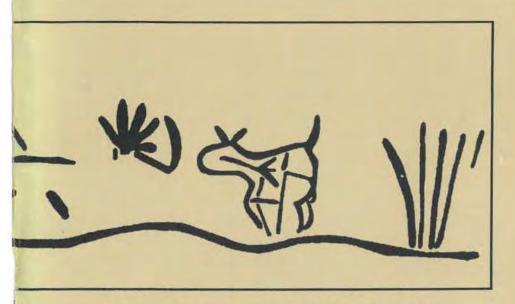
The 36th Annual

# Midwest Archaeological Conference



**Program and Abstracts** 



October 18-20, 1991 La Crosse, Wisconsin

## Midwest Archaeological Conference

36th Annual Meeting Oct. 18-20, 1991 La Crosse, Wisconsin

Sponsored by
The Mississippi Valley Archaeology Center
The UW-La Crosse Sociology and Anthropology Department
The UW-La Crosse Geography Department

### **Conference Organizing Committee**

Jim GallagherBob BoszhardtConnie ArzigianJames ThelerSheila GarrityBonnie ChristensenRoland RodellCharles MoffatLynn Jarvinen

The Mississippi Valley Archaeology Center extends its gratitude to the following individuals and organizations for their assistance in coordinating the Midwest Archaeological Conference for 1991:

The Society for American Archaeology
The UW-La Crosse Office of Minority Affairs
The UW-La Crosse Office of Continuing Education and Extension
The UW-La Crosse Native American Student Association
The University of Michigan Museum of Anthropology
G. Heileman Brewing Company
Tristine Smart

Cover Illustration: Petroglyph, Indian Cave, Richland County, Wisconsin

## **General Information**

Stevelensink OSA, VoFI

REF Conference MAC

#### REGISTRATION

A registration table, located in the La Crosse Center foyer, will be staffed from 11 a.m.-4 p.m. Friday, Oct. 18; 7:30 a.m.-1 p.m. Saturday, Oct. 19; and 7:30-9 a.m. Sunday, Oct. 20.

#### PARKING

Two parking ramps near the La Crosse Center provide free parking. One ramp is on the east side of the First Bank building. The other ramp is one block south of the La Crosse Center on Front Street. Participants staying at the Radisson Hotel can park in the hotel parking lot.

#### **EXHIBITS**

An interpretive exhibit on the archaeology of the La Crosse area will be displayed in the Convention and Visitors Bureau, north end of Riverside Park, just a short walk from the La Crosse Center. Hours are 3:30-7:30 p.m. Friday and 11 a.m.-2 p.m. Saturday.

#### BUSINESS MEETING

Selecting a site for the 1993 Midwest Archaeological Conference will be discussed at a short business meeting, noon on Sunday, Oct. 20 in Room C of the La Crosse Center. Also at the meeting, winners of the "Best Paper" awards will be announced. Participants need not be present to win.

#### NO SMOKING

Smoking is not permitted at sessions or in the book room. Smoking is permitted in the La Crosse Center foyer only.

#### SLIDE SCREENING

A projector will be available for speakers who wish to preview their slides. Hours are 7:30 a.m.-3:30 p.m. Saturday and 7:30-11 a.m. Sunday in Room B.

#### INFORMATION TABLE

An information table will be set up in the foyer during the conference for messages, maps, and other information on the program. Information on parking, restaurants, shopping and other points of interest will also be available.

#### **BOOK SALES**

Individuals and publishers will sell books in Room A. A "book exchange," offering used archaeology and related books for sale, will also be staffed there. Set up begins 7:30 a.m. Saturday. Hours are 8 a.m.-5 p.m. Saturday and 8-11 a.m. Sunday.

#### SNACK BAR

Snacks can be purchased at the La Crosse Center during conference hours.

## **Special Events**

#### RIVERBOAT CRUISE

Board the La Crosse Queen, an authentic paddlewheel steamboat, for a cruise on the Mississippi River Friday evening. A 4:30 p.m. before dinner cruise and a 6:30 p.m. after dinner cruise are available. The Queen is docked just west of the Convention and Visitors Bureau at the north end of Riverside Park, a short walk from the La Crosse Center. Tickets are available at the registration table for those who have not already pre-registered.

#### RECEPTION FOR NATIVE AMERICAN PANELISTS

A reception honoring the Native American panelists participating in the conference will be held from 5-6 p.m. Saturday in Room B of the La Crosse Center, All conference participants are invited to attend. The event is sponsored by the UW-La Crosse Minority Affairs Office and Native American Student Association, the Society for American Archaeology, and the University of Michigan Museum of Anthropology.

#### SATURDAY EVENING RECEPTION

A reception, hosted by the G. Heileman Brewing Company, will be held from 7-10 p.m. Saturday at Heileman Hall. The Hall is located on Third Street, across from the brewery, about a six-block walk south of the La Crosse Center. Parking is available directly behind Heileman Hall.

#### PAPER AWARDS

Two cash awards (\$100 each) will be presented for the best student and best professional papers given at symposia or contributed sessions. All registered participants can vote for the best paper in each category. A ballot will be enclosed with registration materials. Ballots must be returned to the information table before noon on Sunday. Winners will be announced at the business meeting. Papers from the plenary session are not eligible.

#### LITHIC RAW MATERIAL EXCHANGE

Samples of various lithic raw material types, with precise provenience information, will be available to conference participants. Set up will begin at 11:30 a.m. Saturday in Room A. Participants who bring samples have first priority to swap materials from 1:30-2:30 p.m. After 2:30, the remaining samples will be available to other conference registrants.

#### T-SHIRTS

Those who ordered T-shirts (with the official conference rock art logo) when they registered can pick them up in Room A. A limited number of shirts will also be available for purchase by those who did not preorder. Cost is \$8. Several Mississippi Valley Archaeology Center shirts and sweatshirts will also be for sale.

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## Program at a Glance

## FRIDAY, OCT. 18

Plenary Session Exhibition Hall 1:00-4:00 p.m.
La Crosse Center

Mississippi River Riverside Park 4:30 p.m. or Boat Cruises La Crosse 6:30 p.m.

SATURDAY, OCT. 19

Wisconsin Archaeological

Settlement Patterns

and Subsistence

1 GENERAL SESSION: Room E 8:00-8:30 a.m. Hopewell La Crosse Center

2 SYMPOSIUM: Room E 8:35 a.m.-noon

The Crab Orchard Culture: La Crosse Center Recent Studies of Settlement

3 SYMPOSIUM: Room C 8:00 a.m.-noon

Living With the Dead: La Crosse Center
State Burial Laws and
Programs in the Upper
Midwest

4 SYMPOSIUM: Room F 8:00-10:15 a.m.
The Southeastern La Crosse Center

Program: Fifteen
Years of Research

5 GENERAL SESSION: Room F 10:30-11:45 a.m. Historic Research La Crosse Center

6 GENERAL SESSION: Room D 8:00-11:45 a.m.
Mississippian and Late La Crosse Center
Woodland Studies and

LUNCH Noon-1 pm.

7 SYMPOSIUM: Room E 1:00-3:20 p.m. Mississippian at the 38th La Crosse Center

Parallel: Late Prehistoric

Dynamics Seen From the

Lower Ohio Valley

8 GENERAL SESSION: Oneota Studies	Room E La Crosse Center	3:40-5:00 p.m.
9 SYMPOSIUM: Forging Links Between Communities: Examples of Archaeologists and Native Americans Working Together in the Midwest	Room C La Crosse Center	1:00-5:00 p.m.
Reception for Native American Panelists	Room B La Crosse Center	5:00 p.m.
10 SYMPOSIUM: Geoarchaeology	Room F La Crosse Center	1:00-2:40 p.m.
11 GENERAL SESSION: Lithic and Copper Studies	Room F La Crosse Center	3:00-5:00 p.m.
12 GENERAL SESSION: Archaic Through Late Woodland Studies	Room D La Crosse Center	1:00-4:45 p.m.
Evening Reception	Heileman Hall La Crosse	7:00-10:00 p.m.
SUNDAY, OCT. 20		
13 SYMPOSIUM: Oneota in the La Crosse Locality	Room C La Crosse Center	8:00 a.mnoon
14 SYMPOSIUM: Signs and Symbols: A Symposium Dealing With Investigations of Ideologies of the Past	Room E La Crosse Center	8:00 a.mnoon
15 GENERAL SESSION: Earthworks and Ridged Fields	Room F La Crosse Center	8:00-8:45 a.m.
16 SYMPOSIUM: Plains-Woodland Interactions	Room F La Crosse Center	8:50 a.mnoon
Business Meeting	Room C La Crosse Center	Noon



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## Friday, Oct. 18, 1991 1-4 p.m.

#### PLENARY SESSION:

"The Prehistory of the Upper Mississippi River Drainage"

Exhibition Hall, La Crosse Center Organizer and Chairperson: James Theler

1:00	Introduction and Welcome
1:05	Kenneth B. Tankersley, Clovis Colonization of the Mississippi River
	Valley
1:20	Clark A. Dobbs, Howard Mooers and Mathew Murray, Changing
	Landforms and the Archaic Along the Prairie-Forest Border in the
	Northern Mississippi Drainage
1:35	Nurit Goldman, William Green and E. Arthur Bettis III, The Archaic
	Woodland Transition in the Upper Mississippi Valley
1:55	James Theler, Hopewell in the Upper Mississippi River Valley
2:10	Guy Gibbon, Late Woodland
2:25	Robert J. Salzer, Mississippian
2:45	Clark A. Dobbs, Oneota Cultures of the Northern Mississippi Valley
3:00	Robert F. Boszhardt, Oneota South
3:15	DISCUSSANT: Elden Johnson
3:30	DISCUSSANT: James Stoltman
3:45	OPEN MICROPHONE: Discussion period for the public

#### MISSISSIPPI RIVER BOAT CRUISES:

4:30 - Before dinner cruise

6:30 - After dinner cruise

Complimentary hors d'oeuvres and cash bar are provided.



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## Saturday, Oct. 19, 1991 8 a.m. - 5 p.m.

### 1

#### GENERAL SESSION:

"Hopewell"

#### Room E, La Crosse Center

8:00 Curtis H. Tomak, The Mount Vernon Site: A Hopewell Ceremonial/ Burial Site in Posey County, Indiana 8:15 George H. Odell, What Were Middle Woodland Blades Used For?

## 2

#### SYMPOSIUM:

"The Crab Orchard Culture: Recent Studies of Settlement and Subsistence"

Room E, La Crosse Center

Organizers: Michael L. Hargrave and Jeanette E. Stephens

- 8:35 Michael L. Hargrave and Jeanette E. Stephens, An Introduction to Crab Orchard Studies
- 8:45 Jeanette E. Stephens, Crab Orchard Settlement Patterns in the Big Muddy Drainage of Southern Illinois
- 9:05 Charles R. Moffat, Crab Orchard Ceramics and Chronology in the Till Plains of Southern Illinois
- 9:25 Kathryn E. Parker, Crab Orchard Plant Use and Food Production Technology
- 9:45 Terrance J. Martin, Animal Exploitation and the Crab Orchard Tradition: The View From the Little Muddy Rockshelter
- 10:05 BREAK
- 10:20 Mark J. Wagner and Mary R. McCorvie, Feature Form and Function at the Harvest Moon Site (24B2-181): Implications for Crab Orchard Settlement Within Interior Southern Illinois
- 10:40 Michael L. Hargrave, Implications of Architecture for Crab Orchard Settlement and Subsistence
- 11:00 Brad Koldehoff, The Organization of Crab Orchard Lithic Technology in the Big Muddy River Basin

#### SATURDAY

- 11:20 Carol A. Morrow, Hopewellian Traits at the Twenhafel Site: Non-Local Cherts and Blade Technology
- 11:40 DISCUSSANT: Brian M. Butler

## 3

#### SYMPOSIUM:

"Living With the Dead: State Burial Laws and Programs in the Upper Midwest"

Room C, La Crosse Center			
Organizer and Chairperson:	Diane	Young	Holliday

 8:00 Diane Young Holliday, Wisconsin's Burial Sites Preservation Law
 8:25 Rosanne M. Meer, The Research Potential of Human Remains Recovered From Salvage Situations
 8:50 Paula G. Cross, Birth of a Program: The Illinois Human Grave

Protection Act

- 9:15 David Keene and Beverly B. Kralovec, The Dunning Cemetery: Archaeological Investigations of a 19th-Century Cemetery in the City of Chicago
- 9:40 Kenneth B. Farnsworth and Karen Atwell, Naples-Russell Mound B. Reconstruction Project
- 10:05 BREAK
- 10:15 Shirley Schermer, Implementing Iowa's Burial Protection Law: The Office of the State Archaeologist's Burial Program
- 10:40 Robin Lillie and Marlin Ingalls, A Historic Burial Site in Northeastern Iowa
- 11:05 Barbara O'Connell and Susan T. Myster, The Minnesota Human Remains Project: Objectives, Status, and Future Developments
- 11:30 Christy A. Hohman-Caine and Roger Head, No Ivory Towers in Indian Country: Native Americans, Archaeologists, and Interpreting the Past

#### 11:45 DISCUSSION

#### SYMPOSIUM:

"The Southeastern Wisconsin Archaeological Program: Fifteen Years of Research

Room F, La Crosse Center	
Organizer and Chairperson:	Lynne Goldsteir

8:00	Lynne Goldstein, Introduction		
8:05	Lynne Goldstein, Woodland and Wetlands: An Overview of the		
	Southeastern Wisconsin Archaeological Program and Its		

Accomplishments

8:20 Michael F. Kolb, Holocene and Modern Geomorphic History in the Lower Crawfish River Valley: Holocene Stability and Recent Instability

8:35 Geralyn Flick, Woodland Ceramics From the Lange Site (47 Do-182)

8:50 Ellen Ghere Paulus, Effigy Mounds From a Bioanthropological Perspective

9:05 BREAK

9:10 John D. Richards, The Aztalan Ceramic Assemblage in Comparative Perspective

9:25 Rob Brubaker, Oneota Ceramics From Lake Koshkonong: A Study of Inter- and Intra-Site Patterning

9:40 Patricia R. Richards, Winnebago Subsistence - Change and Continuity

9:55 DISCUSSANT: James A. Brown

10:15 BREAK

## 5

#### GENERAL SESSION:

"Historic Research"

#### Room F, La Crosse Center

10:30 William M. Cremin, Current Research in the Southern Lake Michigan Basin: Seeking an Ethnic Identity for the Berrien Phase of Southwest Michigan

10:45 Jeffery A. Behm, Recent Excavations at the Bell Site (47-WN-9), Winnebago County, Wisconsin

