

1987 MIDWEST ARCHAEOLOGICAL CONFERENCE

Welcome to Milwaukee and the Midwest Archaeological Conference. The conference will be held at the University of Wisconsin-Milwaukee and the Park East Hotel. All scheduled events on Friday are at the UWM Library; all other scheduled events are at the Park East.

REGISTRATION. On Friday, registration will take place at the UWM Library, on the fourth floor, just outside the Conference Center. If you have pre-registered, your packet of materials will be waiting for you. Registration on-site will also be available. On Friday, registration will be open from 1:30 PM until 6 PM. On Saturday, registration will be at the Park East Hotel, from 8:00 AM until 4:00 PM.

HOW TO FIND SESSIONS & EVENTS:

FRIDAY: All events on third and fourth floors of UWM Library.

AT THE PARK EAST: Registration - in hotel lobby
Executive Room 1 & 2 - on first floor of hotel, down
corridor behind hotel registration desk.
Michigan & Ontario - on second floor
Superior - on second floor
Huron - on second floor

BOOK EXHIBITS. A book room with vendors and merchandise will be open all day Saturday and on Sunday morning. The exhibits will be in the Huron room.

AMERICAN GEOGRAPHICAL SOCIETY (AGS) COLLECTION. If you are interested in seeing the AGS Collections in more detail than is possible at the Open House on Friday evening, the Collection will be open from 8:00-Noon on Saturday.

SOILS LAB. The UWM Soils Lab will be open from 2:00-6:00 PM on Friday. The Lab is located in Sabin Hall, Room 371 (please see separate flyer for details).

PARTIES. There will be a reception/cash bar (with free food) at the AGS Collections on Friday from 5:30-7:30 PM. There will be another party/cash bar (less elaborate free food) on Saturday from 8:00 PM-Midnight in Executive Rooms 1 & 2 at the Park East.

FOOD. A notably impressive restaurant guide is included with your registration materials.

1987 MIDWEST ARCHAEOLOGICAL CONFERENCE Program

FRIDAY AFTERNOON, OCTOBER 16 (all events on Friday at UWM Library)

MINING THE ARCHAEOLOGICAL PAST: THE VALUE & POTENTIAL OF EXTANT COLLECTIONS (Conference Center, 4th floor) Organizer & chair: Lynne Goldstein

- 3:00 William W. Mayrl (Assistant Vice Chancellor for Academic Programs, University of Wisconsin-Milwaukee)
Welcome to the University of Wisconsin-Milwaukee
Lynne Goldstein (University of Wisconsin-Milwaukee)
Introduction to the session
- 3:15 William Green (Office of State Archaeologist-University of Iowa)
Archival Sources for Midwestern Archaeology
- 3:30 William A. Lovis (Michigan State University)
"Squeezing" Your Collection (or) Upgrading an Older Data Set
- 3:45 Lynne P. Sullivan (New York State Museum)
Cashing in on the Data Bank or How to Have a Profitable Research Experience with an Old Collection
- 4:00 Bonnie W. Styles and Mary Bade (Illinois State Museum)
The Value of Photographic Archives: Examples from the University of Chicago Photograph Files
- 4:15 Break
- 4:30 Jane E. Bulkstra (University of Chicago) and George R. Milner (Pennsylvania State)
Carbon Isotope Analysis and Dietary Inferences in the Midcontinent
- 4:45 Nancy J. Parezo (National Science Foundation)
Understanding and Using Ethnographic Collections
- 5:00 Bruce D. Smith (Smithsonian Institution)
Discussion
- 5:15 Nancy O. Lurie (Milwaukee Public Museum)
Discussion

THE AMERICAN GEOGRAPHICAL SOCIETY COLLECTIONS

- 5:30 - 7:30 An open house and special exhibit in the AGS Collections, as well as a cocktail party and cash bar

SATURDAY MORNING, OCTOBER 17 (all sessions at Park East Hotel)

PATTERN, PHASE AND FOCUS: A SYMPOSIUM HONORING WILL C. MCKERN
(Michigan & Ontario Rooms) Organizer & chair: Roland L. Rodell

- 9:05 **Roland L. Rodell** (University of Wisconsin-Milwaukee)
Introduction
- 9:15 **Alton K. Fisher** (University of Iowa)
Recollections of W. C. McKern When He Was Curator of
Anthropology at the Milwaukee Public Museum
- 9:30 **James B. Griffin** (Smithsonian Institution)
McKern and the Midwest Taxonomic Method
- 9:45 **Robert L. Hall** (University of Illinois at Chicago)
Will C. McKern and Ceramic Chronology in Wisconsin
- 10:00 **Roland L. Rodell** (University of Wisconsin-Milwaukee)
Diamond Bluff Revisited: a Review of the 1948 Excavation
- 10:15 *Break*
- 10:30 **John D. Richards, Patricia B. Bruhy, and Lynne Goldstein**
(University of Wisconsin-Milwaukee)
Culture Contact in the Late Prehistoric and Historic Midwest: French
and Native American Interactions as a Model for Late
Woodland-Mississippian Dynamics
- 10:45 **Paul P. Krelsa** (University of Illinois-Urbana)
Oneota Burial Patterns in Eastern Wisconsin
- 11:00 **Cynthia Stiles-Hanson** (Mississippi Valley Archaeology Center)
Caves and Carvings: Three Rock Art Sites in West-Central Wisconsin
- 11:15 **Robert F. Sasso** (Northwestern University)
The White Camp and Mounds Revisited
- 11:30 **Robert Boszhardt** (Mississippi Valley Archaeology Center)
Midway Village Revisited: It's More and Less than What it Used to Be

REGIONAL PERSPECTIVES (Executive Room 1) Chair: Charles W. Markman

- 9:00 **Charles W. Markman** (Northern Illinois University)
Chicago Area Archaeology: Where are the Data?
- 9:15 **John P. Hart** (Northwestern University)
An Archaeological Survey of the Illinois and Michigan Canal National
Heritage Corridor
- 9:30 **Robert J. Jeske** (Northwestern University)
Test Excavations within the Illinois and Michigan Canal National
Heritage Corridor

- 9:45 **Robert E. Warren** (Illinois State Museum)
Prehistoric Settlement Patterns in the Eastern Prairie Peninsula: the
FAP-412 Project
- 10:00 **Stephen C. Lensink** (University of Iowa)
Population and Settlement Trends in the Uplands of the Northern
Prairie Peninsula: A Regional Comparison
- 10:15 *Break*
- 10:30 **Mark J. Lynott** (National Park Service-Lincoln), **Patrick E. Martin**
(Michigan Technological University), and **Caven P. Clark** (National Park
Service)
Isle Royale Archeology: 1987
- 10:45 **Flora Church** (Ohio State University)
The Rhythm of Change: Late Woodland and Late Prehistoric
Settlements in Central Ohio
- 11:00 **Brian G. Redmond** (Indiana University)
Yankeetown, Duffy, or Duffytown?: An Examination of Ceramic
Variability in the Lower Ohio Valley
- 11:15 **Michael J. Hambacher** (Michigan State University)
Of Transition Zones and Archaeological Inference

RESEARCH IN EXTANT COLLECTIONS: SPECIFIC EXAMPLES (Executive
Room 2) Chair: Norman Sullivan

- 10:30 **Kenneth B. Tankersley** (Indiana University)
A Close Look at the Big Picture: Early Paleoindian Lithic
Exploitation in the Midwest
- 10:45 **Bradley T. Lepper** (Johnson-Humrickhouse Memorial Museum)
Regional Patterns of Variation in Ohio Fluted Projectile Points: An
Exploratory Analysis
- 11:00 **Douglas Kullen** (University of Chicago)
Winfield Mounds and Village -- Forgotten Excavations in Northeast
Illinois
- 11:15 **Norman Sullivan** (Marquette University) and **Carter Lupton**
(Milwaukee Public Museum)
Research Potential of Human Remains in Extant Archaeological
Collections
- 11:30 **James A. Marshall** (Schaumburg, IL)
Research Potential of the Marshall Surveys and Maps of Earthworks
of Eastern United States
- 11:45 **Annette G. Ericksen-Latimer and Marilyn R. Orr** (Ohio State Univ.)
The Horseshoe Cave Collection: Recent Research from the Johnson-
Humrickhouse Memorial Museum

SATURDAY AFTERNOON, OCTOBER 17 (all sessions at Park East Hotel)

MOUND 72: EARLY MISSISSIPPIAN SOCIAL STATUS, SITE STRUCTURE, & SPECIALIZED PRODUCTION AT CAHOKIA (Executive Rooms 1 & 2) Organizer & Chair: Melvin L. Fowler

- 1:30 **Melvin L. Fowler** (University of Wisconsin-Milwaukee)
Stratigraphy, Sequence and Significance of Mound 72
- 1:45 **Jerome C. Rose and Phillip Hartnady** (University of Arkansas-Fayetteville)
Bioarchaeology of Mound 72, Cahokia
- 2:00 **Barbara VanderLeest** (Carefree, AZ)
The Ceramics of Mound 72, Cahokia
- 2:15 **Steven R. Ahler** (Illinois State Museum)
Lithic Materials from Mound 72, Cahokia
- 2:30 **George R. Milner** (Pennsylvania State University)
Discussant

SINGLE-SITE RESEARCH: REPORTS OF INVESTIGATIONS (Superior Room)
Chair: Marla Buckmaster

