Southeastern Archaeological Conference



Bulletin 28 1985

BULLETIN 28

SOUTHEASTERN ARCHAEOLOGICAL CONFERENCE

ABSTRACTS OF THE

FORTY-SECOND

SOUTHEASTERN ARCHAEOLOGICAL CONFERENCE

BIRMINGHAM, ALABAMA NOVEMBER 7-9, 1985

Edited by

Marvin D. Jeter

Center for American Archeology Kampsville Archeological Center Kampsville, Illinois

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The cover illustration depicts Vulcan, Roman god of the forge, whose statue atop Red Mountain symbolizes Birmingham's metalworking industries, holding aloft the archaeologist's symbolic tool: the trowel.

PREFACE AND ACKNOWLEDGEMENTS

Following the precedent begun with the 1982 Southeastern Archaeological Conference meeting, this number of the <u>SEAC Bulletin</u> is devoted to the abstracts of the symposia and papers presented at the 1985 SEAC meeting in Birmingham, Alabama.

The organization of this volume is fairly straightforward: it begins with a chronological summary of the entire program, listing the symposia and "contributed papers" sessions with the names of the contributors and the titles of their papers; next come the abstracts of the various symposia, again in chronological order; and finally, the abstracts of the papers, in alphabetical order of the last names of the authors or senior co-authors. The names of junior co-authors are also inserted into this alphabetical listing, with reference made to the senior co-authors for the actual abstracts. An indication of the date and time of a paper's presentation is added at the end of each abstract.

Organizing the 1985 SEAC meeting program has been an interesting and educational experience. I would like to thank first of all Jerry Miller, Executive Secretary of the Society for American Archaeology, for furnishing much valuable information on organizing meetings, and Ruthann Knudson for tipping me off about Jerry's resources. Credit for the idea of bringing SEAC back to Birmingham ("where it all began" in November, 1938, with an actual regional meeting in the Southeast) goes to my old(?) mentor, C. Roger Nance of the University of Alabama at Birmingham. I have greatly enjoyed working once again with Roger, who has been in charge of local arrangements for this SEAC meeting.

I am grateful for the good advice and support of the following SEAC officers: President Jeff Chapman, President-elect Jerry Milanich, Treasurer Ann Cordell, and Editor Vin Steponaitis (who deserves special thanks, along with Roger Nance, for reading a draft of this volume). Mary Youngblood of the Center for American Archeology in Kampsville, Illinois, did her usual fine job of word-processor inputting. Despite the best efforts of "all of the above," no doubt a few gremlins have found their ways into the works of the program and the pages of this volume. Their presence is, of course, my responsibility.

A special "thanks" goes to Brian M. Fagan of the University of California-Santa Barbara, a leading exponent of "public archaeology", for presenting our Keynote Address on "The Archaeology of Metallurgy". This is also a lecture in the "Regional Conversations" series, sponsored by the Linn-Henley Charitable Trust and the University of Alabama at Birmingham. We are also grateful to Dr. Blaine A. Brownell, Dean of the School of Social and Behavioral Sciences, and Dr. James H. Woodward, Senior Vice-President, University College, UAB, for their support of the Keynote Address and their help in providing UAB's printing services for this Bulletin and the meeting program.

We are indebted to Dr. Douglas Hyland, Director of the Birmingham Museum of Art, for providing space for our wine and cheese party, and an interesting exhibit of Southern folk art. Thanks are also due to the Birmingham Archaeological Society (a chapter of the Alabama

Archaeological Society) for hosting the party, and to the following sponsors: South Trust Bank of Alabama; Golden Enterprises; Piggly-Wiggly Food Stores of Jefferson County, Inc.; and Bruno's, Inc.

I would like to personally thank: the organizers, chairpersons, and discussants of the five symposia presented at this meeting; the chairpersons of the "contributed papers" sessions, who either volunteered or cheerfully assented when I drafted them; and the numerous contributors of papers, who generally sent in well-written abstracts on time and reasonably close to the ideal 100-word maximum. I have attempted to edit the lengthier abstracts down toward that ideal, while preserving as much of the substance as I could.

It has been a personal pleasure for me to be involved in bringing SEAC back to my old home town, and I only regret that the late Steve Wimberly, former State Archaeologist of Alabama, could not be with us for this meeting. Steve left the field of archaeology to work for U. S. Steel in Birmingham during the latter portion of his career, but retained a strong interest in archeology and was quite helpful to me when I was a neophyte in the early 1970s. I know that he would have enjoyed not only the prehistoric sessions of this program, but also those portions dealing with industrial/metallurgical subjects, and I would like to dedicate my efforts in assembling this program to his memory.

Marvin D. Jeter Kampsville, Illinois October, 1985

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1985 SEAC MEETING PROGRAM

THURSDAY, NOVEMBER 7

- MORNING SESSION A Caribbean Room
- SYMPOSIUM: THE PREHISTORIC ARCHAEOLOGY OF THE SAVANNAH RIVER VALLEY
- Organizers: Glen T. Hanson (Institute of Archeology & Anthropology, U South Carolina) and David G. Anderson (U Michigan)
- Chair: Glen T. Hanson (IAA-USC)
- 8:00 M. J. Brooks (IAA-USC), P. A. Stone (IAA-USC), J. Schuldenrein (Commonwealth Associates), J. G. Brown (IAA-USC), K. B. Steele (IAA-USC) and D. J. Colquhoun (IAA-USC) A GEOARCHAEOLOGICAL OVERVIEW OF THE SAVANNAH RIVER VALLEY
- 8:20 A. C. Goodyear and T. Charles (IAA-USC) PALEO-INDIAN IN SOUTH CAROLINA: A VIEW FROM THE SAVANNAH RIVER VALLEY
- 8:40 D. G. Anderson (U Michigan) and G. T. Hanson (IAA-USC) THE EARLY ARCHAIC OCCUPATION OF THE SAVANNAH RIVER BASIN
- 9:00 K. E. Sassaman (U Massachusetts) THE MIDDLE ARCHAIC IN THE SAVANNAH RIVER VALLEY: PATTERNS OF ADAPTIVE FLEXIBILITY
- 9:20 M. Alterman (Louis Berger & Associates) THE SAVANNAH RIVER LATE ARCHAIC
- 9:40 G. T. Hanson (IAA-USC) THE EARLY AND MIDDLE WOODLAND IN THE SAVANNAH RIVER VALLEY
- 10:00 COFFEE BREAK
- 10:20 W. D. Wood (Southeastern Archeological Services), T. P. Rudolph (U California-Santa Barbara) and M. J. Brooks (IAA-USC) THE LATE WOODLAND IN THE SAVANNAH RIVER VALLEY
- 10:40 D. G. Anderson (U Michigan), D. J. Hally (U Georgia) and J. L. Rudolph (U California-Santa Barbara) THE MISSISSIPPIAN OCCUPATION OF THE SAVANNAH RIVER VALLEY
- 11:00 D. J. Hally (U Georgia), C. Hudson (U Georgia), C. B. DePratter (IAA-USC) and M. T. Smith (Garrow & Associates) THE PROTOHISTORIC PERIOD ALONG THE SAVANNAH RIVER
- 11:20 E. J. Reitz (U Georgia) SURVEY OF VERTEBRATE REMAINS FROM THE SAVANNAH RIVER VALLEY
- 11:40 DISCUSSANTS: David S. Brose (Cleveland Museum of Natural History), Stephen Williams (Peabody Museum/LMS, Harvard), and James B. Stoltman (U Wisconsin)

- MORNING SESSION B Indian Room
- CONTRIBUTED PAPERS: SURVEYS; ARCHAIC; EARLY AND MIDDLE WOODLAND
- Chair: Jay K. Johnson (U Mississippi)
- 8:00 J. K. Johnson (U Mississippi) NINE YEARS OF NICKEL NASTIES IN NORTH MISSISSIPPI: AN EVALUATION OF SMALL SURVEY DATA
- 8:20 K. P. Cannon (U Tennsesee) PREHISTORIC SETTLEMENT IN THE WATTS BAR RESERVOIR, EAST TENNESSEE
- 8:40 L. B. Wayne (Water and Air Research) LOCATIONAL MODELING IN THE CHATTAHOOCHEE RIVER BASIN: NEW SUPPORT FOR OLD ARCHAEOLOGICAL ADAGES
- 9:00 H. S. Hale (U Florida) A PREDICTIVE MODEL OF SETTLEMENT AND SUBSISTENCE PATTERNS FOR THE CHARLOTTE HARBOR/PINE ISLAND SOUND ESTUARIES, SOUTHWEST FLORIDA, BASED ON SEA LEVEL FLUCTUATION
- 9:20 W. H. Marquardt (U Florida), H. S. Hale (U Florida), C. M. Scarry (Florida Division of Archives, History & Records Management) and K. J. Walker (U Florida) ENVIRONMENT AND CULTURAL CHANGE IN SOUTHWEST FLORIDA: SOME PRELIMINARY RESULTS FROM JOSSLYN ISLAND
- 9:40 K. H. Phillips (U Mississippi) 22TS1530: A STONE TOOL PRODUCTION STATION IN NORTHEAST MISSISSIPPI
- 10:00 W. L. Lawrence (Murray State U) ANALYSIS OF EXCAVATED AND SURFACE-COLLECTED MATERIALS FROM THE CRICK SITE (15CW96): A TURKEY-TAIL CACHE IN WESTERN KENTUCKY)
- 10:20 S. D. deFrance (U Florida) VERTEBRATE FAUNAL REMAINS FROM A DEPTFORD PERIOD MIDDEN IN THE FLORIDA PANHANDLE: THE PIRATE'S BAY SITE
- 10:40 V. Canouts (Smithsonian Institution) BIRD MOTIFS ON MIDDLE WOODLAND RITUAL WARE
- 11:00 A. S. Hohol and L. A. Beck (Northwestern U) COPENA CELTS: CONSIDERATIONS OF WEAR AND FUNCTION OF COPPER AND GREENSTONE ARTIFACTS
- 11:20 R. A. Saunders (U Florida) DESIGN VARIABILITY IN SWIFT CREEK COMPLICATED STAMP CERAMICS
- 11:40 T. P. Rudolph (U California Santa Barbara) LATE SWIFT CREEK AND NAPIER SETTLEMENT IN NORTH GEORGIA

- CONTRIBUTED PAPERS: HISTORIC AND CONTACT HISTORIC ARCHAEOLOGY
- Chair: Jack H. Wilson, Jr. (N. C. Department of Cultural Resources)
- 1:00 B. C. Allen (Appalachian State U) THE HISTORIC WARD SITE (31WT22), NORTHWESTERN NORTH CAROLINA
- 1:20 K. G. Wood (Southeastern Archeological Services) NINETEENTH CENTURY FOODWAYS IN THE PIEDMONT OF GEORGIA
- 1:40 W. D. Wood (Southeastern Archeological Services), K. R. Burns (Center for Archaeological Sciences) and S. R. Lee (Western Washington Research Extension Service) THE IMPORTANCE OF HISTORIC CEMETERIES: AN EXAMPLE FROM WESTERN GEORGIA
- 2:00 J. H. Wilson, Jr. (N. C. Department of Cultural Resources)
 MATERIAL REMAINS FROM THE SLAVE COMPOUND ARCHAEOLOGY AT SOMERSET
 PLACE STATE HISTORIC SITE, NORTH CAROLINA
- 2:20 K. J. Walker (U Florida) KINGSLEY PLANTATION AND SUBSISTENCE PATTERNS OF THE SOUTHEASTERN COASTAL SLAVE
- 2:40 B. Guevin and J. M. Exnicos (U. S. Army Corps of Engineers)
 ARCHAEOLOGICAL TESTING AT FORT ST. MARY (16PL37), AN EIGHTEENTH
 CENTURY FRENCH COLONIAL FORT AT ENGLISH TURN, PLAQUEMINES PARISH,
 LOUISIANA
- 3:00 M. F. Dickinson (Water and Air Research) ARCHAEOLOGICAL SITE LOCATION PATTERNS IN THE CENTRAL HIGHLANDS OF MARION COUNTY, FLORIDA
- 3:20 G. Shapiro (Florida Bureau of Archaeological Research) THE APALACHEE COUNCIL HOUSE AT SEVENTEENTH CENTURY SAN LUIS
- 3:40 R. A. Marrinan (Florida State U) THE SAN PEDRO DE PATALE MISSION LOCATIONS, LEON COUNTY, FLORIDA
- 4:00 K. W. Hardin (Piper Archaeological Research) INVESTIGATIONS AT THE SANTA MARIA MISSION SITE, AMELIA ISLAND, FLORIDA
- 4:20 J. Ford (U Mississippi) CALVIN BROWN AND ARCHAEOLOGY OF MISSISSIPPI

- SYMPOSIUM: THE STONE MOUND PROBLEM: TOWARD DEFINITION AND RESOLUTION
- Organizers and Co-Chairs: Thomas H. Gresham (Southeastern Archeological Services) and David L. McCullough (U. S. Army Corps of Engineers)
- 1:30 D. L. McCullough (U. S. Army Corps of Engineers) and T. H. Gresham (Southeastern Archeological Services) SOIL CHEMISTRY ANALYSIS AT A NORTHEAST GEORGIA ROCK PILE SITE
- 1:40 C. M. Niquette (Cultural Resource Analysts) STONE MOUNDS OF THE UPPR GASCONADE RIVER DRAINAGE OF THE SOUTH CENTRAL MISSOURI OZARKS
- 2:00 D. W. Chase (National Forests in Alabama) STONE STRUCTURE SITE 1CY32: A NATIONAL FOREST ENIGMA
- 2:20 A. F. Kirkland (U Alabama-Tuscaloosa) THE ARCHAEOLOGICAL SURVEY OF STONE MOUNDS ON MORGAN MOUNTAIN IN CALHOUN COUNTY, ALABAMA
- 2:30 J. M. Walker (Thunderbird Museum) and W. M. Gardner (Catholic U) STONE MOUNDS IN THE WESTERN MIDDLE ATLANTIC
- 2:50 COFFEE BREAK
- 3:10 T. H. Gresham (Southeastern Archeological Services) PATTERNS OF HISTORIC ROCK PILING
- 3:20 R. B. Clay (State Archaeologist, U Kentucky) DOWN WITH THE STONE MOUND PROBLEM: LONG LIVE RITUAL PRECINCTS
- 3:40 H. O. Holstein and K. J. Little (Jacksonville State U) STONE MOUND INVESTIGATIONS IN NORTHEAST ALABAMA
- 4:00 R. W. Jefferies (U Kentucky) MOUNDS, WALLS, AND EFFIGIES: AN EVALUATION OF PREHISTORIC STONE CONFIGURATIONS IN MIDDLE AND NORTH GEORGIA
- 4:20 C. B. Oakley (Alabama State Museum of Natural History) THE STONE MOUND PROBLEM: A THIRD OPTION
- 4:40 DISCUSSANT: James H. Kellar (Indiana U)

