer excavations at the Bartley site, Beech Island, SC.

Forehand, T.
Discovering Beech Island's Colonial Past. Presentation to Augusta Archaeological Society, Augusta, GA.

Lewis, G. S., and D. K. Stephenson
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

Sassaman, K. E.
Artifact Identification. ASSC Archaeology Field Day, Santee State Park, SC.

November 1993

Browder, T. A.
Guided tour on the SRS for the Powell family.

Crass, D. C., Bruce P., and T. Forehand
Volunteer excavations at the Bartley site, Beech Island, SC.

Forehand, T.
Colonial Archaeology in Beech Island. Presentation to the Aiken Chapter of the Archaeological Society of South Carolina, Aiken, SC.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

December 1993

Sassaman, K. E.
Future Land-Use and Resource Management on Savannah River Site. Presentation to Weshinghouse-Savannah River engineers and managers, SRS, SC.

January 1994

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

Sassaman, K. E.
The Early Inhabitants of Hampton County. Presentation to the Hampton County Historical Society, Hampton, SC.

Stephenson, D. K.
The Hartford Site in South-Central Georgia. Presentation to Charleston Chapter of the Archaeological Society of South Carolina.

February 1994

Browder, T. A.
Guided tour on the SRS for the Friedman family.

Guided tour on the SRS for Michael Frank and the Channel 6 News team.

Guided tour on the SRS for the Johnson family.

Crass, D. C.
Current Archaeological Research at New Windsor Township, SC. Presentation to the February meeting of the Augusta Genealogical Society, Augusta, GA.

Sassaman, K. E.
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

March 1994

Crass, D. C.
Colonial Archaeology in Beech Island. Presentation to the Charleston Chapter, Archaeological Society of South Carolina, Charleston, SC.

Crass, D. C., and J. Strickland
Archaeology and Genealogy in Beech Island. Presentation to the Beech Island Historical Society, Beech Island, SC.

Crass, D. C., B. Penner, and T. Forehand
Volunteer excavations at the Bartley site, Beech Island, SC.

Forehand, T.
Discovering New Windsor's Past: Archaeological Excavations and Documents Research of the Bartley Site (38AK615). Presentation to Edgefield Lion's Club, Edgefield, SC.

Sassaman, K. E.
Mims Point in Regional Context. Presentation to the Charleston Chapter of the Archaeological Society of South Carolina.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

April 1994

Browder, T. A.
Guided tour on the SRS for the Bell/Long family.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

May 1994

Browder, T. A.
Display on the Community History Project at Heritage Day, Beech Island Historical Society, Beech Island, SC.

Guided tour on the SRS for the Sunshine Retirement Group.

Lifeways: Oral history of the small towns and hamlets on the Savannah River Site. Presentation to the Sunshine Retirement Group meeting, Jackson, South Carolina.

Crass, D. C.
Presentation, Beech Island Heritage Day, Beech Island, SC.

Crass, D. C., B. Penner, and T. Forehand
Volunteer excavations at the Bartley site, Beech Island, SC.

Crass, D. C., and K. E. Sassaman
History and Archaeology of Savannah River Ecology Laboratory's Conference Center Site. Informal presentation for groundbreaking ceremony for SREL Conference Center, SRS, SC.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

Lewis, G. S., D. C. Crass, and K. E. Sassaman
Artifact Identification. Augusta Archaeological Society Artifact Identification Day for Georgia Archaeology Awareness Week, Ezekiel Harris House, Augusta, GA.

June 1994

Browder, T. A.
Guided tour on the SRS for the Weathersbee family.

Lifeways: Oral history of the small towns and hamlets on the Savannah River Site. Presentation to the North Augusta Historical Society meeting, North Augusta, SC.

Browder, T. A., M. M. Inkrot, and R. D. Brooks
Guided tour on the SRS for the Ellenton reunion.

