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

FISCAL YEAR 1991

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SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA

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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 FY91 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. Two documents produced in FY90 laid the groundwork for ongoing operations. One document comprised a synthesis of prehistoric archaeological investigations conducted on the SRS since 1973. The other document, which includes a Programatic Memorandum of Agreement (PMOA) among the United States Department of Energy-Savannah River Site, the South Carolina State Historic Preservation Office and the Advisory Council on Historic Preservation, is an Archaeological Resource Management Plan (ARMP) that combined the results of the prehistoric synthesis with data on historic period resources. The ARMP specifies the extant knowledge of archaeological site distribution and significance on the SRS, details potential impacts resulting from SRS operations, and provides a predictive model for locating and evaluating these resources. Implementing procedures are outlined in the SRARP FY90 Annual Review.

Over 3500 acres of land on the SRS came under cultural resources review in FY91. This activity entailed 89 field surveys, resulting in the recording of 34 new sites. Nineteen existing sites within survey tract boundaries were revisited to update site file records.

Research conducted by SRARP was reported in five journal articles and three monographs published during FY91. SRARP staff also presented research results at eleven professional meetings, and organized and chaired two symposia.

In the area of public education, the SRARP continued to intensify its service activities in FY91. Volunteer excavations at the Tinker Creek site (38AK224) were continued with the Augusta Archaeological Society and other avocational groups. Over two dozen presentations and displays were provided for schools, historical societies, civic groups, and environmental and historical awareness day celebrations. Additionally, SRARP staff taught seven archaeology/anthropology courses at area colleges and universities. Staff members were invited guest lecturers for other courses as well.

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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 1991.

SRARP management procedures were modified in FY90 in preparation for the implementation this fiscal year of a Programatic 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. Beginning this fiscal year, the SRARP is required under the PMOA to produce an annual review of all cultural resource activities conducted during the year. However, in the interest of gaining experience with the new procedure, the SRARP staff prepared an FY90 report for review under the PMOA. The reader is referred to the SRARP FY90 Annual Review for a detailed discussion of the new procedures and databases.

The following section (Part I) on Cultural Resource Management contains the results of the FY91 surveys and an update on curation activities. Research activities of the SRARP are summarized in Part II and include prehistoric, protohistoric, 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 volunteer program, involvement with avocational archaeology groups, and public outreach efforts. An appendix provides a listing of the professional and public service activities of the SRARP staff.

PART 1. CULTURAL RESOURCE MANAGEMENT

RESULTS OF FY91 SITE USE, TIMBER COMPARTMENT AND CLEARCUT SURVEYS

Introduction

Archaeological survey by SRARP staff of Site Use Application and Timber Compartment Prescription land tracts continued through the FY91 period according to procedures outlined and implemented in March 1990 (Annual Report FY90:7-17). In addition, clearcut surveys initiated in January of 1990 have been maintained as an important means of improving survey recovery from timber compartments.

During the FY90 period, 143 stands slated for cutting from the last five years of timber compartment prescriptions were earmarked for survey. A fieldcheck of these stands revealed that 105 had not been cut or prepared for planting and were deemed unsuitable for archaeological survey. This past year, four of these stands and another seven stands that were not included in the original 143 tally were subjected to surface reconnaissance. The results of this work are discussed below in conjunction with Site Use and Timber Compartment surveys.

Survey Coverage

SRARP staff conducted field survey and testing on 30 projects in FY91. A total of 60 tracts of land comprising 3598.56 acres was covered during this period. Among these were 15 of the 103 SR-88 Site Use Applications issued in FY91. SRARP staff screened each of the 103 applications for proposed land alteration, and found that 15 required detailed review of existing archaeological documentation. Based on these reviews, field survey was conducted to evaluate existing sites and to search for new sites at all 15 locations. The survey tracts comprised 80 percent or 2877 acres of the total land surveyed in FY91.

Many SR-88 Site Use Applications involve some form of major land alteration. However, the majority of Site Use surveys in FY91, 64 percent (1840 acres), involved stands slated for tree thinning, a land-use activity with minimal site impact. The greatest potential for site disturbance during tree thinning is the use of sites as log loading docks. The primary management objectives in these instances is to locate and flag sites, especially historic period sites, so that they can be avoided. In addition, three Site Use land parcels (142 acres) were slated for clearcutting. This is somewhat unusual in that timber stands marked for clearcutting are submitted for review by SRARP staff under the more informal Timber Compartment Prescriptions process. The remaining Site Use Applications included a research project concerning the effects of herbicides on biodiversity and ground water, the extension of borrow pits, small scale construction, effluent pipe rerouting, and a walking trail.

Four stands in one timber compartment were subjected to archaeological review in FY91. All four stands, totalling 161 acres, were surveyed during this period. These stands comprise five percent of the total acres surveyed archaeologically. In addition, three stands in three timber compartments were in the process of being surveyed at the time of the FY90 report and the results are included in this document. Although the results of this work are carried over, the total acreage surveyed was reported for FY90.

It should be noted that according to the projected timber compartment clearcutting schedule, from four to six compartment prescriptions are usually processed annually. However, due to extensive tornado damage in the fall 1989, and revised rules regarding endangered species habitat management, many compartment stands underwent reconfiguration by the Forest Service. This process offset the pre-planned schedule of clearcut prescriptions until late in the FY91 period. For this reason only one timber compartment prescription was received and processed by the SRARP this year.

As indicated above, of 143 timber stands reviewed for clearcut survey in FY90, 105 had not been clearcut or prepared for planting. An updated review of these stands during FY91 revealed that four had undergone site preparation. The remaining 101 are scheduled for archaeological survey over the next few years and are given no further consideration in this report. In addition to the original total of 143, seven more stands were located and reviewed for clearcut survey this past year. Altogether, 11 stands in eight timber compartments comprising 561 acres, or 15 percent of total acreage surveyed in FY91, were subjected to surface reconnaissance.

In addition to Site Use Applications, Timber Compartment Prescriptions, and clearcut surveys, we fortuitously located several new archaeological sites inventoried in Table 1 as Opportunistic. These sites were brought to our attention by SRS personal not connected with the SRARP or discovered by SRARP staff on land tracts other than

Table 1. Tabulation of Existing Sites and New Sites by Survey Project Type, FY91.

	EXISTING SITES			NEW SITES		
	Prehistoric	Historic	Both	Prehistoric	Historic	Both
Site-Use	38AK143 38AK144 38AK160 38BR51 38BR560 38AK139 38AK140	38BR251	38AK161 38AK168		38AK448 38AK668	
Timber Compartments					38AK449 38AK450 38AK451	
Carry-overs	38BR413			38BR657	38BR645	38BR653
Clearcuts	38AK441 38AK443 38AK132 38AK133 38AK183 38AK195		38BR401	38BR651 38BR662 38BR663 38BR655 38BR656 38BR666 38BR671 38BR673	38BR660 38BR664	38AK445 38AK446 38BR654 38BR658 38BR667 38BR670 38BR674
Opportunistic			38BR162	38AK442 38AK447 38BR672 38BR675 38BR676	38BR669	38BR659 38BR665 38BR677
TOTAL	14	1	4	14	9	11

those undergoing FY91 compliance survey. Opportunistic sites are included in this document solely on the basis that they were located during FY91 on SRS property and they will be given no further consideration in the following discussions concerning site use, timber compartment, and clearcut surveys.

In sum, most Site Use surveys were comprehensive as parcels were small and had limited archaeological potential or were located in previously disturbed areas. The more extensive Site Use surveys pertained to large tracts of land slated for tree thinning or clearcutting. Overall, these parcels had limited potential for prehistoric sites. Most of our survey efforts were concentrated on locating and defining historic period sites that were observed on 1951 aerial photographs of the SRS area. Timber Compartment Prescriptions surveys were limited to a single compartment. The low quantity of Timber Compartment Prescriptions in FY91 is attributed to the postponement by the Forest Service of scheduled clearcuttings due to stand reconfigurations. Walkover surveys of stands that were clearcut in the last five years continued in FY91 and have kept pace with areas being planted.

Survey Results

Thirty-four new archaeological sites were located and recorded in FY91 and FY90 carry-over survey projects. Also, 19 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 1. Summary data on new sites are provided in Table 2.

The occurrence of sites, existing and new, varies to some extent with the size of survey tracts and archaeological sensitivity. Survey methods and land-use also affected the return on survey efforts.

With regard to survey parcel size, mean acreage generally increases with number of existing sites (Figure 1). This relationship is not apparent among new sites found in FY91. The difference can be attributed to the fact that FY91 surveys included a number of parcels that were previously surveyed (Figure 2), and otherwise had limited archaeological potential (Figure 3). The mean weighted survey value for site use surveys, 64 percent of which were timber thinnings, is 0.77, indicating that many of the stands had experienced some level of previous survey. The mean archaeological sensitivity value for site-use surveys is high (2.36), reflecting low potential for prehistoric sites. The potential for historic period sites was also limited. In fact, nearly all of the timber stands surveyed in FY91 were old fields adjacent to, but not encompasssing the yard and house complexes that have archaeological potential. In sum, low sensitivity, previous survey coverage, and specific site conditions combined to affect the relationship between survey acreage and site discovery observed in FY90.

The relationship between site counts and mean weighted sensitivity values (Figure 4) is generally inverse for new prehistoric sites. This corroborates the SRS-wide patterns used to construct sensitivity zones (SRARP 1989). The major exception in the FY91 sample is the high mean value for parcels that produced more than two prehistoric sites. This in part reflects a sampling bias: only two parcels yielded more than two prehistoric sites, one with a sensistivity value of 1.50, the other with a value of 2.44. The former fits our expectations for site distributions, while the latter shows that higher prehistoric site densities can be expected in moderate to low sensitivity zones. Among these are small Mississippian homesteads that have heretofore been underrepresented. Given the results of FY91 surveys, it is apparent that our efforts in certain areas must be intensified to locate Mississippian sites, and that these results need to be incorporated into the

Table 2. Data on the Extent, Depth, and Content of Sites Located in FY91 Surveys.