- 1:30 **Marla Buckmaster** (Northern Michigan University)
The Gorto Site in Marquette County, Michigan
- 1:45 **Toby Morrow** (Center for American Archeology)
Twin Ditch: Investigations at an Early Archaic Site in the Lower Illinois Valley
- 2:00 **Jacqueline A. Ferguson and Robert E. Warren** (Illinois State Museum)
Archaeological and Geological Fieldwork at the Tonica Kettle Site in North-Central Illinois
- 2:15 **James A. Robertson** (Michigan State University)
Site Typologies: A Lesson from a Middle Archaic Site in Saginaw County, Michigan
- 2:30 **Kathryn C. Egan** (Michigan State University)
Analysis of the Floral Remains from the Weber I Site (20SA581) Frankenmuth, Michigan
- 2:45 *Break*

- 3:00 **John F. Doershuk** (Northwestern University)
Archaeological Reconnaissance and Testing at the Joliet Army Ammunition Plant, Will County, Illinois
- 3:15 **Mark L. Anderson** (Ball State University)
The Rescue Excavations of Three Late Archaic Sites in the Marks Bay Park Reserve, Sault Ste. Marie, Ontario, Canada
- 3:30 **Elizabeth D. Benchley** (University of Wisconsin-Milwaukee)
The Trout Point Site: a Late Archaic(?) Lithic Workshop(?) and Warming Station(?) (Bake shop?) (Sauna?) (Light house?) on the South Shore of Lake Superior, Michigan
- 3:45 **Dale W. Quattrin and William M. Cremln** (Western Michigan University)
A Unique Feature at the Schilling Site (20KZ56), Kalamazoo County, Michigan

PERSPECTIVES ON HISTORIC ARCHAEOLOGY (Michigan & Ontario Rooms)
Chair: Carol Mason

- 1:30 **Keith L. Barr** (Illinois State University)
Material Culture on the Midwestern Frontier
- 1:45 **Guy Gibbon** (University of Minnesota)
The Savanna Portage
- 2:00 **Carol Mason** (University of Wisconsin-Fox Valley)
Indians, Maple-Sugaring, and the Spread of Market Economies
- 2:15 **Thor Conway** (Ontario Ministry of Citizenship & Culture)
Archaeological Evidence for Algonkian Shamanism

WOODLAND SITE RESEARCH: REPORTS OF INVESTIGATIONS (Michigan & Ontario Rooms) Chair: Charles R. Moffat

- 2:45 **William S. Dancy** (Ohio State University)
The Water Plant Site: an Early Late Woodland Village in Central Ohio
- 3:00 **Paul J. Pacheco** (Ohio State University)
Salvage Excavations at the Continental Construction Site
- 3:15 **Albert H. Brine** (Springfield, IL)
Land Snails from Eilers (11Cs20): a Middle to Early Late Woodland Site in Central Illinois
- 3:30 **Barbara L. Barrish** (Cleveland State University)
Preliminary Analysis of a Late Woodland Burial Site in Northeast Ohio

- 3:45 **Charles R. Moffat** (American Resources Group, Ltd.)
Investigations at the Little Muddy Rock Shelter, Jackson County,
Illinois

MISSISSIPPIAN AND LATE PREHISTORIC MANIFESTATIONS (Executive Rooms
1 & 2) Chair: William M. Cremin

- 3:00 **Duane Esarey** (Dickson Mounds Museum)
Mississippian Spider Gorgets
- 3:15 **Susan Jelly** (University of Illinois-Urbana)
Preliminary Report on the Excavations at Orendorf Mounds
- 3:30 **Sherri L. Hllgeman** (Indiana University)
Patterning in the Fill of a Mississippian House Basin
- 3:45 **Mark Schurr** (Indiana University)
Prehistoric Mortuary Behavior at the Angel Site
- 4:00 **Dale R. Henning** (Luther College)
Western Onocota: a Perspective from the Blood Run Site, Northwest
Iowa
- 4:15 *Break*
- 4:30 **Clark A. Dobbs and Kim C. Breakey** (Institute for Minnesota
Archaeology)
A Preliminary Report on Investigations at the Energy Park Site
(21GD158): A Silverdale Phase Village at the Lake Pepin Locality
- 4:45 **Joseph Craig** (Northern Illinois University)
Investigations at an Upper Mississippian Langford Tradition Site in
the Calumet City Quadrangle, Cook County, Illinois
- 5:00 **William M. Cremin** (Western Michigan University)
Upper Mississippian Adaptation: a Ten Year Perspective on
Southwest Michigan
- 5:15 **John P. Nass** (Ohio State University)
The Analysis of Storage Feature Volume as a Technique for
Studying Fort Ancient Household Organization and Community
Structure
- 5:30 **Charles R. Ewen** (Florida Bureau of Archaeological Research)
That Was No Picnic: Current Research at the Site of De Soto's
First Winter Encampment

PARTY - MUNCHIES & CASH BAR

8:00-midnight Park East Hotel - Executive Rooms 1 & 2

SUNDAY MORNING, OCTOBER 18 (all sessions at the Park East Hotel)

HOPEWELL AND MIDDLE WOODLAND RESEARCH (Michigan & Ontario Rooms)
Chair: Robert B. Pickering

- 9:00 **John K. White** (Ancient Lifeways Institute)
Indications of Middle Woodland Multi-site Ceremonialism in the
Lower Illinois Valley
- 9:15 **Joyce A. Williams, Thomas O. Maher, and Kathryn Parker**
(University of Illinois)
The Meridian Hills Site (11-Ms-1258): An Upland Middle Woodland
Extractive Site
- 9:30 **Robert B. Pickering** (Field Museum of Natural History)
Examination of a Middle Woodland Ossuary from Will County,
Illinois
- 9:45 **Charles B. Stout** (University of Illinois-Urbana)
The Mushroom Site (20AE88): Lonely Campfires on the Bluff
- 10:00 **John Edward Blank** (Cleveland State University)
Hopewellian Landform Utilization Patterns in the Central Scioto River
Valley, Ross County, Ohio
- 10:15 *Break*
- 10:30 **N'omi Greber** (Cleveland Museum of Natural History)
Shetrone's Mound 17 at the Hopewell Site, Ross County Ohio:
Excavated 1924; Studied 1986
- 10:45 **Richard W. Yerkes, John P. Nass, Jr., and Elizabeth K. Griebling**
(Ohio State University)
Stone Tool Function and Activity Patterns at the Murphy Site, A
Hopewell Settlement in Licking County, Ohio
- 11:00 **Dee Anne Wymer** (Licking County Arch. & Landmarks Society) and **Paul
J. Pacheco** (Ohio State University)
Correspondence Analysis: Paleoethnobotanical Data and the Middle
Woodland to Late Woodland Transition
- 11:15 **Frances Clark** (Cleveland Museum of Natural History)
Anculosa Shell Beads and Middle Woodland Exchange
- 11:30 **Ellenor P. White** (Ancient Lifeways Institute)
Current Analysis and Replication of Hopewell Textiles

HISTORIC ARCHAEOLOGY: 19TH CENTURY SITES (Executive Room 1) Chair:
Robert A. Birmingham

- 9:00 **Floyd Mansberger** (USACOE-Rock Island District)
Urban Archeology: an Often Overlooked Context for Significant Cultural Resources
- 9:15 **Candace J. Lutzow** (American Resources Group, Ltd.)
The Davis Site : Reconstruction of Historic Subsistence Models
Combining Archaeological and Oral History Data
- 9:30 **Mary R. McCorvle** (American Resources Group, Ltd.)
The Davis Site: a Mid-nineteenth Century Farmstead in Southern Illinois
- 9:45 **Mark Bruhy** (USDA Forest Service-Nicolet Nat'l Forest)
Late 19th and Early 20th Century Historic Properties in Northern Wisconsin's National Forests
- 10:00 **Patrick E. Martin** (Michigan Technological University)
Workers' Housing in a Nineteenth Century Company Town
- 10:15 *Break*
- 10:30 **Terrance J. Martin** (Illinois State Museum)
Animal Remains from Laborers' Houses at Fayette, a Late 19th-Century Industrial Community in Northern Michigan
- 10:45 **Ann Koski** (Neville Public Museum) and **William Krueger** (Heritage Hill State Park)
Search for Shanty Town
- 11:00 **Robert Boszhardt** and **Cynthia Stiles-Hanson** (Mississippi Valley Archaeology Center)
Historic Archaeology in Western Wisconsin
- 11:15 **Philip Salkin** (Archeological Consulting and Services)
A Preliminary Report on Mitigation Excavations at the Brower Store in Prairie du Chien, Wisconsin
- 11:30 **Wil Gilmore** (Cultural Resources Consultant)
Historical Archaeological Interpretation at Villa Louis

METHODS, TECHNIQUES, AND OTHER APPROACHES TO ARCHAEOLOGY (Executive Room 2) Chair:

- 9:00 **Kevin P. McGowan** (University of Illinois-Urbana)
Bathtub Sampling: a Post-impoundment Reservoir Survey
- 9:15 **John Clafflin** (Diachronic Research Associates)
Looking for Mom: a Commentary on Relationships Between Professionals and Amateurs
- 9:30 **M.H. Sidky** (Ohio State University)
Materialism and Marxism: A Necessary Alliance?
- 9:45 **Richard E. Bisbing** (McCrone Associates, Inc.), **William A. Lovis**, and **Norman J. Sauer** (Michigan State University)
Forensic Archeology: Training Forensic Scientists in Human Remains Recovery Techniques
- 10:00 **Mark L. Madsen** (Roosevelt University)
Continuing Patterns of Lithics Distribution at Two Endangered Poplar Creek Sites Through Two Plowing Seasons
- 10:15 *Break*
- 10:30 **Robert G. Thompson** (University of Iowa) and **Michael Timpson** (University of Tennessee)
The Geoarchaeology of the Dahnke/Reinke Site (32CS29)
- 10:45 **Jodie A. O'Gorman** (Mankato State University)
Preliminary Findings of a Comparative Study on Three Predictive Field Methods Applied at the "OT" Site, Wis.
- 11:00 **Keith A. Sverdrup** (University of Wisconsin-Milwaukee) and **James Stoltman** (University of Wisconsin-Madison)
A Resistivity Survey at the Fred Edwards Site (Wisconsin)
- 11:15 **James G. Foradas** (Ohio State University)
Site Geophysical Survey Possibility Evaluations: Making Life Easier for the Geophysicist on an Archaeological Site

"BUSINESS" MEETING (Michigan & Ontario Rooms)

- 11:45 Only known item of business: Where will next Midwest Archaeological Conference be held.