SEAC BUSINESS MEETING - CARIBBEAN ROOM, 5:15 - 6:00 PM

SEAC FILM FESTIVAL - CARIBBEAN ROOM, 7:30 - 9:30 PM
Executive Producer: C. Wesley Cowan (Cincinnati Museum of Natural History)

Key Grip: Bruce D. Smith (Smithsonian Institution)

FRIDAY, NOVEMBER 8

- MORNING SESSION A Arctic Room
- SYMPOSIUM: WHAT MEAN THESE BONES? THE DYNAMIC INTEGRATION OF PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY IN THE SOUTHEAST
- Organizers and Co-Chairs: Patricia S. Bridges (Queens College, CUNY), Ann Marie Mires (U Massachusetts) and Mary Lucas Powell (Smithsonian Institution)
- 8:00 G. R. Milner (U Kentucky) HUMAN SKELETONS AND INTERPRETATIONS OF MISSISSIPPIAN PERIOD CULTURAL CHANGE IN THE AMERICAN BOTTOM, ILLINOIS
- 8:20 J. C. Rose (U Arkansas) and M. K. Marks (Louisiana State U) BIOARCHAEOLOGY AND SUBSISTENCE IN THE CENTRAL AND LOWER MISSISSIPPI VALLEY
- 8:40 L. E. Eisenberg (New York U) MISSISSIPPIAN CULTURAL TERMINATIONS: WHAT THE BIOARCHAEOLOGICAL EVIDENCE CAN TELL US
- 9:00 T. A. Rathbun (U South Carolina) HEALTH AND DISEASE IN SOUTH CAROLINA SKELETAL SAMPLES: BLACK, WHITE AND RED
- 9:20 P. Miller-Shaivitz and M. Y. Iscan (Florida Atlantic U) TESTING ARCHAEOLOGICAL HYPOTHESES WITH OSTEOLOGICAL HUMAN REMAINS: PHYSICAL ANTHROPOLOGY OF THE FORT CENTER POPULATION
- 9:40 COFFEE BREAK
- 10:00 A. M. Mires (U Massachusetts) SIFTING THE ASHES: RECONSTRUCTION OF A COMPLEX ARCHAIC LOUISIANA MORTUARY PROGRAM FROM CREMATED SKELETAL REMAINS
- 10:20 K. R. Turner (U Alabama-Tuscaloosa) EPIDEMIC DISEASE IN THE EARLY HISTORIC SOUTHEAST
- 10:40 P. S. Bridges (Queens College, CUNY) SKELETAL EVIDENCE OF CHANGE IN SUBSISTENCE ACTIVITY PATTERNS IN ARCHAIC AND MISSISSIPPIAN POPULATIONS IN NORTH ALABAMA
- 11:00 C. S. Larsen (Northern Illinois U) and C. B. Ruff (Johns Hopkins U) BEHAVIORAL APPROACHES TO THE STUDY OF HUMAN REMAINS FROM THE GEORGIA COAST
- 11:20 L. A. Beck (Northwestern U) TRACE ELEMENTS AND DIETARY VARIATION DURING THE MISSISSIPPIAN PERIOD IN NORTH GEORGIA
- 11:40 DISCUSSANTS: Jane E. Buikstra (Northwestern U) and Bruce D. Smith (Smithsonian Institution)

MORNING SESSION B - Caribbean Room

CONTRIBUTED PAPERS: LATE PREHISTORIC, PROTOHISTORIC, AND EARLY CONTACT

Chair: C. Hudson (U Georgia)

- 8:00 V. J. Knight, Jr. (U Alabama) SYMBOLISM OF MISSISSIPPIAN MOUNDS
- 8:20 J. L. Rudolph (U California Santa Barbara) A SOUTH APPALACHIAN MISSISSIPPIAN ADAPTIVE NICHE
- 8:40 C. O. Braley (Southeastern Archeological Services) 9McI41: AN IRENE HOMESTEAD ON HARRIS NECK NATIONAL WILDLIFE REFUGE, COASTAL GEORGIA
- 9:00 T. R. Kidder (Peabody Museum/LMS, Harvard) JORDAN (16MO1): A LATE PREHISTORIC AND PROTOHISTORIC SITE IN NORTHEAST LOUISIANA
- 9:20 J. M. Mitchem (U Florida) EARLY SPANISH CONTACT IN THE COVE OF THE WITHLACOOCHEE: WINTER 1985 EXCAVATIONS AT THE TATHAM MOUND, CITRUS COUNTY, FLORIDA
- 9:40 C. Hudson (U Georgia), M. T. Smith (Garrow & Associates), C. B. DePratter (IAA-USC) and E. Kelley (U Georgia) THE TRISTAN DE LUNA EXPEDITION, 1559-1561
- 10:00 COFFEE BREAK
- 10:20 R. R. Polhemus (U Tennessee) THE SEARCH FOR TANASQUI
- 10:40 M. Williams (Lamar Institute/U Georgia) and G. Shapiro (Florida Bureau of Archaeolgoical Research/Lamar Institute) THE ANTIQUITY OF LAMAR CENTERS IN THE OCONEE PROVINCE
- 11:00 C. R. Nance (U Alabama-Birmingham) EXPLORING THE DIMENSIONS OF LAMAR INTER-SITE CERAMIC VARIABILITY
- 11:20 M. T. Smith (Garrow & Associates), M. Williams (Lamar Institute/U Georgia) and C. B. DePratter (IAA-USC) THE LAMAR INSTITUTE/IAA EXCAVATIONS AT TOMASSEE, 380C186
- 11:40 M. A. Harmon (IAA-USC) ANALYSIS OF HISTORICAL ARTIFACTS FROM THE LOWER CHEROKEE VILLAGES OF CHAUGA (380C1) AND ESTATOE (9ST3)

AFTERNOON SESSION A - Caribbean Room

CONTRIBUTED PAPERS: LATE WOODLAND, COLES CREEK, EARLY MISSISSIPPIAN

Chair: Robert H. Lafferty III (Mid-Continental Research Associates)

- 1:00 S. R. Ahler and R. W. Jefferies (U Kentucky) ARCHAEOLOGICAL INVESTIGATIONS AT 15GP14, NORTHEASTERN KENTUCKY
- 1:20 T. Sussenbach (U Illinois) NEW DATA ON THE LATE WOODLAND OF THE UPPER LOWER MISSISSIPPI VALLEY
- 1:40 D. B. Blanton (Garrow & Associates) TOWARD AN EXPLANATION OF CHANGES IN ABORIGINAL ARCHITECTURE IN THE SOUTHEAST
- 2:00 J. L. Gibson (U Southwestern Louisiana/U des Acadiens) and J. S. Belmont (Peabody Museum/LMS, Harvard) COALESCENT COLES CREEK
- 2:20 M. A. Rolingson (Arkansas Archeological Survey-Toltec) INTERNAL PLANNING OF LARGE CEREMONIAL CENTERS IN THE LOWER MISSISSIPPI VALLEY: TOLTEC MOUNDS EXAMPLE
- 2:40 COFFEE BREAK
- 3:00 R. H. Lafferty III and M. C. Sierzchula (Mid-Continental Research Associates) EARLY MISSISSIPPIAN ARROWPOINT REDUCTION IN THE EASTERN OZARKS
- 3:20 B. A. Smith (Kennesaw College) THE HOBGOOD SITE: A WOODSTOCK PERIOD SITE IN NORTHERN GEORGIA
- 3:40 G. F. Schroedl and C. C. Boyd, Jr. (U Tennessee) EXPLAINING MISSISSIPPIAN ORIGINS IN EAST TENNESSEE
- 4:00 C. B. Stout (U Illinois) SPATIAL RELATIONSHIPS AT A MISSISSIPPIAN CIVIC CENTER
- 4:20 B. M. Butler and J. S. Penny, Jr. (Southern Illinois U-Carbondale)
 THE FELDKER MOUND: A MISSISSIPPIAN MORTUARY FEATURE IN THE
 AMERICAN BOTTOM

AFTERNOON SESSION B - Arctic Room

SYMPOSIUM: INDUSTRIAL ARCHAEOLOGY IN THE SOUTHEAST

Organizer and Chair: Nicholas Honerkamp (U Tennessee-Chattanooga)

- 1:30 L. E. Babits (Armstrong State College-Savannah) THE CENTRAL OF GEORGIA TRAIN SHED: CONTINUITY BURIED
- 1:50 J. A. Barnes (Armstrong State) INVESTIGATIONS OF WILLINK'S MARINE RAILWAY, SAVANNAH, GEORGIA
- 2:10 R. B. Council (U Tennessee-Chattanooga) THE SUCCESSION OF HYDRAULIC POWER INSTALLATIONS AT A RURAL GEORGIA GRISTMILL: TECHNOLOGY AND ENVIRONMENT
- 2:30 N. Honerkamp (U Tennessee-Chattanooga) INNOVATION AND CHANGE IN THE SOUTHERN IRON INDUSTRY: AN EXAMPLE FROM CHATTANOOGA, TENNESSEE
- 2:50 S. D. Smith (Tennessee Division of Archaeology) A SURVEY OF CULTURAL RESOURCES PERTAINING TO TENNESSEE'S WESTERN HIGHLAND RIM IRON INDUSTRY, CA. 1795-1940
- 3:10 J. Bergstresser (U Alabama-Birmingham) THE INDUSTRIAL ARCHAEOLOGY OF ANTEBELLUM ALABAMA: STEAM-POWERED COAL MINING IN A SLAVE LABOR REGIME
- 3:30 DISCUSSANT: Brian M. Fagan (U California-Santa Barbara)

AFTERNOON SESSION C - Arctic Room

CONTRIBUTED PAPERS: ARCHAEOBOTANY

Chair: Richard A. Yarnell (U North Carolina)

- 4:00 R. A. Yarnell (U North Carolina) A SURVEY OF PREHISTORIC CROP PLANTS IN EASTERN NORTH AMERICA
- 4:20 K. J. Gremillion (U North Carolina) PLANT REMAINS FROM THE WESTMORELAND-BARBER AND PITTMAN-ALDER SITES, MARION COUNTY, TENNESSEE
- 4:40 C. R. Ison (U.S. Forest Service) THE ROLE OF FUNGI IN PREHISTORIC SUBSISTENCE SYSTEMS

RECEPTION AT BIRMINGHAM MUSEUM OF ART, 5:30 - 6:30 PM

KEYNOTE ADDRESS: 8:00 PM, Birmingham-Jefferson Civic Center Theater BRIAN M. FAGAN (University of California at Santa Barbara):
"THE ARCHAEOLOGY OF METALLURGY"

SATURDAY, NOVEMBER 9

- MORNING SESSION A Indian Room
- SYMPOSIUM: THE HAWKSHAW PROJECT: URBAN ARCHAEOLOGY AND HISTORY IN PENSACOLA, FLORIDA
- Organizer and Chair: Judith A. Bense (U West Florida)
- 8:00 J. A. Bense (U West Florida) THE HAWKSHAW PROJECT: CROSSING THE FRONTIER INTO URBAN AND PUBLIC ARCHAEOLOGY IN PENSACOLA, FLORIDA
- 8:20 E. F. Gadus (U West Florida) A SINGLE-COMPONENT DEPTFORD SITE AT HAWKSHAW, PENSACOLA, FLORIDA
- 8:40 R. R. Lurie (U West Florida) THE LITHIC ASSEMBLAGE OF THE DEPTFORD COMPONENT AT THE HAWKSHAW SITE
- 9:00 I. R. Quitmayr (U Florida) FISHING, SHELLFISHING AND HUNTING AT THE HAWKSHAW SITE, 8ES1287: A FAUNAL ANALYSIS OF A DEPTFORD PERIOD SITE ON PENSACOLA BAY
- 9:20 DISCUSSANT: Jerald T. Milanich (U Florida)
- 9:40 A. Gantzhorn (Historic Pensacola Preservation Board) THE HISTORY OF THE HAWKSHAW NEIGHBORHOOD AND ITS PLACE IN PENSACOLA HISTORY
- 10:00 R. W. Deiss (Kentucky History Musem) THE HISTORIC ARCHAEOLOGICAL RECOVERY AND INTERPRETATION OF HAWKSHAW: AN HISTORIC NEIGHBORHOOD IN PENSACOLA, FLORIDA
- 10:20 DISCUSSANT: R. S. Dickens, Jr. (U North Carolina)
- 10:40 D. C. Dusevitch (U West Florida) THE PUBLIC VISUAL AND GRAPHIC INTERPRETATION OF THE HISTORY AND ARCHAEOLOGY AT HAWKSHAW
- 11:00 M. Davey (Gulf Power Company) THE HAWKSHAW DOCUMENTARY FILM
- 11:20 J. E. Hansen (Gulf Power Company) CORPORATE MANAGEMENT AND THE HAWKSHAW ARCHAEOLOGY AND HISTORY PROJECT
- 11:40 DISCUSSANT: Hester A. Davis (State Archeologist, Arkansas Archeological Survey-Fayetteville)

- MORNING SESSION B Arctic Room
- CONTRIBUTED PAPERS: ANALYTICAL AND EXPERIMENTAL STUDIES
- Co-Chairs: Vincas P. Steponaitis (SUNY-Binghamton) and Christopher Carr (Arizona State U)
- 8:00 J. A. Homburg and B. J. Miller (Louisiana State U) PARTICLE SIZE DISTRIBUTIONS AS DETERMINED BY HYDROMETER/SIEVE AND PIPETTE/SIEVE METHODS: A COMPARISON OF SOILS FROM COWPEN SLOUGH (16CT147)
- 8:20 C. Carr (Arizona State U) COMPOSITIONAL ANALYSIS OF METEORITIC IRON FROM THE TUNACUNNHEE AND MANDEVILLE SITES (GEORGIA)
- 8:40 J. M. Leader (U Florida) METAL ARTIFACTS FROM FORT CENTER: ABORIGINAL METALWORKING IN THE SOUTHEASTERN UNITED STATES
- 9:00 C. Claassen (Appalachian State U) CHEMICAL SIGNATURES OF SHELLFISH FOOD REFUSE
- 9:20 B. K. Nodine (U Florida) SHELL MIDDEN FORMATION PROCESSES AT HONTOON ISLAND, FLORIDA
- 9:40 V. P. Steponaitis (SUNY-Binghamton) and K. W. Kintigh (U California-Santa Barbara) SOME NEW WAYS OF ESTIMATING SITE OCCUPATION SPANS FROM DATED ARTIFACTS
- 10:00 T. R. Whyte (U Tennessee) AN EXPERIMENTAL STUDY OF SMALL ANIMAL ENTRAPMENT IN PIT FEATURES
- 10:20 B. L. Manzano (U Tennessee) A STUDY OF BUTCHERING AND CARNIVORE GNAW MARKS ON CERVIDAE BONES FROM A ROCKSHELTER IN NORTHEASTERN TENNESSEE
- 10:40 R. M. Thorne and P. M. Fay (U Mississippi) HOT ROCKS: THERMAL ALTERATION OF CHERT IN AN ABOVE-GROUND OVEN

ABSTRACTS OF SYMPOSIA

(In order of presentation at the 1985 SEAC meeting.)