Site	Type	Max. Size(m)	Max. Depth (cm BS)	Survey Methods	Surface Visibility	Components
38AK442	Prehistoric	80x160	120	STP, TU	1-25%	PI,EA,EW,MW,LW
38AK445	Hist, Prehist	170x190	Unk.	Surface Recon.	51-75%	EW,MW,LW,20th c
38AK446	Hist, Prehist	100x275	Unk.	Surface Recon.	25-50%	LA,MW,LW,20th c
38AK447	Prehistoric	20x70	50	Surf., STP	1-25%	Miss.,Unk. Prehist.
38AK448	Historic	50x100	Unk.	Surface Recon.	1-25%	20th c
38AK449	Historic	45x70	Unk.	Surface Recon.	1-25%	20th c
38AK450	Historic	140x250	Unk.	Surface Recon.	1-25%	20th c
38AK451	Historic	50x65	Unk.	Surface Recon.	1-25%	20th c
38BR645	Historic	Unk.	Unk.	Surface Recon.	1-25%	20th c
38BR653	Hist, Prehist	75x130	60	Surf., STP	1-25%	Unk. Prehist., 20th c
38BR654	Hist, Prehist	100x130	Unk.	Surface Recon.	26-50%	MW,LW,19th c
38BR655	Prehistoric	70x130	Unk.	Surface Recon.	51-75%	MW,LW
38BR656	Prehistoric	25x25	Unk.	Surface Recon.	26-50%	Unk. Prehist.
38BR657	Prehistoric	80x120	40	Surf., STP	1-25%	LW
38BR658	Hist, Prehist	100x100	Unk.	Surface Recon.	51-75%	EA,19th c
38BR659	Hist, Prehist	130x160	Unk.	Surface Recon.	1-25%	EW, 20th c
38BR660	Historic	20x20	Unk.	Surface Recon.	26-50%	19th c
38BR661	Prehistoric	90x170	Unk.	Surface Recon.	26-50%	MW
38BR662	Prehistoric	70x150	Unk.	Surface Recon.	51-75%	Unk. Prehist.
38BR663	Prehistoric	60x105	Unk.	Surface Recon.	26-50%	MW
38BR664	Historic	110-130	Unk.	Surface Recon.	1-25%	19th c
38BR665	Hist, Prehist	70x140	Unk.	Surface Recon.	26-50%	MW,LW,20th c
38BR666	Prehistoric	50x250	Unk.	Surf., TU	26-50%	LA,MW,LW,Miss.
38BR667	Prehistoric	90x140	Unk.	Surface Recon.	26-50%	LA,MW,LW,Miss.
38BR668	Historic	30x55	40	Surf., STP	76-100%	20th c
38BR669	Historic	40x45	Unk.	Surface Recon.	1-25%	20th c
38BR670	Prehistoric	125-130	Unk.	Surface Recon.	26-50%	LA,MW,LW
38BR671	Prehistoric	100x120	Unk.	Surface Recon.	1-25%	Unk. Prehist.
38BR672	Prehistoric	120-180	50	Surf., STP	1-25%	MW,LW
38BR673	Prehistoric	Unk.	Unk.	Surface Recon.	1-25%	MW
38BR674	Hist, Prehist	Unk.	Unk.	Surface Recon.	1-25%	Unk. Prehist., 19th c
38BR675	Hist, Prehist	Unk.	Unk.	Surface Recon.	25-50%	MW,LW,Unk. Prehist
38BR676	Prehistoric	Unk.	Unk.	Surface Recon.	25-50%	Unk. Prehist.
38BR677	Hist, Prehist	25x100	Unk.	Surface Recon.	26-50%	Unk. Prehist., 20th c

Surface Recon. - Surface Reconnaissance
STP - Shovel Test Pits
TU - Test Unit
Unk. - Unknown
PI - Paleoindian
EA - Early Archaic
MA - Middle Archaic
LA - Late Archaic
EW - Early Woodland
MW - Middle Woodland
LW - Late Woodland
Miss - Mississippian

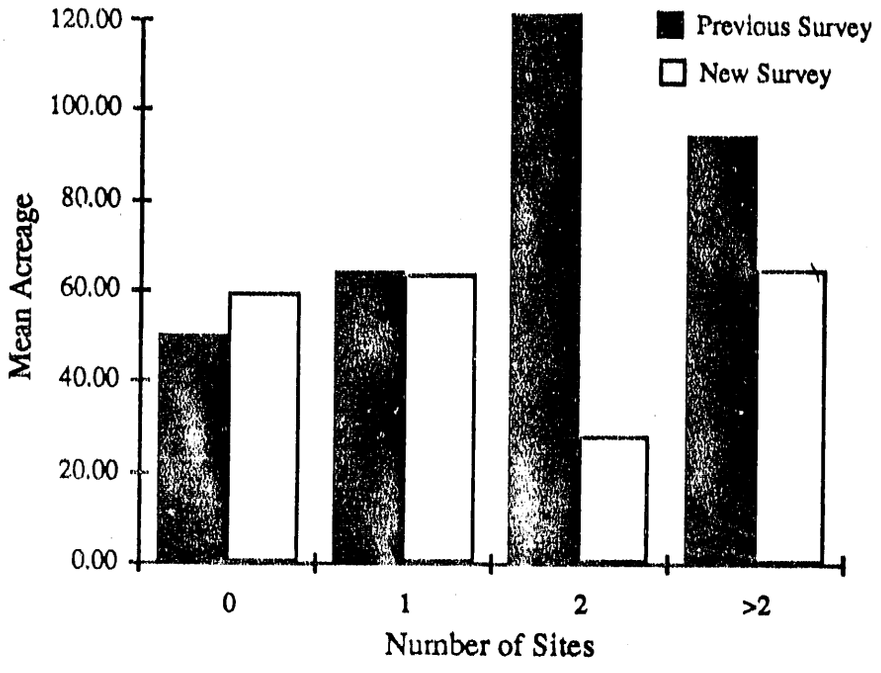

Figure 1. Mean survey tract acreage by number of sites found in previous survey and in FY91 survey.

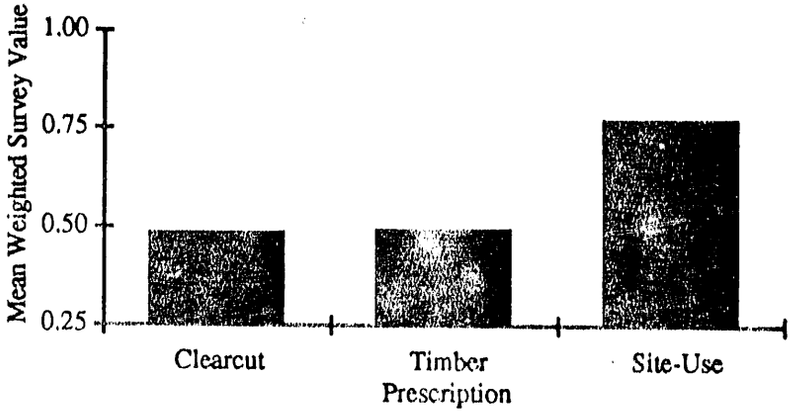

Figure 2. Mean weighted survey value by survey type, FY91.

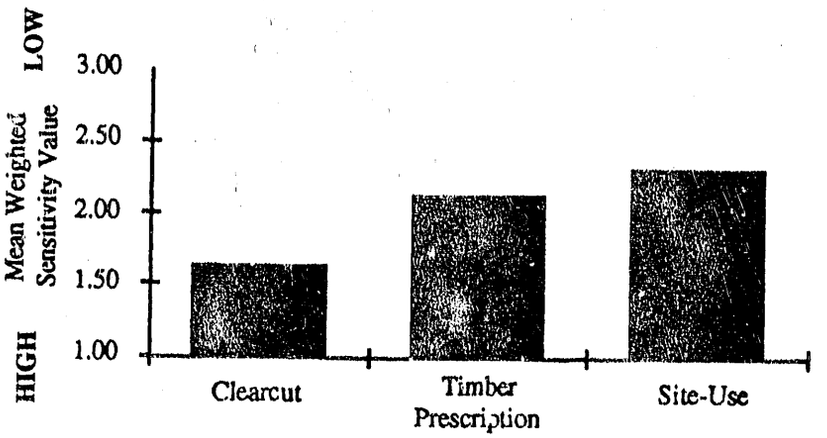

Figure 3. Mean weighted sensistivity value by survey type, FY91.

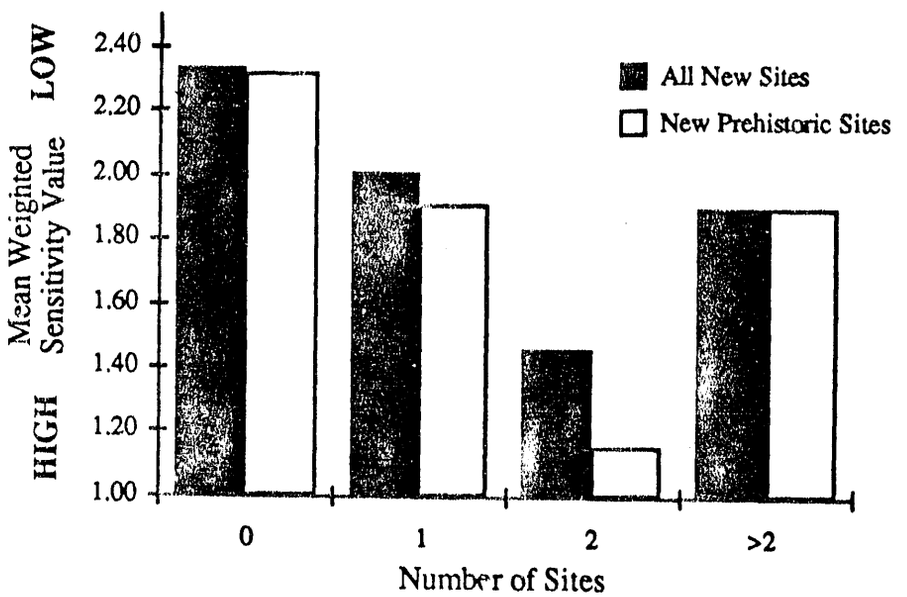

Figure 4. Mean weighted sensitivity values by number of all new sites and new prehistoric sites, FY91.

Archaeological Resource Management Plan. Clearcut surveys are undoubtedly the best method for locating such resources. As the results of testing at one such site (38BR666) indicate, significant archaeological deposits are shallow but sufficiently buried to be spared destruction from limited clearcutting activities.

The relationship between site counts and mean weighted sensitivity values for all new sites parallels the prehistoric site patterns. This is not surprising considering that three-quarters of the new sites contain prehistoric components. Also, most of the new historic sites were found in clearcuts that had good (prehistoric) archaeological potential. As indicated above, the vast majority of FY91 survey parcels were timber stands in old fields. Only one new historic site (38AK448) was recorded in a timber stand, while many

more sites adjacent to stands were located on 1951 aerial photos but were not visited because they were outside the areas of impact. Thus, the inverse relationship between sensistivity values and historic site counts observed in FY90 surveys did not hold for FY91.

In March 1990 the SRARP decided that in addition to systematic shovel testing of sites, limited testing with a minimum of one 1x2 m test unit was to be part of the basic survey procedure. However, as the volume of survey and site revisits increased, the time available to test each site was diminished. At that time, rather than forego survey for new sites, it was decided that site testing would be limited to only those sites under the threat of destruction. With the exception of two sites, 38AK442 and 38BR666, which were tested for research potential, this policy continued during FY91. A report on the testing strategy and results at 38AK442 is presented in a later section and a description of testing at 38BR666 is given below.