- 11:00 David J. Cooper, Before the Mast: Archaeological Evidence for Social Conditions Aboard the Nineteenth-Century Great Lakes Schooner LUCERNE
- 11:15 Vergil E. Noble, An Archaeological Survey of the Ohio and Erie Canal, Cuyahoga and Summit Counties, Ohio
- 11:30 C. S. "Paddy" Reid, The "Sacredness" of Carved Stone Pipes in the Ojibwa-Cree Area of the Northern Mid-Continent: A Spatial and Temporal Dilemma



#### GENERAL SESSION:

"Mississippian and Late Woodland Studies and Settlement Patterns"

#### Room D, La Crosse Center

- 8:00 William Iseminger, John E. Kelly, Gayle J. Fritz, Bonnie L. Gums and William Gustav Gartner, Cahokia's Mound 1: In Over Our Heads
- 8:15 Melvin L. Fowler, William I. Woods and Rinita A. Dalan, Archaeological and Electromagnetic Testing of Woodhenge 72 at Cahokia Mounds Historic Site
- 8:30 George R. Milner, Sissel Schroeder and Steve Taxman, Stone Box Graves in Southern Illinois and Adjacent Missouri: New Perspectives From Old Collections
- 8:45 Roland L. Rodell, A Middle Mississippian Presence at Trempealeau, Wisconsin
- 9:00 Elizabeth B. Garland, The Wymer-West Knoll (20BE132), an Early Mississippian Component on the St. Joseph River in Southwestern Michigan: A Preliminary Report
- 9:15 Daniel B. Goatley, Variations in Lithic Raw Material Procurement and Utilization Among Late Woodland and Upper Mississippian Groups Occupying Southwest Michigan
- 9:30 BREAK
- 9:45 Keith W. Adams, Two Previously Undescribed Late Woodland Ceramic Varieties: Wild Onions and Late Woodland Archaeology
- 10:00 Michael D. Conner, Late Woodland Ceramic Diversity and Settlement Patterns in the Mississippi River Valley Near Quincy, Illinois
- 10:15 Mark A. Hill, Timid Mink: A Late Woodland Site in Michigan's Western Upper Peninsula
- 10:30 Janet G. Brashler, The Spoonville Site and the Middle -Late Woodland Transition in Southwestern Michigan: A New View at Old Data
- 10:45 Kevin P. McGowan, Across the Prairie: A Pipeline Survey in Central Illinois

- 11:00 John A. Schwegman, Archaeological Investigations Along the Rock River in Northern Illinois
- 11:15 Madeleine Garceau and Douglas Kullen, Prehistoric Settlement
  Patterns in the Upper Kishwaukee Drainage, Northeastern Illinois
- 11:30 Timothy D. Knapp, Environmental Factors Influencing Prehistoric Site Selection Along the Portage River, A Tributary of the St. Joseph of Southwestern Michigan

## 7

#### SYMPOSIUM:

"Mississippian at the 38th Parallel: Late Prehistoric Dynamics Seen From the Lower Ohio Valley"

Room E, La Crosse Center Organizer and Chairperson: Sherri L, Hilgeman

- 1:00 Brian G. Redmond, On the Frontiers of Mississippian: The Oliver Phase Occupation of Southern Indiana
- 1:20 R. Berle Clay, Political Evolution of a Hinterland Mississippian Site
- 1:40 Sherri L. Hilgeman, The Chronology of the Middle Mississippian Occupation of the Angel Site
- 2:00 Paul Kreisa, At the Confluence: Mississippian Settlement Organization in the Heartland
- 2:20 Kit W. Wesler, Living High: A Residential Mound at Wickliffe
- 2:40 Mark R. Schurr and Margaret J. Schoeninger, Stable Isotope Ratios and Prehistoric Diet in the Lower Ohio Valley
- 3:00 DISCUSSANT: Brian M. Butler
- 3:20 BREAK

## 8

#### **GENERAL SESSION:**

"Oneota Studies"

Room E, La Crosse Center

3:40 Alan D. Harn and Nicholas W. Klobuchar, An Oneota House From the Central Illinois River Valley

- James Brown, John A. K. Willis and Teresa Kugler, Subsistence
   Research at the Zimmerman Site
   Douglas Kullen, The Comstock Trace: A Huber Phase Earthwork
   and Habitation Site Near Joliet, Will County, Illinois
- 4:25 Ronald J. Mason and Carol I. Mason, AMS Dates on Oneota and Late Woodland Pottery From the Door Peninsula, Wisconsin
- 4:40 Jeffrey K. Yelton, A Functional Approach to Oneota Pottery Analysis

## 9

#### SYMPOSIUM:

"Forging Links Between Communities: Examples of Archaeologists and Native Americans Working Together in the Midwest"

#### Room C, La Crosse Center

Organizer and Chairperson: Tristine Lee Smart

Special thanks to the UW-La Crosse Minority Affairs Office and Native American Student Association, the Society for American Archaeology, and the University of Michigan Museum of Anthropology

- 1:00 Tristine Lee Smart, Introduction
- 1:05 Robert J. Salzer, Indians and Archaeologists: Four Wisconsin Cases
- 1:20 Ronald Hicks, Elizabeth Glenn and Donald R. Cochran, Working With the Indiana Miami
- 1:35 Susan Branstner, Teaching Multicultural Awareness Through Archaeology
- 1:50 Stephen C. Lensink, Participation of Indians in Teacher Workshops
- 2:00 Charles Cleland, Anthropological and Archaeological Data in the Context of Indian Treaty Rights Litigation
- 2:20 Daniel C. Swan, Addressing the Research Agendas of American Indian Communities: An Example From Osage County, Oklahoma
- 2:35 BREAK
- 2:45 James B. Stoltman, Archaeology Is More Than Grave Robbing: Indian Students and the First Season of Excavation at the Fred Edwards Site
- 3:00 Grant Goltz, Heritage Sites Management in Indian Country
- 3:15 Barbara H. O'Connell and Susan M. T. Myster, Blackduck Subsistence in Northern Minnesota: Archaeology and Oral Tradition
- 3:30 PANEL DISCUSSION: How can archaeologists and Native American Communities work together more effectively?

Howard Allen, Kickapoo Nation School, Kansas Bill Lonetree, Winnebago Nation Burial Mounds Committee Buck Martin, White House Conference on Indian Education Robert Powless, Bad River Reservation, Wisconsin A representative from the Great Lakes Inter-Tribal Council

## 5:00 RECEPTION FOR NATIVE AMERICAN PANELISTS Room B, La Crosse Center. All conference participants welcome.

## 10

#### SYMPOSIUM:

"Geoarchaeology"

Room F. La Crosse Center	Room	FI	a Cr	osse	Center
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Organizer and Chairperson: Dean Wilder

1:00	Michael F. Kolb, Cultivation and Site Formation Processes: A
	Geomorphic Perspective
1:20	Julieann Van Nest, Archaeological Geology of a Portion of the
	Mississippi River Valley Near Hannibal, Missouri
1:40	Stephen Ball, The Practical Application of Magnetic Surveys to
	Excavation Strategy: A Question of Scale
2:00	Susan C. Mulholland, Phytolith Analysis in Geoarchaeology
2:20	Brad Koldehoff, Kenneth B, Tankersley, Stanley A, Ahler and John

Fox, A Source of Knife River Flint in Southern Illinois

## 11

#### GENERAL SESSION:

"Lithic and Copper Studies"

#### Room F, La Crosse Center

- 3:00 Mark Lawrence Madsen and Jerol Hilliard Hanlon, A Search to Find Patterns in Crude Tool Assemblages 3:15 Dan Ruggles and Maria Buckmaster, Mount Mesnard: A Prehistoric Quartzite Quarry John H. Broihahn, The Arcadia Ridge Orthoquartzite Quarries: Their 3:30 Rediscovery and Preliminary Investigation 3:45 Riaz Malik and Kent Bakken, The Bradbury Brook Site: A Late Paleo-Indian Stone Workshop 4:00 Jacqueline A. Ferguson, Chert Resources of Northern Illinois: Discriminant Analysis and an Identification Key Mark L. Anderson, Application of Microdebitage Analysis in Phase I 4:15
- 4:15 Mark L. Anderson, Application of Microdebitage Analysis in Phase I Archaeological Surveys in Iowa
- 4:30 Donald B. Simons and Michael J. Shott, The Butler Site: A Gainey Phase Paleo-Indian Occupation in Southeastern Michigan
- 4:45 William A. Fox, The Serpent's Copper Scales

## 12

#### GENERAL SESSION:

"Archaic Through Late Woodland Studies"

#### Room D, La Crosse Center

1:00	Curtis H. Tomak, The Jerger Phase and Early Archaic Mortuary
	Ceremonialism in Southwestern Indiana
1:15	Daniel B. Goatley and Kathryn C. Egan, Quasar: Field Impressions of a Specialized Middle Archaic Encampment on the Illinois River
1:30	Thomas C. Pleger, Seasonal Occupation and Grouping at the
	Chautauqua Grounds Site (47-Mt-71), a Multi-Component Site
	Situated Near the Junction of the Menominee River and the Bay of
	Green Bay
1:45	Ronald Hicks, Toward a Radiocarbon Chronology for Indiana
2:00	Steven Mark Taxman, Non-Metric Trait Variation in the Adena
	Peoples of the Ohio River Drainage
2:15	Mark F. Seeman and N'omi B. Greber, Flames of Reverence:
	Variations in the Use of Prepared Clay Basins Within Ohio Hopewell
2:30	Robert J. Jeske, The Davidson Site: A Late Prehistoric Burial and
	Habitation Site in Porter County, Indiana
3:00	Blane Nansel and William Green, Time Trend Analysis of Late
	Woodland Pottery From Western Illinois
3:15	Derrick Marcucci, John Cordell and William Green, The Paul Sagers
	Archaeological Collection
3:30	William Green and Rebecca Wallace, Woodland Community Definition
	at the Gast Farm Site (13LA12), Louisa County, Iowa
3-45	John Bower and Sheila Hainlin Middle to Late Archaic Occupation of

and Food Debris
4:00 David C. Lowe, Results of the First Systematic Rock Art Survey of
Wisconsin

the Buchanan Site, Central Iowa (13 SR 153): Chronology, Artifacts

4:15 Fred A. Finney, Scott Meyer and Kathryn Parker, Investigations at the Bobwhite Site: A Middle Archaic Raddatz Occupation in the Driftless Area of Wisconsin

4:30 Norm Meinholz, A Late Woodland Community at the Statz Site, Dane County, Wisconsin: A Preliminary Report

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7-10 p.m.

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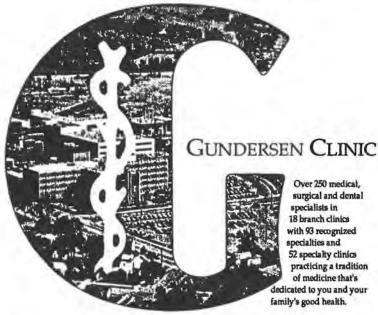
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## Sunday, Oct. 20, 1991 8 a.m.-noon

## 13

#### SYMPOSIUM:

"Oneota in the La Crosse Locality"

Room C, La Crosse Center	
Organizers and Chairpersons:	Robert Boszhardt and Jodie A. O'Gorman

8:00	Robert F. Boszhardt, The La Crosse Locality and History of Oneota
	Investigations
8:10	Robert F. Sasso, The Nature of Oneota Settlement Land Use and
	Agricultural Patterns in the La Crosse Region of Western Wisconsin
8:25	Robert F. Boszhardt, Oneota Ceramics and Chronology of the
	La Crosse Locality
8:40	Constance Arzigian, Studying Prehistoric Plant Food Utilization by
	Oneota Populations in La Crosse, Wisconsin
8:55	James L. Theler, Oneota Animal Resource Utilization in Western
	Wisconsin
9:10	Michael J. Scott, Midway Village Faunal Remains
9:25	Anthony L. Zalucha, Wood Charcoal From the Valley View Site: The
	Northern Excavated Area
9:40	DISCUSSION
9:50	BREAK

- 10:00 Jodie A. O'Gorman, The Tremaine, OT, Filler, and Firesign Site Excavations: Late Prehistoric Oneota Sites in the La Crosse Locality
- 10:20 Andrea Hunter
- 10:40 John T. Penman and Richard W. Yerkes, Fauna From Filler: An Oneota Site in La Crosse County, Wisconsin
- 11:00 Jodie A. O'Gorman, OT Site Ceramics: Cultural Chronology and the Pursuit of Form and Function
- 11:20 Joseph A. Vradenburg, Skeletal Analysis of a Late Prehistoric Oneota Population: La Crosse County, Wisconsin
- 11:40 Jodie A. O'Gorman and R. Eric Hollinger, The Tremaine Structures: Methodological and Theoretical Issues

## 14

#### SYMPOSIUM:

"Signs and Symbols: A Symposium Dealing With Investigations of Ideologies of the Past"

Room E, La Crosse Center	
Organizer and Chairperson:	Robert Salzer

8:00	Robert Salzer, Introduction
8:05	Carol Diaz-Granados, Missouri Rock Graphics and the Green Corn
	Ceremony
8:25	Grace Rajnovich, Reading Rock Art: Interpreting the Indian Rock
	Paintings of the Canadian Shield
8:45	John E. Kelly, Wells Incised Plates: Symbolic Antecedents and
	Spatial Affinities
9:05	Duane Esarey, Style and Symbolism of Mississippian Spiders
9:25	Robert L. Hall, "Sun Dogs Don't Bark" and Other Wisdom of the
	Ancients

9:45 BREAK

10:00 Richard E. Bisbing, Ultramicroanalysis of Signs and Symbols

10:20 William Gustav Gartner, Semiotics, Sediments, and the Geoarchaeology of the Gottschall Rockshelter, Wisconsin

10:40 Robert J. Salzer, Reading Symbols in Dirt

11:00 Thomas S. Hurlbutt and B. K. Swartz, Jr., Architectural Interpretation as an Insight into Petroglyph Meaning and Mystique

11:20 Russell A. Hapke and B. K. Swartz, Jr., Water Basin Markers: An Interpretation of Petroglyphs at White River Narrows, Lincoln County, Nevada

11:40 DISCUSSANT: James Brown

## 15

#### GENERAL SESSION:

"Earthworks and Ridged Fields"

#### Room F, La Crosse Center

8:00 John H. Moore, Two Central Wisconsin Earthen Rings

8:15 James A. Marshall, The Prehistoric Circular Earthwork Openings of Eastern North America Examined for Astronomical Orientations

8:30 William Gustav Gartner, The Hulburt Creek Fields

## 16

#### SYMPOSIUM:

"Plains-W oodland Interactions"

Room F, La Crosse Center

Organizer and Chairperson: Stephen C. Lensink

- 8:50 Stephen C. Lensink, Introduction
- Robert E. Warren, Prehistoric Settlement Patterns in Central Illinois: 9:00 The FAP-412 South Highway Project
- 9:20 Dale R. Henning, Great Oasis and Emergent Mississippian
- 9:40 Clark A. Dobbs, Prairie-Woodland Interaction and the Red Wing Connection
- 10:00 Lawrence A. Conrad and David J. Nolan, Preliminary Observations on the Occurrence of Catlinite in West Central Illinois
- 10:20 BREAK
- 10:35 Michael Scullin, Growing Corn in the Upper Midwest
  - 10:55 John Paul Staeck, New Directions in Interpretation: Chiwere Myth Traditions and the Late Prehistoric of the Western Great Lakes
  - Kenneth B. Tankersley, Terrance J. Martin and Dawn Harn-Sullivan, 11:15 The Windrose Site: A Late Eighteenth-, Early Nineteenth-Century Habitation
  - Paul R. Picha and Michael L. Gregg, Stones, Bones, Shells, and Other Objects of Value: Middle Woodland Resource Exchange as Viewed From the Northern Plains

#### BUSINESS MEETING

Noon

Room C. La Crosse Center

12 row = husks -- Cambria - where Nelson Folk Northern Flint = SIW

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#### ABSTRACTS

Adams, Kelth W. (Patrick Engineering, Inc.) (Professional)

TWO PREVIOUSLY UNDESCRIBED LATE WOODLAND CERAMIC VARIETIES: WILD
ONIONS AND LATE WOODLAND ARCHAEOLOGY

Two previously undescribed varieties of Late Woodland ceramics were recovered in Phase I testing at Nelson Lake Forest Preserve Kane County. The sherds are "Swanson-like" with coarse light-colored grit temper but are much thicker than the pottery of the Swanson Complex. Lithic artifacts recovered from the site indicate a Late Woodland temporary camp function for the site.