MIDWEST ARCHAEOLOGICAL CONFERENCE

Abstracts
(in program order)

MINING THE ARCHAEOLOGICAL PAST: THE VALUE AND POTENTIAL OF EXTANT COLLECTIONS Organized by Lynne Goldstein

William Green (Office of State Archaeologist-University of Iowa) **ARCHIVAL SOURCES FOR MIDWESTERN ARCHAEOLOGY** This paper focuses on the productive use of the unpublished records of early archaeological investigations. Document collections and archives contain an enormous amount of information important for current archaeological research and management. Case studies emphasize the value of archival research in both problem-oriented and CRM work in Iowa and Wisconsin. Biases and the incomplete nature of archival material are noted. Nevertheless, the usable data obtained through archival research generally will repay the effort involved in such work.

William A. Lovis (Michigan State University) **"SQUEEZING" YOUR COLLECTION (OR) UPGRADING AN OLDER DATA SET** Past collection strategies might not always address the needs of future researchers. Even short time periods may result in changes of problem orientation, analytic techniques, and consequent sample collection. Making the most of existing data therefore becomes a priority for collection use. Judicious use is imperative where analytic techniques may be destructive. Alternative directions of obtaining similar data need to be explored. These problems are addressed through the example of the Fletcher site collection.

Lynne P. Sullivan (New York State Museum) **CASHING IN ON THE DATA BANK OR HOW TO HAVE A PROFITABLE RESEARCH EXPERIENCE WITH AN OLD COLLECTION** Archaeological collections made using past research paradigms and older field techniques offer challenges for present researchers, both as resources for new interpretations and as stimuli for creative problem-solving. Conducting research projects with older collections often requires similar levels of planning resolutions to data collection problems as does primary data collection (field work). A strategy for conducting research projects with older collections is proposed, using examples from research with WPA-era collections from the Chickamanga Basin in Tennessee.

Bonnie W. Styles and Mary Bade (Illinois State Museum) **THE VALUE OF PHOTOGRAPHIC ARCHIVES: EXAMPLES FROM THE UNIVERSITY OF CHICAGO PHOTOGRAPH FILES** The University of Chicago photograph file provides a visual illustration of the importance of photographic archives. This collection of 1930-40s vintage photograph albums contains over 8000 images that document the archaeology and prehistoric material culture of Eastern North America. The file includes pictorial surveys of 13 states and several field projects in Illinois. They document renowned archaeologists in the early days of their careers and the excavation techniques of the time.

Jane E. Bulkstra (University of Chicago) and George R. Milner (Pennsylvania State) **CARBON ISOTOPE ANALYSIS AND DIETARY INFERENCES IN THE MIDCONTINENT** During the past decade, museum collections of archaeologically recovered human remains have provided key data for generating models of agricultural intensification in the Midcontinent. In this paper, newly derived $\delta^{13}C$ values from 5 Illinois sites are used to explore inter- and intra-regional patterning in maize dependence during the Woodland and Mississippian periods. The sites reported here include three components of Dickson Mounds, Orendorf, Norris Farms 36, Kane Mounds, and the East St. Louis Stone Quarry.

Nancy J. Parezo (National Science Foundation) **UNDERSTANDING AND USING ETHNOGRAPHIC COLLECTIONS** Museums hold countless ethnographic and archaeological artifacts waiting to be analyzed in light of recent theoretical advances. Anthropologists, however, have not made effective use of these invaluable resources, partly because most researchers have understood neither the procedures employed in making collections nor the assumptions and decisions that surrounded and informed their construction. This talk will discuss the questions a researcher must ask in order to effectively use ethnographic collections to help address archaeological questions.

PATTERN, PHASE AND FOCUS: A SYMPOSIUM HONORING WILLIAM C. MCKERN Organized by Roland L. Rodell

Alton K. Fisher (University of Iowa) **RECOLLECTIONS OF W. C. MCKERN WHEN HE WAS CURATOR OF ANTHROPOLOGY AT THE MILWAUKEE PUBLIC MUSEUM** McKern was curator of anthropology from January 1925 to November 1943. Prior to his arrival in Milwaukee he had acquired archaeological experience in California, Tonga and the American southwest, and for a year he was instructor in Anthropology at the University of Washington. Mac was an informal and affable man and an excellent teacher. The personal training that was received from him became the foundation for my scientific and academic life. Our most significant collaborative effort was in the initial development of the taxonomic method proposed for midwestern archaeological research.

James B. Griffin (Smithsonian Institution) **MCKERN AND THE MIDWEST TAXONOMIC METHOD** The gestation period of the McKern Classification or Midwestern Taxonomic Method was approximately two to three years, from May 1932 to 1935. It was adopted, attacked and abused by many archaeologists from the Plains to the East Coast and the Gulf of Mexico to Ontario from the mid-1930's to the first decades after World War II. Like all other new developments in archaeology it had its virtues and faults.

Robert L. Hall (University of Illinois at Chicago) **WILL C. MCKERN AND CERAMIC CHRONOLOGY IN WISCONSIN** Although Will C. McKern is remembered outside of Wisconsin principally for his association with the Midwest (or McKern) Taxonomic System, which was conceived to be non-chronological, he also made analyses and recovered material which contributed to our knowledge of ceramic chronology in the Great Lakes area and upper Mississippi valley. The implications of some of his contributions are still fruitful to consider.

Roland L. Rodell (University of Wisconsin-Milwaukee) **DIAMOND BLUFF REVISITED: A REVIEW OF THE 1948 EXCAVATION** In 1948 the Wisconsin Archaeological Survey (W.A.S.) excavated portions of six mounds and habitation area at the Diamond Bluff site (47-Pi-2) in Pierce County, Wisconsin. The results of this project questioned some basic assumptions regarding the cultural and temporal relationships of Woodland and Mississippian traditions in the upper Mississippi Valley. This paper will review the archaeology of the Diamond Bluff terrace from 1887 to 1948 and discuss the findings of the W.A.S. excavation.

John D. Richards, Patricia B. Bruhy, and Lynne Goldstein (University of Wisconsin-Milwaukee) **CULTURE CONTACT IN THE LATE PREHISTORIC AND HISTORIC MIDWEST: FRENCH AND NATIVE AMERICAN INTERACTIONS AS A MODEL FOR LATE WOODLAND-MISSISSIPPIAN DYNAMICS** Early Historic period accounts of French and Native American culture contact in southern Wisconsin are used to develop a model for the differential acceptance of fur trade practices among Native Americans. This model is then used to evaluate Late Prehistoric culture contact situations in southern Wisconsin.

Paul P. Kreisa (University of Illinois-Urbana) **ONEOTA BURIAL PATTERNS IN EASTERN WISCONSIN** Burial data accumulated over the past two decades from Lake Winnebago phase Oneota sites are presented. Analysis of burial attributes indicates a strong patterning in the burial population based on demographic factors. Those burials that do deviate from a basic pattern tend to be older males and a few older females. This pattern suggests a relatively non-ranked socio-political organization for the Lake Winnebago phase Oneota. These data are also compared with burial populations from the Oneota Koshkonong, Grand River, and Orr phases of Wisconsin.

Cynthia Stiles-Hanson (Mississippi Valley Archaeology Center) **CAVES AND CARVINGS: THREE ROCK ART SITES IN WEST-CENTRAL WISCONSIN** In 1929 W. C. McKern visited several cave and rockshelters in La Crosse, Vernon and Crawford Counties, Wisconsin. Three of these sites- Samuel's Cave, Larson Cave and Indian Cave- have been revisited as part of an ongoing program to document and preserve the rock art in the "Coulee Region." These caves contain some of the best examples of prehistoric petroglyphs and pictographs recorded in the area, as well as some of the worst preservation problems. This paper compares the past and present condition of the sites, damage to the rock art through weathering and modern recreational use of the caves, and steps taken to preserve rock art.