38BR666. Although we no longer test sites unless they are threatened with adverse impacts, we selected one Mississippian site for testing to determine extent of damage, if any, by cutting and harrowing and to recover an artifact sample from subsurface context. 38BR666 is a multicomponent site, with occupations during the Late Archaic, Middle Woodland and Middle Mississippian periods. Shovel testing was not necessary at the site because ground surface visibility was good in the clearcut. After several intensive walkovers we were able to estimate site dimensions to be 50x250 meters. We were also able to determine that Mississippian sherds were originating along the western edge of the site directly overlooking an unnamed Rank 1 stream.

A 2x2 meter test unit was placed in this portion of the site and oriented to cardinal directions. With the exception of Level A, the test unit was excavated in 10 centimeter arbitrary levels to a depth of 30 centimeters below ground surface (cm BS). Level A was excavated down to the base of the plowzone. Although there were archaeological deposits deeper than 30 cm BS, the test unit was not dug to sterile soil because the Mississippian component was the focus of this excavation.

Upon completion of the test unit, the west profile was drawn and photographed. This profile shows an undulating ground surface due to harrowing. The soil matrix, although not forming distinct soil lenses due to intergradations of soil colors, did reveal two recognizable strata. Stratum 1, a humus zone, extended from 10 to 20 cm BS and consisted of brown sandy topsoil. At the base of Stratum 1, plowscars were evident in the profile. Stratum 2 was a layer of light orange-brown clayey-sand that extended from the base of Stratum 1 into the final level of the unit.

At the base of Level A the ground was undisturbed from cutting and harrowing activities. After troweling the floor of Level A, plowscars, oriented in a northeast - southwest direction, were noted and photographed. The only diagnostic artifacts in Level A were five Mississippian period sherds encountered in the northwest portion of the unit. These sherds, all from a single vessel, exhibited a concentric circle with cross-in-center motif and were classified as Savannah Complicated Stamped (Caldwell and McCann 1941:45; Caldwell and Waring 1968:132-133). The temporal placement of these sherds would be in the Savannah III phase or A.D. 1200 - 1300 (Anderson et al. 1986:44; Sassaman et al. 1990:207). As noted during excavation, these sherds were lying in a horizontal position and their context did not appear to have been badly disturbed by either agricultural or silvicultural activities.

The artifact samples from Levels B and C contained sherds, lithics, ferruginous sandstone, quartz cobbles, faunal remains, and nut shell fragments. Two rock clusters were encountered in these levels and are discussed below. The ceramic and lithic recovery from Level B consisted of 61 sherds, five triangular points, 5 bifaces, and 799 pieces of debitage. The pottery assemblage included eight cord-marked, four linear check stamped, two simple stamped, one curvilinear complicated stamped, 11 plain, and 35 eroded sherds. The ceramic and lithic sample from Level C contained 47 sherds, five bifaces, and 2,494 pieces of debitage. The pottery collection included three check stamped, 20 plain, and 24 eroded sherds.

At 19 cmbs, about midway along the north profile, a rock cluster of predominantly ferruginous sandstone was encountered and extended to a depth of 28 cmbs. This rock cluster, designated Feature 1, was approximately 30 centimeters in diameter exclusive of a few extraneous sandstone pieces around the cluster. The cultural assignment of Feature 1 is somewhat dubious since there were no associated diagnostic artifacts. It could be Mississippian in origin. However, given its depth and the sherd types found in Levels B and C, Feature 1 probably dates to the Middle or Late Woodland.

At 25 cmbs, a second rock cluster extending to a depth of 39 cmbs, was encountered in the northeast corner. The rock cluster, designated Feature 2, was about 30 centimeters in diameter and was composed of whole and broken quartz cobbles. A large broken biface with a stemmed haft element was found in proximity to Feature 2 suggesting a Late Archaic context. However, Feature 2 could be associated with the Middle Woodland sherds found in Levels B and C.

In summation, this 2x2 meter excavation demonstrates that the subsurface integrity of this clearcut site is good even at a depth of 10 centimeters. It also shows that the Mississippian component is shallow and is represented by a thin scatter of complicated stamped sherds which could easily go undetected by shovel tests spaced 20 meters apart.

Survey Summary

A total of 3,598.6 acres was surveyed by the SRARP in FY91 for 15 Site Use Applications, 4 Timber Compartment Prescriptions, and 10 clearcuts. Surface reconnaissance was conducted at 97 survey loci, 377 shovel tests were excavated at 18 survey loci, and three 2 x 2 m and one 3 x 3 meter test units were excavated at two sites. Thirty-four new archaeological sites were located, and another 19 sites were revisited to collect additional information.

In comparison to total acres surveyed in FY 90, an additional 317 acres was surveyed in FY91 despite the decrease in the number of Timber Compartment Prescriptions and clearcut surveys (Table 3). An additional seven Site Use Applications were field checked this year. In addition, more shovel tests were dug during FY91 than in FY90 at fewer survey loci. This can probably be attributed to the increase of new sites and site revisits over those in FY90 and to the more intensive investigation of several of the new sites.

One noticeable result of this year's work over that in FY90 is the recovery of several small middle Mississippian sites. Clearcut survey and opportunistic survey of firebreak lines along Rank 1 drainages resulted in the location of at least three sites with recognizable Mississippian components. The reason for the recent discovery of these sites is that there seems to be an increase in Forest Service cutting along drainages as opposed to just upland harvesting of tree stands. As discussed above, these sites are

relatively small with thin scatters of artifacts and therefore most likely missed during systematic shovel testing. It seems that walkover survey after clearcutting is the best method of locating these shallow, low density sites. The disadvantage to this site discovery method is the potential damage to archaeological contexts as a consequence of repeated timbering activities. Once we obtain additional data on Mississippian sites, a predictive model of settlement patterns can be established for future compliance survey in order to locate sites prior to cutting.

Table 3. Comparison of FY90 and FY 91 Survey Results.

	FY90	FY91
Total acreage surveyed	3282	3599
Site Use Applications	15	8
Timber Compartment Prescriptions	14	4
Clearcuts	38	10
Survey Loci	35	18
Shovel Test	286	377
Number of new sites	25	34

CURATION COMPLIANCE ACTIVITIES

General Background

The SRARP curates archaeological and archival materials in accordance with 36 CFR 79 under a cooperative agreement between the U.S. Department of Energy and the University of South Carolina. At SRARP curated collections are an important part of ongoing compliance efforts because they furnish data which can be used to formulate survey and excavation procedures undertaken in response to the SR-88 process. Curated collections are also vital to scientific research as they furnish a database which can be used to formulate and test hypotheses related to past lifeways.

Curation activities at SRARP focussed on several important areas during FY91, including finalization of the Savannah River Archaeological Research Program Guide to Curation Procedures (Crass 1991), ongoing curation processes associated with compliance activities, evaluation and upgrade planning of collections and the SRARP Central Curation Facility (CCF) according to newly-published guidelines contained in the National Park Service Museum Handbook (U.S. Department of the Interior 1990a), and evaluation of SRARP inventories and artifact holdings with regard to the Native American Graves Repatriation Act (NAGPRA) (U.S. Congress 1990) and the American Indian Religious Freedom Act (AIRFA) (U.S. Congress 1978).

Finalization of Curation Guide and Ongoing Curation Processes

A draft curation guide containing instructions regarding treatment of archaeological objects, preparation and documentation of materials, and legal background information pertinent to 36CFR79 was prepared and circulated to SRARP staff members in December 1990. Following a 3-month comment period, a finalized guide was published in March 1991 as *SRARP Technical Report Series Number* 14 (Crass 1991). The SRARP Guide to Curation Procedures sets forth explicit guidelines for the

processing and curation of archaeological materials in conformance with the new federal regulation.

After artifact collections are brought in from the field, they are washed, dried, analyzed, and catalogued by SRARP staff. Following cataloguing, collections are bagged in inert bags with acid-free provenience tags. These bags are then stored in curation "flats" in the CCF. When collections are sent to the CCF, a record which summarizes the assemblage in entered into the Master Curation Database. This database allows the curator to track collections with regard to such variables as culture history, numbers of diagnostic artifacts, and location data (Crass 1991:24-32). During FY91, 11,863 artifacts resulting from surface collections, test excavations, and block excavations at 52 archaeological sites were processed for curation.

NAGPRA and AIRFA

Recently-passed congressional legislation regarding Native American religious beliefs and artifacts excavated from Native American sites requires inventories of varying levels of resolution of all human remains, associated funerary objects, unassociated funerary objects, sacred objects, and cultural patrimony held in Federal repositories. Current SRARP inventories fill the requirements of NAGPRA and AIRFA in all areas except human remains, which must be fully inventoried on an item-by-item basis by 1995. Human remains from the Savannah River Site are currently being analyzed by University of South Carolina specialists; when these analyses are complete, complete inventories will be furnished to the SRARP curator.

Planned Curatorial Upgrades and the National Park Service Museum Handbook

36 CFR 79 was written by the National Park Service (NPS) to set standards and establish guidelines for the curation of federal archaeological collections (U.S. Department of the Interior 1990b). The regulation addresses a series of seven broad curation concerns, including management and preservation of collections, methods to secure curatorial services, methods to fund curatorial services, terms and conditions to include in contracts and agreements, standards to determine when a repository possesses the capability to provide adequate long-terms curatorial services, use of collections, and conduct of inspections and inventories.

In September 1990 the NPS published its Museum Handbook (U.S. Department of the Interior 1990a), which covers myriad topics to guide curators at NPS facilities in managing museum collections. The Museum Handbook is essentially a guide to curators on how the NPS implements 36 CFR 79, and includes discussions of a variety of disciplines and materials, as well as such topics as specialized storage, conservation treatments, and repository evaluation. The Museum Handbook represents, in essence, the most up-to-date statement on how archaeological (and other) collections should be curated.

As part of a planned upgrade of collections, SRARP conducted a detailed self-evaluation contained in the NPS Museum Handbook of its curation policies and physical plant at the end of FY91. This self-evaluation revealed that, although current collections procedures are fully compatible with Handbook standards, past collections are in need of upgraded storage media and should be entered on the Master Curation Database, and the CCF physical plant security should be upgraded to enhance security, environmental controls, and fire protection. As part of the comprehensive review for planned upgrades in these areas, the SRARP curator travelled to National Park Service repositories in order to inspect how NPS curators are implementing Handbook procedures, and in early FY92

will participate in a joint curation and collections management course offered by the NPS and George Washington University in Washington, D.C. A proposal to upgrade collections and management at the SRARP based on these background tours and the NPS course will be made to DOE-SROO for FY93.

PART II. RESEARCH

RESEARCH ABSTRACTS

Prehistoric Settlement in the Aiken Plateau: Summary of Archaeological Investigations at 38AK158 and 38AK159, Aiken County, South Carolina

South Carolina Antiquities 21:31-64.