Ahler, Stanley A. - see Koldehoff, Brad

Anderson, Mark L. (Office of the State Archaeologist, Iowa) (Professional)

APPLICATION OF MICRODEBITAGE ANALYSIS IN PHASE I ARCHAEOLOGICAL
SURVEYS IN IOWA

Microdebitage is the powdery debris produced by flintknapping activities and identified by microscopic analysis of water screened soil samples. This class of artifacts was initially defined by Fladmark in 1982 and its application in archaeological site analysis grew throughout the 1980s. Beginning in late 1987, field and lab techniques focusing on microdebitage have been applied during Phase I archaeological surveys conducted in many landform regions and geomorphological settings, and under various surface visibility and erosional conditions in Iowa. The primary goals of this paper are threefold: (1) to investigate the utility of microdebitage analysis in site identification, especially in zero visibility conditions and in buried contexts; (2) to evaluate the time and cost effectiveness of this method; and (3) to illustrate the importance of the data provided in overall site analysis and interpretation.

Arzigian, Constance (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Professional) [13] STUDYING PREHISTORIC PLANT FOOD UTILIZATION BY ONEOTA POPULATIONS IN LA CROSSE, WISCONSIN

A summary of prehistoric plant remains recovered from Oneota sites in La Crosse indicates numerous cultivated, domesticated, and wild plant food resources were utilized. This material is used to examine methodological problems that emerge when evaluating the significance and pattern of utilization of floral resources. An examination of the specific context of recovery of plant remains from several features at the Pammel Creek site suggests the potential for a more detailed understanding of the specific seasonal and behavioral activities involved in subsistence strategies. In addition, field and lab sampling methods that may bias these results are considered.

Atwell, Karen - see Farnsworth, Kenneth

Bakken, Kent - see Malik, Riaz

Ball, Stephen (Glenn A. Black Laboratory of Archaeology, Indiana University) (Student) [10]
THE PRACTICAL APPLICATION OF MAGNETIC SURVEYS TO EXCAVATION
STRATEGY: A QUESTION OF SCALE

Recent advances in magnetometer design have allowed for a dramatic increase in the speed and intensity of magnetic surveys. Magnetic surveys conducted at a .25 meter sample interval have become a feasible part of pre-excavation strategies. A geoscan FM36 gradiometer was employed in a magnetic survey of 12 Lr 239, an Oliver phase village in south-central Indiana. Information from the magnetic survey and a controlled surface collection were combined to determine the excavation strategy. The gradiometer was markedly successful in detecting intact sub-surface pits.

Behm, Jeffery A. (University of Wisconsin-Oshkosh) (Professional) RECENT EXCAVATIONS AT THE BELL SITE (47-WN-9), WINNEBAGO COUNTY, WISCONSIN

The Bell site, on the southern shore of Big Lake Butte des Morts, is the location of the French and Fox battle of 1716. Partially salvaged in the late 1950s when part of the site was removed for highway fill, disturbance continued through many years of uncontrolled looting. Recent excavations at the site, spurred on by the threatened development of the area, have expanded the boundaries of this important Middle Historic village and identified several intact areas. Portions of three stockade lines and a thick midden deposit have been located. The potential for additional features appears to be high.

Bettis, E. Arthur, III - see Goldman, Nurit

Bisbing, Richard E. (McCrone Associates, Inc.) (Professional) ULTRAMICROANALYSIS OF SIGNS AND SYMBOLS

1141

Ultramicroanalysis in archaeology can lead to a better understanding of the record left by native peoples even with regard to their signs and symbols. The reasons we care to analyze the materials used in artifacts include: our need to more fully identify our archaeological data; to characterize the raw materials used; and to better understand the fourth dimension in archaeology - the material dimension. Obviously, before signs and symbols can be interpreted, their authenticity must be indisputable. Signs and symbols do not seem to fall neatly into traditional descriptive archaeological investigations, archaeometry, or environmental archaeology; but even signs and symbols are modifications of materials. Therefore, materials analysis should lead to a better understanding of them.

Boszhardt, Robert F. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) [Plenary] ONEOTA SOUTH

Most Oneota occupations below Lake Pepin post-date A.D. 1300. Although the predominate late prehistoric culture of the upper Mississippi River, Oneota sites are conspicuously rare from the confluences of primary tributaries. Instead, intensive habitations were established at lesser streams. While initially continuing a mixed agriculture and hunt/gather subsistence economy, with emphasis on Mississippi River floodplain resources, bison hunting apparently increased in protohistoric times. This "pull" effect, coupled with other pressures such as the Little Ice Age, European diseases, and a ripple impact from the Iroquois Wars apparently caused some Oneota groups to abandon the Mississippi Valley in favor of westerly locations at contact.

Boszhardt, Robert F. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Professional) [13]

THE LA CROSSE LOCALITY AND HISTORY OF ONEOTA INVESTIGATIONS

The La Crosse locality conforms to an unusually wide section of the upper Mississippi River trench. This locality displays a diverse habitat ranging from the rich Mississippi River floodplain to dissected uplands supporting a prairie/forest mosaic. In between are extensive sandy Pleistocene outwash terraces that contain one of the most intensive concentrations of Oneota culture occupation in the upper Midwest. Investigations since the 1920s have recognized the presence of Oneota on the terraces near La Crosse, but only in the past decade has the extensive and varied Oneota settlement of the La Crosse Locality come to light.

Boszhardt, Robert F. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Professional) [13]

ONEOTA CERAMICS AND CHRONOLOGY OF THE LA CROSSE LOCALITY

Over 60 radiocarbon dates are available for Oneots components within the La Crosse locality. These provide a framework for examining stylistic change through time. Analyses of ceramics from local Oneota sites has revealed a group continuity from about A.D. 1300-1650.

Observed stylistic differences within this continuum have allowed the recognition of two sequential phases. Brice Prairie phase ceramics include the type Perrot Punctate and compare with other manifestations dating from A.D. 1300-1400. Following a clear transition to new types such as Allamakee Trailed and Midway Incised, the Valley View phase is recognized as lasting from A.D. 1450-1650.

Bower, John (Iowa State University) and Shella Hainlin (Professional)

MIDDLE TO LATE ARCHAIC OCCUPATION OF THE BUCHANAN SITE, CENTRAL IOWA
(13 SR 153); CHRONOLOGY, ARTIFACTS AND FOOD DEBRIS

During three seasons of excavation (1987, 1989 and 1991), a substantial record of Archaic occupation has been recovered from the Buchanan site (13 SR 153). The site is located in a small, sidewall valley that drains into the South Skunk River near Ames, Iowa. Included in the materials that has been obtained from the valley's alluvial fill are numerous artifacts of Middle and Late Archaic type, food debris (faunal and carbonized plant remains) and wood charcoal. In this paper, we review the evidence of the age of the Archaic presence at 13 SR 153 and various aspects of the occupants' behavior.

Branstner, Susan (Lake Superior State University) (Professional)
TEACHING MULTICULTURAL AWARENESS THROUGH ARCHAEOLOGY

[9]

The teaching of history in elementary schools has emphasized white males and EuroAmerican events with, at best, a cursory introduction of Native Americans. This unbalanced
presentation builds early lessons of bias and bigotry. To counter this problem, Late Superior
State University and the Sault Ste. Marie Foundation for Culture and History, funded through a
Kellog Foundation grant, are developing a program to teach multicultural awareness in a school
district with a history of racial abuse against Native American children. Archaeology projects and
the regional history museum are used as tools to teach local history and cultural concepts.
Importantly, the dynamic and active participation of white and Native children in this project
leads to cooperative learning about the past by both groups.

Brashler, Janet (Grand Valley State University) (Professional)

THE SPOONVILLE SITE AND THE MIDDLE - LATE WOODLAND TRANSITION IN
SOUTHWESTERN MICHIGAN: A NEW VIEW AT OLD DATA

Almost thirty years have passed since the original Grand Valley State University excavations at Spoonville occurred. During that time, excavations of burial mound and village material have been conducted sporadically, concluding with excavations conducted during the 1991 season. The mound has produced extraordinary copper artifacts and the village an array of diverse ceramic, lithic and subsistence materials. This paper summarizes the previous research at this important site on the Grand River, and re-evaluates it in light of new data and information from other areas of the Midwest.

Brothahn, John H. (State Historical Society of Wisconsin) (Professional)

THE ARCADIA RIDGE ORTHOQUARTZITE QUARRIES: THEIR REDISCOVERY AND
PRELIMINARY INVESTIGATION

In 1990 and 1991, during the survey of a portion of STH 93 in Trempealeau County, Wisconsin, personnel from the Museum Division of the State Historical Society rediscovered a series of orthoquartzite exposures and quarry/workshops that were originally reported by Charles E. Brown. The orthoquartzite is present in the Jordan Formation. Ledge outcrops, large blocks, and talus slopes of the material occur primarily at the ends of small upland ridges and spurs. At one site several shallow depressions may be evidence of quarrying. Cores, quarry blanks, and debitage have been recovered from the surface and from undisturbed contexts on the shoulder slopes and summits of the spurs and ridges. The range of color in the Arcadia Ridge material parallels that described for Hixton and Alma orthoquartzite. Textures are similar to those reported for Alma orthoquartzite, The Arcadia Ridge outcrops and quarries appear to be a part of

a discontinuous belt of orthoquartzite stretching from the Synstad Site (47-Bf-63) in Buffalo County to northern La Crosse County.

Brown, James, John A. K. Willis and Teresa Kugler (Northwestern University) (Professional)

[8]

SUBSISTENCE RESEARCH AT THE ZIMMERMAN SITE

The 1991 summer field school of Northwestern University worked a portion of the Zimmerman Site [or Old Kaskaskia (11Ls13)]. Although this site has been excavated on a number of occasions, the purpose of the present work was to use flotation extraction methods to broaden our knowledge of prehistoric subsistence and make it comparable to up-to-date work in the Midwest. This investigation is part of an on-going project in comparative subsistence-settlement in the central Midwest. A small excavation at the western end of the site in Orr's Grid D produced evidence of an Upper Mississippian occupation that was earlier than others identified at the site. The distinctive subsistence remains of this early period contrast with the pattern present in Historic period pits.

Brubaker, Rob (University of Wisconsin-Milwaukee) (Student)

ONEOTA CERAMICS FROM LAKE KOSHKONONG: A STUDY OF INTER- AND INTRASITE PATTERNING

Shell-tempered ceramics from Carcajou Point and Twin Knolls Village (two Koshkonong Phase Oneota sites on Lake Koshkonong) are compared. The comparison suggests a high degree of similarity between the ceramics from both sites in terms of most of the attributes considered. The analysis also suggests that diagnostic Koshkonong Phase ceramics may actually be minority types at these Koshkonong Phase sites. These data are integrated with data from earlier excavations at Carcajou Point to examine the possibility of intra-site patterning in ceramics at the site. Several possible interpretations are explored.

Buckmaster, Maria - see Ruggles, Dan

Clay, R. Berle (Office of State Archaeology, University of Kentucky) (Professional)
POLITICAL EVOLUTION OF HINTERLAND MISSISSIPPIAN SITE

[7]

Andalex of the lower Pond River in western Kentucky was a small Mississippian community which went through a sequence of changes between ca. A.D. 1000 and 1400. These are reflected in the construction sequence of the small temple mound which, perhaps only after A.D. 1200, was a distinctive feature of the community. Changes in the mound suggest that local political evolution was by no means gradual or unidirectional. In contrast, the mound record suggests that the community gradually adapted to a regional political system, in itself undergoing change.

Clay, R. Berle - see also Hilgeman, Sherri L.

Cleland, Charles (Michigan State University) (Professional)

ANTHROPOLOGICAL AND ARCHAEOLOGICAL DATA IN THE CONTEXT OF INDIAN
TREATY RIGHTS LITIGATION

During the last several decades, Indian treaty rights cases have provided an opportunity to apply anthropological and archaeological knowledge to the solution of some complex social problems involving land tenure and land use prerogatives. This paper will review the application of such data in the Michigan fishing rights case, <u>United States v. Michigan</u>, and the Wisconsin off-reservation hunting and fishing case, <u>Lac Court Oreilles v. Wisconsin</u>. Consideration is given to the special context for the use of data in legal settings as well as standards of proof.

Cochran, Donald R. - see Hicks, Ronald

Excavations at several Late Woodland habitation and mortuary sites in the Mississippi Valley and tributary streams have been conducted for the FAP 408 IDOT project by the Center for American Archeology. This work has revealed a diversity of apparently contemporary ceramic styles principally representing ties to eastern Missouri, the central Illinois Valley, and eastern Iowa. Though mortuary sites are large and complex, habitation sites reveal only evidence of short-term, repeated-use sites. One site also produced possible evidence of a ceramic manufacturing area, including a subsurface kiln.