Robert F. Sasso (Northwestern University) **THE WHITE CAMP AND MOUNDS REVISITED** In 1929, the Milwaukee Public Museum began archaeological investigations at two sites on the Mississippi River at Stoddard, Wis. Under Will C. McKern, the excavations yielded data that advanced the understanding of prehistoric cultural relationships in the Midwest. The White Camp II site was the first in Wisconsin to demonstrate chronological relationships through stratigraphic position of Woodland and Upper Mississippian materials. Recent investigations under the Mississippi Valley Arch.Ctr. have yielded more detailed information on prehistoric occupations at the sites, and have defined areal relationships between the habitation and mounds.

Robert Boszhardt (Mississippi Valley Archaeology Center) **MIDWAY VILLAGE REVISITED: IT'S MORE AND LESS THAN WHAT IT USED TO BE** This paper will summarize the previous research at the Oneota Midway Village site in La Crosse County, Wisconsin, including the 1929 investigations by the Milwaukee Public Museum under the direction of W.C. McKern, and present for the first time, salvage efforts by the Mississippi Valley Archaeology Center as the site continues to be quarried away. Preliminary analysis of ceramics reveal that the site contains more than an "Orr Phase/Focus" Oneota component. Rather, the initial Oneota occupation at Midway was by groups producing Silvernale/Blue Earth-like ceramics.

REGIONAL PERSPECTIVES

Charles W. Markman (Northern Illinois University) **CHICAGO AREA ARCHAEOLOGY: WHERE ARE THE DATA?** The first mound excavations in the Chicago area took place just after the Civil War and systematic site recording began at the end of the 19th century. Currently over 500 sites have been recorded for Cook County alone. The local crisis in curation is assessed.

John P. Hart (Northwestern University) **AN ARCHAEOLOGICAL SURVEY OF THE ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR** The Northwestern Archaeological Center, under the auspices of the National Park Service, conducted a random, proportional, double-stratified survey of the Illinois and Michigan Canal National Heritage Corridor during the fall of 1986. This survey was designed to sample the environmental variation among the five geographical subareas of the Corridor and variation within the subareas. Over 8000 acres were surveyed, and 61 prehistoric and eight historic sites were recorded. Analysis indicates that environmental variation did affect prehistoric site location.

Robert J. Jeske (Northwestern University) **TEST EXCAVATIONS WITHIN THE ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR** Northwestern University conducted test excavations at four sites along the Upper Illinois River during the summer of 1987, including the Zimmerman (11-Ls-13) and La Salle County Farm (11-Ls-14) sites. Collection was geared toward recovery of floral, faunal, and radiocarbon samples. Flotation samples from Early, Middle and Late Woodland, and Mississippian features are providing the data necessary to build a ceramic temporal key as well as yielding information on changing subsistence patterns in the late prehistoric periods in northeastern Illinois.

Robert E. Warren (Illinois State Museum) **PREHISTORIC SETTLEMENT PATTERNS IN THE EASTERN PRAIRIE PENINSULA: THE FAP-412 PROJECT** Investigations along an 82-km highway corridor in north-central Illinois indicate there were significant changes through time in patterns of prehistoric upland settlement. Early-Holocene sites are common near glacial kettles on high Woodfordian end moraines; middle-Holocene sites are common near low ground-moraine kettles; late-Holocene sites are prevalent near forested river valleys. Environmental and economic changes probably causes these shifts, yet the magnitude of environmental change apparently was less severe in the eastern Prairie Peninsula than in areas farther to the west.

Stephen C. Lensink (University of Iowa) **POPULATION AND SETTLEMENT TRENDS IN THE UPLANDS OF THE NORTHERN PRAIRIE PENINSULA: A REGIONAL COMPARISON** This paper compares survey results from several upland areas in Iowa and Northern Illinois. Settlement patterns for two areas separated by the Mississippi River show remarkable similar trends through time. During Paleo-Indian and Archaic occupations, settlement location favored glacial wetland habitats. A later Woodland-period trend beginning as early as 1000 B.C. resulted in a population shift to settlements near forested habitats and major drainages. A larger population decline began with the advent of intensive horticulture following A.D. 900.

Mark J. Lynott (National Park Service-Lincoln), Patrick E. Martin (Michigan Technological University), and Caven P. Clark (National Park Service) **ISLE ROYALE ARCHEOLOGY: 1987** As part of multi-year study of archeological resources at Isle Royale National Park, field crews from the Midwest Archeological Center and Michigan Technological University conducted intensive survey of potentially eroding shorelines in the northeastern third of the archipelago. The field investigations included reconnaissance surveys of likely portage routes and evaluative testing at four sites. The resulting data sheds substantial light on the Late Woodland occupation of Isle Royale.

Flora Church (Ohio State University) **THE RHYTHM OF CHANGE: LATE WOODLAND AND LATE PREHISTORIC SETTLEMENTS IN CENTRAL OHIO** A comparison of Late Woodland and Late Prehistoric settlement system changes has shown that nucleated, sedentary settlements existed in the central Scioto River Valley in the early Late Woodland period. This pattern changed by the late Late Woodland to dispersed settlements. By the early Late Prehistoric period, nucleated sedentary settlements were once more the norm, although the pattern of these communities was much different and persisted over a much greater period of time.

Brian G. Redmond (Indiana University) **YANKEETOWN, DUFFY, OR DUFFYTOWN?: AN EXAMINATION OF CERAMIC VARIABILITY IN THE LOWER OHIO VALLEY** Recent analysis of ceramic material from the Yankeetown site (12W1) has revealed a greater diversity of decorative elements than that indicated by earlier descriptions. In particular, the high frequency of bar-stamped motifs in the sample has demonstrated a closer relationship with Illinois Duff Complex materials than previously suspected. Furthermore, the presence of diagnostic Yankeetown ceramics on sites within the Duffy "core" area suggests that these two complexes may in fact be one in the same.

Michael J. Hambacher (Michigan State University) **OF TRANSITION ZONES AND ARCHAEOLOGICAL INFERENCE** The concept of major biotic provinces and associated ecological transition zones have played a central role in the interpretation of late prehistoric cultural adaptations in the Upper Great Lakes. Broad correlations between differing adaptive modes and the major biotic provinces have been proposed. Expectations concerning the use of the intervening transition zones have also been developed. Recent work suggests that the nature of the ecological transition zones and their role in Upper Great Lakes prehistory are more complex than initially indicated.

RESEARCH IN EXTANT COLLECTIONS: SPECIFIC EXAMPLES

Kenneth B. Tankersley (Indiana University) A CLOSE LOOK AT THE BIG PICTURE: EARLY PALEOINDIAN LITHIC EXPLOITATION IN THE MIDWEST Approximately 350 fluted points from ten early Paleoindian sites in Indiana, Kentucky, and Ohio have been petrologically examined. These areal distribution of the lithic resource source areas were compared to the artifacts manufactured from those sources. Restricted lithic exploitation patterns have been identified almost exclusively in lithic procurement areas. Sites outside of lithic procurement areas, on the other hand, display an unrestricted lithic exploitation pattern regardless of their geomorphologic setting: glaciated or unglaciated terrain.

Bradley T. Lepper (Johnson-Humrickhouse Memorial Museum) REGIONAL PATTERNS OF VARIATION IN OHIO FLUTED PROJECTILE POINTS: AN EXPLORATORY ANALYSIS An examination of variability in selected attributes of fluted projectile points from Ohio reveals several interesting patterns. The spatial organization of this variability is used here to study the interrelationships between physiography, drainage systems, and aspects of Paleo-Indian technological and social organization. The results of this analysis suggest that fluted point using cultures in Ohio were unspecialized hunter-gatherers. Neither megafauna nor high quality chert provide a sufficient *raison d'être* for inferred Paleo-Indian land use patterns.

Douglas Kullen (University of Chicago) WINFIELD MOUNDS AND VILLAGE -- FORGOTTEN EXCAVATIONS IN NORTHEAST ILLINOIS Archeological excavations were conducted more than a decade ago at the Winfield Mounds and Village site in DuPage County, Illinois. Although investigated by the University of Chicago in 1931 and by Wheaton College in 1975-76, no reports on the site have ever been published. This paper utilizes existing collections of unpublished manuscripts, original field notes, and artifacts to summarize both the history of archeological investigations and the prehistory of this site.

Norman Sullivan (Marquette University) and Carter Lupton (Milwaukee Public Museum) RESEARCH POTENTIAL OF HUMAN REMAINS IN EXTANT ARCHAEOLOGICAL COLLECTIONS Human remains form a significant proportion of many extant archaeological collections - a basic source of information on adaptations of past populations, largely underutilized and essentially non-expandable. Projects at the Milwaukee Public Museum have dealt with osteological remains excavated in Wisconsin during the 1920's through the 1940's and Egyptian mummies held for over a century. These projects have demonstrated that extant collections, when studied with new techniques, can yield significant insights into current research problems.

James A. Marshall (Schaumburg, IL) RESEARCH POTENTIAL OF THE MARSHALL SURVEYS AND MAPS OF EARTHWORKS OF EASTERN UNITED STATES Correcting 100 or more year old surveying and mapping errors of Squier and Davis, Whittlesey, Thomas and others; establishing a chronology of these constructions; providing maps for analysis by military scientists; comparing sites with those in Europe and elsewhere; determining patterns of replication; deriving mathematical and astronomical knowledge of builders; monumenting sites by establishing bench marks; locating lost sites and finding new sites; establishing a permanent record of sites.