Recent archaeological investigations at two prehistoric sites in the Aiken Plateau of South Carolina provide evidence for intensive utilization of upland locations during the Late Archaic and Early Woodland Periods. In particular, lithic assemblages recovered from these sites reflect a variety of technological strategies for adapting to the lithic-poor conditions of the Aiken Plateau. Combined with data from features and the spatial patterning of artifacts, the technological evidence supports the conclusion that long-term, perhaps permanent, settlement of the Aiken Plateau was made possible by the careful conservation of imported tools and the resourceful use of local materials and abandoned refuse.

Cultural Quarries: Strategies for Scavenging and Recycling Lithic Refuse

Paper presented at the Southeastern Archaeological Conference, Mobile, AL, November 7-10, 1990.

Over seven millennia of human occupation in the Southeast resulted in the accumulation of lithic debris that was exploited as raw material by late prehistoric tool makers. In particular, Early Woodland tool makers often targeted Late Archaic sites as "cultural quarries," scavenging any available material for recycling or expedient use. Other strategies of provisioning sites with rock reflect the resourceful use of refuse at otherwise lithic-poor locations. Examples of Early Woodland scavenging and recycling from sites in the Coastal Plain of South Carolina illustrate the significance of "cultural quarrying" to interpretations of technology, settlement patterns, labor organization, and lithic typology.

Early Archaic Settlement in the South Carolina Coastal Plain

Paper presented at the Prehistoric Synthesis Symposium, *PaleoIndian and Early Archaic Research in the Lower Southeast: A South Carolina Prespective*, Council of South Carolina Professional Archaeologists, Columbia, SC, September 14, 1991

The distribution of Early Archaic hafted bifaces in the South Carolina Coastal Plain show that two technological traditions existed before 9500 B.P. After this time, a single tradition of corner-notched bifaces spanned the entire province, and much of the greater Southeastern United States. Data on the use of lithic raw materials during this period support the argument that small groups moved seasonally within major river drainages, spending only a portion of the year within the Coastal Plain province. However, some lateral movement of Coastal Plain chert within the province suggests that mechnisms for group integration operated at the local level. Preliminary evidence for local interaction is found within the Upper Coastal Plain of the Savannah River Valley. These data also provide an example of the archaeological correlates of logistical mobility

during presumed winter occupations. In contrast, evidence from the Middle and Lower Coastal Plain lend support to a model of residential mobility and generalized foraging.

Woodland Period Occupations in the Aiken Plateau

Invited paper presented at the Spring Meeting of the Society for Georgia Archaeology, Augusta College, Augusta, GA, May 4, 1991

Excavations of an upland Woodland site in the Aiken Plateau were completed by the Savannah River Archaeological Research Program in the summer of 1990. A 229 m^2 block in the core of the site yielded relatively low density assemblages dating to the Thom's Creek (4000-3000 B.P.) and Deptford (2600-1500 B.P.) phases. Semi-circular patterns in sherd and lithic distributions provided indirect evidence for at least one Deptford phase structure. A 144 m^2 block excavated on the perimiter of the site produced a Refuge (3000-2500 B.P.) phase assemblage 25-35 cm below surface. Simple stamped pottery, small stemmed points and gorget fragments dominated the assemblage. At least two structures are evident from the patterned distribution of artifacts and associated cobble clusters (probable hearths). Combined with the results of excavations elsewhere in the Aiken Plateau, the 38AK157 investigations are expanding our knowledge about Woodland Period utilization of upland sites.

Gender and Technology at the Archaic-Woodland "Transition"

Invited paper presented at the *Anthropology and Archaeology of Women Conference*, Boone, NC, May 2-4, 1991

The technological categories American archaeologists use in time-space systematics of prehistory have inherent gender biases. For the period before pottery, divisions of archaeological time and space are based on variation in hafted bifaces, technology usually attributed to men's labor. For the period of time after which pottery was used, time-space systematics are based largely on variation in ceramic design, the assumed result of women's labor. Inasmuch as the work of men and women in any society is not totally isomorphic in time and space, archaeological categories for the periods before and after the introduction of pottery are incomparable. The unfortunate result is that technological variation that crosscuts gender categories is taken as evidence for change in the economic activity of one gender over the other. Two examples from the Archaic-Woodland "transition" in the American Southeast serve to illustrate this bias. First, the shift from bifacial core to amorphous core lithic technology, cited as evidence for change in male hunting technology, reflects the increased visibility of women's labor in the archaeological record. Second, the adoption of pottery technology by women in the Southeast was influenced by traditions of stone vessel production and exchange that likely involved male labor. In looking for gender at the Archaic-Woodland "transition," one not only gains new insight into the biases of archaeological systematics, but also finds that many of the technological changes believed to characterize the "transition" have limited empirical support.

The Androgenic Nature of Prehistoric Lithic Technology

Invited paper presented in the Plenary Session of the Middle Atlantic Archaeological Conference, Ocean City, MD, May 5-7, 1991

A technological change from formal to expedient core reduction marks the "transition" from mobile to sedentary prehistoric societies in many parts of the world. The phenomenon has often been attributed to changes in the organization of men's activities, particularly hunting. Considering, however, that the change coincides with the adoption of pottery, technology usually attributed to women, an alternative explanation must be considered. From the standpoint of archaeological systematics, the addition of pottery turns our focus away from places where hafted bifaces were discarded towards places where pottery was discarded. The latter are largely domestic contexts, locations at which women, as well as men, employed expedient core technology for a variety of tasks. Thus, the perceived change in core technology reflects the increased visibility of women's activities in the archaeological record. This recognition provides a basis for incorporating gender variables into our interpretations of prehistoric technology and labor organization.

Gender and Technology in Prehistory

Paper presented at the Annual Meeting of the Society for American Archaeology, New Orleans, LA, April 24-28, 1991

Technological variation in prehistory is the basis for archaeological systematics and interpretations of economy. It is thus ironic that an important source of technological variation, gender relations, is ignored in most representations of the past. Two examples of technological change in the American Southeast, the developrnent of pottery and the shift from bifacial to amorphous core technology, serve to illustrate the benefits of a gender perspective in prehistory. In drawing gender into models of these changes, one can illustrate how differential demands on labor both promote and inhibit technological change, while also exposing the gender biases that permeate archaeological systematics.

Hartford: A 4th Century Swift Creek Mound Site in the Interior Coastal Plain of Georgia

Paper presented at the Southeastern Archaeological Conference, Mobile, AL, November 7-10, 1990.

Recent excavations at the Hartford site (9PU1), on the Ocmulgee River, concentrated primarily on a Swift Creek mound where a rich submound midden was exposed. Architectural features encountered beneath the midden revealed a premound oval shaped structure and a large central refuse pit. Archaeological evidence suggests that the structure served cermonial as well as nonceremonial functions. The midden and central refuse pit contained a diverse, well preserved assemblage of subsistence remains. Exotic artifacts indicate long-distance exchange and analysis of Swift Creek complicated stamped designs reveals interaction between Hartford and contemporaneous regional sites.

A Savannah Period Mound in the Upper-Interior Coastal Plain of Georgia

Early Georgia 18:41-64

The 1988 archaeological investigations at the Sandy Hammock site (9PU10) in Pulaski County, Georgia, focused on a small, Mississippian platform mound. A contour map of the mound was produced, and a test unit that was excavated on the summit exposed mound stratigraphy. Mound strata revealed a construction sequence beginning with a premound structure over which two superimposed platform mound stages were constructed. Evidence indicates a burned summit structure on Mound Stage I. Ceramic data show that the mound was constructed during the Savannah period, or approximately A.D. 1200 to 1300. A corrected radiocarbon determination of A.D. 1281 ± 47 (UGA 6019) for the mound substantiates this chronological placement. The significance of 9PU10 is that the site seems to be the southernmost major occurrence of Etowah and Savannah Complicated Stamped pottery along the Ocmulgee River. The presence of an earthen mound suggests that 9PU10 was an administrative center for a simple chiefdom.

A Point Bar Site on the South Edisto River in the Upper Coastal Plain of South Carolina: Depositional History and Environmental Implications

South Carolina Antiquities , Vol 22 (in press)

The Neeley Site (38BM85) is located on the South Edisto River in the Upper Coastal Plain of South Carolina. The upper 75 cm of stratigraphically undifferentiated (no visible stratigraphy) sandy deposits contain low-density, early to late Holocene artifact distributions that are calibrated with four point bar depositional surfaces, as determined through simple grain-size analysis. From the temporally diagnostic artifacts attributed to each of the four surfaces, minimum estimates of the times and duration of land/occupation surface stability are derived. In turn, through a comparison of the depositional history of 38BM85 with that of Pen Point (38BR383) on the Savannah River, drainage-specific variation vs. broad-based environmental controls (i.e., climate and/or eustatic sea level) are examined. It is argued that synchronous depositional histories between sites in different drainage systems reflect environmental controls. While such controls appear to be operative to an as yet unknown degree, the available chronological and stratigraphic data from 38BM85 are inadequate for drawing definitive conclusions. Additional investigations on the older and more stable upslope portion of 38BM85 may produce stratigraphic and chronological results more in line with Pen Point.

Late Pleistocene-Holocene Depositional Change in the Coastal Plain of the Savannah River Valley: A Geoarchaeological Perspective

Invited paper presented at the Spring Meeting of the Society for Georgia Archaeology, Augusta College, Augusta, GA, May 4, 1991

Holocene sea level rose rapidly until 6,000 B.P., after which the overall rate of rise decreased up to the present. The timing of the variable rates of rise, before and after the mid-Holocene, corresponds with upriver, time-transgressive changes in the modes and rates of deposition. These patterns are inferred from numerous locality and site-specific studies that delineated land/occupation surfaces and determined their times and duration of stability. Times of change (i.e., deposition) were ascertained as well. Aside from a better understanding of site formation processes and landscape evolution in the Coastal

Plain of the Savannah River Valley, this research has broader, regional implications. A comparison with preliminary data from the adjacent South Edisto River Valley indicates both drainage-specific variation and inter-drainage similarities in the timing of depositional change, the latter suggesting broad-based regional controls (i.e., climate and/or eustatic sea level) on fluvial deposition.

The Origins of the Yamasee

Paper presented at the Southeastern Archaeological Conference,
Mobile, AL, November 7-10, 1990.

The Yamasee Indians arrived in South Carolina in 1684 and remained there until the outbreak of the Yamasee War in 1715. Historical documents indicate that the Yamasee were a multi-ethnic confederation composed primarily of refugee populations from coastal and interior Georgia. The Yamasee confederation was a byproduct of the European colonial system, and for a while the Yamasee functioned as part of that system. Their towns served as a buffer against Spanish attacks on Carolina, and their wide-ranging raids provided Indian slaves for the Charles Town market. Abuses by traders, mounting debt, and other economic considerations were major causes of the Yamasee War.