Conrad, Lawrence A. and David J. Nolan (Western Illinois University) (Professional)
PRELIMINARY OBSERVATIONS ON THE OCCURRENCE OF CATLINITE IN WEST
CENTRAL ILLINOIS

This paper is a progress report on an ongoing project to plot the occurrence of catlinite in west central Illinois. Current findings indicate catlinite from sources other than pipestone found its way into the region from time to time prior to A.D. 1500. After 1500, disk pipes and pendants of pipestone material became relatively common on Oneota and Algonquian sites in the region.

Cooper, David J. (State Historical Society of Wisconsin) (Professional) [5]
BEFORE THE MAST: ARCHEOLOGICAL EVIDENCE FOR SOCIAL CONDITIONS
ABOARD THE NINETEENTH CENTURY GREAT LAKES SCHOONER "LUCERNE"

In the 1970s, divers undertook an amateur excavation of the schooner "Lucerne", lost with her entire crew in 1886 off Long Island, Lake Superior. The site produced an exceptional collection of historic material culture, including clothing, food remains, ship's equipment, and furnishings. Recent re-examination of excavation records, the collection, and the site itself has helped reconstruct something of the original unpublished excavation, and has produced new insights into social conditions aboard nineteenth century Great Lakes vessels. Field investigations have also produced interesting new data on the "Lucerne" herself, detailing her design, construction, and the largely unknown circumstances of her loss.

Cordell, John - see Marcucci, Derrick

Cremin, William M. (Western Michigan University) (Professional)

CURRENT RESEARCH IN THE SOUTHERN LAKE MICHIGAN BASIN: SEEKING AN

ETHNIC IDENTITY FOR THE BERRIEN PHASE OF SOUTHWEST MICHIGAN

Two years ago, in a paper entitled "Researching the 'Void' between History and Prehistory in the Southern Lake Michigan Base", I summarized current knowledge of the Berrien Phase (ca. 1400 - 1600) and addressed some of the difficulties inherent in any attempt to establish a connection between this phase and early historic residents of the area. Here, I present the results of ongoing work at a series of sites overlooking the Galien River that promise to help us bridge this "void", extending the Berrien Phase into the mid-17th century and forging a link between this cultural formation and, I believe, the Potawatomi.

Cross, Paula G. (Illinois Historic Preservation Agency) (Professional)

THE BIRTH OF A PROGRAM: THE ILLINOIS HUMAN GRAVE PROTECTION ACT

Prior to August, 1989, Illinois had few laws which protected human burials outside of registered, active cemeteries. In the aftermath of the Slack Farm looting in Kentucky and the movement of these same looters into Illinois, the Human Grave Protection Act was written and signed into law. This paper will review the language and intent of this act and provide examples of resources saved and projects permitted under the auspices of the law.

Dalan, Rinita A. - see Fowler, Melvin L.

Diaz-Granados, Carol (Washington University)
MISSOURI ROCK GRAPHICS AND THE GREEN CORN CEREMONY

Intensive maize agriculture on the Missouri side of the Mississippi River across from the greater Cahokia prehistoric community may have generated this area's frequent occurrence of petroglyphs and pictographs. Documented historical accounts of the Busk and Green Corn Ceremony link a number of factors found in these rock graphic sites. Preliminary research supports the historic descriptions of the isolated physical settings "not associated with major villages or campsites." Also discussed in these accounts is the use of various items used as symbols of power. Many of these symbols are possibly portrayed in the repeated motifs of significant number of these eastern Missouri rock carvings and paintings.

Dobbs, Clark A., Howard Mooers and Mathew Murray (Institute for Minnesota Archaeology) [Plenary] CHANGING LANDFORMS AND THE ARCHAIC ALONG THE PRAIRIE-FOREST BORDER IN THE NORTHERN MISSISSIPPI DRAINAGE

The Mississippi Drainage in the northern Valley encompasses a broad and diverse physiographic region. The very early Native American cultures of this area remain poorly known, particularly during the Archaic. Recent investigations at the Granite Falls Bison Kill Site in southwestern Minnesota, the Middle River site in the Lake Agassiz Basin, Ozatonka Lakebed in southern Minnesota, and the Nushka Lake Site in the Mississippi Headwaters provide a baseline for some initial considerations of the archaic in this region. The dramatic changes in landforms, climate, and vegetation during the Early and Middle Holocene are not tangential to Archaic studies, but rather probably conditioned and directed human adaptation to this region.

Dobbs, Clark A. (The Institute for Minnesota Archaeology)
ONEOTA CULTURES OF THE NORTHERN MISSISSIPPI VALLEY

[Plenary]

The Oneota cultures of the northern Mississippi Valley flourished between ca. A.D. 1100 and the time of European contact. These Native American groups had an economy based on horticulture and focused hunting and gathering. The earliest Oneota materials seem to be at the Red Wing Locality, where Oneota and Mississippian artifacts are found at the same sites. After about A.D. 1250, Blue Earth Oneota emerges along the prairie-forest border in Minnesota. After about A.D. 1500, Orr focus and the northern Ogechie complex are most common.

Oneota is often perceived as a "ceramic" culture. However, recent methodological advances in fine-scale dating, settlement studies, and other aspects of Oneota are providing data for a more sophisticated evaluation of the Native American history of the northern Mississippi Valley during the last 1000 years.

Dobbs, Clark A. (The Institute for Minnesota Archaeology) (Professional)

PRAIRIE-WOODLAND INTERACTION AND THE RED WING CONNECTION

The Red Wing Locality is a dense concentration of Oneota and Mississippian sites at the confluence of the Cannon and Mississippi Rivers in southeastern Minnesota. The function of the locality has been matter of discussion for many years, but the most popular hypothesis involves interaction between the locality, Middle Mississippian sites to the south, and the prairie to the west. Bryan is one of the sites within the locality and is situated to control travel from the Mississippi westward along the Cannon River. Recent detailed analysis of ceramics, pit features, and high-precision radiocarbon dates provide new insights into the nature and timing of the prairie-woodland connection at Bryan.

Egan, Kathryn C. - see Goatley, Daniel B.

Esarey, Duane (Dickson Mounds, Illinois State Museum) (Professional) STYLE AND SYMBOLISM OF MISSISSIPPIAN SPIDERS [14]

Stylized spiders are a well-known, but relatively rare, image in Mississippian symbolic art. Comparisons of the less than 50 known spider depictions provide an excellent example of geographic variation in style. Limited geographic distribution of spiders within the Mississippian culture area and stylistic integrity of spiders produced within several style zones counters any assumption of long-distance exchange (such as occurred with some classes of iconographic and/or ceremonial paraphernalia), and generates a template for examination of regionalism in production and symbolism in Mississippian iconography. A search for the significance of Mississippian spiders is complicated by the fact that few tribal groups identified as having had Middle Mississippian culture are known to have had specific associations for spiders. However, a broader survey of aboriginal American ethnography and folklore produces numerous and varied spider associations, several of which can be argued to provide relatively specific parameters for the Mississippian significance of spiders.

Farnsworth, Kenneth and Karen Atwell (Center for American Archeology) (Professional) [3] NAPLES-RUSSELL MOUND 8 RECONSTRUCTION PROJECT

During 1990 the Center for American Archeology conducted a project to evaluate the extent of damage caused by a century of treasure hunters digging in what is now the largest remaining blufftop mound in Illinois, and to restore this mound to its original contours. Naples-Russell Mound 8 is a massive 6.5 m tall loaf-shaped Middle Woodland mound located on the western bluffs of the lower Illinois River valley. Five test units were excavated in areas believed to be modified by vandals. The results of this work established the presence of intact Middle Woodland deposits and provided important information on the structure, function, and integrity of the mound.

Ferguson, Jacqueline A. (Illinois State Museum) (Professional) [11] CHERT RESOURCES OF NORTHERN ILLINOIS: DISCRIMINANT ANALYSIS AND AN IDENTIFICATION KEY

Knowledge of the source locations of raw materials used to manufacture chipped-stone tools can provide important insights into the behavior of prehistoric societies. Systematic analysis of cherts collected from northern Illinois indicates that lithic raw materials can be identified accurately using a low-powered microscopic approach. Results of a discriminant function analysis were used to create a chert-identification key, which classifies specimens into 12 groups with 93.2% accuracy. The most important variables for discriminating cherts are fossil type, translucency, internal color patterns, and the presence or absence of dark inclusions, colites, druse, and pyrite.

Finney, Fred A. (Office of the State Archaeologist, Iowa), Scott Meyer (University of Wisconsin-Madison), and Kathryn Parker (Great Lakes Ecosystems) (Professional)
INVESTIGATIONS AT THE BOBWHITE SITE: A MIDDLE ARCHAIC RADDATZ
OCCUPATION IN THE DRIFTLESS AREA OF WISCONSIN

Recent investigations at the Bobwhite site (47-Ri-185) in Richland County, Wisconsin, revealed a Middle Archaic Raddatz occupation consisting of 25 pit features and one burial pit. The site is located in the Pine River floodplain which is one of the many interior valleys of the Driftless Area. This presentation will outline the artifact cache in Feature 24 and the radiocarbon dating of the Raddatz occupation. Items found in the Feature 24 cache include a flattened tubular barnerstone, a copper bracelet, Raddatz Side-notched points, and large and small bifaces. The radiocarbon dating of this component is of particular interest to Upper Mississippi Valley archaeology. Floral remains from the Raddatz component will also be discussed.

Flick, Geralyn (University of Wisconsin-Milwaukee) (Student)
WOODLAND CERAMICS FROM THE LANGE SITE (47 Do-182)

This paper focuses on the Lange Site (47 Do-182) within the Crawfish-Rock survey area. The site is unusual because: 1) a surprisingly large amount of pottery has been recovered from surface collections; and 2) much of that pottery is Middle Woodland, as opposed to the more commonly found Late Woodland types. This analysis describes and explores the variation within the Lange pottery collection. In addition, the collection is considered in the context of all

[4]

Woodland sites delimited in the Crawfish-Rock survey, comparing those sites from which pottery was recovered and those in which no pottery was found.

Fowler, Melvin L. (University of Wisconsin-Milwaukee), William I. Woods (Southern Illinois University at Edwardsville), and Rinita A. Dalen (University of Minnesota) (Professional) [6] ARCHAEOLOGICAL AND ELECTROMAGNETIC TESTING OF WOODHENGE 72 AT CAHOKIA MOUNDS HISTORIC SITE

Examination of Mound 72 and surrounding area at Cahokia Mounds Historic Site indicated an associated Lohman phase Woodhenge of the same dimensions and post placement as Woodhenge 3. Mound 72 burials and sub-mounds were toward positions in Woodhenge 72. Post loci in Woodhenge 72 were predicted. During August, 1991 investigations of these predictions were carried on with support of the National Geographic Society Committee on Research Exploration and permit from the Illinois Historic Preservation Agency. Conductivity surveys, soil coring and archaeological excavation were the methods used. Evidence of postpits were found at the predicted locations.

Fox, John - see Koldehoff, Brad

Fox, William A. (Ministry of Culture and Communications, Ontario) (Professional)
THE SERPENT'S COPPER SCALES

A considerable literature exists concerning the form and distribution of native copper artifacts in eastern North America, particularly during the Archaic through middle Woodland periods. Some studies relating to the sources and artifact types utilized by Mississippian societies are available, however, little has been written concerning native copper use among Woodland groups. Historic references are unfortunately brief and provide few insights into the importance of this raw material to the First Nations. Trace element analyses of copper artifacts from sixteenth- and early seventeenth - century sites in Ontario have provided new information on the distribution and use of native copper at this critical period in the Great Lakes region.

Archaeological data are combined with ethnohistoric and ethnographic observations to better understand the significance of this metal in proto-historic Woodland society.

Fritz, Gayle J. - see Iseminger, William

Garceau, Madeleine and Douglas Kullen (Patrick Engineering, Inc.) (Professional) [6]
PREHISTORIC SETTLEMENT PATTERNS IN THE UPPER KISHWAUKEE DRAINAGE,
NORTHEASTERN ILLINOIS

An archeological survey of 2600 acres at the headwaters of the Kishwaukee River and the surrounding uplands in northeast Illinois encountered thirty-three prehistoric localities. These localities yielded artifacts dating from the Early Archaic to Late Woodland periods. Artifact types and topographic settings are synthesized to gauge the role of climatic and other environmental factors in relation to prehistoric occupations at each locality. Settlement patterns inferred from the results of this survey are compared to and contrasted with existing hypotheses of prehistoric settlement in the region.

Garland, Elizabeth B. (Western Michigan University) (Professional)

THE WYMER-WEST KNOLL (20BE132), AN EARLY MISSISSIPPIAN COMPONENT ON
THE ST. JOSEPH RIVER IN SOUTHWESTERN MICHIGAN: A PRELIMINARY REPORT

Excavations at the Wymer site in 1991 revealed an early Mississippian occupation previously undescribed in this area. Ceramics indicate that this component differs from Oneota and other regional expressions of Upper Mississippian. Two radiocarbon dates place the Wymer component at about A.D. 1000; relationships to contemporary Middle Mississippian developments are considered.

Gartner, William Gustav (University of Wisconsin-Madison) (Student)
SEMIOTICS, SEDIMENTS, AND THE GEOARCHAEOLOGY OF THE GOTTSCHALL
ROCKSHELTER, WISCONSIN

Geoarchaeology at the Gottschall Rockshelter is yielding insights on site formation, past environments, and the interpretation of rock art and ritual. Stratigraphy, physical/chemical analyses, and micromorphology suggest that the "H-I-J-K" sediment strata were manufactured by people and deposited within a platform prior to A.D. 1000. A literature review implies sediment production to be common at elite burial sites and public places. Symbolic aspects are indicated by noting the relations of "H-I-J-K" ingredients at other North American sites (semantics), detailing the intrasite context of the deposit and its assemblage (pragmatics), and linking the "H-I-J-K" strata to the Red Horn composition (syntactics).

Gartner, William Gustav (University of Wisconsin-Madison) (Student) THE HULBURT CREEK FIELDS [15]

Approximately 200 acres of linear raised fields surround the southern headwaters of Hulburt Creek near Wisconsin Dells, Wisconsin. Physical/chemical analysis, soil stratigraphy, and micromorphology detail erosion management for field construction, suggest maintenance, and document agroecological functions of hydrology and fertility. Experiments show the fields to minimize temperature variation and lengthen the growing season. Corrected radiocarbon ages of 980 ± 50 and 920 ± 50 B.P., tentative archaeobotanical identification, estimated labor requirements, and regional site survey imply that the Hulburt Creek fields are a product of local cultural and historical ecologies embedded within the political matrix of the Upper Midwest.

Gartner, William Gustav - see also Iseminger, William

Glbbon, Guy (University of Minnesota) LATE WOODLAND [Plenary]

Late Woodland archaeological complexes in the Upper Mississippi River valley are identified; processes of integration and change are emphasized. Complexes discussed include Effigy Mound, Brainerd, St. Croix, Onamia, Blackduck-Clam River, and Sandy Lake.