THE PREHISTORIC ARCHAEOLOGY OF THE SAVANNAH RIVER VALLEY

Organizers: Glen T. Hanson (Institute of Archeology & Anthropology, U South Carolina) and David G. Anderson (U Michigan)

Chair: Glen T. Hanson (IAA-USC)

Archaeological research in the Savannah River Valley has a rich heritage which began in the last century with the work of Thomas and Moore. Since these early endeavors, the scientific understanding of prehistoric cultural development in the valley has benefited by intensive research throughout the watershed. Recent studies conducted in the Piedmont and Coastal Plain provinces of the basin have brought the level of knowledge to a point which permits broad, synthetic statements. This symposium is composed of a series of papers which address the regional archaeological with the goals of characterizing assemblage variation, documenting settlement and demographic distributions, clarifying chronological criteria, determining organizational patterns and changes, and establishing overall summaries of specific chronological periods. These studies are augmented by a broad examination of the geoarchaeological information base in the region, which documents localized and regional changes in hydrology, vegetation, climate, and sedimentation over the valley, and by a synthesis of zooarchaeological information derived from the sites in the valley. In sum, this symposium offers a compilation of the current state of prehistoric and protohistoric, geoarchaeological and zooarchaeological knowledge in the Savannah River Basin. (11/7 AM)

Discussants: David S. Brose (Cleveland Museum of Natural History), Stephen Williams (Peabody Museum/LMS, Harvard) and James B. Stoltman (U Wisconsin)

THE STONE MOUND PROBLEM: TOWARD DEFINITION AND RESOLUTION

Organizers and Co-Chairs: Thomas H. Gresham (Southeastern Archeological Services) and David L. McCullough (U. S. Army Corps of Engineers)

Stone mounds in the Eastern United States have been the subject of archaeological investigation for over a hundred years, yet they remain a "problem" in that the distribution, variability, function, and cultural significance of many of them remain unclear. While investigation of larger stone mounds has demonstrated a Woodland period mortuary function, the association of these mounds with numerous other types of stone configurations, or with other Woodland period site types, has not been clearly defined. This symposium will review what is known about stone mound sites and will describe and assess current research goals and methods in order to formulate a regional research design that will effectively deal with the stone mound problem. (11/7 PM)

Discussant: James H. Kellar (Indiana U)

WHAT MEAN THESE BONES? THE DYNAMIC INTEGRATION OF PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY IN THE SOUTHEAST

Organizers and Co-Chairs: Patricia S. Bridges (Queens College, CUNY), Ann Marie Mires (U Massachusetts) and Mary Lucas Powell (Smithsonian Institution)

Modern studies in Southeastern physical anthroopology embrace a wide range of concerns beyond description of static physical types, diagnosis of isolated pathological specimens, and simple estimates of demographic profiles. The papers included in this symposium exemplify the new "bioarchaeological" approach, presenting osteological data from archaeological contexts in interpretations which draw upon current research in ecology, epidemiology, nutrition, developmental biology, and kinematics.

The focus of the first group of papers is upon broad-spectrum assessment of adaptive success, measured by skeletal and dental evidence of age at death, infectious and traumatic pathology, nutritional deficiencies, and disruptions in growth and development. Milner, Rose, and Marks address the biological implications of long-term alterations in subsistence and settlement patterns attendant upon intensification of agriculture in the Central and Lower Mississippi River Valley, noting differential distribution of stress between and within sites of differing size and Eisenberg presents evidence of poor health due to organization. intensive occupation and inadequate diet in a terminal Mississippian community in central Tennessee. Miller-Shaivitz and Iscan test hypotheses predicting superior health for a specialized population segment occupying a ceremonial site in the Lake Okeechobee basin in Rathbun identifies skeletal consequences of heavy workloads, frequent infection, and poor childhood diet in a mid- to late 19th Century Black population from Charleston, South Carolina.

In the second group of papers, the themes are more diverse. Mires delineates body processing and curation of selected elements within a complex mortuary program featuring cremation and fragmentation of remains from a Louisiana Archaic site. Turner combines techniques from paleodemography and paleoepidemiology to interpret variations in morbidity and mortality after AD 1550 in Alabama and Georgia, concluding that post-1700 patterns indicate a gradual adaptation to introduced diseases. Bridges, Larsen, and Ruff associate contrasting patterns of arm and leg bone size and strength with variations in diet and specific activities in pre-agricultural and agricultural populations from north Alabama and coastal Georgia. Beck interprets variations in levels of trace elements in bone samples from major and minor Mississippian sites in north Georgia as evidence of a broader-based, more balanced diet in later times.

This symposium was organized to encourage continued cooperation between archaeologists and physical anthropologists concerned with aspects of Southeastern population adaptations. The research presented here represents fruitful outcomes of such cooperation, and should inspire future efforts to this end. (11/8 AM)

Discussants: Jane E. Buikstra (Northwestern U) and Bruce D. Smith (Smithsonian Institution)

INDUSTRIAL ARCHAEOLOGY IN THE SOUTHEAST

Organizer and Chair: Nicholas Honerkamp (U Tennessee-Chattanooga)

Papers in the Symposium on Industrial Archaeology in the Southeast reveal a broad spectrum of research on industrial sites and processes, a diversity of topics characteristic of the discipline itself. The iron industry of the southern Appalachian region is discussed in two papers, one describing the methodologies for a thematic survey of iron industry sites in a geographic region, the other, a detailed archaeological examination of innovation and technology at a pioneering blast furnace. Changes in industrial technology are also discussed in papers on archaeological investigations of a marine railway and a railroad site. The interaction of technology and environment is treated in a paper on hydraulic power systems at a rural gristmill. A final paper summarizes recent and potential research in the Birmingham region. (11/8 PM)

Discussant: Brian M. Fagan (U California-Santa Barbara)

THE HAWKSHAW PROJECT: URBAN ARCHAEOLOGY AND HISTORY IN PENSACOLA, FLORIDA

Organizer and Chair: Judith A. Bense (U West Florida)

The Hawkshaw Project was an urban archaeological and historical non-compliance project funded by the Gulf Power Company to preserve the information of the past occupations of an 11-acre area of a downtown working class neighborhood prior to the construction of an executive building complex. The archaeological deposits included a single-component Deptford site (mean date 178 AD) with 144 refuse pits, some of which appear to be organized into "clusters" and may be the remains of separate "living groups". The historical component was characterized by residential lots with features, especially refuse pits, dating from the post-Civil War to the present. The project was designed to benefit the scholarly and public audiences equally. The public products include a documentary film, a book for the layman, a package for the public school system and exhibits in the new building. This project has spurred public interest and a City archaeological program to identify and protect the City's archaeological resources. (11/9 AM)

Discussants: Jerald T. Milanich (U Florida), Roy S. Dickens, Jr. (U North Carolina) and Hester A. Davis (State Archeologist, Arkansas Archeological Survey-Fayetteville)

ABSTRACTS OF PAPERS

(In alphabetical order by last name of author or senior co-author. Junior co-authors, last names are also included in the alphabetical listing, with reference to their senior co-authors.)

Ahler, Steven R. and Richard W. Jefferies (U Kentucky) ARCHAEOLOGICAL INVESTIGATIONS AT 15GP14, NORTHEASTERN KENTUCKY

Testing and major excavation of a portion of this site revealed at least three buried prehistoric occupational strata. The uppermost received the most attention, with about $400\,\mathrm{m}^2$ excavated. A light midden with associated posts, pit features, and architectural elements was encountered in the matrix of a buried A horizon. This upper occupation contains primarily Late Woodland Newtown phase materials (500-800 AD). Mechanical exposure of the lower strata revealed scattered pit and surface features which apparently date to the Late Archaic period. No additional midden or paleosol development was observed. Completion of analysis is targeted for early 1987. (11/8, 1:00 PM)

Allen, Bradley C. (Appalachian State U) THE HISTORIC WARD SITE (31WT22), NORTHWESTERN NORTH CAROLINA

The date for the historic structure at the Ward site is ca. 1780, based on the artifacts discovered. These artifacts include metal, such as nails, a bit and a hinge and Moravian ceramics in the form of slip-decorated ware and pipe bowls. Some aboriginal artifacts were also found in association with the historic structure. These artifacts include stone gaming discs and aboriginal ceramics. (11/7, 1:00 PM)

Alterman, Michael L. (Louis Berger & Associates) THE SAVANNAH RIVER LATE ARCHAIC

The Late Archaic (ca. 3000 - 1000 BC) was a period of significant cultural transformations in the Savannah River Valley. Changes in technology and the patterns of lithic utilization provide material evidence for a diversification of settlement patterning, which includes increased sedentism. The classic sequence from the Stalling's Island site is examined in light of more recent investigations along the river and provides a reassessment of aspects of the Late Archaic, including the introduction of ceramic technology and the development of territoriality. The traditional concept of Late Archaic shellfish eaters benefiting from the abundance of their environment is also discussed in terms of models of hunter-gatherer adaptations and procurement strategies. (11/7, 9:20 AM)

Anderson, David G. (U Michigan), David J. Hally (U Georgia) and James L. Rudolph (U California-Santa Barbara) THE MISSISSIPPIAN OCCUPATION OF THE SAVANNAH RIVER VALLEY

Extensive surveys and excavations in Georgia and the Carolinas and within

the Savannah River Basin itself over the past 15 years permit the detailing of socio-political, settlement, and subsistence evolution. Within the Savannah Basin, the Woodland-initial Mississippian transition is characterized by a shift from small, widely dispersed sites to larger, nucleated settlements near the floodplain. This coincides with the appearance of ceremonial centers dominated initially by earthlodges and later by burial/platform mounds, and villages dominated by first circular and later square/rectangular structures. Subsistence proceeds from a general to a more focused pattern of procurement of wild plant and animal resources, coupled with an increasingly intensive reliance on agriculture. Evidence documenting the appearance and evolution of discrete chiefly societies within the valley is emerging; this process appears to be linked to political developments throughout the region. (11/7, 10:40 AM)

Anderson, David G. (U Michigan) and Glen T. Hanson (Institute of Archeology & Anthropology, U South Carolina) THE EARLY ARCHAIC OCCUPATION OF THE SAVANNAH RIVER BASIN

Surveys and excavations conducted since 1975 have yielded a wealth of information about the organization and adaptive strategies of Early Archaic populations, both within and adjacent to the Savannah River drainage. Excavations at Rucker's Bottom (9EB91) and G. S. Lewis (38AK228) have yielded large, complementary assemblages indicating a watershed-extensive adaptation employing a mixed collector-forager strategy. Analyses and comparative studies document an increase in expedient technologies at the expense of more formalized technologies. Raw material distributions further suggest an extensive range of Analyses of resource structure, theoretical arguments, and archaeological evidence suggest that large drainage systems served subsistence/resource needs while bio-cultural interaction operated both along and across watershed boundaries. A pan-regional settlement model, based on band/macroband mobility and interaction, is thought to partially account for the variation during this period on the South Atlantic Slope. (11/7, 8:40 AM)

Babits, L. E. (Armstrong State College-Savannah) THE CENTRAL OF GEORGIA TRAIN SHED: CONTINUITY BURIED

Excavations at the Central of Georgia Train Shed, Battlefield Park, Savannah, Georgia, provided a series of profiles relating to the succession of changing rail technologies in the South. From original rails recovered <u>in situ</u> to 1950s period rails on the surface, a sequence was noted which sheds light on rail constructions in a marshy environment over time. (11/8, 1:30 PM)

Barnes, Julie A. (Armstrong State College-Savannah) INVESTIGATIONS OF WILLINK'S MARINE RAILWAY, SAVANNAH, GEORGIA

Shipping was an integral part of Savannah's culture in the late nineteenth century, as exemplified in the construction of a marine railway and shippard complex by Henry F. Willink in 1873. With the approach of the twentieth century, increased industrialization resulted

in the decline of this family-owned business. Archaeological investigations allowed the reconstruction of the railway through the extant features on the site. The remains indicated that the complex was extensive and it was concluded that the site was indeed important to Savannah's shipping industry. Furthermore, the investigations led to additional hypotheses about changes which took place in shipping from the late nineteenth century to the early twentieth century. (11/8, 1:50 PM)

Beck, Lane A. (Northwestern U) TRACE ELEMENTS AND DIETARY VARIATION DURING THE MISSISSIPPIAN PERIOD IN NORTH GEORGIA

Journals kept by early explorers refer to extensive fields of corn surrounding villages of Southeastern American Indians. Building on this information, archaeologists have viewed the Mississippian period as involving increasing utilization of cultivated crops. Recent trace element analysis of human skeletal materials from three Mississippian cemeteries in north Georgia has suggested that at the time of first European contact, Indians in this area of the Southeast were exploiting a broader subsistence base than those earlier in the Mississippian period. Alternatively, it may be argued that the variability in diet is associated with site size, with the smaller settlements utilizing a broader range of resources. Examination of additional collections is necessary to determine which of these interpretations is correct. (11/8, 11:20 AM)

Beck, L. A. (see Hohol, A. S.)

Belmont, J. S. (see Gibson, J. L.)