The Yamasee in South Carolina: An Archaeo-Historical Perspective

Invited paper presented at the Spring Meeting of the Society for Georgia Archaeology,
Augusta College, Augusta, GA, May 4, 1991

The Yamasee were a multi-ethnic Native American group whose roots can be traced back to the sixteenth-century Georgia chiefdoms of Altamaha, Ocute, and Ichisi, and to remnants of the coastal Georgia Guale. By 1684, the Yamasee had migrated to the Lower Savannah River area of South Carolina, where they remained until the outbreak of the Yamasee War in 1715. During their tenure in Carolina, the Yamasee played a key role in the colony's early history, participating in both the deerskin and Indian slave trades, as well as serving as a "buffer" for the English, guarding against possible Spanish attacks from St. Augustine. During the past two years, we have conducted archival and archaeological research focusing on the Yamasee in South Carolina. This research has resulted in the location of a number of Yamasee towns, and our findings are presented in this paper.

A Critical Evaluation of the Sixteenth-Century Spread of Disease in the Interior Southeast

Paper Presented at the Annual Conference on South Carolina Archaeology,
Columbia, SC, April 13, 1991
and at the Southern Anthropological Society Meetings, Columbia, SC,.

Anthropologists have argued that following contact, pandemics spread rapidly throughout the Southeastern United States causing a massive demographic collapse of Native American populations. Recently, however, there has been a growing dissatisfaction with this model, and a number of historians and anthropologists have begun to raise questions concerning its validity. A critical examination of the historical, bio-archaeological, and epidemiological data reveals that there is little evidence to

support a model of disease-induced depopulation, and that competing models taking into account political cycling, trade, and missionization, offer better explanations for the collapse of the Southeastern chiefdoms.

Historic Archaeology at SRS: The Current State of Knowledge

Paper presented at the 17th Annual Conference on South Carolina Archaeology, Columbia, SC, April 13, 1991 and at the Spring Meeting of the Society for Georgia Archaeology, Augusta, GA, May 4, 1991

Historical sites archaeology has been carried out at the Savannah River Site since 1973. The earliest known historic sites date from the mid-18th century; settlement extended up to 1951. The vast majority of these sites are known only from survey and limited testing. Nonetheless, some important data have been recovered, particularly with regard to rural settlement patterning and agricultural systems. Future research will investigate several broad archaeological issues. Several small towns and settlements hold promise for investigating questions relating to 19th century industrialization and settlement nucleation. In addition, because of the unique mid-20th century history of the area, issues of settlement abandonment can be investigated both archaeologically and through oral history. The survey data already gathered, combined with these more in-depth studies, offer rich potential for probing the historical settlement of the Savannah River Valley on a geographic scale not often available to historical archaeologists.

Settlement Patterning on an Agriculturally Marginal Landscape

Paper presented at the South Carolina Historic Landscapes Symposium, Columbia, SC, September 13, 1991

Archaeological and historical data gathered since 1973 at the Department of Energy's 300 square mile Savannah River Site are used to trace the development of historic-period land use through time. From the initial occupation of the area by mid-eighteenth century cattle herders to the terminal phase of occupation in the mid-twentieth century, economic activities were strongly agricultural and/or pastoral in orientation. However, the shifting demands of the world economy combined with technological and social factors, as well as the physical characteristics of the Inner Coastal Plain landscape itself, strongly conditioned the cultural trajectory within the study area. These factors are examined through settlement patterning, which reflects attempts by the Euro-American culture to mediate between market forces and the reality of an environment that has relatively marginal agricultural potential.

Cultural Resource Management on the US Department of Energy's Savannah River Site

Invited paper presented at the Spring Meeting of the Society for Georgia Archaeology, Augusta College, Augusta, GA, May 4, 1991

This paper presents a summary of the history of archaeology on the SRS from its inception in response to Executive Order 11593 in 1973 to the present. An archaeological staff from the South Carolina Institute of Archaeology and Anthropology has been maintained on the SRS by the Department of Energy since 1978. Numerous special projects and a Cooperative Agreement (1987) between DOE and USC increased

the staff and therefore, the program's capabilities greatly. The program's commitment to research and public service through compliance work is examined in some detail through the long-term involvement of the Augusta Archaeological Society. Without the help of volunteers from this and other avocational groups, the Savannah River Archaeological Research Program's efforts in preservation and research would be greatly curtailed.

From Cerrita to Santa Fe

Paper presented at the Archaeological Society of South Carolina, Charleston Chapter, Charleston, SC, November 20, 1990

Excavations carried out by Southern Methodist University (Dallas) archaeologists in the southern Rocky Mountains around Taos, N.M. have uncovered a prehistoric pueblo which was on the northern frontier of Anasazi culture and a frontier military post which was on the Anglo-American western frontier. These two sites, as well as Hispanic sites from the intervening period, have yielded information on how expanding societies on frontiers adapt to new environments and cultures. The inhabitants of Pot Creek, a northern Tiwa pueblo, apparently followed a diversified subsistence strategy to off-set risks of periodic crop destruction by late frosts and other weather-related phenomenon. Hispanic colonists attempted to integrate local economic and social systems into their presidios and missions. Anglo military colonists turned to a different strategy to survive—minimal dependence on local resources and maximal use of imported goods. These three strategies represent attempts to adapt to a new and sometimes hostile natural and cultural environment. This lecture examines in broad terms the archaeological and archival evidence for these cultural systems, and concludes with a brief discussion of how this evidence contributes to our understanding of frontier archaeology.

800 Years of Taos Archaeology

Paper presented at the Athens Chapter of the Society for Georgia Archaeology, Athens, GA, July 25, 1991

Archaeological and archival data are utililized to test a model of cultural adaptation which put a premium on diversified subsistence strategies. Environmental variables played a key role in determining the cultural trajectory of prehistoric and historic populations in the study area, and despite modern technology, continue to do so today.

Economic Interaction on the New Mexican Military Frontier

Volumes in Historical Archaeology XIII, 1990. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia

Recent archaeological studies of frontiers have emphasized the importance of economic relationships between the colonizing culture, the local indigenous culture, and the core area or homeland. These relationships can theoretically range between complete economic dependence of the colonizing culture on the homeland and complete dependence of the colonizing culture on the local, indigenous economic system. This study adopts these behavioral extremes and incorporates them into a model that includes both local and external economic links. The model is tested using archaeological and archival data from Cantonment Burgwin (1852-1860), a small frontier post in northern

New Mexico. It is concluded that the frontier army as seen at this site interacted with the indigenous economic system only within specific parameters, and was to a large extent dependent on the core area for many of its supplies.

RESEARCH NOTES

Midden Point Site Testing

Members of the SRARP participated in salvage excavations at the Midden Point site (9Bk113) in Burke County, Georgia. Midden Point is a Stallings-Thom's Creek phase (4500-3000 B.P.) shell midden along Brier Creek that has been all but destroyed by vandals in the last few decades. The current owners of the site, the Nature Conservancy, sought assistance from the professional community, eventually reaching an agreement with SRARP staff to conduct limited testing and analyses. Several days in March and May 1991 were spent excavating two 1x2 m units. An enormous volume of shell, bone, flaked stone and pottery was recovered. Processing and analysis of the assemblge is now underway. A report of the investigations by Kenneth E. Sassaman is anticipated in Spring 1992.

38AK157 Excavations

Analysis and report prepartion for the 38AK157 excavations on the SRS continued through FY 1991. Analytical emphases include (1) refinement of the typological and chronological placement of Early Woodland pottery in the Upper Coastal Plain, (2) spatial modeling and analysis of the distribution of artifacts to infer locations of habitation structures and activity areas, (3) geoarchaeological study of sediments and vertical artifact distributions to delineate patterns in the colluviation of the site, and (4) integration of assemblage content and structure to interpret the role of the site in the broader context of Early Woodland settlement. The final report by Kenneth E. Sassaman, D. Keith Stephenson, William Green and David C. Crass is anticipated by late 1991.

Middle Woodland Research in South Georgia

Stephenson and Snow have also concluded laboratory sorting and classification of artifacts from excavations at Hartford (9Pu1), a Swift Creek period mound in southern Georgia (see Annual Report FY 1991:34). The faunal remains from Feature 1 have been analyzed by Dr. Elizabeth Reitz at the University of Georgia and a report of the results will be included in the final site report forthcoming this winter. The faunal analysis will be a major contribution to the understandng of Middle Woodland subsistence in Georgia as there is very little subsistence data from contemporaneous sites in the state. In addition, the site report and faunal analysis will provide important comparative information about Middle Woodland societies in the southeast, their local manifestations on the SRS, and in particular the Lewis West site (38AK228).

Excavations at a Middle Mississippian Site in South Georgia

This past winter, Keith Stephenson and Frankie Snow continued archaeological investigations at the Sandy Hammock site (9Pu10) located along the Ocmulgee River. Prior research at the site focused entirely on a small Mississippian platform mound (see Annual Review FY 1990: 34). This year, work concentrated in the associated village in a effort to characterize cultural stratigraphy and delineate village extent. The eventual excavation of thirteen 2x2 m test units demonstrated the absence of a sheet midden

revealing instead a thin distribution of Mississippian complicated stamped sherds. Interestingly, excavations did encounter two discrete areas of organically rich midden from 10-30 centimeters below surface that contained sherds, fired pottery coils, debitage, animal bone, seeds, nut shell fragments, and mussel shell. That these midden deposits were about 10 centimeters below ground surface indicates that refuse was discarded on the prehistoric occupational surface rather than deposited in abandoned storage pits. Although no postmolds were observed in any test units, these refuse dumps are quite likely waste accumulations from individual households and therefore serve as indirect evidence for nearby structures. The presence of these distinct refuse deposits suggests that site occupation was one of relatively short duration. The period of occupation was apparently sufficient for the construction of a small mound but not for the formation of a sheet midden.

Yamasee Archaeological Project

William Green focused on the Archaeology and Ethnohistory of the Yamasee Indians, a multi-ethnic confederation that lived in the lower coastal plain of South Carolina from 1684-1715. During the past two years, there has been a series of excavations at the Yamasee town of Altamaha. These excavations have yielded a large quantity of Native American ceramics and European trade goods that could be dated to the late 17th/early 18th century. The results of these excavations will be presented in Green's master's thesis, "The Search for Altamaha: The Archaeology of an Early 18th Century Yamasee Indian Town," Department of Anthropology, University of South Carolina (to be completed by December 1991).

Historic Occupation of the Savannah River Site

As the SRARP FY91 Annual Review went to press, *A Desperate Poor Country: History and Settlement Patterning on the Savannah River Site* was in press. This document summarizes the current state of knowledge of historical archaeology on the SRS within a settlement systems perspective, and will serve as the overarching framework for future historic period archaeological research. *A Desperate Poor Country* will be published as Savannah River Archaeological Research Program Occasional Paper Number 2.