Glenn, Elizabeth - see Hicks, Ronald

Goatley, Daniel B. (Western Michigan University) (Student) [6]
VARIATIONS IN LITHIC RAW MATERIAL PROCUREMENT AND UTILIZATION AMONG
LATE WOODLAND AND UPPER MISSISSIPPIAN GROUPS OCCUPYING SOUTHWEST
MICHIGAN

This paper presents the results of analysis of identifiable raw materials among lithic debitage from a series of Late Woodland and Upper Mississippian sites in the lower Kalamazoo River Valley. Comparison of the data from these sites suggests changing levels of interaction and trade over time, with variations in appearance and percentage of exotic cherts in the assemblages arguing strongly for intensification of exchange following introduction of Upper Mississippian lifeways (strategies for survival) into the region.

Goatley, Daniel B. (Western Michigan University) and Kathryn C. Egan (Center for American Archeology) (Student) [12]
QUASAR: FIELD IMPRESSIONS OF A SPECIALIZED MIDDLE ARCHAIC ENCAMPMENT ON THE ILLINOIS RIVER

Test excavations during the 1991 field season confirmed the presence of a stratified Archaic occupation on a natural levee adjacent to the Illinois River. Test excavations conducted in 1983 indicated that a lower occupation surface dates to 6320 +/- 90 (LS.G.S.-1278). Points recovered from the upper midden and feature contexts suggest a late Middle to Late Archaic occupation. Results of this summer's test excavations suggest that the site served as a specialized logistical camp for exploitation of a range of floodplain resources. While the lower occupation was

inhabited on a short term basis for what appear to be several purposes. Initial impressions suggest that these occupations served different roles within the dynamic Archaic settlement/subsistence system.

Goldman, Nurit (University of Michigan), William Green (Office of the State Archaeologist, Iowa), and E. Arthur Bettis, III (Iowa Department of Natural Resources) [Plenary]
THE ARCHAIC-WOODLAND TRANSITION IN THE UPPER MISSISSIPPI VALLEY

The transition from Archaic to Woodland ways of life involved shifts in easily visible aspects of technology and in more clusive areas such as socio-political organization. Depending on whether the Archaic and Woodland are viewed as stages or time periods, either an arbitrary date (ca. 500 B.C.) or the presence of a single artifacts class (ceramics) can be used to divide them. Radiocarbon dating problems and geomorphological processes are critical factors in understanding the Archaic-Woodland transition. The usefulness of radiocarbon dates relevant to this issue is severely limited by erratic atmospheric radiocarbon production between 400 and 800 B.C. (calendar years). Regional patterns of geological processes that occurred ca. 2000-3000 years ago exerted a strong influence on the appearance of the archaeological record of this period. A joint geological and archaeological investigation in eastern Iowa provides a case study for some of the points raised in this review.

Goldstein, Lynne (University of Wisconsin-Milwaukee) SYMPOSIUM ORGANIZER: [4]
THE SOUTHEASTERN WISCONSIN ARCHAEOLOGICAL PROGRAM: FIFTEEN YEARS
OF RESEARCH

The University of Wisconsin-Milwaukee has been home to the Southeastern Wisconsin Archaeological Program (SEWAP) since 1976. Although the initial research area included only the Crawfish and Rock River valleys, more recent work has expanded the focus to a 10-county region. The program has consistently moved between site-specific research and maintenance of a regional perspective. This symposium reviews the history of work and especially some of the results of the research, focusing specifically on the areas of landscape analysis and the late prehistoric and early historic cultures.

Goldstein, Lynne (University of Wisconsin-Milwaukee) (Professional) [4]
WOODLAND AND WETLANDS: AN OVERVIEW OF THE SOUTHEASTERN WISCONSIN
ARCHAEOLOGICAL PROGRAM AND ITS ACCOMPLISHMENTS

The Southeastern Wisconsin Archaeological Program began in 1976 with a survey focused on the Crawfish and Rock River Valleys. The 15% stratified sample survey of an approximate 70 square-mile area resulted in the development of a model of prehistoric wetland utilization and an understanding of specific regional adaptations. Focus of much of the research has been on landscape analysis and Woodland and Mississippian sites, both in terms of site-specific research and regional settlement models. This paper will outline the project history, but will focus on the development of an overall model of Woodland-Mississippian utilization of the region.

Goltz, Grant (Leech Lake Reservation-Heritage Sites Program) (Professional)
HERITAGE SITES MANAGEMENT IN INDIAN COUNTRY

In 1986, the Leech Lake Reservation in northern Minnesota began a program in archaeology which involved Tribal members as archaeological technician trainees. By 1989, the program had grown to include a staff of eight persons and was doing contract work for state and federal agencies. Although it started as only a summer program, it now runs year-round, with a staff of 12 people and a newly remodeled lab and office facility. In addition to meeting Tribal cultural resource management needs, the program handles contract work for federal, state, county, and city governments as well as private concerns. Program members are enrolled in a college level program in Heritage Sites Management through the newly formed Leech Lake Tribal College.

Greber, N'omi B. - see Seeman, Mark F.

Green, William (Office of the State Archaeologist, Iowa) and Rebecca Wallace (Midwest Archaeological Center, National Park Service) (Professional) [12] WOODLAND COMMUNITY DEFINITION AT THE GAST FARM SITE (13LA12), LOUISA COUNTY, IOWA

Controlled surface collections and aerial photography allowed delineation of Havana (Middle Woodland) and Weaver (Late Woodland) communities at the Gast Farm site (13LA12), a large alluvial fan in the Mississippi River valley in southeastern Iowa. Surface collections in 1990 and 1991 covered 12.5 ha (30 acres) in 1250 10 x 10 m units. Over 40,000 cultural items were collected. A ca. 1.86 ha Havana occupation was defined in the eastern part of the site. The ca. 1.25 ha Weaver "ring midden" village in the western part of the site is similar in form and size to coeval sites in Illinois. A Black Sand (Early Woodland) surface concentration corresponds to the location of a plowed-down Havana mound.

Green, William - see also Marcucci, Derrick; see Nansel, Blane; see Goldman, Nurit

Gregg, Michael L. - see Picha, Paul R.

Gums, Bonnie L. - see Iseminger, William

Hainlin, Sheila - see Bower, John

Hall, Robert (University of Illinois at Chicago) (Professional)
"SUN DOGS DON'T BARK" AND OTHER WISDOM OF THE ANCIENTS

[14]

Sun dogs, rainbows, and solar pillars are atmospheric phenomena which had a symbolic value for Indians which is commonly overlooked. Sun dogs were the basis of the concept of the Fire Serpent of <u>Xinhcoatl</u> that has never been explained by Mesoamericanists but can be explained by reference to Pawnee beliefs. The rainbow was widely seen as a serpent. Solar pillars were represented in Osage rituals by eagle plumes wom on the top of the head. Fire Serpents cognitive links to the crook-shaped staffs once used as symbols of authority by the Winnebago, Dakota, Omaha, Osage, Pawnee, and other tribes.

Hanlon, Jerol Hilliard - see Madsen, Mark Lawrence

Hapke, Russell A. and B.K. Swartz, Jr. (Ball State University) (Professional)

WATER BASIN MARKERS. AN INTERPRETATION OF PETROGLYPHS AT WHITE
RIVER NARROWS, LINCOLN COUNTY, NEVADA

Using distributional analysis and landscape configuration a simple patterning of cup-shaped elements and rock basins is noted. Of the 23 known occurrences of this element 21 align with routes to the basins. The basins may be man-made or natural, but retain rainwater for extended periods of time, an important event for inhabitants of a dry and arid environment.

Hargrave, Michael L. (Center for Archaeological Investigations, Southern Illinois University, Carbondale) (Professional) [2]
IMPLICATIONS OF ARCHITECTURE FOR CRAB ORCHARD SETTLEMENT AND SUBSISTENCE

The remains of domestic architecture can provide information about household size, seasons of site occupation, and nature of mobility strategies. Throughout Illinois there is considerable variation in Middle Woodland architecture. Still more dramatic variation is seen when one compares structures of the Middle and Late Woodland and Emergent Mississippian periods. This paper discusses possible causes of variation in architectural design. Through comparisons with the American Bottom and Lower Illinois Valley, Crab Orchard architecture is viewed in a broad spatial and temporal context. The focus is on the implications of variation in architecture for the nature of Crab orchard households, settlement, and subsistence.

Hargrave, Michael L. and Jeanette E. Stephens (Center for Archaeological Investigations, Southern Illinois University, Carbondale) SYMPOSIUM ORGANIZERS:
THE CRAB ORCHARD CULTURE: RECENT STUDIES OF SETTLEMENT AND SUBSISTENCE

Initially defined as a focus, Crab Orchard is now treated as a ceramic tradition or an archaeological culture. Crab orchard is centered in extreme southern Illinois and spans the Early and Middle Woodland periods (600 B.C. to A.D. 400). With the exception of several mound sites in the Mississippi and Wabash river valleys, Crab Orchard is marginal to the Hopewellian exchange network. In recent years, Southern Illinois University and American Resources Group have investigated several open air sites and a stratified rockshelter. The symposium papers use recent data to evaluate models of Crab Orchard settlement, subsistence and chronology.

Hargrave, Michael L. and Jeanette E. Stephens (Center for Archaeological Investigations, Southern Illinois University, Carbondale) (Professional) AN INTRODUCTION TO CRAB ORCHARD STUDIES

This introduction to the symposium outlines major themes in previous and ongoing research. Crab orchard material culture is characterized by a modest range of stylistic diversity and there is a continuing need to refine local chronologies. A second priority is the refinement and systematic evaluation of alternative models for Crab Orchard settlement and subsistence. An initial model developed in the 1970s postulated seasonal population movements between the till plains, Mississippi floodplain, and Shawnee Hills. A more recent model proposes year-round occupation of each natural division, but the extent of seasonal residential mobility remains unclear. Other research themes include regional variation in subsistence practices, chert technology, and exchange.

Harn, Alan D. (Dickson Mounds Museum) and Nicholas W. Klobuchar (Illinois State Museum)
(Professional)
[8]
INSIDE MORTON HOUSE 7: AN ONEOTA HOUSE FROM THE CENTRAL ILLINOIS
RIVER VALLEY

Recent excavation and analysis of a burned Bold Counselor phase Oneota structure provides new information about the secular existence of this poorly understood cultural component. A pristine artifact assemblage on the floor of Morton site House 7 consisted of 123 items that were spatially organized into aix discrete activity units. Analysis of the internal house composition indicates that a relatively narrow range of activities are represented; that the equipment and activities are decidedly male oriented; and that the technologies and lifeway they represent differ little from those of other Oneota and northern-frontier Mississippian cultural groups across the upper Midwest.

Ham-Sullivan, Dawn - see Tankersley, Kenneth B.

Head, Roger - see Hohman-Caine, Christy

Henning, Dale R. (Luther College) (Professional) GREAT OASIS AND EMERGENT MISSISSIPPIAN [16]

[2]

[2]

Great Oasis culture is defined as an integral part of the early Initial Middle Missouri tradition. It also functioned in an important trading relationship with Emergent Mississippian peoples of the central Mississippi valley. The nature of that trade relationship and its importance to Great Oasis and the closely-related Mill Creek cultures of the plains-prairie border are discussed.

Hicks, Ronald (Ball State University) (Professional)
TOWARD A RADIOCARBON CHRONOLOGY FOR INDIANA

[12]

The radiocarbon dates obtained over the past few decades from more than fifty prehistoric sites in Indiana have been compiled, calibrated to calendar years and their contexts and associated

cultural materials evaluated. The resulting analysis provides a more clearly defined chronological framework for the phase of Indiana prehistory than has heretofore been available. It also spotlights those phases and time periods for which our understanding of chronological placement currently lags behind.

Hicks, Ronald, Elizabeth Glenn and Donald R. Cochran (Ball State University) (Professional)

[9]

[6]

WORKING WITH THE INDIANA MIAMI

Over the past decade, members of the Department of Anthropology at Ball State University have successfully worked with the Miami Indians of Indiana on a variety of issues and projects, including carrying out extensive ethnohistorical research in connection with their petition to regain Federal recognition, protection of archaeological sites (especially those where skeletal remains have been found) both on an ad hoc basis and through development of state legislation, providing a temporary office of the tribal chairman, and programs and exhibits to educate the public about Indiana's Miami heritage. These activities have been mutually beneficial to both groups.

Hilgeman, Sherri L. (Glenn A. Black Laboratory of Archaeology, Indiana University)
(Student)

[7]

THE CHRONOLOGY OF THE MIDDLE MISSISSIPPIAN OCCUPATION OF THE ANGEL
SITE

A three-phase pottery chronology has been established for the Angel site and phase. It appears as if the initial recognizable Mississippian use of the Angel site area occurred beginning at about A.D. 1200, and the most intensive and extensive usage of the site area occurred in the A.D. 1300 - 1450 time period. This is <u>circa</u> 100 years later than the maximal use of the Kincaid site. This is a major contrast between these otherwise quite similar centers.

Hilgeman, Sherri L. and R. Berle Clay (Glenn A Black Laboratory of Archaeology, Indiana University) SYMPOSIUM ORGANIZERS:

MISSISSIPPIAN AT THE 38TH PARALLEL: LATE PREHISTORIC DYNAMICS SEEN FROM THE LOWER OHIO VALLEY

The lower Ohio Valley represents the northeastern-most geographic extension of the Middle Mississippian cultural tradition. The town-and-mound centers of Wickliffe, Kincaid, and Angel have long been considered a cultural-historical unit. New and on-going investigations focused on both the restudy of old collections and recent survey and excavation projects demonstrate the individuality of the lower Ohio Valley Mississippian systems and contribute new insights into the timing and nature of socio-political dynamics in the region. These papers offer opportunities to compare the lower Ohio Valley systems to developments in the American Bottom and the Southeast.

HIII, Mark A. (USDA Forest Service, Ottawa National Forest) (Professional)
TIMID MINK: A LATE WOODLAND SITE IN MICHIGAN'S WESTERN UPPER
PENINSULA

The Timid Mink site (201093) is an early Late Woodland seasonal camp, located on the shores of Late Ottawa in Iron County, Michigan. This site represents the mid-summer aspect of a seasonal settlement system utilized by the Lakes Phase peoples of northern Wisconsin and the western Upper Peninsula. Excavations and analysis have revealed a well defined house floor rare in the region - and have provided a detailed look at the material assemblage related to a summer occupation. Flotation samples taken from midden soils have also revealed details of utilization of floral species at this site. Radiocarbon dates indicate an occupation around A.D. 900.