Crass, D. C.
Historical Archaeology and History in Beech Island, SC. Presentation to Savannah River Ecology Laboratory, Aiken, SC.

Forehand, T.
Mentor, National Science Foundation Young Scholar's Program.

Inkrot, M. M.
Archaeology and Bones. Presentation at Williston Library, Williston, SC.

Archaeology and Bones. Presentation at the Bamberg Library, Bamberg, SC.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

July 1994

Browder, T. A.
Guided tour on the SRS for the Owens family.

Browder, T. A., and M. M. Inkrot
Guided tour on the SRS for the Four Mile High School reunion.

Forehand, T.
Mentor, National Science Foundation Young Scholar's Program.

Inkrot, M. M.
Archaeology and Bones. Presentation at the Blackville Library, Blackville, SC.

Archaeology and Bones. Presentation at the Aiken Library, Aiken, SC.

Archaeology and Bones. Presentation at the Nancy Carson Library, North Augusta, SC.

Archaeology and Bones. Presentation at the Denmark Library, Denmark, SC.

Archaeology and Bones. Presentation at the Edgefield Library, Edgefield, SC.

Archaeology and Bones. Presentation at the New Ellenton Library, New Ellenton, SC.

Inkrot, M. M., M. A. Cabak, T. R. Forehand, P. Graves, K. Wilson, and G. Wingard
Digging for Data Archaeology Camp. Savannah River Site, SC.

Sassaman. K. E.
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

August 1994

Browder, T. A.
Guided tour on the SRS for the Cope family.

Lewis, G. S., and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

September 1994

Browder, T. A.
Guided tour on the SRS for the Rountree family.

Guided tour on the SRS for the New Ellenton Middle School Soar Class.

Exploring the research methods of oral history and its influence on SRARP's Community History Project. Presentation to the 4th Grade Soar Class at North Augusta Elementary School, North Augusta, SC.

Exploring the research methods of oral history and its influence on SRARP's Community History Project. Presentation to the Soar Class at the New Ellenton Middle School, New Ellenton, SC.

Crass, D. C.
The Colonial Archaeology of Beech Island. Presentation to the Aiken County Historical Society, Aiken, SC.

Crass, D. C., Bruce Penner, and T. Forehand
Discovering Beech Island's Colonial Past. Presentation for South Carolina Archaeology Week, University of South Carolina-Aiken, SC.

Crass, D. C., B. Penner, and T. Forehand
Volunteer Excavations at 38AK615, the Bartley Site, Beech Island, SC.

Inkrot, M. M.
Introduction to Archaeology. Presentation to 5th graders at Chukker Creek Elementary, Aiken, SC.

Introduction to Archaeology. Presentation to 6th graders at Merriwether Middle, North Augusta, SC.

Prehistoric Tool-Making and Historic Archaeology. Presentation to 12th graders at North Augusta High School, North Augusta, SC.

Introduction to Archaeology. Presentation to 5th graders at Aiken Elementary, Aiken, SC.

Doing Archaeology. Nancy Carson Library, North Augusta, SC.

Prehistoric Foodways. A display of artifacts explaining foodways in prehistory.

What is Archaeology. Nancy Carson Library, North Augusta, SC.

South Carolina Prehistory. Aiken Library, Aiken, SC.

Historic Archaeology. Presentation to 4th graders at Aiken Elementary, Aiken, SC.

Introduction to Archaeology. Presentation to 7th and 8th grade SOAR students at Ridge Spring-Monetta Middle School, Ridge Spring, SC.

Inkrot, M. M., and T.A. Browder
Remembering the Former Towns of the Savannah River Site. Posters on the community history project displayed in Aiken, Barnwell, Jackson, New Ellenton, and North Augusta, SC.

Lewis, G. S. and K. E. Sassaman
Volunteer excavations at the Tinker Creek site (38AK224), Augusta Archaeological Society, Augusta, GA.