Oral History Project

David Crass and Richard Brooks continued work on the SRARP Oral History Project, which is intended to capture ethnographic data relating to past occupation of the SRS by making public presentations and gathering data from area residents and conducting family members on tours of ancestral homesites. Planning is currently underway to broaden the reach of this program, which is valuable both in terms of the scientific data gathered and in terms of public outreach and education.

University of South Carolina-Aiken Involvement at SRARP

SRARP involvement with the University of South Carolina-Aiken (USC-A) campus increased in FY91 with David Crass' appointment as a lecturer in the Sociology Department. During the summer of 1991, Crass taught an advanced undergraduate class in archaeological methods at USC-A. The class emphasized current scientific research strategies within a cultural resource management framework by introducing students to basic techniques and theories of archaeological science through a combination of field excavations and class room lectures/lab sessions. The course was organized around a 7-step process that archaeologists use when investigating a research problem. Students

were graded on a combination of improvement in field skills and knowledge of basic concepts derived from assigned readings. Lecture topics included "Why We Dig: An Introduction to Archaeology," "Introduction to Historic Occupation of the CSRA," "Introduction to Survey Techniques," and "Introduction to Archival Data." As part of their training, the class members participated in the excavation of 38AK62 (the Treadaway site) a late-eighteenth/early-nineteenth century farm on Upper Three Runs Creek being excavated by Crass, and produced a final essay integrating knowledge gained through excavations with data derived from archival sources.

In addition, several independent study and honors students worked under Crass' direction on SRARP archaeological collections and research problems. One independent study student conducted oral interviews with former inhabitants of the Savannah River Site and synthesized the results in a final report, which included old photographs of the area. Another carried out an analysis of historic period ceramics from the Treadaway site and compared the results of her analysis to archival data with the goal of understanding the socioeconomic status of the family in Barnwell District. Finally, an honors student under Crass' coordination rotated among SRARP staff members in order to gain an understanding of the processes of cultural resource management. Research results from these independent study students will be published by SRARP. In addition, several USC-Aiken students were hired as part-time staff by SRARP to work as archaeological lab assistants and field crew members. In sum, SRARP supported USC-Aiken both through direct financial remuneration to students for work performed at SRS and also by offering courses and research opportunities which would not have been available otherwise.

International Historic Archaeological Cooperation

Dr. David Crass continues to serve as an historical archaeology consultant for a study being conducted by Dr. C. Garth Sampson of Southern Methodist University in Dallas, Texas. Dr. Sampson and a team of 15 international specialists are examining the impact of European colonization on hunter-gatherer bands. Analysis concentrates on changing land tenure and band boundary maintenance strategies through time (cf. Sampson 1988).

RESEARCH REPORT

Geoarchaeological Research at 38AK442: Implications for Terminal Pleistocene-Holocene Alluvial Terrace Formation

Introduction

Site 38AK442, located on the SRS in the Upper Coastal Plain, is situated on the second alluvial terrace (T1b) of the Savannah River, immediately downstream from the relict confluence of the river and Upper Three Runs. Investigations at the site were initiated after the surface discovery on November 2, 1990 of a Clovis point (early Paleoindian period--ca. 11,500-11,000 B.P.) by Ruth Estes of the University of Georgia's Savannah River Ecology Lab (SREL). Ms. Estes was accompanied by Mr. Charlie Davis (also with the SREL), who recognized the significance of the find and reported it to SRARP staff. The Clovis point was found in a deeply incised (varying from ca. 1-2 m below present ground surface) roadbed that dissects the terrace perpendicular to its Savannah River-parallel, long axis.

Field research at the site was conducted on an intermittent basis from November, 1990 through July 1991. Systematic shovel testing was employed in order to ascertain the depth of archaeological deposits and the horizontal extent of the site. Based on the shovel test data, two 2x2 m units and one 3x3 m unit were excavated in order to obtain more refined archaeo-stratigraphic, artifact assemblage, and sedimentological data. Continuous sediment columns with samples collected at 5 cm increments were extracted to the total depth of excavation in two of the units. Using a standard soil auger with a 10 cm diameter bucket, sediment data were collected from below the depth of excavation to the channel lag deposits at the base of the terrace.

Sedimentological and archaeo-stratigraphic analyses for ascertaining site formation processes are in progress. The site-level information will, in turn, contribute to the growing body of comparative data necessary for deriving the history of, and the environmental processes operative in, Savannah River alluvial landscape evolution during the terminal Pleistocene-Holocene. Accordingly, preliminary site-level observations and inferences are presented, followed by a summary comparison of the evolutionary relationship between the T1a (first alluvial terrace of the Savannah River) and T1b landforms.

38AK442 Observations and Inferences

No definite Paleoindian material was recovered in stratigraphic context. Although the original stratigraphic and horizontal location of the Clovis surface find is unknown, it almost certainly originated on the T1b landform, thereby tending to confirm earlier predictions (Brooks et al. 1989; Brooks and Sassaman 1990) that, based on archaeological data from T1a (early to mid-Holocene in age) overlooking the modern, mid- to late Holocene, Savannah River floodplain, T1b must be of terminal Pleistocene age (ca. 10,500-12,000 B.P.) or earlier. Assuming that maximum terrace development occurs with rapid rises in sea/base level that reduces river gradients and promotes lateral stream migration, it is reasonable to infer that T1b formed between ca. 17,000 and 10,500 B.P., following the glacial maximum at ca. 18,000 B.P. The assumed relationship between base-level change and terrace development is supported by correlations in sea-level change and landform development of T1a and the modern floodplain (Brooks et al. 1986; Colquhoun and Brooks 1986).

Site 38AK442 sands are exclusively (?) of quartz and are fairly coarse-grained, like those characteristic of T1a sites. T1a sands appear to have been derived primarily from local tributaries originating in the uplands and deposited via the Savannah River, while the surficial sands containing the archaeological deposits at 38AK442 were likely derived largely, and directly, from Upper Three Runs. The fairly coarse-grained sediments at 38AK442 are in contrast with the finer grained sediments on T1b sites mid-way between tributaries (e.g., 38BR631, see below) where overbank sediments from the Savannah River were dominant during the early to mid-Holocene when T1a was developing. Thus, surficial early to mid-Holocene T1b sediments near relict confluences with upland tributaries are apparently rather coarse-grained due to the direct contribution of sediments from the adjacent tributary. Although comparative analyses have not been conducted, it is probable that T1a sediments are also coarser grained at Savannah River-tributary confluence areas.

Based on the preliminary archaeo-stratigraphic and sedimentological data from the high, central portion of the 38AK442 landform, a series of buried alluvial surfaces occurring in the upper ca. 0.70 m of deposits range from Early Archaic (Early Holocene) to Late Woodland (Late Holocene) in age. Depositionally, there is an overall fining upward of sediments, starting at 3.36 m below surface where channel lag deposits

consisting of quartz cobbles were encountered. Post-depositional, pedogenic modification of the sediments occurs to a depth of 2.40 m, with lamellae beginning at 1.25 m and a dark brown, patchy Bt Horizon occurring between 1.35 and 1.60 m. The Bt Horizon is particularly noteworthy in that a period of long-term surface stability without significant deposition is indicated. From this, it may be inferred that T1b development was not a continuous, uninterrupted process.

Regarding the stratigraphic position of a potential Paleoindian surface, there are two likely candidates. One candidate is the Early-Middle Archaic surface identified at 0.70 m below present ground surface. Given that the surface was apparently stable for several thousand years, it could have formed during Paleoindian times or earlier, and continued to be stable during the early to mid-Holocene. The second candidate is a surface or surfaces below the 0.70 m surface that, due to the likely ephemeral nature of the Paleoindian occupation, was not identified on archaeological grounds, but may be identified when the sedimentological analyses are completed. Of course, in the absence of temporally diagnostic artifacts or materials suitable for ^{14}C dating, the age of such a surface will be indeterminable. The Bt Horizon noted above was probably derived from the 0.70 m surface or this hypothetical surface(s) that has yet to be delineated.

In contrast with the high central portion of the landform, the depositional sequences are much thinner in the upslope and in the leading edge/toe areas. In the former area, channel lag deposits occur within ca. 0.40 m of the surface. The latter area contains channel lag deposits starting at 1.40 m below surface. There, slabs of orthoquartzite and angular chunks of fossiliferous marine hash are incorporated in the lag deposits. This suggests a cutbank situation in which the river was migrating/scouring laterally and cut earlier marine sediments (Middle Eocene in age) that fell into the channel as "slump blocks." The stream energy was insufficient for transport; hence, quartz pebbles and cobbles filled in and around the marine materials as matrix.

T1a/T1b Comparative Summary

For purposes of T1a/T1b comparison, summary data from additional T1a and T1b sites that have been subjected to geoarchaeological investigation are introduced. For T1b, 38BR631 is considered along with 38AK442. Site 38BR631 is a 'Dalton site' located mid-way between Pen Branch and Fourmile Branch. A Dalton (late Paleoindian period--ca. 10,500-10,000 B.P.)-Kirk surface occurs at ca. 0.80 m below ground surface. The age and depth of this surface indicate that it may correlate with the 0.70 m surface at 38AK442. If this is so, then the 0.70 m surface at 38AK442 is older than documented and could in fact be of Clovis age.

Fine sand and silt are dominant at 38BR631, suggesting that the upper, artifact-bearing portion of T1b in this location formed through infrequent overbank deposition during floods of greatest magnitude. This occurred during the earlier phases of T1a development, prior to T1a attaining its present elevation during the mid-Holocene.

38BR383 (Pen Point) and 38BR39 are T1a sites containing early to mid-Holocene sequences in the top ca. 1.0 m, with the total depth of channel deposits in excess of 3.5 m. Channel lag was not encountered at either site due to the depth of deposits. Pen Point and 38BR39 are dominated by medium-coarse sand. Dark minerals were observed at 38BR39, but only quartz sand at Pen Point, suggesting Piedmont and local, tributary stream sediment contributions, respectively.

From the foregoing data, T1a deposits are much deeper, and their contained archaeological sequences are slightly deeper, than those of T1b. This may relate to a shallower, more consolidated, erosion-resistent substrate (e.g., the marine materials noted above) in the area of T1b. Such a condition would promote lateral migration, rather than downcutting; the latter being essential for the formation of deep basins that are necessary to accommodate the accumulation of thick depositional units like T1a. The differences may also relate to availability of sediments between the terminal Pleistocene and the early to mid-Holocene. The scoured, terminal Pleistocene basement in alluvial valley fill sequences of the Southeast (Goodyear 1991) indicates not only more downcutting due to depressed sea/base levels but also sediment "starved" alluvial systems due to good forest groundcover in the adjacent uplands. That is, cycles of erosion are related to decreases or interruptions in sediment supply. In contrast, the formation of thick T1a deposits implies abundant sediments under what were probably more braided-like, sediment choked, stream conditions. This implies reduced groundcover in the uplands during the early to mid-Holocene, possibly reflecting relatively warm, dry conditions.