Hohman-Calne, Christy (Minnesota State Archaeologist) and Roger Head (Minnesota Indian Affairs Council) (Professional) [3]
NO IVORY TOWERS IN INDIAN COUNTRY: NATIVE AMERICANS, ARCHAEOLOGISTS, AND INTERPRETING THE PAST

The relationship between Native Americans and archaeology/archaeologists has been an explicit and increasing concern of the archaeological discipline for at least two decades. In Minnesota these relationships have ranged from confrontational/hands off to a move to transform the very nature of archaeology as practiced and interpreted. This paper outlines the perspectives of the State Archaeologist's Office and the Indian Affairs Council in promoting an Indian-oriented archaeology. Issues discussed include reburial and the evolution of the Private Cemeteries Act, repatriation of grave goods and sacred items, sovereignty and control over sites and artifacts, and development of Indian-controlled archaeology and the Leech Lake Heritage Sites Protection Program. These issues are placed within the larger framework of the development of American archaeology, including a discussion of their relationship to perspectives presented by Hoddez, Goldstein, Lovis and others.

Holliday, Diane Young (State Historical Society of Wisconsin) (Professional) WISCONSIN'S BURIAL SITES PRESERVATION LAW

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Wisconsin's burial sites preservation law has given the State Historical Society's Burial Sites Office the responsibility for 1) identifying and cataloguing all known burial sites within the state; 2) maintaining a registry of persons who have an interest in a particular burial site or class of burial sites; and 3) handling emergency excavations and analysis of any human remains inadvertently discovered across the State. The law also establishes the Burial Sites Preservation Board comprised of three Native Americans, three anthropologists or historians and the Director of the State Historical Society who oversee the actions of the burial sites program and determine who has an interest in a burial site.

Hollinger, Eric - see O'Gorman, Jodie A.

Huributt, Thomas S. and B.K. Swartz, Jr. (Ball State University) (Professional) [14]
ARCHITECTURAL INTERPRETATION AS AN INSIGHT TO PETROGLYPH MEANING
AND MYSTIQUE

Through time certain architectural concepts have emerged as constants in defining space.

Among the most basic and intuitive of these ideas are the elements of entry, enclosure, focus and hierarchy. These concepts, combined with the aesthetic mark, distinguishes mankind's attempt to create the structures of his environment. Analysis of concepts, their relationships to each other and their contextual relationship to petroglyphs can elicit important insights in interpreting the meaning and mystique of petroglyphs themselves.

Ingalls, Marlin - see Lillie, Robin M.

Iseminger, William (Cahokia Mounds Historic Site), John E. Kelly (CMVARI), Gayle J. Fritz (Washington University), Bonnie L. Gums (SIUE), and William Gustav Gartner (University of Wisconsin-Madison) (Professional)

[6] CAHOKIA'S MOUND 1: IN OVER OUR HEADS

Mound I on the eastern margin of the Cahokia site was first mapped by Patrick in the 1870s as part of his survey of the mounds. Investigations one hundred years later suggested that Mound I may have been a historic construct rather than prehistoric. Excavations in 1991 conducted by Washington University in conjunction with the Central Mississippi Valley Archaeological Research Institute and the Cahokia Archaeological Society found evidence for both views, verifying the presence of a prehistoric mound with a later twentieth century addition comprising the present mound.

Jelks, Edward B. - see Tankersley, Kenneth B.



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Jeske, Robert J. (Indiana-Purdue University at Fort Wayne) (Professional) [12]
THE DAVIDSON SITE: A LATE PREHISTORIC BURIAL AND HABITATION SITE IN
PORTER COUNTY, INDIANA

The Davidson Site was investigated under Indiana State statutes governing the accidental discovery of human remains. The site is located on a dune deposit on the northern edge of the Kankakee River Valley, in northwest Indiana. Lithic, ceramic, osteological, and radiocarbon evidence suggest that the site contains components ranging in date from Late Woodland to Protohistoric. Site investigation, material analyses, and the potential for future research into late prehistoric adaptations in northwest Indiana are presented.

Keene, David and Beverly B. Kralovec (Archaeological Research, Inc.) (Professional)
THE DUNNING CEMETERY: ARCHAEOLOGICAL INVESTIGATIONS OF A 19TH
CENTURY CEMETERY IN THE CITY OF CHICAGO

In 1989, real estate developers working within the City of Chicago inadvertently unearthed human remains on land once occupied by the Cook County Farm and Poor House. The county medical examiner was called, and under the regulations of the new "Human Grave Protection Act of 1989," he immediately notified the Illinois Historic Preservation Agency. This became the first case to test the 1989 Human Grave Protection Act of Illinois. Archaeologists from the Chicago Area were contacted to conduct investigations at the cemetery. Archaeological investigations within this urban setting located not one, but three cemeteries. Presently, one cemetery has been completely excavated. The results of these investigations will be outlined in this paper.

Kelly, John E. (Southern Illinois University - Edwardsville) (Professional) [14]
WELLS INCISED PLATES: SYMBOLIC ANTECEDENTS AND SPATIAL AFFINITIES

Decorated plates are a unique vessel type found in an area extending from the central Illinois River valley to the lower Mississippi valley and encompassing the lower Ohio drainage. Wells Incised plates represent a distinct form which is indigenous to the American Bottom in Illinois. Analyses of assemblages from Cahokia and other nearby sites provide a basis for examining the context of this vessel form. The design field and associated motifs are indicative of a sumburst. The antecedents and areal affinities of this symbolism are examined and discussed.

Kelly, John E. - see also Iseminger, William

Klobuchar, Nicholas W. - see Ham, Alan D.

Knapp, Timothy D. (Western Michigan University) (Student) [6]
ENVIRONMENTAL FACTORS INFLUENCING PREHISTORIC SITE SELECTION ALONG
THE PORTAGE RIVER, A TRIBUTARY OF THE ST. JOSEPH OF SOUTHWESTERN
MICHIGAN

Presettlement vegetation in the Portage River drainage consisted of a number of distinctive plant communities including; prairie; burr oak opening; oak savanna; oak forest; beech-sugar maple forest; southern floodplain forest; and various wetland associations. After four seasons of systematic site survey, during which more than 100 sites were recorded, an attempt is made to correlate site location with the following environmental variables: distance to permanent water; landform; soil types; and resources occurring within plan associations in the immediate site environs. These data are then compared to 100 randomly chosen site loci in order to generate hypotheses about site function.

Kolb, Michael F. (University of Wisconsin-Milwaukee) (Professional) [4]
HOLOCENE AND MODERN GEOMORPHIC HISTORY IN THE LOWER CRAWFISH RIVER
VALLEY: HOLOCENE STABILITY AND RECENT INSTABILITY

The lower Crawfish River Valley is located in Woodfordian glacial terrain in Southeastern Wisconsin. Subsequent modification of the glacial landscape by Holocene geomorphic processes has been minimal. A geomorphic response to Holocene climatic changes, though lacking in the

lower Crawfish River, has been documented to the west in the Driftless Area and to the east in the Lake Michigan basin. Analysis of fluvial sediments in the Crawfish River and lacustrine sediments in Chub Lake suggests that both systems were stable through the Holocene, but have changed dramatically since the advent of agricultural land use. Possible reasons for Holocene stability are examined.

Koth, Michael F. (University of Wisconsin-Milwaukee) (Professional) [10]
CULTIVATION AND SITE FORMATION PROCESSES: A GEOMORPHIC PERSPECTIVE

Archaeological deposits are the result of both cultural and natural processes. The effects of cultivation, a post-depositional cultural process, on artifact distributions has been extensively studied by archaeologists. On many cultivate surfaces, however, the distribution of artifacts is not only the result of movement during cultivation but is also the result of movement by natural hillshope processes such as sheet wash erosion, rill erosion and mass movement. These processes create a complex mosaic of erosional and depositional landscape facets. The factors which control movement of sediment and artifacts on slopes are reviewed and simple predictive model is presented. The model is illustrated by two examples: the Gillen Site in southeastern Wisconsin and the DERT Thinker Site in southwestern Wisconsin. Understanding the effects of hillshope processes on archaeological deposits is important for assessing site integrity, locating buried sites and analyzing artifact patterning from surface collections.

Koldehoff, Brad (Louis Berger and Associates, Inc.) (Professional) [2]
THE ORGANIZATION OF CRAB ORCHARD LITHIC TECHNOLOGY IN THE BIG MUDDY
RIVER BASIN

In some respects, our understanding of Crab Orchard lithic technology has advanced little since Moreau Maxwell first addressed the topic more than forty years ago. A problem has been the recovery of large, well-dated lithic assemblages. However, excavations at the Little Muddy Rock Shelter in 1986 uncovered deep stratified deposits. The lithic assemblages from the Terminal Archaic through Late Woodland horizons are summarized, and temporal shifts in lithic technology are examined for insights into settlement mobility, subsistence strategies, and exchange networks.

Koldehoff, Brad (Louis Berger & Associates, Inc.), Kenneth B. Tankersley (Illinois State Museum), Stanley A. Ahler (University of North Dakota), and John Fox (Ward's Natural Science Establishment, Inc.) (Professional)

A SOURCE OF KNIFE RIVER FLINT IN SOUTHERN ILLINOIS

From 1983 to 1990, sand bars along the Illinois side of the Mississippi River in Randolph, Jackson, Union, and Alexander Counties were examined for lithic raw materials. A wide range of materials from distance and local sources were collected. Most noteworthy are pebbles and cobbles of Knife River Flint, transported by natural processes over 1,000 km from Dunn County, North Dakota. In this paper, an inventory of raw materials is presented, the processes of redeposition are outlined, and implications for prehistoric exchange and settlement mobility are explored.

Kralovec, Beverly B. - see Keene, David

Krelsa, Paul (State Historical Society of Wisconsin) (Professional)
AT THE CONFLUENCE: MISSISSIPPIAN SETTLEMENT ORGANIZATION IN THE
HEARTLAND

Recent fieldwork has revealed several quite disparate patterns in Mississippian settlement in a rather restricted area surrounding the confluence of the Mississippi and Ohio Rivers. The patterns differ both in terms of temporal parameters, site hierarchies, and site types present. Specifically, it is argued that the small mound centers along the lower Ohio River Valley in Ballard and McCracken Counties, Kentucky, are the end result of a period of Kincaid expansionism that occurred during the 13-14th centuries A.D. A broad overview of Mississippian

[7]

settlement organization in the areas surrounding the confluence of the Ohio and Mississippi Rivers is presented. Implications for sociopolitical institutions, political entities, chiefdom formation, and regional interactions in the area are also discussed.

Kugler, Teresa - see Brown, James

Kullen, Douglas (Patrick Engineering) (Professional) [8]
THE COMSTOCK TRACE: A HUBER PHASE EARTHWORK AND HABITATION SITE
NEAR JOLIET, WILL COUNTY, ILLINOIS

Archeological fieldwork was conducted recently at the Comstock Trace — one of the few intact prehistoric earthworks left in northeastern Illinois. Investigations determined conclusively that the site dates to the late prehistoric/protohistoric Huber Phase, rather than to the French Colonial Period, as had been reported previously. The remains of palisaded enclosures occur at several Huber Phase village site in the Chicago area, but this relationship has not previously been noted. The function of these enclosures appears to have been ceremonial rather than defensive.

Kullen, Douglas - see also Garceau, Madeleine

Lensink, Stephen C. (Office of the State Archaeologist of Iowa) (Professional)
PARTICIPATION OF INDIANS IN TEACHER WORKSHOPS

[9]

During the summer of 1990, Indians from Iowa took part in four-day workshops in archaeology for primary and secondary teachers which were funded by the Iowa Humanities Board. Each Indian spoke for a half day on a topic of his or her choice--substance abuse, protection of Indian burial sites, and history--providing ample opportunity for teachers to ask questions and to interact with the Indian presenters. An important consideration when cooperating with Indians in these and similar education programs is providing honoraria commensurate with the unique knowledge and perspective they can contribute.

Lillie, Robin M. and Marlin Ingells (Office of the State Archaeologist, University of Iowa) (Professional)

[3]

A HISTORIC BURIAL SITE IN NORTHEASTERN IOWA

A historic Native American burial site in Chickasaw County, Iowa, which had been vandalized, was excavated in May, 1990 by members of the Iowa Office of the State Archaeologist to protect the remains from further disturbance. The site yielded skeletal remains from at least two young children. Associated artifacts included glass beads, silver tinklers and a brooch, and remnants of a blanket. The human remains are analyzed and similarities drawn to other eastern Iowa archaeological sites.

Lowe, David C. (University of Wisconsin-Madison) (Student)
RESULTS OF THE FIRST SYSTEMATIC ROCK ART SURVEY OF WISCONSIN

The author presents survey results of rock art research in Dane, Iowa, Sauk, and Grant Counties, Wisconsin. Over one hundred rockshelters utilized by prehistoric populations were discovered, and 50 of these sites contained petroglyphs and pictographs. Implications of the distribution of rock art sites throughout Southwestern Wisconsin are discussed.

Madsen, Mark Lawrence and Jerol Hillard Hanlon (Past Chicago Archaeological Society Presidents) (Professional) [11]

A SEARCH TO FIND PATTERNS IN CRUDE TOOL ASSEMBLAGES

When time, energy, and material resources are the important factors in the manufacture of stone tools and survival, the American Indian could surpass the quality and quantity of fine classic spearpoints, knives, and scrapers found in the Old World. On the spur of the moment, however, they were adaptable enough to utilize even the waste flakes and bipolar fragments of inferior chert cobbles for every day living. This paper will deal with experimental studies of

crude tool distribution on plowed fields at both Poplar Creek and Klein Creek Sites. Do the percentages of "crude tool" distribution in each survey area match the classic tool distribution? Can crude tools be categorized?

Malik, Riaz (Minnesota Historical Society) and Kent Bakken (University of Minnesota) (Student)

[11]

[15]

THE BRADBURY BROOK SITE: A LATE PALEO-INDIAN STONE WORKSHOP

This site in east central Minnesota, excavated in 1990, contained three artifact concentrations relating to the procurement and reduction of siltstone; one concentration included intact remains of a lithic workshop. Over 126,000 artifacts were recovered, including hammer and anvil stones, a trihedral adze, keeled scrapers, preforms and the basal portion of a stemmed Alberta point. Charcoal from a feature was dated to 9,220 ± 75. Initial analysis has identified multiple workstations and suggested that the site was only used for a brief period. Completion of detailed analyses of tools and of flakes from intact contexts promised to reveal significant details of site structure.