Bense, Judith A. (U West Florida) THE HAWKSHAW PROJECT: CROSSING THE FRONTIER INTO URBAN AND PUBLIC ARCHAEOLOGY IN PENSACOLA, FLORIDA

The Hawkshaw Project has been everything that "traditional archaeology" usually is not: non-compliance, privately funded, urban, locally generated by a group of professionals and interested citizens, without federal or state review procedures, including both archaeologists and historians, and the public audience is as important as the scholarly audience in receiving the information. The project encountered an unusual single-component Deptford site which provides a baseline of information in this westernmost area of the Deptford culture. The historic occupation was a working-class residential neighborhood which deteriorated following the Depression. This project has initiated a City archaeological policy, increased public awareness, and opened a new avenue of archaeology in this area. (11/9, 8:00 AM)

Bergstresser, Jack (U Alabama-Birmingham) THE INDUSTRIAL ARCHAEOLOGY OF ANTEBELLUM ALABAMA: STEAM-POWERED COAL MINING IN A SLAVE LABOR REGIME

By the 1850s, foreboding of war and growing misgivings about the viability of a monocultural economy triggered efforts to develop the mineral region of north-central Alabama. A showpiece of this effort was

a steam-powered mine opened in the Cahaba coal field. Archaeological and written records reveal: employment of free labor; adoption of the latest technology; and support of the Alabama legislature, which passed specific legislation to facilitate the mine's operation. These features suggest the presence of a modernizing entrepreneural sector ready to abandon the old ways. By focusing on the material remains of past industrial activity, industrial archaeologists have a unique empirical perspective to contribute to larger historical questions. (11/8, 3:10 PM)

Blanton, Dennis B. (Garrow & Associates) TOWARD AN EXPLANATION OF CHANGES IN ABORIGINAL ARCHITECTURE IN THE SOUTHEAST

Through at least the Woodland and Mississippian periods, the predominant architectural form changed from primarily circular or elliptical to rectangular. These changes occur among both secular and non-secular structures. This pattern is documented by remains reported from Georgia, Alabama, South Carolina and North Carolina. Although purely technofunctional considerations in structural design were of at least limited importance in effecting these changes, changing social and ideological factors may also have played important roles. Namely, changes in sociopolitical organization and ideological complexity documented for these periods might be manifested in these corresponding architectural changes. (11/8, 1:40 PM)

Boyd, C. C. (see Schroedl, G. F.)

Braley, Chad O. (Southeastern Archeological Services) 9McI41: AN IRENE HOMESTEAD ON HARRIS NECK NATIONAL WILDLIFE REFUGE, COASTAL GEORGIA

Excavations at 9McI41, a Mississippian and Protohistoric site located on Harris Neck, west of St. Catherine's Island, revealed over 500 features including late Mississippian structural remains, daub processing pits, large refuse-filled pits, a burial, and scattered postmolds. Zooarcheological analyses suggest a year-round occupation during the late prehistoric Irene/Pine Harbor period. Two C-14 samples date the Irene/Pine Harbor component to about AD 1400. The protohistoric component included Spanish olive jar and majolica sherds, and two C-14 samples date this occupation to about AD 1650. Eleven vessel shape categories were recognized, with significant differences noted in the distribution of vessel shapes in domestic vs. mortuary assemblages (11/8, 8:40 AM)

Bridges, Patricia S. (Queens College, CUNY) SKELETAL EVIDENCE OF CHANGE IN SUBSISTENCE ACTIVITY PATTERNS IN ARCHAIC AND MISSISSIPPIAN POPULATIONS IN NORTH ALABAMA

Modern ethnological research has shown that primitive hoe agriculture is associated with an increase in workload over hunting and gathering. This paper considers the differences in the level and type of subsistence activities of Archaic and Mississippian inhabitants of the middle Tennessee River Valley, as reflected by changing patterns of post-cranial size and strength. Major findings show: (1) in general, Mississippian

agriculturalists had relatively thicker and stronger long bone shafts than did their Archaic predecessors; and (2) the females changed more than did the males. Mississippian females had stronger arms and legs than Archaic females. Mississippian males had much stronger legs than Archaic males but their upper arms were similar in size and strength. Some of the differences may be attrributed to specific changes in subsistence activities. Mississippian females show large increases in many dimensions of the arms. This pattern is most likely due to pounding dry corn in mortars. The overall increases in size and strength in the Mississippian group correspond with intensive hoe agriculture. Larger and more widespread changes occur in the females, as a result of their relatively greater participation in agricultural tasks. (11/8, 10:40 AM)

Brooks, Mark J. (Institute of Archeology & Anthropology, U South Carolina), Peter A. Stone (IAA-USC), Joseph Schuldenrein (Commonwealth Associates), Janice G. Brown (IAA-USC), Kathy B. Steele (IAA-USC) and Donald J. Colquhoun (IAA-USC) A GEOARCHAEOLOGICAL OVERVIEW OF THE SAVANNAH RIVER VALLEY

Previous Holocene geoarchaeological research in the Savannah River Valley is synthesized in light of broader environmental change patterns documented for the Southeastern United States. Toward this end, available stratigraphic, sedimentological, hydrological, palynological and C-14 data from the Savannah River Valley are examined in order to determine the times and rates of salt marsh, floodplain, river swamp and terrace development. Possible correlates between these developmental trends and observed archaeological site patterning are then explored in order to ascertain fruitful avenues of inquiry for future geoarchaeological research in the Savannah River Valley. (11/7, 8:00 AM)

Brooks, M. J. (see Wood, W. D.)

Brown, J. G. (see Brooks, M. J.)

Burns, K. R. (see Wood, W. D.)

Butler, Brian M. and James S. Penny, Jr. (Southern Illinois U) THE FELDKER MOUND: A MISSISSIPPIAN MORTUARY FEATURE IN THE AMERICAN BOTTOM

Excavations at the Feldker site have documented a mortuary feature which appears to represent a previously unrecognized facet of the American Bottom Mississippian mortuary program. The feature is a small oval mound on a blufftop. It contained large quantities of highly fragmented burned and unburned human bone. Analysis suggests that the mound represents the final deposition of material from one or more charnel structures. Ceramics indicate an association with either the Moorehead or Sand Prairie phase. Such sites may have been frequently overlooked and may be more common than present data indicate. (11/8, 4:20 PM)

Cannon, Kenneth P. (U Tennessee-Knoxville) PREHISTORIC SETTLEMENT IN THE WATTS BAR RESERVOIR, EAST TENNESSEE

The Department of Anthropology, University of Tennessee, is conducting an archaeological survey of the Watts Bar Reservoir, East Tennessee. This survey, restricted to above-pool portions of the Reservoir, encompasses a much wider range of environments than previous surveys, which were biased toward highly obtrusive sites adjacent to the main river channel. Only 5% of the previously documented sites are in ecological settings other than along the main river channel. In contrast, this survey provides a much broader base of data about prehistoric human settlement in this portion of the Upper Tennessee Valley. (11/7, 8:20 AM)

Canouts, Veletta (Smithsonian Institution) BIRD MOTIFS ON MIDDLE WOODLAND RITUAL WARE

The similarity of the bird iconography appearing on Middle Woodland ritual ceramic vessels is an effective communicator, but the similarity of the information exchanged is conditioned by its context. Beyond sharing ideology is a variety of ways such information is used and incorporated by a society. The way in which stylistic boundaries are opened and closed in the reproduction of ritual ware responds to the group or individuals who are bounding other social identities involved in production and alliance. The results of an analysis of ritual ware recovered from four localities along the Mississippi River Valley suggest that organized social and ritual behavior were affecting the stylistic variation. (11/7, 10:40 AM)

Carr, Christopher (Arizona State U) COMPOSITIONAL ANALYSIS OF METEORITIC IRON FROM THE TUNACUNNHEE AND MANDEVILLE SITES (GEORGIA).

Chemical analyses of several meteoritic iron artifacts from Tunacunnhee and Mandeville, using energy-dispersive X-ray spectrometry, are presented. The data, along with a comparison of the distribution of Middle Woodland meteoritic iron artifacts to that of meteorite falls over the eastern United States, suggest the diverse nature of Hopewellian procurement and exchange of iron and differing relationships of various Southeastern Middle Woodland complexes to Ohio or Illinois Hopewell groups. (11/9, 8:20 AM)

Charles, T. (see Goodyear, A. C.)

Chase, David W. (National Forests in Alabama) STONE MOUNDS: A NATIONAL FOREST ENIGMA

Of over 350 archaeological sites found in the five National Forest districts in Alabama, 15 have been found to contain stone "mounds" or structures. During an assessment of several exchange tracts in the Talladega Ranger District, two very large stone structure sites were found. These were deemed to be potentially significant and since the law required a determination of significance before exchange could take place, excavation of three mound units was performed. Findings strongly

suggested an aboriginal origin; however, no firm conclusion could be reached. (11/7, 2:00 PM)

Claassen, Cheryl (Appalachian State U) CHEMICAL SIGNATURES OF SHELLFISH FOOD REFUSE

Neutron activation and XRF have been used to derive chemical signatures for shellfish food refuse from prehistoric sites in Onslow Bay, Bulls Bay, south Florida Gulf coast sites, Choctawhatchee Bay, Escambia and Perdido Bay. Individual elements, particularly Europium, barium and cobalt, are proving to be unique to each locality. (11/9, 9:00 AM)

Clay, R. Berle (Office of State Archaeology, U Kentucky) DOWN WITH THE STONE MOUND PROBLEM: LONG LIVE RITUAL PRECINCTS

It is argued that the genesis of the "stone mound problem" lies in late 19th Century archaeology in the eastern United States. No longer a useful way of looking at archaeological matters, it now in fact inhibits our understanding of very diverse phenomena. What we are talking about is "isolated ritual precincts" which flourished after the Archaic, partly as stone structures, partly as earthen mounds, partly as a variety of enclosures. Problems of their interpretation in general will be sketched. Illustrative materials are drawn principally from Kentucky. (11/7, 3:20 PM)

Colquhoun, D. T. (see Brooks, M. J.)

Council, R. Bruce (U Tennessee-Chattanooga) THE SUCCESSION OF HYDRAULIC POWER INSTALLATIONS AT A RURAL GEORGIA GRISTMILL: TECHNOLOGY AND ENVIRONMENT

An intensively excavated penstock at Ross (Merrell's) Mill in Putnam County, Georgia, revealed a series of wooden center-discharge scroll wheels which powered the mill in the late 1800s. However, a knowledgeable local informant explained the presence of two dams by noting that an overshot wheel powered the mill in the early 20th century. The shift from a primitive type of turbine to a more traditional overshot water wheel may reflect a millwright's idiosyncratic preference for conventional technology or the adaptation of the mill seat to changes in local hyrdological circumstances, namely, the culturally-accelerated siltation of Oconee River channels caused by erosive 19th century agricultural practices. (11/8, 2:10 PM)

Davey, Mike (Gulf Power Company) THE HAWKSHAW DOCUMENTARY FILM

As part of the public interpretation of the Hawkshaw project, a 45-minute documentary film was made by Gulf Power. It is targeted for people of all ages and will be shown to secondary school and college level classes, community interest groups, and visitors to Gulf Power's exhibitions. This film meets both corporate and archaeological goals of community contribution and education. There is no narration; the participants

describe their own involvement and contribution to the project as it is being visually shown. This reveals the people behind the project as well as what the project itself looked like. The real value of the film lies in its accessibility to the public through very available television systems. A 15-minute segment will be shown in this presentation. (11/9, 11:00 AM)

deFrance, Susan D. (U Florida) VERTEBRATE FAUNAL REMAINS FROM A DEPTFORD PERIOD MIDDEN IN THE FLORIDA PANHANDLE: THE PIRATE'S BAY SITE

The Pirate's Bay site (80K183) is an Okaloosa phase Deptford period midden on the mainland shore of Santa Rosa Sound near Fort Walton Beach. Excavations conducted by New World Research, Inc., during 1984 produced a substantial quantity of well-preserved faunal remains. A sample of the vertebrate zooarchaeological material was selected for analysis from the predominant feature types, and from the midden strata. Although diverse vertebrate species are represented, analysis indicates a specialized fishing economy. This strategy emphasized the procurement of two species of jack fishes: blue runner, <u>Caranx fusus</u> and crevelle jack, <u>C. hippos.</u> Comparisons with data from other Deptford sites are made and probable procurement methods and seasonality inferences are discussed. (11/7, 10:20 AM)

Deiss, Ron W. (Kentucky History Museum) THE HISTORIC ARCHAEOLOGY RECOVERY AND INTERPRETATION OF HAWKSHAW: AN HISTORIC NEIGHBORHOOD IN PENSACOLA, FLORIDA

The historic archaeological record at Hawkshaw contained remains from residential occupations for the last 150 years. The organization of the yardlots varied from very structured and stable to non-structured with frequent encroachment of new residences into previous yard space. Testing revealed an abundance of refuse pits with some privies, French drains, and wells. The excavation strategy involved the selection of two residential lots and one midden area to address hypotheses about the different ways of life which had occurred there. The large quantity and variation of the material required complex descriptive and analytical methods. Computerization increased the use of this mass of data. The information recovered adds greatly to our understanding of the growth, development and eventual decline of a working-class neighborhood in an urban coastal city. (11/9, 10:00 AM)

DePratter, C. B. (see Hally, D. J.)

DePratter, C. B. (see Hudson, C.)

DePratter, C. B. (see Smith, M. T.)

Dickinson, Martin F. (Water and Air Research) ARCHAEOLOGICAL SITE LOCATION PATTERNS IN THE CENTRAL HIGHLANDS OF MARION COUNTY, FLORIDA

This paper addresses site location patterns adjacent to secondary water sources in the Central Highlands of Florida. A total of 11 archaeological sites, located in two study areas, ranged in time from the Early Archaic to the Seminole/American planter period. Secondary testing was conducted on seven sites, and extensive excavation prior to development was carried out on five of the seven sites. Three excavated sites date to the Seminole Indian occupation of the area (ca. 1823 to 1837). The study contributes to knowledge of Seminole site distribution, characteristics and artifact assemblage. Changes in the settlement patterns can be related to specific technological, environmental and political factors. (11/7, 3:00 PM)

Dusevitch, Dianne C. (U West Florida) THE PUBLIC VISUAL AND GRAPHIC INTERPRETATION OF THE HISTORY AND ARCHAEOLOGY AT HAWKSHAW

Interpreting information about the past ways of life at Hawkshaw to the public was the primary motivation of this project for Gulf Power Company, and it was a full partner in the factual presentation to the scholarly community. The results included: a 45-page illustrated book summarizing the scientific report in layman's language; a 34-page educational coloring book; a tri-panel pamphlet containing a brief historical overview and orientation material; a public school packet; a post-exhibit visit educational box; and educational, art, and architectural elements which will be incorporated into the structure of the Gulf Power Headquarters Complex. (11/9, 10:40 AM)

Eisenberg, Leslie E. (New York U) MISSISSIPPIAN CULTURAL TERMINATIONS: WHAT THE BIOARCHAEOLOGICAL EVIDENCE CAN TELL US

This paper investigates the problem of Middle Cumberland Culture terminations using a bioarchaeological approach which analyzes the evidence for disease in the human burials from Averbuch, a large habitation-cemetery site located near Nashville, Tennessee, apparently occupied on a number of different occasions from approximately AD 1275 to 1375. Results indicate that nutritionally-related pathologies, along with high levels of infection affecting all segments of the population, were prevalent. These conditions, reflective of high population density as well as subsistence and nutritional problems, may well have had a negative impact on human adaptation and may have been a contributing factor to Middle Cumberland Culture terminations prior to European contact. (11/8, 8:40 AM)

Exnicos, J. M. (see Guevin, B.)