T1a and T1b sediments were both probably derived largely from local, upland tributaries entering the Savannah River just upstream of the evolving landforms. However, sediment origin was apparently quite variable, as indicated by: a) the Piedmont origin of sediments at 38BR39 on T1a, and b) the overbank sediments from the Savannah River at 38BR631 that apparently breached T1a early in its formation (when its elevation was lower than present) to become deposited on T1b. Thus, the formation of T1a did not result in the total stranding of T1b from the Savannah River or its tributaries, as indicated by stratified early to mid-Holocene archaeological materials in both landforms. However, the shallower depth of archaeological materials on T1b does suggest that that terrace did become somewhat removed from the alluvial depositional system as a function of T1a development. That is, as T1a reached maturity in line with its present stability, deposition on T1b became less frequent and of lesser magnitude. Thus, by the mid-Holocene, alluvial deposition on T1b from the Savannah River probably all but ceased. T1b areas such as 38AK442 at relict confluences continued to receive deposition from adjacent upland tributaries during the mid- to late Holocene.

PART III. PUBLIC EDUCATION

Volunteer Program FY91

The Volunteer program, part of the ongoing public outreach/education facet of the SRARP, continued on a regular basis during FY91. Research excavation continued on the Tinker Creek Site (38AK224) under Site Use Permit (SU-90-35-R). The all-volunteer effort, under SRARP staff supervision, is designed to increase knowledge of the use of the uplands of the Aiken Plateau by prehistoric peoples during the Late Archaic through Middle-Late Woodland periods. Excavations at 38AK224 are conducted primarily on one Saturday each month, using volunteers from the Augusta Archaeological Society, the Archaeological Society of South Carolina, and occasional visiting students. This year, anthropology students from Augusta College and the University of South Carolina-Columbia also participated on two dedicated occasions. Approximately 113 person-days, or 678 person-hours, of effort was put into this project during FY91, which resulted in the excavation of 45 contiguous 1x1-meter units. The total area of block excavation to date is 118 square meters. The field work portion of the Tinker Creek project is anticipated to continue through FY92, at which time all effort will be directed toward artifact processing and analysis.

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 FY91, George S. Lewis continued in his role of treasurer for the AAS, edited the bi-monthly newsletter of the AAS, *Debitage*, and organized and chaired the Spring Meeting and Conference of the Society for Georgia Archaeology (SGA). He also served on the Board of Directors of the ASSC and of the SGA. Kenneth E. Sassaman continued in his role of journal editor (*South Carolina Antiquities*) for the ASSC and organized and chaired the Annual Conference of the ASSC. A total of seven presentations were made by SRARP staff members at the SGA and ASSC Conferences. D. Keith Stephenson served as president of the Northeast Chapter of the SGA in Athens, Georgia. SRARP staff also volunteered their own time to organize and run the ASSC's Fall Field Day, an annual event that raises the public's awareness of archaeology in the state while also generating funds for archaeological publication and preservation.

Public Presentations and Workshops

During FY91, SRARP staff made over two dozen presentations at schools and at environmental and historical awareness day celebrations, as well as to historical societies and civic groups. Recognizing the importance of the formal educational process in shaping public attitudes about historic preservation, SRARP's involvement with school programs continued to grow at all levels over the last year. The involvement included not only talks to local schools and workshops for teachers, but also extended to the University level. A total of seven archaeology/anthropology courses were taught by SRARP staff at Augusta College, University of South Carolina-Aiken, and University of South Carolina-Columbia. SRARP staff were invited guest lecturers for other university courses as well.

Public relations through DOE and Westinghouse also continued for the SRARP in FY91. The staff helped Westinghouse Public Relations with five guided tours of old homesites to former inhabitants of the area. In addition, a presentation was made to

Westinghouse employees at a workshop sponsored by the U. S. Department of Agriculture, Soil Conservation and Forest Services, on the applications of the Savannah River Site Soil Survey. The workshop provided an important forum for the discussion of SRS land management issues that went far beyond the specific considerations of soils and archaeology.

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1986 The Mississippian Occupation of the Savannah River Valley. *Southeastern Archaeology* 5(1):32-51.

Brooks, M. J. and K. E. Sassaman
1990 Point Bar Geoarchaeology in the Upper Coastal Plain of the Savannah River Valley, South Carolina: A Case Study. In *Archaeological Geology of North America, Centennial Special Volume 4*, edited by N. P. Lasca and J. Donahue, pp. 183-197. Geological Society of America, Boulder, Colorado.

Brooks, M. J., K. E. Sassaman and G. T. Hanson
1989 Environmental Background and Models. In *Technical Synthesis of Prehistoric Archaeological Investigations on the Savannah River Site, Aiken and Barnwell Counties, South Carolina*, edited by K. E. Sassaman, M. J. Brooks, G. T. Hanson and D. G. Anderson, pp.19-66. Report submitted to the Savannah River Operations Office, U.S. Department of Energy.

Brooks, M. J., P. A. Stone, D. J. Colquhoun, J. G. Brown and K. B. Steele
1986 Geoarchaeological Research in the Coastal Plain Portion of the Savannah River Valley. *Geoarchaeology: An International Journal* 1(3):293-307.

Caldwell, Joseph R. and Catherine McCann
1941 *Irene Mound Site, Chatham County, Georgia*. University of Georgia Press, Athens.

Caldwell, Joseph R. and Antonio J. Waring, Jr.
1968 Some Chatham County Pottery Types and Their Sequence. In *The Waring Papers* edited by S. Williams. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University 58.

Colquhoun, D. J. and M. J. Brooks
1986 New Evidence from the Southeastern U.S. for Eustatic Components in the Late Holocene Sea Levels. *Geoarchaeology: An International Journal* 1(3):275-291.

Crass, D. C.
1991 Savannah River Archaeological Research Program Guide to Curation Procedures. *Savannah River Archaeological Research Program Technical Report Series* 14.

Goodyear, Albert C.
1991 The Early Holocene Occupation of the Southeastern United States: A Geoarchaeological Summary. In *Ice Age Peoples of North America*, edited by R. Bonnichsen, G. C, Frison and K. Turnmire, in press. Center for the Study of the First Americans, Orono, Maine.

Sampson, C. G.
1988 *Stylistic Boundaries among Mobile Hunter-Gatherers*. Smithsonian Institute Press, Washington, D. C.

Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson and David G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley: Synthesis of Archaeological Investigations of the Savannah River Site, Aiken and Barnwell Counties, South Carolina.* Savannah River Archaeological Research Papers 1. South Carolina Institute of Archaeological and Anthropology, University of South Carolina.

Savannah River Archaeological Research Program
1989 *Archaeological Resource Management Plan of the Savannah River Archaeological Research Program.* Report submitted to the Savannah River Operations Office, U.S. Department of Energy. Manuscript on file with the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

U.S. Congress
1978 *American Indian Religious Freedom Act* (Public Law 95-341). Government Printing Office, Washington, D.C.

U.S. Congress
1990 *Native American Graves Protection and Repatriation Act* (Public Law 101-601). Government Printing Office, Washington, D.C.

U.S. Department of the Interior
1990 *Museum Handbook.* Government Printing Office, Washington, D.C.

APPENDIX

PUBLISHED PAPERS AND MONOGRAPHS

Brooks, M. J.
1990 A Point Bar Site on the South Edisto River in the Upper Coastal Plain of South Carolina: Depositional History and Environmental Implications. *South Carolina Antiquities* 22 (in press).

Brooks, M. J. and D. J. Colquhoun
1991 Late Pleistocene-Holocene Depositional Change in the Coastal Plain of the Savannah River Valley: A Geoarchaeological Perspective. *Early Georgia* 19(2) (in press).

Crass, D. C.
1990 Economic Interaction on the New Mexican Military Frontier. *Volumes in Historical Archaeology* XIII. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Green, W.
1990 A Ceramic Figurine Head Found in Beaufort County, SC. *South Carolina Antiquities*. 22 (in press).

Rinehart, C.
1990 Crucifixes and Medallions: Their Role at Fort Michilimackinac. *Volumes in Historical Archaeology* XI. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, K. E.
1989 Prehistoric Settlement in the Aiken Plateau: Summary of Archaeological Investigations at 38AK158 and 38AK159, Aiken County, South Carolina. *South Carolina Antiquities* 21:31-64.

Sassaman, K. E., M. J. Brooks, G. T. Hanson and D. G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley: Synthesis of Archaeological Investigations on the Savannah River Site, Aiken and Barnwell Counties, South Carolina.* Savannah River Archaeological Research Papers 1.

Stephenson, D. K., J. E. Worth and F. Snow
1990 A Savannah Period Mound in the Upper-Interior Coastal Plain of Georgia. *Early Georgia* 18:41-64.

TECHNICAL REPORTS

Crass, D. C.
1991 Savannah River Archaeological Research Program Guide to Curation Procedures. *Savannah River Archaeological Research Program Technical Report Series* 14.

SYMPOSIA ORGANIZED

Anderson, D. G. and K. E. Sassaman
1991 *PaleoIndian and Early Archaic Research in the Lower Southeast: A South Carolina Perspective.* South Carolina Synthesis Project, Council of South Carolina Professional Archaeologists, Columbia.

Lewis, G. S.
1991 *Time, and the River Flowing: Archaeology of the Savannah River Valley.* Spring Conference of the Society for Georgia Archaeology, Augusta.

PROFESSIONAL PAPERS PRESENTED

Brooks, M. J. and D. J. Colquhoun
1991 Late Pleistocene-Holocene Depositional Change in the Coastal Plain of the Savannah River Valley: A Geoarchaeological Perspective. Invited paper presented at the Spring Conference of the Society for Georgia Archaeology, Augusta, GA.

Brooks, R. D.
1991 Cultural Resource Management on the US Department of Energy's Savannah River Site. Invited paper presented at the Spring Conference of the Society for Georgia Archaeology, Augusta, GA.

Colquhoun, D. J., M. J. Brooks and W. J. Sexton
1991 Timing of Major Late Pleistocene-Holocene Coastal Zone and Related Inner Shelf and Floodplain Depositional Change, South Carolina, U.S.A. Paper presented at the IGCP # 274 Conference on Quaternary Coastal Evolution, Tallahassee, FL.

Crass, D. C. and R. D. Brooks
1991 Historic Archaeology at SRS: The Current State of Knowledge. Paper presented at the 17th Annual Conference on South Carolina Archaeology, Columbia, SC.

1991 Historic Archaeology at SRS: The Current State of Knowledge. Invited paper presented at the Spring Conference of the Society for Georgia Archaeology, Augusta, Georgia.

1991 Settlement Patterning on an Agriculturally Marginal Landscape. Paper presented at the South Carolina Historic Landscapes Symposium, Columbia, SC.