Annette G. Ericksen-Latimer and Marilyn R. Orr (Ohio State University) THE HORSESHOE CAVE COLLECTION: RECENT RESEARCH FROM THE JOHNSON-HUMERICKHOUSE MEMORIAL MUSEUM Horseshoe cave was excavated in 1969 and the collection donated to the Johnson-Humerickhouse Memorial Museum in Coshocton, Ohio. Following a flurry of interest over associated pictographs, the collection fell into obscurity. As a result of efforts to identify and catalog archaeological collections at the museum, these materials have been analyzed. The result is the identification of a multi-component occupation and varied artifact assemblage which adds to our understanding of prehistoric rock shelter utilization.

MOUND 72: EARLY MISSISSIPPIAN SOCIAL STATUS, SITE STRUCTURE, AND SPECIALIZED PRODUCTION AT CAHOKIA Organized by Melvin L. Fowler

Melvin L. Fowler (University of Wisconsin-Milwaukee) STRATIGRAPHY, SEQUENCE AND SIGNIFICANCE OF MOUND 72 Mound 72 was located at a strategic point relative to the Early Mississippian planning of the Cahokia site. The mound was built up in a sequence of post pits, primary mounds, and burial offerings in pits, spanning a short period of time, between 950-1050 A.D. Status of individuals buried within the mounds probably related to their relationship of the early marker posts. Materials found as grave offerings indicate far flung economic ties.

Jerome C. Rose and Phillip Hartnady (University of Arkansas-Fayetteville) BIOARCHAEOLOGY OF MOUND 72, CAHOKIA Excavation of Mound 72 Cahokia produced a total of 261 individuals which may be grouped as follows: female sacrifices, 4 features, 118 individuals; mixed sex sacrifices, 1 feature, 39 indiv.; male sacrifices, 1 fea., 4 indiv.; litter burials, 2 feas., 24 indiv.; midstatus, 13 fea., 59 indiv.; and high status, 1 fea., 17 indiv. The High status have the lowest infection rate (5.3%) followed by female sacrifices with 10.4%, and the midstatus burials with 25.0%.

Barbara VanderLeest (Carefree, AZ) THE CERAMICS OF MOUND 72, CAHOKIA This paper will present data on the ceramic materials recovered from Mound 72, Cahokia. The analysis will describe the single component assemblage, identify interval variation within and between features and between mound construction stages, and examine the use of ceramics as grave accoutrement. Comparisons will be made with recently recovered archaeological data from the American Bottom.

Steven R. Ahler (Illinois State Museum) LITHIC MATERIALS FROM MOUND 72, CAHOKIA Lithic materials recovered from Mound 72 include over 1000 projectile points from three separate caches. Examination of these points indicates that several different morphological styles are present, and these styles are spatially segregated in two of the caches. Examination of the chert debitage from the mound indicates that the projectile points were not manufactured at the mound. Instead at least two specialized unifacial industries were identified, resulting in production and immediate use of large blade-like flakes and micro-drills. Implications of these different patterns of lithic use and deposition are explored.

SINGLE-SITE RESEARCH: REPORTS OF INVESTIGATIONS

Maria Buckmaster (Northern Michigan University) THE GORTO SITE IN MARQUETTE COUNTY, MICHIGAN The Gorto site is located in the bottom of Deer Lake Reservoir in Marquette County, Michigan. The site was exposed when the reservoir was drained in an attempt to cleanse the lake of mercury contamination. Northern Michigan University, with the help of volunteers, surface collected the site and excavated two 2 x 2 meter test units before the reservoir was refilled. Thirty-eight Late Paleo-Indian projectile points were recovered. Fourteen Scottsbluff and two Eden points are among the recovered materials.

Toby Morrow (Center for American Archeology) TWIN DITCH: INVESTIGATIONS AT AN EARLY ARCHAIC SITE IN THE LOWER ILLINOIS VALLEY Excavations at the Twin Ditch site by the Center for American Archeology's Education Program have revealed a rich, stratified Early Archaic site on the Illinois River floodplain. Two distinct horizons were discovered. The upper zone yielded a variety of Middle Archaic and late Early Archaic diagnostics. The Lower component is a well preserved Thebes Cluster site producing Thebes knives, St. Charles points, a variety of other tools, and faunal remains.

Jacqueline A. Ferguson and Robert E. Warren (Illinois State Museum) ARCHAEOLOGICAL AND GEOLOGICAL FIELDWORK AT THE TONICA KETTLE SITE IN NORTH-CENTRAL ILLINOIS Recent fieldwork has been conducted in and around an upland glacial kettle in north-central Illinois (FAP-412 project). The kettle, situated on a Woodfordian ground moraine, has produced evidence of late-Pleistocene and possible

Holocene biota (pollen, wood, spruce cones, aquatic snails, beetles, birds, turtles). The biota may provide evidence of the local environmental context of a large Middle Archaic site (c. 8000-5000 BP) that rings the kettle. Excavations at the site uncovered a rectangular structure and other features, which provide new information on the upland adaptations of Middle Archaic hunter-gatherers.

James A. Robertson (Michigan State University) **SITE TYPOLOGIES: A LESSON FROM A MIDDLE ARCHAIC SITE IN SAGINAW COUNTY, MICHIGAN** The Weber I site (20SA581) is a Middle Archaic site located along the Cass River near Frankenmuth, Michigan. Spatial and microwear (high power method) analyses suggest that Weber I was briefly occupied by a small residential group(s). A range of both subsistence related and manufacturing activities took place. These findings are evaluated in light of current site typologies. This site illustrates that there is much more variation and many more complexities in hunter-gatherer settlement systems than many of our models and site typologies are capable of predicting or encompassing.

Kathryn C. Egan (Michigan State University) **ANALYSIS OF THE FLORAL REMAINS FROM THE WEBER I SITE (20SA581) FRANKENMUTH, MICHIGAN** Recent analysis of the archaeobotanical assemblage from the Middle Archaic and terminal Late Archaic Weber I site in the Saginaw Valley of Michigan provides new information about the environmental setting and subsistence activities of these populations. Comparisons with other archaeobotanical assemblages suggests that a generalized and opportunistic subsistence strategy developed during the Archaic period in this region. This strategy was an adaptation to the diverse and patchy environment of the region.

John F. Doershuk (Northwestern University) **ARCHAEOLOGICAL RECONNAISSANCE AND TESTING AT THE JOLIET ARMY AMMUNITION PLANT, WILL COUNTY, ILLINOIS** Archaeological testing around the Arsenal Site (11-WI-241), located on Joliet Army Ammunition Plant property in southwestern Will County, Illinois, is described and results presented in light of previous area research and associated sites. Investigations initially focused on Plenemuk Mound, an intact late prehistoric burial facility, but later shifted to a buried Archaic layer located stratigraphically beneath the mound. This undisturbed deposit yielded numerous artifacts and lithic debitage, permitting characterization of technological aspects of this relatively early northeastern Illinois assemblage.

Mark L. Anderson (Ball State University) **THE RESCUE EXCAVATIONS OF THREE LATE ARCHAIC SITES IN THE MARKS BAY PARK RESERVE, SAULT STE. MARIE, ONTARIO, CANADA** Three archaeological sites, from the Late Archaic period, are examined in this paper. The sites are located in the Marks Bay Park Reserve, approximately 15 km. west of the city of Sault Ste. Marie, Ontario. The purpose of the excavations are two-fold. Since the sites are located on sand beach ridges in a riverine context, the first objective was to rescue the sites from destruction due to erosion by the St. Marys River. Using the archaeological information gained during three seasons of fieldwork and the description and analysis of the information, the second objective was to study the settlement and activity patterns of the occupants.

Elizabeth D. Benchley (University of Wisconsin-Milwaukee) **THE TROUT POINT SITE: A LATE ARCHAIC(?) LITHIC WORKSHOP(?) AND WARMING STATION(?) (BAKE SHOP?) (SAUNA?) (LIGHT HOUSE?) ON THE SOUTH SHORE OF LAKE SUPERIOR, MICHIGAN** The Trout Point Site, on the Hiawatha National forest, is located on a 65 foot high bluff top overlooking Lake Superior just off Munising, Michigan. The prehistoric site is a concentrated area of quartzite cores and flakes and fire-cracked quartzite cobbles. No temporally diagnostic artifacts were found during data recovery and no organics were preserved in the acidic soils. Analysis of the 1200 pounds of rock collected during data recovery focused on understanding the lithic tool production systems in evidence at the site. Thermoluminescence dating of fire cracked rock samples provided a date of 2,300 BP.

Dale W. Quattrin and William M. Cremin (Western Michigan University) **A UNIQUE FEATURE AT THE SCHILLING SITE (20KZ56), KALAMAZOO COUNTY, MICHIGAN** During archaeological excavation of the Schilling site in 1984, excavators encountered a massive concentration of fire-cracked rock in a matrix of charcoal impregnated soil suggesting very substantial firing and the subsequent shattering of perhaps several thousand large cobbles of locally derived till material. It is suggested that this feature represents an episode(s) of ritual purification (i.e. sweat lodge) dating to 2300 radiocarbon years BP.