Fay, P. M. (see Thorne, R. M.)

Archaeology of Mississippi (1926) by Calvin S. Brown, is considered a classic volume in early Southeastern archaeology. Brown, himself, was also a classic. Formally a professor of Modern Languages, his interest in archaeology, combined with a background in natural sciences, resulted in a methodology far in advance of the times. His detailed records reveal a wealth of data which yield an insight into the history of archaeological investigation in the state while providing information vital to a productive restudy of his collection of artifacts. The original manuscript of his 1926 publication reflects a remarkable scholar at work. His other publications and unpublished journals reveal a scientist, an archaeologist, and a man of wit -- a Renaissance man whose contribution to the archaeology of the Southeast endures. (11/7, 4:20 PM)

Gadus, Eloise (U West Florida) A SINGLE COMPONENT DEPTFORD SITE AT HAWKSHAW, PENSACOLA, FLORIDA

The prehistoric component at Hawkshaw was limited to a brief occupation. The Deptford deposits consisted of 144 prehistoric refuse pits which contained an abundance of cultural material. The ceramic assemblage was dominated by classic Deptford types with minorities of complicated stamped and incised types. Many reconstructable vessels were present. Many of the pits appear to be organized into clusters which may be the refuse areas for separate "living groups". Marine resources were the primary subsistence base, and many different areas of the bay were utilized, including deep waters. The date range is 50 BC-320 AD, and is later than expected. (11/9, 8:20 AM)

Gantzhorn, Alan (Historic Pensacola Preservation Board) THE HISTORY OF THE HAWKSHAW NEIGHBORHOOD AND ITS PLACE IN PENSACOLA HISTORY

Pensacola was first settled in 1559 by deLuna. However, this attempt did not succeed, and the Spanish did not return until 1698. The mainland in the vicinity of the Hawkshaw neighborhood was first occupied by the Spanish in 1752. The British governor in 1771 constructed a summer villa in Hawkshaw. During the second Spanish Period (1781-1821), Pensacola was in a turmoil; after American possession in 1821, Hawkshaw was occupied again. This boom ended with the Civil War. Recovery was swift; Hawkshaw developed into a working-class neighborhood with adjacent sawmills, railroads and wharfs. With the collapse of the lumber industry in 1914, the city's growth halted, only to pick up again in the 1940s with the growth of military bases. The city continued to expand, and the neighborhood became a poor area with an older population. Almost none of the residences remain today, since the area is changing into one of corporate business, entertainment, and condominiums. (11/9, 9:40 AM)

Gardner, W. M. (see Walker, T. M.)

Gibson, Jon L. (U of Southwestern Louisiana/Universite des Acadiens) and John S. Belmont (Peabody Museum/LMS, Harvard) COALESCENT COLES CREEK

Although Late Coles Creek culture was generally homogeneous throughout its Lower Mississippi Valley homeland, the coalescent stages of that culture were not. Growing out of two somewhat similar but separate Late Woodland traditions, Baytown in the north and Troyville in the south, the five or so ceramically recognizable proto-Coles Creek or Early Coles Creek subcultures contributed uniquely toward that eventual region-wide convergence after ca. AD 1000. A cultural-historical and typological framework more in line with the variability inherent at the outset of this episode of accelerated culture change is proposed. (11/8, 2:00 PM)

Goodyear, Albert C. and Tommy Charles (Institute of Archaeology & Anthropology, U South Carolina) PALEO-INDIAN IN SOUTH CAROLINA: A VIEW FROM THE SAVANNAH RIVER VALLEY

The study of Paleo-Indian peoples in South Carolina has been constrained by the lack of sites with stratigraphic integrity. Classic Clovis points were reported from Georgia and South Carolina by Wauchope and Waring several decades ago. An extensive fluted point survey conducted by Michie for South Carolina in the '60s and '70s strongly indicated that a major concentration of lanceolate points was related to the chert sources of Allendale County, S. C. and Brier Creek in Georgia. A subsequent survey of private collections by Charles in South Carolina has revealed a similar pattern. Although fluted points and early related lanceolate forms have been infrequently excavated in the Savannah River Valley, no sites with a definable pre-Dalton horizon have yet been discovered. Typological patterns are presented based on extensive artifact collections, and are suggested to have temporal and adaptive significance. (11/7, 8:20 AM)

Gremillion, Kristen Johnson (U North Carolina) PLANT REMAINS FROM THE WESTMORELAND-BARBER AND PITTMAN-ALDER SITES, MARION COUNTY, TENNESSEE

Two sites in the eastern Tennessee River Valley provide a record of plant use from Late Archaic through Mississippian times. Evidence from Late Woodland deposits indicates that chenopod was harvested; maize was also grown, but on a small scale. Mississippian samples illustrate the increased importance of maize and the introduction of common bean. Evidence is offered for the initially minor role of maize as a crop which was incorporated into a gardening system based upon indigenous small grains. Comparisons are made with Late Woodland and Mississippian subsistence trends in other parts of eastern Tennessee. (11/8, 4:20 PM)

Gresham, Thomas H. (Southeastern Archeological Services) PATTERNS OF HISTORIC ROCK PILING

Three methods: documentary research, ethnographic analogy and informant interview, were used to gather data on the historic practice of piling rock as a result of clearing fields. The goal of this research is to discern and contrast patterns of historic rock piling with prehistoric patterns as an aid to the interpretation of rock pile sites. Informant

interview and documentary research were most useful and indicated that clearing fields of rock was an accretional, mundane task. Rocks were often used to fill breeches in terraces or gullies, but when they were piled, the piles were usually placed along fence or property lines and most importantly, simply out of the way. Data on historic rock piles are compared to a rock pile site in Lincoln County, Georgia that was thought to be aboriginal but in fact was historic. (11/7, 3:10 PM)

Gresham, T. H. (see McCullough, D. L.)

Guevin, Bryan and Joan M. Exnicios (U. S. Army Corps of Engineers) ARCHAEOLOGICAL TESTING AT FORT ST. MARY (16PL37), AN EIGHTEENTH CENTURY FRENCH COLONIAL FORT AT ENGLISH TURN, PLAQUEMINES PARISH, LOUISIANA

Fort St. Mary (16PL37), just below New Orleans on the east bank of the Mississippi River, represents one of the earliest eighteenth century French settlements in colonial Louisiana. A cultural continuum of European settlement began with an early French colonial concession, followed by successive French fort occupations in the eighteenth century, and ended during the American period in the early nineteenth century. During the early American period, Fort St. Mary fell into disuse and was abandoned. A small, rural river village known as Woodsville developed out of the previous military-related settlement. The economy of Woodsville was based upon the growing sugar production in the area and the associated steamboat and railroad traffic that formerly characterized the English Turn region. (11/7, 2:40 PM)

Hale, H. Stephen (U Florida) A PREDICTIVE MODEL OF SETTLEMENT AND SUBSISTENCE PATTERNS FOR THE CHARLOTTE HARBOR/PINE ISLAND SOUND ESTUARIES, SOUTHWEST FLORIDA, BASED ON SEA LEVEL FLUCTUATION

Effects of fluctuating sea level on flora, vertebrate fauna, and invertebrate fauna can be modeled by the preparation of hypsographic plots of the estuary at predicted mean sea levels. Frustrum volumes are calculated for each sea level stand and resulting floral and faunal communities are predicted, based on contemporary studies of similar estuaries. The model for the Charlotte Harbor/Pine Island sound area (southwest Florida) provides useful insights into the species composition, size, distribution, and number of midden sites. This model may help explain trends observed in samples already analyzed from sites in the area. (11/7, 9:00 AM)

Hale, H. S. (see Marquardt, W. H.)

Hally, David J. (U Georgia), Charles Hudson (U Georgia), Chester B. DePratter (Institute of Archaeology & Anthropology, U South Carolina) and Marvin T. Smith (Garrow and Associates) THE PROTOHISTORIC PERIOD ALONG THE SAVANNAH RIVER

In this paper we identify and characterize the late Lamar phases that existed along the Savannah River in the 16th century and attempt to show

their relationship to historically documented people encountered by Europeans during the 16th, 17th and 18th centuries. Special attention is given to the archaeological identity of people living along the Savannah River at the time of early Spanish contact in the middle and late 16th century. (11/7, 11:00 AM)

Hally, D. J. (see Anderson, D. G.)

Hansen, James E. (Gulf Power Company) CORPORATE MANAGEMENT AND THE HAWKSHAW ARCHAEOLOGY AND HISTORY PROJECT

The Hawkshaw Project has enhanced the construction of the new corporate headquarters of Gulf Power Company and has had no negative impacts on our construction program. There has been and continues to be a valuable contribution to the quality of life of our customers from our efforts on this project. In addition, it has positively affected our corporate image and produced valuable information about past qualities of life which would otherwise have been unknown. An essential element in the success of this project was the understanding by the archaeologist of the workings and needs of the corporate environment. We found a great number of ways to incorporate the findings into the physical design of our new building that will generate a feeling of cultural concern and understanding for our community. The study of past people and their life styles gave us insight into the progression of the needs society has and our involvement in it as we serve their needs. (11/9, 11:20 AM)

Hanson, Glen T. (Institute of Archaeology & Anthropology, U South Carolina) THE EARLY AND MIDDLE WOODLAND IN THE SAVANNAH RIVER VALLEY

Early and Middle Woodland occupations in the region have been best studied along the coastal zone, especially at the mouth of the Savannah. Previous work in the Piedmont and Coastal Plain provinces suggested only marginal occupations of seasonal duration. Recent research clearly contradicts this, and suggests major Deptford occupations of the interior Coastal Plain. Current data relating to the Early-Middle Woodland periods are synthesized from chronological, technological, distributional, and adaptational perspectives. A model of Deptford interior-coastal interaction is proposed on the basis of comparative analyses of assemblages from the G. S. Lewis site and coastal sites. The distinction between Piedmont (Cartersville) and Coastal Plain (Deptford) appears to represent a localization of populations during the Middle Woodland. (11/7, 9:40 AM)

Hanson, G. T. (see Anderson, D. G.)

Hardin, Kenneth W. (Piper Archaeological Research) INVESTIGATIONS AT THE SANTA MARIA MISSION SITE, AMELIA ISLAND, FLORIDA

Preliminary excavations at the site of the 17th century Santa Maria Mission were sponsored by the landowners, Dr. and Mrs. George Dorion, and conducted by Piper Archaeological Research. Inc. With some exceptions,

the general pattern of interment under the church floor conforms to that found at Santa Catalina de Gaule. Later occupations both altered and protected some features and probably account for the excellent preservation of the predominantly aboriginal remains. Extensive subsurface tests also indicate the probable location of the mission "convento". A cooperative approach between the private landowners and cultural resource managers resulted in the enhancement of the archaeological resource, as well as an increased appreciation of the historical setting of the residential community. (11/7, 4:00 PM)

Harmon, Michael A. (Institute of Archeology and Anthropology, U South Carolina) ANALYSIS OF HISTORICAL ARTIFACTS FROM THE LOWER CHEROKEE VILLAGES OF CHAUGA (38PC1) AND ESTATOE (9ST3)

European trade goods from the Lower Cherokee village sites of Chauga and Estatoe are examined after having lain dormant for more than 20 years. Recent advances in historical archaeology have expanded the potential usefulness of these assemblages and also necessitated the refinement of previous analyses. These artifact assemblages are compared to assemblages from other Lower Cherokee sites. Emphasis has been placed on determining the use and function of European objects in 18th century Indian adaptive strategies. Aboriginally modified artifacts will also be examined. Examples of such artifacts from Lower Cherokee sites are compared to similar artifacts from Overhill Cherokee sites to discern similarities and differences in the use of European items by these two regional divisions of the Cherokee cultural group. (11/8, 11:40 AM)

Hohol, April S. and Lane A. Beck (Northwestern U) COPENA CELTS: CONSIDERATIONS OF WEAR AND FUNCTION OF COPPER AND GREENSTONE ARTIFACTS

Frequently, copper artifacts are presumed to be of a ceremonial or non-utilitarian nature, due to the non-local raw materials. Re-examination of the field notes and artifacts from WPA excavations of several Middle Woodland Copena sites in northern Alabama has produced evidence of use on artifacts previously classified as entirely ceremonial. Newly collected data on copper and greenstone celts from Copena burial mounds are offered as an argument for the re-evaluation of museum collections and for re-evaluation of the concept that the use of non-local materials indicates a strictly ceremonial function. (11/7, 11:00 AM)

Holstein, Harry O. and Keith J. Little (Jacksonville State U) STONE MOUND INVESTIGATIONS IN NORTHEAST ALABAMA

Stone mounds and other stone configurations have been found in the upper Coosa River Basin of northeast Alabama. These sites are located in a variety of environmental settings, including ridge tops, ridge spurs, and alluvial plains. Although some of these sites have archaeologically demonstrated aboriginal origins, there still exists controversy as to the origins of many other local stone configurations. Initial assessments of stone mound sites in northeast Alabama indicate that site variability and distribution may offer some preliminary explanations of the local stone mound phenomenon and end at least some of the existing disputes. (11/7, 3:40 PM)

Homburg, J. A. and B. J. Miller (Louisiana State U) PARTICLE SIZE DISTRIBUTONS AS DETERMINED BY HYDROMETER/SIEVE AND PIPETTE/SIEVE METHODS: A COMPARISON OF SOILS FROM COWPEN SLOUGH (16CT147)

Hydrometer/sieve and pipette/sieve analyses are the two most common methods for determining particle size distributions of archaeological sediments; however, the more time-consuming pipette sampling is generally considered more accurate. Both methods are compared by analyzing twelve duplicate soil samples collected from Cowpen Slough, an Archaic site located in the Lower Tensas Basin of east-central Louisiana. Identical pretreatment procedures were employed, and controlled temperature conditions were maintained throughout the experiment. Eight size fractions determined by the two methods were compared. No significant difference was found between results yielded by the two methods. (11/9, 8:00 AM)

Honerkamp, Nicholas (U Tennessee-Chattanooga) INNOVATION AND CHANGE IN THE SOUTHERN IRON INDUSTRY: AN EXAMPLE FROM CHATTANOOGA, TENNESSEE

In 1859 Bluff Furnace, a traditional charcoal-fired, hot blast furnace located in Chattanoga, Tennessee, was converted into a cupola furnace that used coke as its fuel. This transformation represented an innovative, almost radical shift in industrial technology for the southern Appalachian region. Both the success and failure of the shift at Bluff Furnace are linked to larger economic, political and technological forces operating in the ante-bellum South. It is argued that research at sites such as Bluff Furnace compels archaeologists to examine past cultural dynamics in order to adequately explain particularistic aspects of industrial sites. (11/8, 2:30 PM)

Hudson, Charles (U Georgia), Marvin Smith (Garrow and Associates), Chester DePratter (U South Carolina) and Emilia Kelley (U Georgia) THE TRISTAN DE LUNA EXPEDITION, 1559-1561

In 1559 Tristan de Luna attempted to found a colony at Pensacola. But he lost most of his food and supplies in a storm, and with his colonists starving, in February of 1560 he moved northward to Nanipacana on the Alabama River. Still pressed for food, he sent a party of soldiers northward to Coosa, which had been visited twenty years earlier by the De Soto expedition. Using recent research on the De Soto expedition, the route followed by Luna and his colonists can now be reconstructed, and the social information in the Luna documents can be used to shed light on the protohistoric period. (11/8, 9:40 AM)

Iscan, M. Y. (see Miller-Shaivitz, P.)