Sassaman, K. E.
Excavations at Small Shell Middens in Vicinity of Stallings Island. Presentation to Abbeville Chapter of the Archaeological Society of South Carolina.

ERRATA

ANNUAL REVIEW OF CULTURAL RESOURCE INVESTIGATIONS BY THE SAVANNAH RIVER ARCHAEOLOGICAL RESEARCH PROGRAM: FISCAL YEAR 1994

PUBLIC SERVICE ACTIVITIES

October 1993

Inkrot, M.M.
What is Archaeology. Presentation to the Science Club at Schofield Middle, Aiken, SC.

Introduction to Archaeology. Presentation to 4th graders at Hammond Hills Elementary, North Augusta, SC.

Introduction to Archaeology. Presentation to 2nd graders at East Aiken Elementary, Aiken, SC.

Introduction to Archaeology. Presentation to 5th graders at North Augusta Elementary.

Introduction to Archaeology. Presentation to 4th graders at Millbrook Elementary, Aiken, SC.

Introduction to Archaeology. Presentation to 8th and 10th graders at Wardlaw Academy, Johnston, SC.

Inkrot, M.M. and T.A. Browder
Display on the Community History Project. Fall Field Day, South Carolina Archaeology Week. Santee State Park, Santee, SC.

November 1993

Inkrot, M.M.
Introduction to Archaeology. Presentation to 4th graders at Kelly Edwards Elementary, Willison, SC.

Introduction to Archaeology. Presentation to 4th and 5th graders at Leesville-Batesburg Elementary, Leesville, SC.

Enrichment Program. Presentation to students at Aiken Elementary, Aiken, SC.

November 1993

Inkrot, M.M.
Introduction to Archaeology. Presentation to 2nd graders at north Aiken Elementary, Aiken, SC.

December 1993

Inkrot, M.M.
Introduction to Archaeology. Presentation to 4th and 5th graders at Macedonia Elementary, Blackville, SC.

Introduction to Archaeology. Presentation to 4th graders at North Augusta Elementary, North Augusta, SC.

January 1994

Inkrot, M.M.
Introduction to Archaeology. Presentation to 6th graders at Ridge Springs Elementary, Ridge Spring, SC.

Enrichment Program. Presentation to students at Aiken Elementary, Aiken, SC.

Inkrot, M.M., T.A. Browder, and E. Collins
What is Archeology? Children's display at the South Carolina Humanities Fair, Beaufort, SC. Included distribution of *Archaeology in the Classroom* and pottery making.

February 1994

Inkrot, M.M.
Archaeology in the Classroom. In-service presentation to teachers in Orangeburg 7 School District. Elloree, SC.

Presentation on the Savannah River Archaeological Research Program given at the monthly Westinghouse Safeguards meeting, Savannah River Site.

Inkrot, M.M. and M.A. Cabak
What is Archaeology. Children's display and prehistoric pottery making at the Girl Scout International Festival, Regency Mall, Augusta, GA.

March 1994

Inkrot, M.M.
Careers in Archaeology. Presentation to 12th graders at Augusta Christian High School, Augusta, GA.

Introduction to Archaeology. Presentation to 3rd, 4th, and 5th graders at Mead Hall, Aiken, SC.

April 1994

Inkrot, M.M.
Introduction to Archaeology. Presentation to 6th graders at North Augusta Middle, North Augusta, SC.

What is Archaeology? Children's display at Smoky Bear's 50th Birthday, Bush Field, Augusta, GA.

May 1994

Inkrot, M.M.
Archaeology and Bones. Presentation to 3rd, 4th and 5th graders at J.D. Lever Elementary, Aiken, SC.

What is Archaeology? Display at the South Carolina Wildlife Fish Rodeo, Graniteville, SC.

What is Archaeology? Children's display and pottery making at the Girl Scout Roundup, Fort Gordon, Augusta, GA.

Prehistoric Pottery Making. Presentation to 4th and 5th graders at Tanglewood Girl Scout Camp, Augusta, GA.