William S. Dancy (Ohio State University) **THE WATER PLANT SITE: AN EARLY LATE WOODLAND VILLAGE IN CENTRAL OHIO** Systematic surface collection and testing in 1980 at 33-Fr-155 in central Ohio produced evidence of a 3.15 ha early Late Woodland settlement on a 12 m high bluff enclosed by a c-shaped ditch. Chesser Notched points and ceramics resembling Newtown Cordmarked dominate the assemblage. Radiocarbon dates from feature fill samples fall in the 6th century A.D. An analysis of the internal layout of the settlement is the subject of this paper.

Paul J. Pacheco (Ohio State University) **SALVAGE EXCAVATIONS AT THE CONTINENTAL CONSTRUCTION SITE** In the summer of 1986 the Licking County Archaeology and Landmarks Society in conjunction with the Ohio State University conducted salvage excavations at the construction site of the new Chillicothe Mall, Ross County, Ohio. A total of 27 cultural features were investigated in the course of a two week period. Stratified floodplain deposits revealed pit features, hearths, and human burials. This report focuses on the recovered material, with emphasis on the Early and Late Woodland periods.

Albert H. Brine (Springfield, IL) **LAND SNAILS FROM EILERS (11CS20): A MIDDLE TO EARLY LATE WOODLAND SITE IN CENTRAL ILLINOIS** Analysis of land snails from the Eilers site test excavations indicate a stable forest during the Havana phase, changing to a less stable, more open environment during the subsequent Weaver phase. It is suggested that this change in environment was the result of ameliorating climatic conditions.

Barbara L. Barrish (Cleveland State University) **PRELIMINARY ANALYSIS OF A LATE WOODLAND BURIAL SITE IN NORTHEAST OHIO** The Norma Grantham Site in Fairport Harbor, Ohio provides a unique resource for the study of the Late Woodland in Northeastern Ohio, particularly in aiding to reconstruct information on the prehistoric society that inhabited this area c. 400 years ago. 152 burials have been excavated and removed for analysis, along with other cultural remains. The topic of discussion is the preliminary analysis of the skeletal material from this site. Included are the criteria used for sex and age determination, their distributions within the population, as well as a brief discussion of gross macroscopic observations of disease and injury.

Charles R. Moffat (American Resources Group, Ltd.) **INVESTIGATIONS AT THE LITTLE MUDDY ROCK SHELTER, JACKSON COUNTY, ILLINOIS** During 1985 and 1986 American Resources Group excavated the Little Muddy Shelter, a stratified site with thirteen components dating from c. 7200 B.C. to 650 B.P. The site is located in the till plains of southern Illinois on a low terrace adjacent to a large tributary of the Big Muddy River. The site features a particularly detailed Late Archaic and Woodland period sequence and contains the earliest radiocarbon dated Crab Orchard tradition occupation in southern Illinois.

PERSPECTIVES ON HISTORIC ARCHAEOLOGY

Keith L. Barr (Illinois State University) **MATERIAL CULTURE ON THE MIDWESTERN FRONTIER** The American Frontier has long been a fertile theme in our nation's scholarly and popular literature. It has inspired novelists, historians, film writers, and even archaeologists. As a part of his famous frontier thesis, Frederick Jackson Turner stated that when the European went to the frontier his life was ordered by the wilderness conditions he met there. This paper will compare and contrast some of Turner's ideas about material culture with evidence found in the archives of an Illinois county during the frontier period.

Guy Gibbon (University of Minnesota) **THE SAVANNA PORTAGE** Results of several years of survey and excavation along the Savanna Portage connecting the Great Lakes and the Mississippi River system in Minnesota are summarized. Historical Archaeology, fur trade, Western Great Lakes.

Carol Mason (University of Wisconsin-Fox Valley) **INDIANS, MAPLE-SUGARING, AND THE SPREAD OF MARKET ECONOMIES** The history of world-wide sugar production makes indigenous maple-sugaring an unlikely prehistoric pattern.

Thor Conway (Ontario Ministry of Citizenship & Culture) **ARCHAEOLOGICAL EVIDENCE FOR ALGONKIAN SHAMANISM** Archaeological investigations in northeastern Ontario have revealed evidence of prehistoric and early historic shamanism. An early historic Ottawa village site in northern Lake Huron contained a series of ritually killed dogs, as well as beaver burials and eagle burials, that relate to the Wabeno and Midewewin forms of Algonkian shamanism. An Ojibwa site at Sault Ste. Marie has similar animal interments plus the buried paws from black bears. Interpretation of these features relies on historical accounts of shamanic activities as well as recent ethnographic fieldwork with Ojibwa and Ottawa shamans.

MISSISSIPPIAN AND LATE PREHISTORIC MANIFESTATIONS

Duane Esarey (Dickson Mounds Museum) **MISSISSIPPIAN SPIDER GORGETS** Marine shell gorgets decorated with life-like depictions of a spider are a well-known, but relatively rare, Mississippian Period art form. Examples of 36 spider gorgets are presented and discussed. Nearly all of the 25 spider gorgets found in the Midwest fall into Phillips and Brown's (1978) tentative McAdams style. Stylistic variation among the McAdams style spider gorgets is explored and potential explanations offered.

Susan Jelly (University of Illinois-Urbana) **PRELIMINARY REPORT ON THE EXCAVATIONS AT ORENDORF MOUNDS** This is a report of 1986 and 1987 field school excavations at the burial mounds associated with the Mississippian Orendorf Village site in the central part of the Illinois River Valley. The report also includes information from a transitional Late Woodland occupation found under the mound area.

Sherri L. Hilgeman (Indiana University) **PATTERNING IN THE FILL OF A MISSISSIPPIAN HOUSE BASIN** Materials from Mississippian house floors are of interest because they might provide some information on the range and location of household activities. After abandonment, however, house basins fill and the patterning is blurred. Observations made during the excavation of an Angel phase house suggested that the floor was cleaned, the house burned, and the basin filled by natural erosional processes and some dumping of refuse. The patterning of artifacts in the fill is examined to distinguish it from patterns that were the result of household activities.

Mark Schurr (Indiana University) **PREHISTORIC MORTUARY BEHAVIOR AT THE ANGEL SITE** Excavations at the Angel Site (12Vg1), a large Mississippian ceremonial center in southwestern Indiana, produced a well documented skeletal series. The demographic structure of this sample of human remains is unlikely to be an accurate estimator of that of the prehistoric population because the demographic structure of the Angel skeletal series was partially determined by prehistoric mortuary behavior. The social and biological dimensions of Angel mortuary practices therefore cannot be considered independently.

Dale R. Henning (Luther College) **WESTERN ONEOTA: A PERSPECTIVE FROM THE BLOOD RUN SITE, NORTHWEST IOWA** The Blood Run site was nominated to the National Register and given Landmark status on the basis of its size (over 650 acres) and the number of surface features which are still extant. Because of site destruction due to gravel removal and efforts by the State of Iowa to acquire portions of the site, two seasons of subsurface investigations have been conducted. Site function and the system of interrelationships participated in by those who used the site are considered.

Clark A. Dobbs and Kim C. Breakey (Institute for Minnesota Archaeology) **A PRELIMINARY REPORT ON INVESTIGATIONS AT THE ENERGY PARK SITE (21GD158): A SILVERNALE PHASE VILLAGE AT THE LAKE PEPIN LOCALITY** The Energy Park Site is a recently discovered Silvernale Phase village near Red Wing, MN. This site (21GD158) appears to be associated with a nearby flat-topped pyramidal mound. This paper discusses the first two seasons of work at the site and reports on the results of controlled surface collection, soil-resistivity studies, and excavation. Galena cubes, ceramics from both Silvernale and Oneota groups, and numerous pit-features have been exposed at the site.

Joseph Craig (Northern Illinois University) **INVESTIGATIONS AT AN UPPER MISSISSIPPIAN LANGFORD TRADITION SITE IN THE CALUMET CITY QUADRANGLE, COOK COUNTY, ILLINOIS** The Northern Illinois University field school investigated a Langford Tradition site situated on a Pleistocene beach ridge south of Chicago. Late Woodland and Upper Mississippian ceramics were recovered. Presented are preliminary results of on-going analysis and interpretations of the site's regional prehistoric context.

William M. Cremin (Western Michigan University) **UPPER MISSISSIPPIAN ADAPTATION: A TEN YEAR PERSPECTIVE ON SOUTHWEST MICHIGAN** Ten years ago, archaeologists at Western Michigan University commenced a program of research that represents the first substantive investigation of the Upper Mississippian occupation of Michigan since the 1940's. Through both survey and excavation we have sought to collect information regarding late prehistoric subsistence-settlement behavior that would enable us to better understand how the mixed economic strategy characteristic of historic Native Americans took root in this area. Both the successes and failures of this endeavor are presented.

John P. Nass (Ohio State University) **THE ANALYSIS OF STORAGE FEATURE VOLUME AS A TECHNIQUE FOR STUDYING FORT ANCIENT HOUSEHOLD ORGANIZATION AND COMMUNITY STRUCTURE** Excavation at the Incinerator Site in Dayton, Ohio by the Dayton Museum of Natural History has exposed over 65% of the community plan and indicates a site structure composed of concentric bands of burials, features, a structure around a central plaza. The purpose of this paper is to provide additional insight into the social organization of Fort Ancient communities in general, and the Incinerator Site specifically, by isolating households and comparing their material assemblages. The analysis supports the idea that a two part division, one domestic and one civic/ceremonial, exists at the site.