Marcucci, Derrick (Louis Berger and Associates, Inc.), John Cordell and William Green (Office of the State Archaeologist, Iowa) (Professional) [12]
THE PAUL SAGERS ARCHAEOLOGICAL COLLECTION

Paul Sagers (1909-1982) was an amateur archaeologist whose work figured prominently in the development of the Woodland cultural sequence in eastern Iowa. His collections from the Levsen and Mouse Hollow rockshelters were used by C. R. Keyes and W. D. Logan to define Woodland Pottery types and cultural complexes. Under a grant from the Iowa Department of Natural Resources, we catalogued the collection in order to increase its research and educational value. This paper reviews the collection, its significance, and cataloging methods. The collection is housed and displayed at the Sagers Museum at Maquokets Caves State Park, Jackson County, Iowa.

Marshall, James A. (Professional)
THE PREHISTORIC CIRCULAR EARTHWORK OPENINGS OF EASTERN NORTH
AMERICA EXAMINED FOR ASTRONOMICAL ORIENTATIONS

Openings in these circles are popularly believed to be oriented to the rising and setting points of the sun, moon, stars, etc. At the 1990 conference, this researcher examined more than 20 pairs of parallel walls and found no pattern of astronomical orientation to them over the 12 degree 30 minute latitude difference from southernmost to northernmost. In this paper we will examine the orientation of openings of about 50 circles from the southernmost in Florida through those in Louisiana and Ohio to the northernmost in Missaukee County, Michigan to see if there are any progressive changes in azimuth through this latitude difference of 17 degree 20 minute.

Martin, Terrance J. (Illinois State Museum) (Professional) [2]
ANIMAL EXPLOITATION AND THE CRAB ORCHARD TRADITION: THE VIEW FROM
THE LITTLE MUDDY ROCKSHELTER

Central to the consideration of regional models for the Crab Orchard Tradition in southern Illinois is the role of rockshelters in the seulement and subsistence system. One model proposed that Crab Orchard groups occupied the till plain of southern Illinois during the summer and early fall, followed by a move to numerous natural shelters in the heavily dissected Shawnee Hills (e.g., Grammar Rockshelter, Cove Hollow Shelter) to hunt white-tailed deer during the late fall and winter. Investigations of the Little Muddy Rockshelter (11-J-814), a multi-component site in the Till Plain Division in Jackson County, Illinois, permits a re-examination of this model. Analysis of the site's large faunal assemblage reveals an animal exploitation pattern consistent with a late fall and winter encampment. As a result, a more complex scenario involving local resource procurement by Crab Orchard populations emerges. Based on this information, the presence of natural shelters in an area was apparently more influential on seasonal mobility than whether or not that shelter was located in the Shawnee Hills.

Martin, Terrance J. - see also Tankersley, Kenneth B.

Mason, Ronald J.(Lawrence University) and Carol I. Mason (University of Wisconsin-Oshkosh)
(Professional)
[8]
AMS DATES ON ONEOTA AND LATE WOODLAND POTTERY FROM THE DOOR
PENINSULA, WISCONSIN

Advances in dating techniques have enabled dates on rimsherds to bracket Mero Complex Oneota in time and provide time ranges for late Woodland pottery types in northeastern Wisconsin.

McCorvie, Mary R. - see Wagner, Mark J.

McGowan, Kevin P. (University of Illinois at Urbana-Champaign) (Professional) [6]
ACROSS THE PRAIRIE: A PIPELINE SURVEY IN CENTRAL ILLINOIS

Archaeological investigations of a proposed pipeline right-of-way from Iowa to east-central Illinois has documented over 200 sites since 1990. Preliminary results are presented from limited testing undertaken at 31 locations between Peoria and Tuscola, Illinois, with a focus on Late Woodland component sites.

Meer, Rosanne M. (BZ Engineering, Inc.) (Professional)
THE RESEARCH POTENTIAL OF HUMAN REMAINS RECOVERED FROM SALVAGE
SITUATIONS

Since 1987, the Wisconsin Burial Sites Office has been involved in excavations of prehistoric Native American as well as historic Native American and Euroamerican human remains. These remains, although recovered in salvage situations, have yielded important information on the lives of Wisconsin's past inhabitants.

Melnholz, Norm (Wisconsin State Historical Society) (Professional) [12]
A LATE WOODLAND COMMUNITY AT THE STATZ SITE, DANE COUNTY, WISCONSIN:
A PRELIMINARY REPORT

Investigations recently were conducted at the multi-component Statz Site (47-Da-642) by the State Historical Society of Wisconsin. Site mitigation included the mechanical removal of plowzone from 70% of the 4.2 acre site area. Over 200 features were defined, the majority relating to a late Woodland occupation. This paper discusses the Late Woodland community of keyhole structures that were defined at the site. This community was situated on the edge of the Waunakee Marsh within the Yahara River drainage basin and was occupied between ca. 900-1100 A.D. The use of a controlled surface collection and plowzone removal to delineate features as part of the data recovery plan is also discussed.

Meyer, Scott - see Finney, Fred A.

Milner, George R., Sissel Schroeder, and Steve Taxman (Pennsylvania State University)
(Professional)

STONE BOX GRAVES IN SOUTHERN ILLINOIS AND ADJACENT MISSOURI: NEW PERSPECTIVES FROM OLD COLLECTIONS

For over 100 years archaeologists have been fascinated by stone box graves. They were once widely distributed, easily found, and contained scintillating artifacts. One such cemetery in southern Illinois — the Guy Smith site — was excavated sixty years ago and yielded an often-illustrated Mississippian figurine pipe. Recently discovered notes allow this cemetery to be described for the first time. Unpublished and published information indicate that it is one of many such cemeteries in the Mississippi River valley in southwestern Illinois and adjacent Missouri. These data are sufficient to delineate similarities among these cemeteries and serve as a foundation for future research.

Moffat, Charles R. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Professional) [2] CRAB ORCHARD CERAMICS AND CHRONOLOGY IN THE TILL PLAINS OF SOUTHERN ILLINOIS

During the 1980s, new data on the Crab Orchard tradition were obtained by American Resources Group during mitigation projects at Consolidation Coal Company surface mines in Jackson and Perry counties. Radiocarbon dates from several sites indicate that the Crab Orchard tradition includes the Early, Middle, and the beginning of the Late Woodland stages, a time span of nearly 1400 years. To facilitate analysis, Maxwell's (1951) ceramic typology was revised following the rules of the Lower Mississippi Valley type-variety system (Phillips 1970:23-31). The ARG ceramic data were used to define four new Woodland phases.

Mooers, Howard - see Dobbs, Clark A.

Moore, John H. (University of Wisconsin-Stevens Point) (Professional)
TWO CENTRAL WISCONSIN EARTHEN RINGS

[15]

While surveying potential sites in the Mead Wildlife Ares during May and June of 1991 the UWSP Regional Archaeology Center mapped a set of two earthen rings whose origins and functions are unknown. Maps and photographs of these rings will be presented within the context of a larger site, Alien Meadows. This is a multicomponent site with artifacts representing the Paleoindian/Archaic, and Woodland traditions. Direct association of these traditions and the rings has not been established. The basic question is, "What have we here?"

Morrow, Carol A. (Southeast Missouri State) (Professional) [2] HOPEWELLIAN TRAITS AT THE TWENHAFEL SITE: NONLOCAL CHERTS AND BLADE TECHNOLOGY

Two supposedly Hopewellian traits, use of nonlocal cherts and blade technology, are examined through the study of materials from the Twenhafel site (11-Jv-87). This Middle Woodland site is the largest, most complex site known for the Crab Orchard culture in southern Illinois and is unique in the area. Analysis revealed that both traits were present in the early Middle Woodland materials, i.e., pre-Hopewell, and persisted into the early Late Woodland materials, i.e., post-Hopewell. It is suggested that these traits may indicate early movement and retention of "valued" nonlocal but low-cost utilitarian (as opposed to exotic) goods and ideas.

Mulholland, Susan C. (University of Minnesota, Duluth) (Professional)
PHYTOLITH ANALYSIS IN GEOARCHAEOLOGY

[10]

Phytoliths, microscopic mineral casts of plant cells, are recovered from a wide range of natural and archaeological sediments. Identification of their botanical origin provides important data for interpretation of the sediments. Paleoenvironmental information such as type of forest or grassland may be determined; plant use in food, shelter, and other activities is detectable form phytoliths. The physical and chemical characteristics of the microfossils can provide data on age (radiocarbon, thermoluminescence) and climate (stable isotopes of carbon and oxygen). Phytolith analysis provides another method of extracting information from sediments.

Murray, Mathew - see Dobbs, Clark A.

Myster, Susan M. T. - see O'Connell, Barbara H.

Nansel, Blane (University of Wisconsin-Milwaukee) and William Green (Office of the State Archaeologist, Iowa) (Student) [12] TIME TREND ANALYSIS OF LATE WOODLAND POTTERY FROM WESTERN ILLINOIS

David Braun has developed a technique for "absolute seriation" of Woodland pottery in parts of Illinois. We tested the broader applicability of this technique with excavated and dated ceramics from an upland locality outside of Braun's study area. We generated time trend data of

vessel wall thickness from Late Woodland assemblages, principally of the Bauer Branch phase, from the Upper Sugar Creek Locality, Schuyler County, western Illinois. The data compare well to the time trench curve developed by Braun. Additional suggested ages are estimated for pottery from undated contexts. We conclude that many midwestern ceramic assemblages are amenable to study using this technique but that independent local and regional chronometric data are required as well.

Noble, Vergli E. (National Park Service) (Professional)

AN ARCHAEOLOGICAL SURVEY OF THE OHIO AND ERIE CANAL, CUYAHOGA AND SUMMIT COUNTIES, OHIO

From 1987 through 1990, the National Park Service, Midwest Archeological Center, carried out a reconnaissance survey along parts of the former Ohio and Eric Canal (1827-1913) in Cuyahoga Valley National Recreation Area. Park planners were intent upon rehabilitating a 22-mile-long section of the canal towpath between Cleveland and Akron for use as a multiple-purpose trail. The archaeological survey was designed to inventory cultural resources that might be impacted within the development corridor. This paper summarizes the findings of that survey and related projects, including the investigation of a buried canal boat hull.

Nolan, David J. - see Conrad, Lawrence

O'Connell, Barbara H. and Susan M. T. Myster (Hamline University) (Professional)
TREATMENT OF HUMAN REMAINS IN MINNESOTA: CASE EXAMPLES

[3]

[1]

The strength of the Minnesota Private Cemeteries Act to resolve disposition of disturbed human remains is based, primarily, on two aspects of the law: 1) the law specifies the parties that will determine disposition and requires agreement, necessitating, minimally, communication and 2) all incidence of disturbance or disposition of extant collections are handled on a case by case basis. Policies and procedures established for implementing the law that specify the protocol for handling human remains, including identification and analysis, incorporate the recommendations of the Paleopathology Association Database Committee and the spiritual concerns of the Indian Affairs Council. Examples of the application of these procedures for recently disturbed Nati9ve American and Euro-American remains, as well as, archaeologically curated remains, suggest a broad range of treatment alternatives are possible when a case by case consensus negotiation strategy is employed.

O'Connell, Barbara H. and Susan M. T. Myster (Hamline University) (Professional) [9]
BLACKDUCK SUBSISTENCE IN NORTHERN MINNESOTA: ARCHAEOLOGY AND
ORAL TRADITION

Hamline University and the Leech Lake Reservation Heritage Sites Preservation Program (LLRHSPP) recently offered an archaeological field school which investigated the subsistence base of the Blackduck culture (ca. 800-1200 A.D.) in northern Minnesota, Indians and non-Indians worked together to interpret and reconstruct past Native American lifeways through a combination of traditional excavation and nontraditional informant interviewing of Ojibwe people about their land use and subsistence practices. Students in the LLRHSPP have extensive archaeological experience and acted as primary field instructors, initial informants about contemporary Native American subsistence practices, and as links to other informants in the community. The success of this project exemplifies that multiple voices with varying perspectives can provide a greater understanding of the past.

Odell, George H. (University of Tulsa) (Professional)
WHAT WERE MIDDLE WOODLAND BLADES USED FOR?

True blade technologies were virtually unknown during the Archaic period. They blossomed briefly during the Middle Woodland period, and then died out again. We have no idea why this specific technology developed. Yerkes' research concluded that blades were used for a variety of tasks. My research, in the lower Illinois Valley, applied use-wear analyses to three Middle

Woodland components: the Smiling Dan site and two mortuary manifestations at Napoleon Hollow. At the Smiling Dan site blades were used for a variety of tasks. however, in the mortuary contexts they were numerically significant and restricted in their range of tasks.

O'Gorman, Jodle A. (University of Wisconsin-Milwaukee) (Professional)
THE TREMAINE, OT, FILLER, AND FIRESIGN SITE EXCAVATIONS: LATE
PREHISTORIC ONEOTA SITES IN THE LA CROSSE LOCALITY

[13]

Excavations have been carried out on a group of late prehistoric Oneota sites in the La Crosse Locality over the past five years by the State Historical Society of Wisconsin for the Wisconsin Department of Transportation. The four sites: Tremaine, OT, Filler, and Firesign are currently under analysis. The largest of the four sites, Tremaine, has multiple components including a large Oneota village. Seven structures and over 900 features including approximately one hundred burials have been recovered at this site. OT, Filler and Firesign are smaller sites containing clusters of Oneota features and burials. Summarizing preliminary findings at these four sites, this paper serves as an introduction to subsequent papers which present various analyses of the sites.

O'Gorman, Jodle A. (University of Wisconsin-Milwaukee) and R. Eric Hollinger (University of Missouri - Columbia) (Professional) [13]
THE TREMAINE STRUCTURES: METHODOLOGICAL AND THEORETICAL ISSUES

Remains of seven structures measuring approximately eight meters (25 feet) wide and ranging from fifty to sixty-five meters (164 - 210 feet) in length have been recovered from area H of the Tremaine site in La Crosse County, Wisconsin. Hundreds of features, including human burials found within each of the structures, have been recovered. This extraordinary opportunity to examine Oneota community and other topics of Oneota research not commonly accessible to the archaeologist has raised methodological and theoretical concerns. Normally employed excavation techniques were not suitable for recovering the scale of information necessary for documenting the structures and recovering information on community pattern. Extant literature documents the presence of similar structures in areas outside the La Crosse Locality but functional interpretation remained problematic. Determining the primary function of these structures is obviously integral to the interpretation of the site but is also imperative for the investigation of Oneota community pattern and social organization. Function of the Tremaine structures as primarily domestic or ritual is evaluated based on the nature of the structures and their context.

O'Gorman, Jodle A. (University of Wisconsin-Milwaukee) (Professional) [13]
OT SITE CERAMICS: CULTURAL CHRONOLOGY AND THE PURSUIT OF FORM AND FUNCTION

Ceramics have been utilized in many non-Oneota studies to address social questions such as division of labor and social organization. Traditional analysis of Oneota ceramics focuses on phase designation primarily through identification of design motifs, its placement, and other decorative attributes. Although important in structuring the regional chronological framework, this type of analysis may not be particularly well suited for addressing more social questions. Analysis of the OT site ceramic assemblage has focused on both traditional phase designation, and on identifying variables to begin defining functional classes. Utilizing both metric and non-metric data, functional classes are pursued which can be applied toward the goal of addressing social questions as well as better understanding the use of decorative motifs frequently used to make phase designations.