Ison, Cecil R. (U. S. Forest Service) THE ROLE OF FUNGI IN PREHISTORIC SUBSISTENCE SYSTEMS

The most important factor affecting subsistence systems is the availability of the food supply. Decisions must be made in selecting alternative food sources during periods of nutritional stress. To gain further insight into prehistoric subsistence systems, the exent that

foods such as fungi were utilized must be determined. It is the intent of this paper to illustrate the nutritional value and availability of fungi and to suggest the role they may have played in the prehistoric diet, utilizing ethnohistorical data and specimens recovered in archaeological contexts. (11/8, 4:40 PM)

Jefferies, Richard W. (U Kentucky) MOUNDS, WALLS, AND EFFIGIES: AN EVALUATION OF PREHISTORIC STONE CONFIGURATIONS IN MIDDLE AND NORTH GEORGIA

The many stone mounds and walls dotting the middle and north Georgia landscape have interested archaeologists for many years. Excavation has confirmed that some are attributable to a variety of prehistoric activities; others are clearly related to different kinds of Euro-American or Afro-American landscape modifications. This paper addresses the role of stone configurations in prehistoric cultural systems, summarizes the range of their morphological variability, and discusses their cultural affiliation and temporal placement. Problems in differentiating prehistoric and historic stone configurations are discussed. (11/7, 4:00 PM)

Jefferies, R. W. (see Ahler, S. R.)

Johnson, Jay K. (U Mississippi) NINE YEARS OF NICKEL NASTIES IN NORTH MISSISSIPPI: AN EVALUATION OF SMALL SURVEY DATA

The advantages and limitations of small-scale surveys in archaeological research are discussed. Analyses dealing with lithic resource procurement, geomorphology and settlement patterns are used to illustrate the potential of this data base. It is concluded that because of sampling problems, such data are not suitable for hypothesis testing. However, when gathered using a comprehensive research design, small-scale survey data are useful in generating hypotheses which involve large-scale spatial patterning. (11/7. 8:00 AM)

Kelley, E. (see Hudson, C.)

Kidder, Tristram R. (Peabody Museum/LMS, Harvard) JORDAN (16M01): A LATE PREHISTORIC AND PROTOHISTORIC SITE IN NORTHEAST LOUISIANA

The Jordan site (16M01) is a large mound group located on what was a historic prairie in Morehouse Parish, Louisiana. The site has an unusual location, in that during its aboriginal occupation it was at least 3.7 km west of the nearest source of flowing water; instead the site was placed on the edge and in the channel of an abandoned paleo-drainage. Despite research dating to 1845, little is known about the site or its culture history. This paper will describe the results of two years of surveying and testing at Jordan by the Lower Mississippi Survey. The geography, geomorphology, and culture history will be summarized. Several hypotheses will be offered to explain the location and culture-historical sequence at this unusual site. (11/8, 9:00 AM)

Kintigh, K. W. (see Steponaitis, V. P.)

Kirkland, Alan F. (U Alabama-Tuscaloosa) THE ARCHAEOLOGICAL SURVEY OF STONE MOUNDS ON MORGAN MOUNTAIN IN CALHOUN COUNTY, ALABAMA

Site 1CA32, on Morgan Mountain in Calhoun County, was subjected to an archaeological survey and photographic investigation by the author and Mr. Duff B. Martin in 1983 and parts of 1984. The site is tentatively characterized as an example of the Middle to Late Woodland ceremonial/mortuary tradition, of which there are other examples in the Southeast. Proximity of the occupation site 1CA42, first excavated in 1971 by the Choccolocco Archaeological Society, and again by Holstein in 1984, provides the basis for inferring that the stone mounds are indeed of a ceremonial or mortuary nature. While there has as yet been no excavation of the Morgan Mountain stone mounds, the author is preparing a proposal for more intensive investigation and analysis. (11/7, 2:20 PM)

Knight, Vernon James, Jr. (U Alabama-Tuscaloosa) SYMBOLISM OF MISSISSIPPIAN MOUNDS

Mississippian mound constructions may be understood in one sense as icons. They operated as conventional symbols having the suggested meaning <u>earth</u> in the Southeastern semiological complex. This contention is supported by (1) Muskogean terminology for mounds; (2) historical connections between mound platform addition and Southeastern ceremonialism oriented to concepts of earth, agriculture, and purification; (3) Muskogee and Choctaw traditions that discuss mound-building ritual in the context of symbolic burial; and (4) the quadrilateral, flat-topped configuration of such mounds. (11/8, 8:00 AM)

Kreisa, Paul P. (U Illinois) AN OVERVIEW OF FAUNAL EXPLOITATION AT THE ADAMS SITE, FULTON COUNTY, KENTUCKY.

Excavations at the Adams site in 1983 resulted in the recovery of a well-preserved faunal assemblage. The site, a regional center in western Kentucky, is located adjacent to the Bayou de Chien on the Mississippi River floodplain. Faunal remains from Baytown and Middle Mississippian components are compared. Preliminary analysis suggests an exploitation pattern similar to that found at Middle Mississippian sites in southeastern Missouri, emphasizing white-tailed deer, medium-sized mammals, fish, and to a lesser extent, migratory waterfowl. (PAPER WITHDRAWN BY AUTHOR)

Lafferty, Robert H., III (Mid-Continental Research Associates) and Michael C. Sierzchula (U Arkansas) EARLY MISSISSIPPIAN ARROWPOINT REDUCTION IN THE EASTERN OZARKS

Archaeological excavations at site 3RA78 in an upland valley on the edge of the Ozarks revealed a buried Early Mississippian midden one meter thick. Analysis has led to the identification of the arrowpoint lithic reduction sequence, and suggests that this was a major source area for cherts to make Early Mississippian points. These were probably

"exported" to the Lower Mississippi Valley. Analysis of flake scar sizes in different stages of production failures indicates that there was a reduction in the energy expended, which probably corresponded to a reduction in tool size at each of three stages. Experimental replication supports these findings and further suggests a low failure rate in the production of these points. (11/8, 3:00 PM)

Larsen, Clark Spencer (Northern Illinois U) and Christopher B. Ruff (Johns Hopkins U) BEHAVIORAL APPROACHES TO THE STUDY OF HUMAN REMAINS FROM THE GEORGIA COAST

Studies of human remains from the Georgia coast have provided evidence for change in health and morphology with the increased emphasis on cultigens, especially maize, in later prehistory. This paper will discuss how the study of human remains from this region has helped to understand better behavioral adaptations as they are seen in the analysis of mechanical properties of bone. Using automated techniques in the analysis of femur cross sections, we report a decline in bone strength in later populations. These data suggest that the later groups on the Georgia coast experienced different levels and types of activities relative to earlier populations. (11/8, 11:00 AM)

Lawrence, William L. (Murray State U) ANALYSIS OF EXCAVATED AND SURFACE-COLLECTED MATERIALS FROM THE CRICK SITE (15CW96): A TURKEY-TAIL CACHE IN WESTERN KENTUCKY

The Crick site is represented by an exceptionally large cache of Turkey-tail blades (n=85), and a sparse surface and subsurface scatter of fire-cracked rock and lithic debitage. The Crick site data reveal new documentation regarding variation not previously described for the procurement, distribution, and function of Turkey-tail caches during the Late Archaic/Early Woodland period. (11/7, 10:00 AM)

Leader, Jonathan M. (U Florida) METAL ARTIFACTS FROM FORT CENTER: ABORIGINAL METALWORKING IN THE SOUTHEASTERN UNITED STATES

A technological analysis of the metal collection from Fort Center, Florida, was performed to determine manufacturing origins and techniques. The analysis used stereo microscopy, xeroradiography, and experimental replication. It was determined that the majority of artifacts were produced by New World aborigines. A smaller number of artifacts have been identified as having been made in South America and Europe. (11/9, 8:40 AM)

Lee, S. R. (see Wood, W. D.)

Little, K. J. (see Holstein, H. O.)

Lurie, Rochelle R. (U West Florida) THE LITHIC ASSEMBLAGE OF THE DEPTFORD COMPONENT AT THE HAWKSHAW SITE

The modified lithic assemblage from the Deptford component at Hawkshaw comprises only 123 pieces of tools and debitage, but does provide interesting information on selection of local and imported raw materials, the possibility of bipolar reduction of quartz, and the use of ferruginous sandstone. A total of 78 pieces of chipped stone were recovered from the Deptford component. All but two were manufactured from three types of non-local raw materials, and are primarily bifacially flaked. The paucity of debitage indicates that little manufacture took place at the site. Most of the artifacts are pecked, battered, or abraded, and made of locally available sandstone. (11/9, 8:40 AM)

Manzano, Bruce L. (U Tennessee-Knoxville) A STUDY OF BUTCHERING AND CARNIVORE GNAW MARKS ON CERVIDAE BONES FROM A ROCKSHELTER IN NORTHEASTERN TENNESSEE

Analysis of Cervidae bones from Mississippian, Woodland, and Archaic levels at the Eastman Rockshelter (40SL34) in northeastern Tennessee reveals that the remains are not simply a function of human activity. Although numerous elements exhibit cut marks from human modification, some exhibit carnivore damage as well as cut marks, while others display various degrees of only carnivore gnaw damage. The findings reflect significant aspects of man's interrelationships with domestic dogs, plus whether the site was used, after human occupation, by wolves as a den or scavenging locality. (11/9, 10:20 AM)

Marks, M. K. (see Rose, J. C.)

Marquardt, William H. (U Florida), H. Stephen Hale (U Florida), C. Margaret Scarry (Florida Division of Archives, History and Records Management) and Karen Jo Walker (U Florida) ENVIRONMENTAL AND CULTURAL CHANGE IN SOUTHWEST FLORIDA: SOME PRELIMINARY RESULTS FROM JOSSLYN ISLAND

The period from 500 BC to AD 800 is particularly interesting in southwest Florida prehistory because of demographic phenomena, settlement patterns, and sociopolitical relations thought to have emerged during that time. Detailed paleobiological analyses of column samples from the Josslyn Island mound (8LL32, Lee County, Florida) seem to indicate shifts from shellfish to small bony fish as the main dietary staple. The matrix analyzed so far represents a very small sample of a rich and complex archaeological and paleo-environmental record, pointing to the need for more comprehensive analyses at Josslyn and other southwest Florida localities. (11/7, 9:20 AM)

Marrinan, Rochelle A. (Florida State U) THE SAN PEDRO DE PATALE MISSION LOCATIONS, LEON COUNTY, FLORIDA

The Franciscan mission of San Pedro y San Pablo de Patale is believed to be a two-stage mission site. Documentation strongly suggests that the initial mission site was abandoned but, to date, indicates neither a date

nor a reason for this movement. This paper reports two years of research at what is considered to be the earliest stage and compares samples from a site believed to have endured until 1704. These sites are helpful in assessing the rates and means of acculturation of native peoples in the Province of Apalachee during the 17th and early 18th centuries. (11/7, 3:40 PM)

McCullough, David L. (U. S. Army Corps of Engineers) and Thomas H. Gresham (Southeastern Archeological Services) SOIL CHEMISTRY ANALYSIS AT A NORTHEAST GEORGIA ROCK PILE SITE

An archeological project at 9LC24, a multicomponent site on Clarks Hill Lake in northeast Georgia, included complete excavation of six (of seven) rock piles, fixed interval test pit sampling, excavation of a 5 x 5 meter block in a site area adjacent to the rock piles, and extensive soil chemistry analysis. One objective of the chemical analysis was to detect the presence of completely decomposed human burials within the rock piles. Various proveniences within and outside rock piles were sampled for comparative purposes. Samples were submitted to the Plasma Emission Spectometry Laboratory at the Institute of Ecology, University of Georgia. This paper presents the methods and results of the soil chemistry analysis and discusses the utility of soil chemistry analysis in rock pile investigations. (11/7, 1:30 PM)

Miller, B. J. (see Homburg, J. A.)