Charles R. Ewen (Florida Bureau of Archaeological Research) **THAT WAS NO PICNIC: CURRENT RESEARCH AT THE SITE OF DE SOTO'S FIRST WINTER ENCAMPMENT** The location of Hernando de Soto's winter encampment of 1539-40 has long been a topic of debate among archaeologists and historians alike. Recent discoveries by state archaeologists (Bureau of Archaeological Research) indicate that at least part of the site is located inside the city limits of Tallahassee, FL, and within sight of the capitol building. Working just ahead of development activities, salvage excavations have recovered features and artifacts characteristic of the late Fort Walton and 16th century Spanish periods.

HOPEWELL AND MIDDLE WOODLAND RESEARCH

John K. White (Ancient Lifeways Institute) **INDICATIONS OF MIDDLE WOODLAND MULTI-SITE CEREMONIALISM IN THE LOWER ILLINOIS VALLEY** A combination of aerial photography and ground observation of previously excavated but unmapped sites has revealed geometric configurations of mounds and solar equinox and solstice alignments of earthworks within and between sites. Mound groups on opposite sides of the Illinois River reveal a unity of planning through alignment of mounds on the same East/West axis. Multi-site Ceremonial Centers with a concern for solar phenomenon and geometric relationships in the placement of earthworks are indicated.

Joyce A. Williams, Thomas O. Maher, and Kathryn Parker (University of Illinois-Urbana) **THE MERIDIAN HILLS SITE (11-MS-1258): AN UPLAND MIDDLE WOODLAND EXTRACTIVE SITE** The Meridian Hills site, located southwest of Edwardsville, Illinois, is situated on the bluffs forming the eastern boundary of

the American Bottom. The site has recently been destroyed by residential construction. Through the efforts of amateur and professional archaeologists, 72 pit features were mapped and excavated. The fill from most pits was floated. The cultural materials recovered indicate an upland manifestation of a recently identified Hopewellian occupation in the American Bottom.

Robert B. Pickering (Field Museum of Natural History) **EXAMINATION OF A MIDDLE WOODLAND OSSUARY FROM WILL COUNTY, ILLINOIS** An unusual ossuary dating from the Middle Woodland period was encountered on the bluffs of the DesPlaines River during recent construction in Will County, Illinois. The remains included at least eleven adults and four juveniles. None of the remains appear to have been interred as complete skeletons, although at least five of the skeletons have most portions of the body represented. The most striking aspect of this small series is the great amount of pathology and trauma represented. Five healed fractures were observed in the sample of ten adults.

Charles B. Stout (University of Illinois-Urbana) **THE MUSHROOM SITE (20AE88): LONELY CAMPFIRES ON THE BLUFF** The Mushroom site contains the only prominent Middle Woodland component within the Kalamazoo Valley of southwestern Michigan. Based on excavation and surface collection data, it is suggested that this site was primarily a warm season encampment, occupied by a few family-sized groups at a time. There was apparently little interest in making Mushroom a more permanent habitation site like many of those in nearby river valleys, which reopens questions regarding Middle Woodland site selection criteria.

John Edward Blank (Cleveland State University) **HOPEWELLIAN LANDFORM UTILIZATION PATTERNS IN THE CENTRAL SCIOTO RIVER VALLEY, ROSS COUNTY, OHIO** Analysis of landform (glacial geomorphology, soil association and stream terrace - based upon the recently published *Glacial Geology of Ross County, Ohio*, [Quinn and Goldthwait 1986]) has been carried out for all 127 known Hopewellian sites in Ross County, Ohio. The 34 known Hopewellian geometrical earthworks display a highly selective distribution - being limited to Circleville Outwash Terraces of terminal Wisconsin age. Several hypotheses explaining this limited distribution are explored.

N'omi Greber (Cleveland Museum of Natural History) **SHETRONE'S MOUND 17 AT THE HOPEWELL SITE, ROSS COUNTY OHIO: EXCAVATED 1924; STUDIED 1986** In 1924 Henry C. Shetrone of the Ohio Historical Society excavated one of the smaller mounds of the Hopewell Site. He did not find burials. He did find two major deposits of Hopewell artifacts. A current study of the field notes and materials recovered more than fifty years ago from this small mound help in expanding our understanding of some of the activities undertaken by Hopewell peoples at this major site.

Richard W. Yerkes, John P. Nass, Jr., and Elizabeth K. Griebing (Ohio State University) **STONE TOOL FUNCTION AND ACTIVITY PATTERNS AT THE MURPHY SITE, A HOPEWELL SETTLEMENT IN LICKING COUNTY, OHIO** The results of a microwear analysis of 678 bifaces, bladelets, and flake tools from the Murphy site (33-LI-212), a Hopewell habitation site located west of the Newark Earthworks, are presented. The functions of chipped stone tools from 23 pit features and postholes and non-feature samples indicate that the site was a small, domestic "hamlet" that was occupied for short periods of time between 100 B.C. and A.D. 200, possibly on a seasonal basis. Results support the earlier interpretations of activities at the Murphy site.

Dee Anne Wymer (Licking County Arch. & Landmarks Society) and Paul J. Pacheco (Ohio State University) **CORRESPONDENCE ANALYSIS: PALEOETHNOBOTANICAL DATA AND THE MIDDLE WOODLAND TO LATE WOODLAND TRANSITION** Paleoethnobotanical analysis of Middle Woodland and Late Woodland sites in central Ohio has demonstrated subsistence continuity between the two periods. However, the assumptions of sample, feature, and site comparability and similarity of disposal and deposition patterns across time can always be questioned. A new statistical approach, correspondence analysis, has been used to explore the similarity and variability of the central Ohio samples, providing insights into understanding cultural change from A.D. 200 to A.D. 800.

Frances Clark (Cleveland Museum of Natural History) **ANCULOSA SHELL BEADS AND MIDDLE WOODLAND EXCHANGE** Anculosa shell beads, usually associated with Illinois Late Woodland burials, may have played a small role in the Middle Woodland Hopewell exchange system. Fourteen Anculosa beads were found recently in dated context in a North Dakota burial mound near the source of Knife River flint (KRF). An Illinois Hopewell burial at the Snyders site included 496 Anculosa beads in direct association with a KRF Ross barbed blade. Possible implications of these occurrences will be discussed.

Eleanor P. White (Ancient Lifeways Institute) **CURRENT ANALYSIS AND REPLICATION OF HOPEWELL TEXTILES** This presentation describes research into textile remains and textile impressions found on copper artifacts from the Hopewell Mound Group in the collections of the Field Museum (Chicago). The author, adept in ethnographically-known Native American Woodlands weaving, has identified textiles constructed by a number of techniques, including previously undescribed color-patterned twining and a ubiquitous fine gauze cloth found on most copper artifacts. She has replicated the latter two weaving techniques.

HISTORIC ARCHAEOLOGY: 19TH CENTURY SITES Organized by Robert A. Birmingham

Floyd Mansberger (USACOE-Rock Island District) **URBAN ARCHAEOLOGY: AN OFTEN OVERLOOKED CONTEXT FOR SIGNIFICANT CULTURAL RESOURCES** Historic archeology-- especially that associated with the 19th- century-- has finally become a viable research interest in Illinois and the midwest. Although some urban archeology has been conducted, the majority of the significant research in Illinois has been associated with rural farmsteads. This paper will present two urban projects which were conducted in urban settings -- areas which were thought to be "hopelessly disturbed". The results of the two projects was the recovery of early to mid 19th century cultural material that has contributed significantly to the understanding of mid 19th century lifestyles.

Candace J. Lutzow (American Resources Group, Ltd.) **THE DAVIS SITE : RECONSTRUCTION OF HISTORIC SUBSISTENCE MODELS COMBINING ARCHAEOLOGICAL AND ORAL HISTORY DATA** Botanical material recovered during excavation of the historic Davis site in Perry County of southern Illinois (1840-1865) provides evidence for ambient environment reconstruction and potential resource exploitation. This paper takes ameliorative steps to abate the paucity of historic ethnobotanical data through the synthesis of archaeological data and oral histories contributed by rural southern Illinois elders for the development of rural subsistence model dependent upon agricultural as well as indigenous plant species.

Mary R. McCorvie (American Resources Group, Ltd.) **THE DAVIS SITE: A MID-NINETEENTH CENTURY FARMSTEAD IN SOUTHERN ILLINOIS** Archaeological investigations at the Davis site revealed the presence of a variety of feature types including cellars, wells and cisterns, storage/refuse pits, smudge pits, a molasses furnace, and smokehouse. This site was occupied from 1840 to 1865. Information from the excavations and probate records indicate that the site functioned as a farmstead with a reliance on corn and pork but with other subsistence items represented including cattle, sheep, wheat, molasses, cotton, tobacco, cabbage, and potatoes.

Mark Bruhy (USDA Forest Service-Nicolet Nat'l Forest) **LATE 19TH AND EARLY 20TH CENTURY HISTORIC PROPERTIES IN NORTHERN WISCONSIN'S NATIONAL FORESTS** The USDA Forest Service has been conducting cultural resources survey in northern Wisconsin for the past ten years. Approximately 1500 historic properties have been located in the on-going surveys, and the types of recorded sites range from those attributable to the Paleo-Indian Tradition through the relatively recent period of pioneer Euro-American settlement. Clearly, sites dating to the late 19th and early 20th century are the major representations in the current inventory, and this discussion will focus on the range of settlement and industrial expressions manifest in these sites.