DePratter, C. B. and W. Green
1990 Origins of the Yamasee. Paper presented at the Southeastern Archaeological Conference, Mobile, AL.

Green, W.
1991 A Critical Evaluation of the 16th Century Spread of Disease in the Interior Southeast. Annual Meeting of the Southern Anthropological Society, Columbia, SC.

1991 A Critical Evaluation of the 16th Century Spread of Disease in the Interior Southeast. Annual Conference on South Carolina Archaeology, Columbia, SC.

Green, W. and D. McKivergan
1991 The Yamasee in South Carolina: An Archaeo-historical Perspective. Invited paper presented at the Spring Conference of the Society for Georgia Archaeology, Augusta, GA.

McKivergan, D. and W. Green
1991 The Yamasee in South Carolina: An Ethnohistorical Perspective. Annual Meeting of the Southern Anthropological Society, Columbia, SC.

Rinehart, C.
1991 Brass Crosses and Medallions from Michilimackinac. Paper presented at the 6th North American Fur Trade Conference, Mackinac Island, MI.

Sassaman, K. E.
1991 Early Archaic Settlement of the South Carolina Coastal Plain. Paper presented in a symposium for the South Carolina Synthesis Project, Council of South Carolina Professional Archaeologists, Columbia, SC.

1991 Gender and Technology at the Archaic-Woodland "Transition." Invited paper presented at the Anthropology and Archaeology of Women Conference, Appalachian State University, Boone, NC.

1991 Gender and Technology in Prehistory. Paper presented at the Annual Meeting of the Society for American Archaeology, New Orleans, LA.

1991 The Androgenic Nature of Prehistoric Lithic Technology. Invited paper presented in the plenary session *The Archaeology of Gender* at the Middle Atlantic Archaeological Conference, Ocean City, MD.

Sassaman, K. E. and M. J. Brooks
1990 Cultural Quarries: Strategies for Scavenging and Recycling Lithic Refuse. Paper presented at the Southeastern Archaeological Conference, Mobile, AL.

Sassaman, K. E., D. K. Stephenson and W. Green
1991 Woodland Period Occupations in the Aiken Plateau. Invited paper presented at the Spring Conference of the Society for Georgia Archaeology, Ausgusta, GA.

Snow, F. and K. Stephenson
1990 Hartford: A 4th-Century Swift Creek Mound in the Interior Coastal Plain of Georgia. Paper presented at the Southeastern Archaeological Conference, Mobile, AL.

JOURNAL CONTRIBUTIONS OF CURRENT RESEARCH

Brooks, M. J.
1991 Regional Implications of Terminal Pleistocene-Holocene Alluvial Landform Evolution in the Savannah and South Edisto River Valleys. *American Antiquity* 56 (3):555.

1990 Geoarchaeological Research in the Coastal Plain Portion of the Savannah River Valley. *Annual Review of Cultural Resource Investigations by the Savannah River Archaeological Research Program*, Fiscal Year 1990: 29-30.

1990 Geoarchaeological Research at 38BM85. *Annual Review of Cultural Resource Investigations by the Savannah River Archaeological Research Program*, Fiscal Year 1990:30-31.

Crass, D. C.
1991 Current Research. Council of South Carolina Professional Archaeologists *Newsletter* XI (4):10-11.

Wendorf, Fred, R. V. Kemper and David C. Crass
1990 CD ROM for Archaeology. Society for American Archaeology *Bulletin* 8 (5):12.

OFFICES HELD

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

Board of Directors, Society for Georgia Archaeology.

Board of Directors, Archaeological Society of South Carolina.

Treasurer, Augusta Chapter of the Society for Georgia Archaeology.

Sassaman, K. E.
Editor, *COSCAPA Newsletter* (quarterly newsletter of the Council of South Carolina Professional Archaeologists).

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

Stephenson, D. K.
President, Northeast Chapter of the Society for Georgia Archaeology, Athens, GA.

SEMINARS/WORKSHOPS

Brooks, M. J.
Invited speaker and discussant at a workshop sponsored by the U. S. Department of Agriculture, Soil Conservation and Forest Services, on the applications of the Savannah River Site Soil Survey. September 1991.

TEACHING

Crass, D.C.
Fall Semester 1991 - Lecturer, Department of Sociology, University of South Carolina at Aiken. AANP 399 - Oral History in Archaeology (Directed Independent Study).

Second Summer Semester 1991 - Lecturer, Department of Sociology, University of South Carolina at Aiken. AANP 399 - Advanced Archaeological Excavation.

First Summer Semester 1991 - Lecturer, Department of Sociology, University of South Carolina at Aiken. AANP 320 - Archaeological Excavation.

Sassaman, K. E.
Fall Quarter 1991 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 101 - Introduction to Anthropology.

Spring Quarter 1991 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 303 - Introduction to Archaeology.

Winter Quarter 1991 - Part-time Instructor, Department of History and Anthropology, Augusta College. ANT 101 - Introduction to Anthropology.

Green, W.
Fall Semester 1990 - Part-time Instructor, Department of Anthropology, University of South Carolina, Columbia. ANTH 101 - Primates, People, and Prehistory.

PUBLIC SERVICE ACTIVITIES

October 1990

Crass, D. C.
Consultation with Richmond County (Georgia) Board of Education regarding historic preservation.

Green, W. and K. E. Sassaman
Student excavation at the Tinker Creek Site (38AK224), Department of Anthropology, University of South Carolina, Columbia, SC.

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

"Savannah River Archaeological Research Program" display booth at the Boy Scout Camporee, SRS.

Sassaman, K. E.
"Early Homind Behavioral Models" presentation to W. Green's Anthropology Class, University of South Carolina, Columbia, SC.

"Archaic Period Prehistory in South Carolina" presentation to L. Stine's Anthropology Class, University of South Carolina, Columbia, SC.

November 1990

Crass, D. C.
Career Day presentation at Jackson Middle School, Aiken County, SC.

Lewis, G. S.
"Early Americans" presentation (videotaped for future use) to the South Columbia Elementary School (Grades 3-5), Evans, GA.

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

December 1990

Crass, D. C.
Career Day presentation at Bath Middle School, Aiken County, SC.

"From Cerrita to Santa Fe" presentation to the Archaeological Society of South Carolina, Charleston Chapter, Charleston, SC.

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

January 1991

Crass, D. C.
"Archaeology at the SRS" presentation to the Aiken County Historical Society, Aiken, SC.

"From Cerrita to Santa Fe" presentation to the Beech Island Historical Society, Beech Island, SC.

Career Day presentation at Schofield Middle School, Aiken County, SC.

Career Day presentation at Ridge Spring-Monetta Middle School, Aiken County, SC.

Consultation at Augusta College, Augusta, GA.

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

February 1991

Crass, D. C.
Vocational Fair presentation to the Columbia County (Georgia) School System.

Career Day presentation at New Ellenton Middle School, Aiken County, SC.

Lewis, G. S.
"The Heard Robertson Collection" presentation to the Beech Island Historical Society, Beech Island, SC.

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

March 1991

Brooks, R. D. and D. C. Crass
"The SRARP Oral History Project on the SRS" presentation to the Jackson Sunshine Club, Jackson, SC.

Crass, D. C.
Consultation at Augusta College, Augusta, GA.

Career Day presentation at A. L. Corbett Middle School, Aiken County, SC.

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

Sassaman, K. E.
"Archaic Period Prehistory in South Carolina" presentation to J. Michie's Anthropology Class, University of South Carolina, Coastal Carolina, Conway, SC.

April 1991

Brooks, M. J.
"Cultural Resource Management and Research Activities of the SRARP" presentation to the Beech Island Historical Society, Beech Island, SC.

Brooks, R. D. and D. C. Crass
Guides for the Beech Island Historical Society tour of the historic town of Ellenton on the SRS.

Brooks, R. D. and W. Green
"Savannah River Archaeological Research Program" display for "Barnwell Fishing Rodeo: Get Hooked on Fishing, Not Drugs," sponsored by the South Carolina Department of Wildlife and Marine Resources, Barnwell, SC.

Crass, D. C.
Career Day presentation at Freedman Middle School, Aiken County, SC.

Green, W.
"Savannah River Archaeological Research Program" display for Environmental Awareness Day, SRS.

Lewis, G. S.
"Savannah River Archaeological Research Program" display for Heritage Day, Beech Island Historical Society..

Sassaman, K. E.
Program Chair of the Annual Conference on South Carolina Archaeology, Archaeological Society of South Carolina, Columbia, SC.

Stephenson, D. K.
"Hartford and Sandy Hammock: Excavations at Two Mound Sites on the Middle Ocmulgee River" presentation to the Anderson Chapter of the Archaeological Society of South Carolina, Anderson, SC.

May 1991

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

Sassaman, K. E. and D. K. Stephenson
Student excavation at the Tinker Creek Site (38AK224), Augusta College, Augusta, GA.

June 1991

Brooks, R. D.
Pre-tour guide, in preparation for the Stephens Family Reunion Tour, to locate the Stephens Family Homeplaces (ca. 1900-1950) and Tyler Plantation (1840-1950) on the SRS.

Guide for the Treadaway Family Tour to the Treadaway Site (1780-1840) excavation, conducted by D. C. Crass with the assistance of students from the University of South Carolina at Aiken, Aiken, SC.

Sassaman, K. E.
"Screwdrivers, Nailclippers, and Archaic Stone Tool Technology" presentation to the Teacher's Summer Workshop, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia, SC.

July 1991

Crass, D. C.
"800 Years of Taos Archaeology" presentation to the Athens Chapter of the Georgia Archaeological Society, Athens, GA.

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

Sassaman, K. E.
"Savannah River Archaeological Research Program" presentation to Teacher Interns of the University of Georgia's Savannah River Ecology Lab.

August 1991

Crass, D. C.
Guide for the Stephens Family Reunion Tour on the SRS.

WSRC NPR Reporter Tour of the historic town of Ellenton on the SRS.

Crass, D. C. and G. S. Lewis
Woodrow Wilson House Project, Historic Augusta, Inc., Augusta, GA.

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

September 1991

Green, W.
"The Archaeology and Ethnohistory of Altamaha: An Early 18th Century Yamasee Indian Town" presentation to the Charleston Chapter of the South Carolina Archaeological Society, Charleston, SC.

Lewis, G. S.
Volunteer excavations at the Tinker Creek Site (38AK224), Augusta Archaeological Society, Augusta, GA.

Sassaman, K. E.
"The Archaeology of Prehistoric Peoples of South Carolina" presentation to the 6th Grade at Kennedy Middle School, Aiken, SC.

"Archaic Prehistory in Eastern North America" presentation to Anthropology 330 class, Augusta College.

Sassaman, K. E. and G. S. Lewis
Artifact identification and water-screening techniques demonstration at Fall Field Day of the Archaeological Society of South Carolina, Santee State Park, SC.

END

DATE FILMED

7/6/92