Miller-Shaivitz, Patricia and Mehmet Yasar Iscan (Florida Atlantic U) TESTING ARCHAEOLOGICAL HYPOTHESES WITH OSTEOLOGICAL HUMAN REMAINS: PHYSICAL ANTHROPOLOGY OF THE FORT CENTER POPULATION

The bioanthropological contribution to the behavior of prehistoric societies of Florida has been a most neglected part of Southeastern archeological studies. The primary problem seems to come from the fact that Florida has played little role in the theory building of North American archaeology. One exception to this is the Fort Center site, in the Lake Okeechobee basin, where a problem-oriented project was conducted. The conclusion was that the site was a ceremonial center with mortuary specialists as the residents. Our research further assumes that these people were also relatively free from skeletal stressors. The purpose of the paper is threefold: 1) to present validity of stress indicators in assessing health status of a given population, 2) to evaluate archaeological evidence, develop a hypothesis, and test this hypothesis with osteological methods and 3) to develop a hypothesis using osteological data to substantiate the archaeological assumption. (11/8, 9:20 AM)

Milner, George R. (U Kentucky) HUMAN SKELETONS AND INTERPRETATIONS OF MISSISSIPPIAN PERIOD CULTURAL CHANGE IN THE AMERICAN BOTTOM, ILLINOIS

It has long been recognized that in the American Bottom, Illinois, the Mississippian cultural system developed, flourished, and then collapsed during a period that spanned only several hundred years. Recent

archaeological research has been oriented toward delineating the alterations in intrasite organization, settlement patterns, social organization, and population density that accompanied this process of cultural change. These transformations in Mississippian society are reviewed in terms of additional information provided by analyses of differential morbidity and mortality rates, based on a recent examination of human skeletal series dating to the last two American Bottom Mississippian phases. (11/8, 8:00 AM)

Mires, Ann Marie (U Massachusetts-Amherst) SIFTING THE ASHES: RECONSTRUCTION OF A COMPLEX ARCHAIC LOUISIANA MORTUARY PROGRAM FROM CREMATED SKELETAL REMAINS

Physical anthropologists with archaeological training, or bioarchaeologists, are not always present to conduct or supervise excavations of human skeletal material. At Cowpen Slough, a late Archaic cemetery and habitation site, an archeologist and a bioarcheologist codirected field excavations and subsequent analyses. The presence of a bioarcheologist in the field facilitated the documentation, in situ analysis, and removal of a complex array of very fragmented and fragile human interments. Four separate modes of burial were observed: primary interment; secondary interment, redeposited bundles; primary cremation; and secondary, redeposited cremation. Analysis suggests that these modes were contemporary methods of interment and not the result of temporal variability in interment practices. Given the high level of curation exhibited, as well as the stratigraphic evidence, a "Feast of the Dead" is posited as the event that created this constellation of highly variable human interments. (11/8, 10:00 AM)

Mitchem, Jeffrey (U Florida) EARLY SPANISH CONTACT IN THE COVE OF THE WITHLACOOCHEE: WINTER 1985 EXCAVATIONS AT THE TATHAM MOUND, CITRUS COUNTY, FLORIDA

From January through March, 1985, the Florida State Museum conducted excavations at Tatham Mound (8CI203), an isolated, undisturbed aboriginal burial mound in western Citrus County, Florida. European artifacts were recovered, including spherical blue glass beads, spherical green glass beads, small blue Nueva Cadiz beads, a silver ingot shaped like a miniature socketed stone ax, silver disc beads, a rolled gold bead, an iron armor plate, a small iron chisel, and part of an iron rosehead spike. Some scholars feel these materials date to the early sixteenth century (AD 1500-1560), while others believe that a date of AD 1560-1580 is more appropriate. (11/8, 9:20 AM)

Nance, C. Roger (U Alabama-Birmingham) EXPLORING THE DIMENSIONS OF LAMAR INTER-SITE CERAMIC VARIABILITY

Ceramics from three well-studied Lamar sites (Little Egypt in northwest Georgia, Nelson's Bend Shelter in eastern Alabama, and Rogers-CETA, a Lamar village in east-central Alabama) are compared from four perspectives. The first approach sees different type proportions as reflecting different site functions. Rogers-CETA and Little Egypt resemble each other and contrast with Nelson's Bend. Secondly, design

variability is related to inter-site geographical distance. Nearby, Nelson's Bend and Rogers-CETA ceramics are similar, and contrast to those at Little Egypt. The third approach has to do with curvilinear vs. rectilinear motifs. Little Egypt has a greater proportion of rectilinear designs than either of the others, consistent with its Appalachian location. The last perspective has to do with style elements which might have served to maintain cultural boundaries. These differences are minor in terms of vessel surface area, but would have been readily apparent. (11/8. 11:00 AM)

Niquette, Charles M. (Cultural Resource Analysts) STONE MOUNDS OF THE UPPER GASCONADE RIVER DRAINAGE OF THE SOUTH CENTRAL MISSOURI OZARKS

Limited test excavations at 11 stone mound sites in Pulaski County, Missouri, between 1981 and 1983, and the excavation of another Pulaski County site by avocational archaeologists during the same period, have generated data pertinent to at least one aspect of the regional Late Woodland mortuary customs. Currently available information suggests that in addition to numerical differences between the number of cairns present at stone mound sites, variable burial types, and the quantitative and qualitative differences in grave assemblages, two different methods of stone mound construction also exist: those with interior chambers and those without internal structure. (11/7, 1:40 PM)

Nodine, Bruce K. (U Florida) SHELL MIDDEN FORMATION PROCESSES AT HONTOON ISLAND, FLORIDA

Excavations at Hontoon Island, on the St. Johns River, Volusia County, Florida, provide pertinent information for evaluating what the inhabitants did with their garbage for the 1500 years they lived there. A generalized model of midden formation is refined for application. The model correctly predicted the changing densities of ceramics and bone, and not only predicted the changing density of features, but also predicted their movement through time and space within the midden. The results indicate these people were not only pushed around by their volumes of garbage, but that they also used these volumes to systematically produce a better, higher landscape on which to live. (11/9, 9:20 AM)

Oakley, Carey B. (Alabama State Museum of Natural History) THE STONE MOUND PROBLEM: A THIRD OPTION

Much of the past and current research about stone mounds has focused upon both aboriginal and historic origins for their construction. Certainly, throughout the Southeastern U.S., there would be examples of each type, ranging from aboriginal Middle Woodland mortuary mounds to historic rock cairns constructed as a result of clearing fields for agricultural purposes. This paper offers a third option, which suggests that at least some of the smaller rock cairns may be attributed to natural phenomena causing the uprooting of trees, such as a high wind, or in the case of cairn clusters, tornadoes. (11/7, 4:20 PM)

Penny, J. S., Jr. (see Butler, B. M.)

Phillips, Kaye H. (U Mississippi) 22TS1530: A STONE TOOL PRODUCTION STATION IN NORTHEAST MISSISSIPPI

The University of Mississippi Center for Archaeological Research conducted an excavation of a Middle Archaic site in northeast Mississippi during the summer of 1985. The site lies close to Fort Payne and Tuscaloosa formations on the eastern side of the Yellow Creek embayment of Pickwick Lake. A lithic production trajectory model based on investigations in the nearby uplands was used to define specific activity areas relating to different production sequences. Both debitage and stone tools were used in the evaluation. Inferences concerning the role of this site within the earlier settlement model are made. (11/7, 9:40 AM)

Polhemus, Richard R. (U Tennessee-Knoxville) THE SEARCH FOR TANASQUI

Tanasqui, a sixteenth century Indian town visited by Juan Pardo on October 6, 1567, is thought to be situated within the juncture of the Big Pigeon and French Broad rivers in Cocke County, Tennessee. Topographic and cultural references in the Bandera document, coupled with an early nineteenth century survey, reduced the search area to a 1000 acre tract between the two rivers. Archaeological survey resulted in the location of a late Pisgah town possessing topographic and cultural features resembling those described in the Bandera document. The Pisgah occupation was found to overlie a fortified late Middle Woodland site. Survey techniques include small diameter core transects, controlled surface collections, and proton magnetometer survey, as well as test excavations. (11/8, 10:20 AM)

Quitmyer, Irvy R. (U Florida) FISHING, SHELLFISHING, AND HUNTING AT THE HAWKSHAW SITE, 8ES1287: A FAUNAL ANALYSIS OF A DEPTFORD PERIOD SITE ON PENSACOLA BAY

Faunal materials were recovered with fine screen flotation. A total of 71 species were represented in the three refuse pits that were selected for study. The major focus of the food quest was on estuarine resources; however, hunting of animals from the maritime forest was important. Small fishes and mollusks suggest that the inhabitants exploited the shoreline and shallow creek microenvironments, while much larger fishes indicate the use of deep channels and open bay. The size classes of the fish further suggest a variety of capture techniques such as fine mesh nets, enclosures, hook and line, or spears. (11/9, 9:00 AM)

Rathbun, Ted A. (U South Carolina) HEALTH AND DISEASE IN SOUTH CAROLINA SKELETAL SAMPLES: BLACK, WHITE AND RED

The core of this paper concerns health and disease indicators in 36 human skeletons recovered during a cemetery relocation near Charleston, S.C. The sample stems from the middle to late 19th century, with the majority of the group from 1840-1870. Both slaves and freed Blacks are included.

The average age at death for males was 34 and for females was 40. Both genders expressed developmental stress as seen in linear enamel hypoplasias. Anemia, probably both genetic and acquired, was a significant problem. Infection was also quite common. The most ubiquitous skeletal changes are those associated with demanding physical labor. Comparisons are made to an 18th century White elite sample and a Middle-Late Woodland aboriginal group, all from the Coastal Plain. Both the White elite and aboriginal samples exhibit fewer pathologies related to diet, infection, and changes associated with vigorous physical labor. (11/8, 9:00 AM)

Reitz, Elizabeth J. (U Georgia) SURVEY OF VERTEBRATE REMAINS FROM THE SAVANNAH RIVER VALLEY

Faunal remains from the G. S. Lewis Site (38AK228), located near the Savannah River, date from the terminal Late Archaic through the Deptford phase, with the vast majority of the materials associated with the Deptford phase. Analysis suggests a subsistence strategy which incorporated a wide variety of resources into the diet, but emphasized venison as the primary source of meat. Riverine resources were also extensively used. Through a comparison with materials from other sites within the Savannah River Valley, it appears that this is a strategy similar to that followed elsewhere except in the lower reaches. These similarities seem to transcend temporal parameters. (11/7, 11:20 AM)

Rolingson, Martha Ann (Arkansas Archeological Survey) INTERNAL PLANNING OF LARGE CEREMONIAL CENTERS IN THE LOWER MISSISSIPPI VALLEY: TOLTEC MOUNDS EXAMPLE

A formal arrangement of platform mounds into a rectangular plan around a plaza is characteristic of Mississippian large ceremonial centers. Detailed stratigraphy and chronology from recent excavations provide data on the development of such community planning. Investigation of the construction sequence of mounds and occupation areas at the Toltec Mounds site indicates that platform mounds supporting residential structures were in use by the late eighth century. Despite the implications for leadership in site planning, mortuary patterns do not provide supporting evidence for ranked society within the Plum Bayou culture. (11/8, 2:20 PM)

Rose, Jerome C. (U Arkansas) and Murray K. Marks (Louisiana State U) BIOARCHEOLOGY AND SUBSISTENCE IN THE CENTRAL AND LOWER MISSISSIPPI VALLEY

The reconstruction of subsistence patterns in the Central and Lower Mississippi Valley has been of great interest to archeologists for over 50 years. Various reconstructions have been proposed, but all have been based entirely upon archeological evidence. This paper uses both data from prehistoric human skeletal material and the archeological record to propose a scenario of subsistence change over time. The bioarcheological data include: paleopathology, dental caries, dental wear, microwear observed by SEM, and stable carbon isotope measurements. The first suggested change occurred during the Coles Creek period, with a shift to intensive use of native starchy seeds and possible domestication. The

next major shift occurred with the first use of maize in the Early Mississippi period in the Central Mississippi Valley. However, maize did not become a dietary staple until Middle Mississippi times. (11/8, 8:20 AM)

Rudolph, James L. (U California-Santa Barbara) A SOUTH APPALACHIAN MISSISSIPPIAN ADAPTIVE NICHE

Data from the Richard B. Russell Reservoir show that the twelfth to fourteenth century inhabitants of the upper Savannah River Valley practiced a relatively generalized version of the Mississippian subsistence pattern. Faunal and floral remains from three very different sites—a farmstead (38AN8), a small village with a number of structures (9EB91), and a political center with very few residential buildings (9EB85)—support this conclusion. The generalized strategy may be related to a low population density in the Savannah Valley or to the presence of a simple chiefdom based at 9EB85. (11/8, 8:20 AM)

Rudolph, J. L. (see Anderson, D. G.)

Rudolph, Teresa P. (U California-Santa Barbara) LATE SWIFT CREEK AND NAPIER SETTLEMENT IN NORTH GEORGIA

Although the traditional ceramic sequence for north Georgia in the Late Woodland period has been defined as Swift Creek Complicated Stamped followed by Napier Complicated Stamped pottery, the legitimacy of the Napier culture has been called into question. The aim of this paper is to address the problem by detailed stylistic analysis of complicated stamped pottery. Early Swift Creek, late Swift Creek and Napier sites were found in the middle Oconee River Valley. The upper Chattahoochee and upper Savannah River valleys produced a different variety of late Swift Creek ceramics with Napier design elements combined with traditional Swift Creek motifs. Settlement and stylistic evidence indicates that the traditional cultural sequence for the Late Woodland period may not apply in all areas of north Georgia. (11/7, 11:40 AM)

Rudolph, T. P. (see Wood, W. D.)

Ruff, C. B. (see Larsen, C. S.)

Sassaman, Kenneth E. (U Massachusetts-Amherst) THE MIDDLE ARCHAIC PERIOD IN THE SAVANNAH RIVER VALLEY: PATTERNS OF ADAPTIVE FLEXIBILITY

The Middle Archaic archaeological record of the Savannah River Valley is much like that of any other area in the Atlantic Slope--ubiquitous, small sites in varied locations containing sparse, low-diversity artifact assemblages. Current explanations for these patterns include high residential mobility, expedient technology, broad land use, open social networks, and generalized foraging. These factors can be articulated in

a general model of adaptive flexibility. A synthesis of recent excavation data and extant survey records supports linkages between the flexibility model and expected patterns of assemblage and site locational variability. Recent excavation results from the middle Savannah region, however, constitute alternative evidence from the terminal Middle Archaic that elucidates one possible pathway for the development of more formalized adaptive strategies which characterize the Late Archaic period. (11/7, 9:00 AM)

Saunders, Rebecca A. (U Florida) DESIGN VARIABILITY IN SWIFT CREEK COMPLICATED STAMP CERAMICS

Theoretical and methodological aspects of the study of design variability in Swift Creek Complicated Stamped ceramics were discussed at last year's meeting. Three scales in the study of design variability were emphasized. Two involved nominal characteristics of design. The third consideration was that of the influence of the individual potter. Analysis of the ceramics from the Kings Bay Site (9CAM171A), a late Swift Creek site in Camden County, Georgia, is now complete. Distribution of nominal and metric characteristics of Swift Creek Complicated Stamped designs among different house middens at the site was studied using Gower's coefficient and cluster analysis. Resulting clusters do not correlate highly with provenience. Alternative hypotheses for the distribution of the designs at the site are considered. (11/7, 11:20 AM)

Scarry, C. M. (see Marquardt, W. H.)

Schroedl, Gerald F. and C. Clifford Boyd, Jr. (U Tennessee-Knoxville) EXPLAINING MISSISSIPPIAN ORIGINS IN EAST TENNESSEE

Late Woodland (AD 600-900), Early Mississippian Martin Farm (AD 900-1000), and Hiwassee Island (AD 1000-1300) cultures document the Woodland-Mississippian transition in east Tennessee. Temporal changes are evident in ceramic types and assemblage composition, but not in lithic artifacts or botanical and faunal remains. Increased site size and changes in site location and facilities suggest greater socio-political complexity and agricultural intensification. Culture replacement and diffusion are unacceptable explanations for these changes. Population growth, correlated with increased agricultural yield (from corn) which necessitated more complex socio-political structures better describes the Woodland-Mississippian transition in east Tennessee. (11/8, 3:40 PM)

Schuldenrein, J. (see Brooks, M. J.)