Patrick E. Martin (Michigan Technological University) **WORKERS' HOUSING IN A NINETEENTH CENTURY COMPANY TOWN** Recent excavations within Fayette State Historic Park concentrated on the ruins of two log houses formerly occupied by the families of laborers employed by the Jackson Iron Company. Active between 1867 and 1891, this company town was established to support the operation of two charcoal-fired blast furnaces to smelt the iron ore of the Negaunee mine. Excavation revealed a great deal about the lifeways of these lower-class workers, including information about construction techniques, dietary choices, social status, and the persistence of ethnicity.

Terrance J. Martin (Illinois State Museum) **ANIMAL REMAINS FROM LABORERS' HOUSES AT FAYETTE, A LATE 19TH-CENTURY INDUSTRIAL COMMUNITY IN NORTHERN MICHIGAN** A faunal assemblage of over 4000 specimens was obtained from the investigation of two laborers' houses at the Fayette State Historic Park located on the Garden Peninsula of northern Michigan. Analysis of these collections contributes to a perception of subsistence activities and refuse disposal practices by the families of lower class unskilled or semi-skilled workers who were employed by the Jackson Iron Company during the period of 1867 to 1891.

Ann Koski (Neville Public Museum) and William Krueger (Heritage Hill State Park) **SEARCH FOR SHANTY TOWN** This paper is a report on archeological investigations conducted by the Neville Public Museum and Heritage Hill State Park to determine the cultural resources of Heritage Hill. The western boundary of the state park has been noted as a possible location for Shantytown. Shantytown was the first yankee settlement in the Green Bay area in Wisconsin. It was established in 1820 as an adjunct community to Camp Smith. Archeological investigations included literature search, fieldwork, and preliminary lab analysis. This report will cover all three phases.

Robert Boszhardt and Cynthia Stiles-Hanson (Mississippi Valley Archaeology Center) **HISTORIC ARCHAEOLOGY IN WESTERN WISCONSIN BY THE MISSISSIPPI VALLEY ARCHAEOLOGY CENTER** In conjunction with the Region 6 Archaeology Program (of western Wisconsin), the Mississippi Valley Archaeology center has undertaken several historic archaeological projects. These include public field schools at the Peter Flurey site (a stone arched structure in the hills bounding La Crosse) and Spence Park; as well as management research including an archival study of aboriginal cemeteries at La Crosse, and of the 1870 wreck of the steamboat War Eagle. This paper will briefly summarize these historic archaeological projects, and focus on the Spence Park and War Eagle research.

Phillip Salkin (Archeological Consulting and Services) **A PRELIMINARY REPORT ON MITIGATION EXCAVATIONS AT THE BROWER STORE IN PRAIRIE DU CHIEN, WISCONSIN** In August 1987 personnel from Archeological Consulting and Services conducted a program of mitigation excavations at the Brower Drugs/Dry Goods Store in Prairie du Chien, Wisconsin. Excavation revealed the foundation of a substantial structure, 16 x 15 m. in size. Associated artifacts and archival research indicated the structure functioned as a wholesale drug and dry goods business from the late 1850's to late 1870's. Upstairs living quarters were also indicated. The large artifact assemblage may help document the position of Prairie du Chien as a regional transportation and economic center in the 19th century.

Will Gilmore (Cultural Resources Consultant) **HISTORICAL ARCHAEOLOGICAL INTERPRETATION AT VILLA LOUIS** Historical archaeological interpretation goes beyond the identification of the place and time of a particular event or erection and modification of a structure. Discussion will briefly describe the elements of historical archaeological research and interpretation utilized during investigations conducted under the preserve House at Villa Louis, the residence of Dousmans in Prairie du Chien. Typical of such projects, stabilization of the building's foundations rather than any research program initiated investigations. In this project, the historical data, the written, oral, and pictorial data, were used to complement the archaeological evidence.

METHODS, TECHNIQUES, AND OTHER APPROACHES TO ARCHAEOLOGY

Kevin P. McGowan (University of Illinois-Urbana) **BATHTUB SAMPLING: A POST-IMPONDMENT RESERVOIR SURVEY** An examination of the survey area specified by contracts led by the U.S. Army Corps of Engineers, St. Louis District for a post-impoundment pedestrian survey of Lake Shelbyville, Illinois between 1979 and 1973 has resulted in the recognition of a rather special type of sample: the "Bathtub Sample." This paper defines the "Bathtub Sample" and explores the advantages and disadvantages of this type of sample for studying prehistoric cultures.

John Claffin (Diachronic Research Associates) **LOOKING FOR MOM: A COMMENTARY ON RELATIONSHIPS BETWEEN PROFESSIONALS AND AMATEURS** During the last two decades, as dependence on contract archaeology has grown, reliance upon the local collector as a resource for general or site specific information has diminished. Concurrently, an increased hostility by professional archaeologists toward these individuals has been noted. This presentation examines the utility of the layman in contract archaeology, with reference to data gathered from three sites in Central Illinois. Some suggestions are offered for taking advantage of collector-generated data in order to more accurately evaluate specific sites, as well as to broaden support for archaeology at the grass roots level.

M.H. Sidky (Ohio State University) **MATERIALISM AND MARXISM: A NECESSARY ALLIANCE?** Interest in Marxist theory among American archaeologists and anthropologists has in the last few decades led to a variety of perspectives professing Marxist orientation. Ranging from economic determinist perspectives such as cultural materialisms to positions such as structural Marxism, each of these theoretical stances claims to offer a "materialist" framework for interpreting sociocultural phenomena. This paper examines some of these positions asking whether one necessarily has to adhere to a "Marxist" orientation in order to produce parsimonious materialist explanations.

Richard E. Bisbing (McCrone Associates, Inc.), William A. Lovis, and Norman J. Sauer (Michigan State University) **FORENSIC ARCHAEOLOGY: TRAINING FORENSIC SCIENTISTS IN HUMAN REMAINS RECOVERY TECHNIQUES** Forensic scientists and archeologists often have a common purpose. This paper describes a program designed and implemented by the Michigan State Police and Michigan State University to train forensic scientists. The training includes lecture and practice in basic survey techniques, excavation, recovery of buried evidence, and preliminary identification of decomposed human remains. Liaisons should be developed between archeologists, physical anthropologists, and forensic scientists in order to promote mutual assistance and training.

Mark L. Madsen (Roosevelt University) **CONTINUING PATTERNS OF LITHICS DISTRIBUTION AT TWO ENDANGERED POPLAR CREEK SITES THROUGH TWO PLOWING SEASONS** Between 1986 and 1987, thorough surface surveys were conducted at two of the last farm fields west of Elgin. Recurring patterns were noted between the two seasons' charts. Middle, Late Woodland, and Mississippian sites were limited to the same area locations. Although a new range of cultural materials made their appearances after the second plowing, the results of the surveys showed that greatest concentration of classic artifacts were located within one hundred paces of the creek bed.

Robert G. Thompson (University of Iowa) and Micheal Timpson (University of Tennessee) **THE GEOARCHAEOLOGY OF THE DAHNKE/REINKE SITE (32CS29)** The Dahnke/Reinke site is a multi-component site located at the junction of the Sheyenne River and Red River in Cass County, North Dakota. Buried landscapes represented by pedologic discontinuities correspond with cultural material. Slight differences in elevation on the same terrace were found to have a great difference in degree of deposition of alluvial material. Study of the directional orientation of the long-axis of artifacts reflected a varying degree of disturbance by moving water.

Jodie A. O'Gorman (Mankato State University) PRELIMINARY FINDINGS OF A COMPARATIVE STUDY ON THREE PREDICTIVE FIELD METHODS APPLIED AT THE "OT" SITE, WIS. During the 1987 field season a study was undertaken in southwestern Wisconsin at the "OT" site (47-Lc-262) in order to contrast and compare the utility and efficacy of three relatively non-destructive, predictive field methods; electromagnetic survey, self-potential survey and phosphate analysis. The test results and a preliminary report on the findings at the Oneota site are presented.

Keith A. Sverdrup (University of Wisconsin-Milwaukee) and James Stoltman (University of Wisconsin-Madison) A RESISTIVITY SURVEY AT THE FRED EDWARDS SITE (WISCONSIN) An electrical resistivity survey was conducted at the Fred Edwards (Oneota) site. Four E-W survey lines spaced 1-2 meters apart and extending roughly 25-30 meters in length were run. The lines began over a previously exposed but not excavated feature. All lines consistently showed two high relative resistivity anomalies; one over the known feature, and a second which was subsequently excavated to reveal a substantial house site.

James G. Foradas (Ohio State University) SITE GEOPHYSICAL SURVEY POSSIBILITY EVALUATIONS: MAKING LIFE EASIER FOR THE GEOPHYSICIST ON AN ARCHAEOLOGICAL SITE For decades archaeologists have been assisted by geophysical prospecting in the exploration for, and identification of, subsurface archaeological features. Geophysical survey is not "standard" archaeological procedure due in part to poor geophysicist-archaeologist communication. Standard site-survey forms do not presently provide geophysically relevant information. Better communication requires that archaeologists address the problems associated with planning, implementation, and analysis of archaeogeophysical survey.