Shapiro, Gary (Florida Bureau of Archaeological Research) THE APALACHEE COUNCIL HOUSE AT SEVENTEENTH CENTURY SAN LUIS

During early historic times, large council houses were important features of Indian communities throughout the Southeast. In Spanish Florida these structures co-existed with mission churches. In 1985, excavations at San Luis de Talimali (8LE4) revealed remains of what was likely the Apalachee

council house in this important mission town. Features, surface topography, and a series of soil cores suggest a circular structure 36 meters in diameter. The structure appears similar to Bartram's description of eighteenth century Creek townhouses. An intriguing difference is the presence of 19 cob-filled smudge pits that line the excavated portion of the structure's interior. A field season is planned for spring 1986 to confirm the structure's dimensions, sequence of rebuildings, internal construction, and chronological placement within the period San Luis was occupied (1655-1704). (11/7, 3:20 PM)

Shapiro, G. (see Williams, M.)

Sierzchula, M. C. (see Lafferty, R. H. III)

Smith, Betty A. (Kennesaw College) THE HOBGOOD SITE: A WOODSTOCK PERIOD SITE IN NORTHERN GEORGIA

Woodstock is the name given to the Early Mississippian period in northern Georgia and to the associated complicated-stamped pottery. Archaeological evidence from a number of Woodstock sites suggests a gradual transition from Woodland to Mississippian socioeconomic patterns. One such site is the Hobgood site, a Woodstock period hunting and gathering camp situated on the third terrace overlooking the Etowah River. All the evidence from this site, such as simple three-sided structures and pits which were virtually devoid of cultural materials, supports this functional interpretation. (11/8, 3:20 PM)

Smith, Marvin T. (Garrow & Associates), Mark Williams (Lamar Institute/U Georgia) and Chester B. DePratter (Institute of Archeology & Anthropology, U South Carolina) THE LAMAR INSTITUTE/I.A.A. EXCAVATIONS AT TOMASSEE, 380C186

After severe vandalism at the eighteenth century Lower Cherokee town of Tomassee, local amateur archaeologists and the landowner requested that the site be evaluated and protected. With excellent local support, members of the Lamar Institute and the I.A.A. spent ten days in December, 1984, testing the site. The midden was found to be disturbed by plowing and vandalism, but intact features were plentiful in the subsoil. Two occupations were defined: Middle Woodland and eighteenth century Lower Cherokee. Cherokee ceramics are analyzed and shown to be slightly different from ceramics of the Estatoe phase defined by Hally from Lower Cherokee sites in the Upper Savannah River Valley. Tomassee is one of the few Lower Cherokee towns not inundated by reservoir construction, and should be the focus of further research. (11/8, 11:20 AM)

Smith, M. T. (see Hally, D. J.)

Smith, M. T. (see Hudson, C.)

Smith, Samuel D. (Tennessee Division of Archaeology) A SURVEY OF CULTURAL RESOURCES PERTAINING TO TENNESSEE'S WESTERN HIGHLAND RIM IRON INDUSTRY, CA. 1795-1940

Recent federal guidelines for archaeology and historic preservation emphasize a resource protection planning process (RP3), which utilizes information about related historic properties based on a theme, geographic limits, and chronological period. Individual "study units" may be created from existing data or become the focus for organizing a cultural resource survey. This paper will summarize the results of such a survey, currently examining the geographically discrete remains of an iron industry that once existed in the Western Highland Rim region of Tennessee. Unlike most archaeological surveys, this cultural resource survey includes standing buildings as well as sites. The expected total inventory is 34 architectural properties and 71 archaeological sites (ranging from individual extraction and processing sites to company towns). (11/8, 2:50 PM)

Steele, K. B. (see Brooks, M. J.)

Steponaitis, Vincas P. (SUNY-Binghamton) and Keith W. Kintigh (U California-Santa Barbara) SOME NEW WAYS OF ESTIMATING SITE OCCUPATION SPANS FROM DATED ARTIFACTS

Over the past 15 years, historical archaeologists have proposed a number of methods for estimating the time span over which a site was occupied. Although the existing methods have all been shown to have practical utility, their theoretical basis remains poorly developed. We present a simple model that shows how site occupation spans are logically related to the known use-dates of the artifact types that are found in the archaeological record. This model is used in constructing two algorithms—one using type presence, the other using type frequencies—for estimating the actual span of occupation. The relative effectiveness of these algorithms is tested by applying them to historic assemblages from sites in the Eastern U.S. These algorithms work at least as well as, and often better than, the other dating methods currently in use. (11/9, 9:40 AM)

Stone, P. A. (see Brooks, M. J.)

Stout, Charles B. (U Illinois) SPATIAL RELATIONSHIPS AT A MISSISSIPPIAN CIVIC CENTER

The Adams site (15FU4), a Mississippian civic center located at the edge of the Mississippi River floodplain in western Kentucky, underwent a spatially controlled surface collection in 1984. Continuing analyses of the collection data have revealed spatial correlations identifying general and specialized activity areas in the east and west villages and on the earthworks north of the plaza. (11/8, 4:00 PM)

Sussenbach, Tom (U Illinois) NEW DATA ON THE LATE WOODLAND OF THE UPPER LOWER MISSISSIPPI VALLEY

Investigations at the Marshall site (15CE27), located on the Mississippi bluffline in western Kentucky, provide new data on the Late Woodland period. Test excavations conducted by the University of Illinois at Urbana-Champaign revealed midden deposits 80 cm in depth with single post structures superimposed by wall trench structures. Low mounds appear to be associated with the earlier occupation of the site, with the later Mississippian component utilizing the mounds for construction activities. (11/8, 1:20 PM)

Thorne, Robert M. and Patricia M. Fay (U Mississippi) HOT ROCKS: THERMAL ALTERATION OF CHERT IN AN ABOVE-GROUND OVEN

Test excavations and analyses of recovered stone tools and debitage indicate that the Middle and Late Archaic activities at site 22TS1530 concentrated on the full range of steps involved in the production of stone tools. Artifacts and debitage alike display visual characteristics indicative of thermal alteration of the raw material. Sub-plowzone features suggest that the alteration process may have been accomplished above ground rather than in a prepared pit. This paper focuses on recent efforts to thermally alter chert in a manner thought to be consistent with evidence gathered from 22TS1530. (11/9, 10:40 AM)

Turner, Kenneth R. (U Alabama-Tuscaloosa) EPIDEMIC DISEASE IN THE EARLY HISTORIC SOUTHEAST

Southeastern aboriginal skeletal series of the period AD 1550-1700 from Alabama and Georgia are characterized by high frequencies of bony lesions associated with episodes of metabolic stress. After about AD 1700, skeletal series from the same area exhibit far lower frequencies of such lesions. At about the same time, epidemic disease patterns in colonial Old World populations undergo certain transitions. The two phenomena are functionally associated. The emergence of the Native American political groupings of the 18th and 19th centuries is interpreted as playing a major role in redefining epidemic disease patterns in early North America and in accomplishing an adaptation to introduced Old World diseases. (11/8, 10:20 AM)

Walker, Joan M. (Thunderbird Museum) and William M. Gardner (Catholic U) STONE MOUNDS IN THE WESTERN MIDDLE ATLANTIC

Stone mounds in Virginia/West Virginia/western Pennsylvania date from 400 BC-AD 200. In concept and content they are related to contemporary Adena/Hopewellian complexes. The Shenandoah Valley is the easternmost occurrence. In the Valley, mounds occur in clusters suggesting population, political, and/or social centralization. Settings are on ridge tops overlooking broad floodplains. Preserved grave goods are uncommon but are of both local and medium distance non-local materials.

Soil acidity has played havoc with skeletal preservation, and little information is currently available on the interred population. (11/7, 2:30 PM)

Walker, Karen Jo (U Florida) KINGSLEY PLANTATION AND SUBSISTENCE PATTERNS OF THE SOUTHEASTERN COASTAL SLAVE

Kingsley Plantation (8DU108), like numerous other Southeastern coastal plantations, represents a successful adaptation to a specific ecozone. The present study focuses on a major aspect of this adaptation, that of slave resource exploitation and food consumption patterns. Vertebrate faunal remains from a Kingsley slave cabin provide the primary data base. Historical records supplement the analysis, while previously excavated coastal plantation zooarchaeological materials allow comparative discussions. Data and methodological biases common to most slave diet reconstructions in the Southeastern coastal area are examined. (11/7, 2:20 PM)

Walker, K. J. (see Marquardt, W. H.)

Wayne, Lucy B. (Water and Air Research) LOCATIONAL MODELING IN THE CHATTAHOOCHEE RIVER BASIN: NEW SUPPORT FOR OLD ARCHAEOLOGICAL ADAGES

A site locational model was developed by Water and Air Research, Inc., as a major product of a recent cultural resource assessment of the portions of the Chattahoochee River Basin within Fort Benning Military Reservation, Alabama and Georgia. This model provided evidence based on systematic, scientific analysis for the intuitive archaeological assumption that major sites are located on high ground close to water. The model brought out the importance of surveying medium and low potential areas for the smaller, more limited occupation sites which are correlated with different environmental features. (11/7, 8:40 AM)

Whyte, Thomas R. (U Tennessee-Knoxville) AN EXPERIMENTAL STUDY OF SMALL ANIMAL ENTRAPMENT IN PIT FEATURES

Bones of small mammals and amphibians are common constituents of archaeological deposits recovered from pit features. These have been interpreted as either food refuse or the remains of intrusive fauna. In May 1985, a year-long series of experiments with pit features was begun to determine 1) how and why certain species of small animals become entrapped in pits, and 2) if this information can be used to understand pit use and deposit seasonality. These experiments, although still in progress, have provided information important to the interpretation of pit features. It seems, for example, that only certain species of mammals will enter covered pits. Furthermore, the frequency of entrapment of certain species is correlated with temperature and rainfall. (11/9, 10:00 AM)

Williams, Mark (Lamar Institute/U Georgia) and Gary Shapiro (Florida Bureau of Archaeological Research/Lamar Institute) THE ANTIQUITY OF LAMAR CENTERS IN THE OCONEE PROVINCE

Excavations were conducted during the summer of 1985 at Scull Shoals (9GE4) and Shinholser (9BI1), two of the six known Mississippian mound sites in the Piedmont portion of the Oconee River drainage, Georgia. Scull Shoals is the northernmost mound in the drainage and Shinholser is the southernmost. Mounds at both sites were begun at least as early as the late Etowah or early Savannah periods (ca. AD 1200). Both sites appear to have been occupied for four hundred years. The six mound sites in the drainage are thought to have been part of a single polity during the sixteenth century. Of the four mound sites investigated to date, three were clearly important Mississippian centers as early as AD 1200. The importance of Shinholser prior to the Lamar period is further demonstrated by a hawk-style copper plate documented during this field season. (11/8, 10:40 AM)

Williams, M. (see Smith, M. T.)

Wilson, Jack H., Jr. (N. C. Department of Cultural Resources) MATERIAL REMAINS FROM THE SLAVE COMPOUND ARCHAEOLOGY AT SOMERSET PLACE STATE HISTORIC SITE, NORTH CAROLINA

At Somerset Place State Historic Site, a seventeenth and eighteenth century rice and corn plantation, the remains of two eighteenth century structures in the slave compound have been uncovered. Materials recovered include Euro-American ceramics, Colono-ware ceramics, glassware, metal artifacts, brick, faunal remains, and wooden hearth piers. The pattern refined from analysis of these classes of artifacts differs from both the hypothesized Slave Artifact Pattern and the Tenant Artifact Pattern. Also, the mean ceramic dates for the two structures are close to the assumed mean occupation dates, another pattern that differs from that found at other plantation sites. Explanation for these anomalies is sought in the change from absentee to resident ownership at Somerset Place in 1830, and the reconstruction and reorientation of the plantation's infrastructure that occurred at that time. (11/7, 2:00 PM)

Wood, Karen G. (Southeastern Archeological Services) NINETEENTH CENTURY FOODWAYS IN THE PIEDMONT OF GEORGIA

The analysis of vertebrate collections excavated at one rural and two small urban nineteenth century historic house sites, coupled with an extensive literature review, provides data for examining foodway patterns in the Piedmont of Georgia. Although the data base is still small, several observations can be made. The two urban sites have more sawed bone and a heavier reliance on domesticated animals, while the rural site has almost no sawed bone but a more diverse fauna that utilized wild animals as well. The later of the two urban sites shows more cuts of meat than are evident with the two earlier sites. (11/7, 1:20 PM)

Wood, W. Dean (Southeastern Archeological Services), Karen R. Burns (Center for Archaeological Sciences) and Steve R. Lee (Western Washington Research Extension Service) THE IMPORTANCE OF HISTORIC CEMETERIES: AN EXAMPLE FROM WESTERN GEORGIA

A multi-disciplinary team studied the skeletal remains from an unrecorded cemetery, accidentally discovered at Fort Benning, Georgia, to identify the cemetery and examine health, diet, and burial customs. The study employed historical research and osteological, trace element, and histological aging analyses. Results suggest that most individuals were white settlers belonging to the Mt. Gilead Baptist Church (1832-1849). There was a high incidence of otitis mastoidea, a disease which may result from swimmer's ear, measles, influenza, or generalized upper respiratory infection. The study demonstrates that the analysis of historic cemeteries by multi-disciplinary teams can provide useful and interesting information about lifeways in the recent past. (11/7, 1:40 PM)

Wood, W. Dean (Southeastern Archeological Services), Teresa P. Rudolph (U California-Santa Barbara) and Mark J. Brooks (Institute of Archaeology & Anthropology, U South Carolina) THE LATE WOODLAND IN THE SAVANNAH RIVER VALLEY

Until recently, very little information was available concerning the Late Woodland period in the Savannah River Valley. Systematic surveys and excavations in the Russell Reservoir and at the Savannah River Plant have remedied this problem to some degree. Although there are still many unresolved issues, analysis shows major stylistic differences between ceramic designs north and south of the Fall Line. Settlement in the Piedmont is characterized by scattered farmsteads with a diffuse subsistence economy: Coastal Plain sites also have a diffuse subsistence economy, but variation in site size, site location, artifact assemblages and preserved subsistence remains suggests a strategy emphasizing the intensive exploitation of a relatively narrow range of high density/biomass resources available seasonally and year-round in dispersed locales in diverse environments. Finally, recommendations are made for resolving certain problems that still hinder our understanding of Late Woodland societies. (11/7, 10:20 AM)

Yarnell, Richard A. (U North Carolina) A SURVEY OF PREHISTORIC CROP PLANTS IN EASTERN NORTH AMERICA

The prehistoric crops of Eastern North America include both introduced and native plants that were domesticated at different times and locales and to varying degrees and had different distributions and histories. There were at least nine cultigens, probably at least five quasi-cultigen crops and perhaps six or more that were ruderal (weed) crops. Thus it appears that twenty or more crop plants were harvested at various times and locales in the East. Oil seeds and small grains were the early staples. The triad of corn, beans, and squash apparently was not important until later Mississippian times. (11/8, 4:00 PM)