Parker, Kathryn E. (Great Lakes Ecosystems) (Professional)
CRAB ORCHARD PLANT USE AND FOOD PRODUCTION TECHNOLOGY

[2]

Accumulated botanical evidence from Middle Woodland sites in the southern half of Illinois has amply demonstrated that farming/gardening was part of overall adaptive strategies. Comparison of Crab Orchard floral assemblages (nuts, horticultural seeds) and horticultural

technologies (hoes and storage facilities) with those of contemporaneous Middle Woodland groups in the American Bottom and Lower Illinois Valley reflect regional and local variation in food production activities. Many of the differences appear dictated by geography, i.e., proximity to highly productive and preferred wild plants foods, either hickory nuts or hazelnuts, versus the availability of fertile and tillable soil.

Parker, Kathryn - see also Finney, Fred A.

Paulus, Eilen Ghere (University of Wisconsin-Milwaukee) (Professional)
EFFIGY MOUNDS FROM A BIOANTHROPOLOGICAL PERSPECTIVE

[4]

[13]

Effigy Mounds are unique to Wisconsin and its surrounding states. In the past, there have been a number of studies which have focused on these mounds. Such studies have looked at aspects such as mound shape and the pottery types found within mounds. This paper takes a different perspective and is the result of a literature search emphasizing burials recovered from mounds in Wisconsin. The paper will discuss and evaluate types of interment, sex and age distributions, and make comparisons to other Late Woodland burials that are not associated with Effigy Mound groups.

Penman, John T. (University of Wisconsin-Madison) and Richard W. Yerkes (Ohio State University) (Professional)

FAUNA FROM FILLER: AN ONEOTA SITE IN LA CROSSE COUNTY, WISCONSIN

The Filler site (47-Lc-149) is on Amsterdam Prairie north of the City of La Crosse and adjacent to the OT site. The 11 radiocarbon dates from Filler (A.D. 1470-1640, corrected) are the latest series for any Oneota site in La Crosse County. As determined from available meat, bison is the dominant food source at Filler. However, here as at other Oneota sites in La Crosse County, bison scapulae are ubiquitous while other elements are rare. The ratio of bison scapulae recovered compared to the total number of pits excavated is used to measure occurrence at Filler. Comparison of this ratio to the earlier Pammel Creek site (A.D. 1360-1450) indicates a decrease in bison utilization through time.

Picha, Paul R. and Michael L. Gregg (University of North Dakota) (Professional) [16] STONES, BONES, SHELLS, AND OTHER OBJECTS OF VALUE: MIDDLE WOODLAND

This paper examines resource exchange during the Middle Woodland period in the Northern Plains and the attendant articulation of this exchange with contemporaneous midcontinental Havans and Hopewell interaction networks. Artifact assemblages from Middle Plains Woodland Sonota components contain high frequencies of Knife River flint, obsidian, and bison bone which were Hopewellian Interaction Sphere resources. These were important local resources in the technological and subsistence economics of Northern Plains Middle Woodland societies. But Knife River flint and obsidian became more involved with political economic behavior as they were exchanged eastwardly. The Sonota archaeological culture of the Northern Plains should be considered in any study of the entirety of the H.I.S.

Pleger, Thomas C. (University of Wisconsin-Madison) (Student)

SEASONAL OCCUPATION AND GROUPING AT THE CHAUTAUQUA GROUNDS SITE

(47-Mt-71), A MULTI-COMPONENT SITE SITUATED NEAR THE JUNCTION OF THE

MENOMINEE RIVER AND THE BAY OF GREEN BAY.

Surface collections from the Chautauqua grounds site in Marinette County, Wisconsin, have led to the construction of a macro-microband subsistence model. The model is based on a macro-microband population utilizing the Chautauqua grounds site as a fishery during spring and summer months. In fall and winter months this population fractures into extended family groups and moves up river to a more sheltered environment. The Chautauqua grounds site is discussed in relation to other regional sites in order to provide a better understanding of subsistence strategies in Northern Wisconsin and the Upper Peninsula of Michigan.

Rajnovich, Grace (Professional)
READING ROCK ART: INTERPRETING THE INDIAN ROCK PAINTINGS OF THE
CANADIAN SHIELD

A paper by the author in a recent issue of the Midcontinental Journal of Archaeology discussed the Indian pictographs of the Canadian Shield as the visions, or dreams, of the medicine men and women in their quest for medicines from the manitous. A comparison of picture writing on the birchbark song scrolls of the Ojbway Midewiwin with rock art signs establishes them as portraying the same Algonkian subject matter in the same picture writing "style". This paper will present further evidence of the medicine themes using picture writing from song scrolls recorded in Minnesota, Wisconsin and Michigan. The paintings depict the medicines, manitous, medicine lodges, poles, drums, and rattles and may, in fact, be portraying the medicine songs themselves given to the healers by the manitous. The research is contained in a book for the public to be published in Canada.

Redmond, Brian G. (Glenn A. Black Laboratory of Archaeology, Indiana University)
ON THE FRONTIERS OF MISSISSIPPIAN: THE OLIVER PHASE OCCUPATION OF
SOUTHERN INDIANA

Recently acquired survey and excavation data from Oliver phase sites in southern Indiana provide evidence for an intensive and extensive occupation by sedentary village horticulturists after A.D. 1000. This occupation is archaeologically distinct from the Middle Mississippian Angel phase settlement of the lower Ohio Valley, but exhibits affinities with Fort Ancient cultural manifestations in the middle Ohio Valley. The temporal, spatial, and material contexts of the Oliver phase are reexamined in light of this new information, and interpretations are made concerning possible relationships with neighboring Mississippian societies.

Reld, C.S. "Paddy" (Ontario Ministry of Culture & Communications) (Professional)

THE "SACREDNESS" OF CARVED STONE PIPES IN THE OIIBWA-CREE AREA OF THE
NORTHERN MID-CONTINENT: A SPATIAL AND TEMPORAL DILEMMA

Excavations over four years at the Ballynacree Site (DkKp-8) at the mouth of the Winnipeg River in northwestern Ontario uncovered a relatively large number of carved stone pipes in the French Fur Trade stratum. The pipes were of extremely varied size and shape, and one was in the "calumet" style. During analysis of the DkKp-8 materials the author discovered major discrepancies in pipe types between the French, North West Company, and Hudson Bay Company strata; a subsequent examination of over 1200 site collections from northwestern Ontario revealed that only one stone pipe could be classed as prehistoric, and it was probably an imported Adena-Hopewell burial offering. It also became apparent that in the period between French contact in the early 1700s and the creation of the Hudson Bay Company monopoly in 1821 stone pipe styles in the study area were extremely varied, however, after 1821 the "calumet" style began to dominate and stone pipe frequencies declined.

Richards, John D. (Great Lakes Archaeological Research Center) (Professional)

THE AZTALAN CERAMIC ASSEMBLAGE IN COMPARATIVE PERSPECTIVE

This paper provides a brief description of the interassemblage variability characteristic of the Woodland and Mississippian ceramics sequence from Aztalan, a late prehistoric village site in southeastem Wisconsin. Comparative analysis of collections housed at the Milwaukee Public Museum, the University of Wisconsin-Madison, and the State Historical Society of Wisconsin, is augmented by stratigraphic interpretation of ceramics recovered during the University of Wisconsin-Milwaukee's 1984 excavations. Results of a morphometric scriation of the Milwaukee Public Museum collections allow direct comparison with excavated ceramic assemblages recovered from Cahokia and the adjacent American Bottom.

During the period of Indian-Euroamerican contact, dramatic culture change occurred among Great Lakes Indians, but the nature and extent of that change is poorly understood. This is true of the Great Lakes Winnebago Indians, particularly during the early period of contact. This paper examines subsistence information from a contact period Oneota site, the Astor Site (47-Br-243) near Green Bay, Wisconsin, in an effort to establish a baseline from which subsistence change may be examined. These data are compared to accounts of later 19th-century Rock River Winnebago subsistence in order to model changing subsistence economies during the culture-contact period in southeastern Wisconsin.

Rodell, Roland L. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Professional)

[6]

A MIDDLE MISSISSIPPIAN PRESENCE AT TREMPEALEAU, WISCONSIN

A Middle Mississippian presence at Trempealeau, Wisconsin, was first recognized a century ago by George Squier. His brief descriptions of a platform mound complex and pottery with red slipped surfaces were reported in the old series of The Wisconsin Archeologist. More detailed information recorded by Squier remained unpublished and unexamined until it was resurrected by Stevenson, Green and Speth in 1983. Continued study of Squier's papers has provided more detailed information on the platform mound complex. And excavation at the Squier Garden site (47-Tr-156) has confirmed both its location and Squier's descriptions of the pottery. A Middle Mississippian presence at circa A.D. 1000 is suggested.

Ruggles, Dan and Maria Buckmaster (Northern Michigan University) (Professional)
MOUNT MESNARD: A PREHISTORIC QUARTZITE QUARRY

The Mount Mesnard site is located within the city limits of Marquette, Michigan in the Lake Superior Basin. The quarry was first discovered in 1989 and investigated during the summer of 1991. The purpose of the investigation was to identify the extent of the site, collect an analytical sample, and determine cultural affiliation, if possible. Although conclusive diagnostic data is yet unavailable, Mount Mesnard quartzite has been recovered from numerous Late Paleo-Indian sites in Marquette County.

#### Salzer, Robert J. (Beloit College) MISSISSIPPIAN

[Plenary]

Assessing the character and importance of the Mississippian phenomenon in the Upper Mississippi River region is difficult since it requires some confidence that the phenomenon in eastern North America is adequately understood. Since such an understanding is still beyond our grasp, this paper is necessarily designed to address the nature of Mississippian in general as well as its more particular manifestation in our area. An attempt is made to explore our changing definitions of this significant late prehistoric development in the continental area and to examine the fresh perspectives that these innovative perceptions reveal for enhancing our understanding of the impact that this development had on the culture history of the upper Midwest.

#### Salzer, Robert J. (Beloit College) (Professional) ARCHAEOLOGISTS AND INDIANS: FOUR WISCONSIN CASES

[9]

In the past several years, it has become obvious that long-standing attitudes of Indians and of archaeologists about each other have surfaced in the form of frequently adversarial and sometimes hostile interaction. However, not all instances of dialogue between these two groups have been confrontational. This paper presents four instances of cooperation between Native American groups and archaeologists. These examples are drawn from the personal experiences of the author and are analyzed in an effort to discover factors which are common to all of the events. What emerges from the analysis is a set of elements which may assist in laying the foundation for greater understanding and cooperation between archaeologists and Native American peoples.

Salzer, Robert J. (Beloit College) (Professional) READING SYMBOLS IN DIRT

Based on the results of on-going research at the Gottschall Site (47 Ia 80) in southwestern Wisconsin, an Anthrosed is defined as a manufactured sediment. The location, composition, depositional sequence, associated features and artifacts, and chronometric assessments provide a basis for provisional interpretations of the symbolic content and meaning of this unusual phenomenon. These interpretations have potentially profound and far-reaching implications for late Middle Woodland and Mississippian ideological developments in the Upper Midwestern United States.

Sasso, Robert F. (University of Wisconsin-Parkside) (Professional) [13]
THE NATURE OF ONEOTA SETTLEMENT LAND USE AND AGRICULTURAL PATTERNS IN THE LA CROSSE REGION OF WESTERN WISCONSIN

Recent archaeological research in the Upper Mississippi Valley has provided an informed perspective on the nature of Oneota settlement, land use, and agricultural patterns. Research results bear significant implications for Oneota regional population density and distribution, the use of several cultivate and wild food species, and the nature of intergroup relations. These central aspects of the Oneota cultural adaptation to the La Crosse region are characterized herein. A series of factors contributing to these patterns are discussed in light of existing information on the subsistence practices of the prehistoric Oneota and early historic descendant cultural groups, the geographic distribution of known Oneota sites in the region, and a recent systematic archaeological survey in the Coon Creek drainage of western Wisconsin.

Schermer, Shirley J. (Office of the State Archaeologist, University of Iowa) (Professional) [3]
IMPLEMENTING IOWA'S BURIAL PROTECTION LAW: THE OFFICE OF THE STATE
ARCHAEOLOGIST BURIALS PROGRAM

In 1976, the Iowa state legislature passed a burial protection law after Indians in Iowa raised the issues of proper disposition of Indian burials, the defilement of Indian burial grounds, and equal protection under the law. The Iowa Office of the State Archaeologist (OSA) was given the responsibility of enacting this law. Since 1976, the OSA Burials Program has handled over 500 projects in 78 of Iowa's 99 counties. The State of Iowa's statute and procedures concerning ancient human remains are reviewed, focusing on the implementation and effectiveness of the protection and reburial program.

Schoeninger, Margaret J. - see Schurr, Mark R.

Schroeder, Sissel - see Milner, George R.

Schurr, Mark R. (University of Notre Dame) and Margaret J. Schoeninger (University of Wisconsin) (Professional)

STABLE ISOTOPE RATIOS AND PREHISTORIC DIET IN THE LOWER OHIO VALLEY

Archaeologists have long recognized that the Middle Mississippian occupations of the lower Ohio Valley and its tributaries possessed very similar material cultures. At the same time, conflicting models have interpreted localized variations in settlement patterns as evidence for local variations in subsistence adaptations. Human stable carbon- and nitrogen-isotope ratios from Wickliffe, Angel, and sites in the Tennessee-Cumberland region indicate that Middle Mississippian occupations of the lower Ohio Valley shared a regional subsistence pattern based on relatively high levels of maize consumption and the exploitation of both floodplain and upland resources.

Schwegman, John A. (Nonhern Illinois University) (Professional)
ARCHAEOLOGICAL INVESTIGATIONS ALONG THE ROCK RIVER IN NORTHERN
ILLINOIS

Seventeen sites along the Rock River in north-central Illinois are currently under Phase II investigation by the Northern Illinois University's Contract Archaeology Program under contract to the Illinois Department of Transportation. The study was initiated because of the proposed construction along Illinois Route 2 from Grand Detour to Byron. Few archaeological investigations have been previously conducted in this area. Several sites, including a rockshelter (11-Og-269), have now been tested. Excavated components range from late Archaic to Late Woodland. The results of these investigations will improve our understanding of regional chronology and settlement patterns in Northern Illinois.

Scott, Michael J. (Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse) (Student) [13] MIDWAY VILLAGE FAUNAL REMAINS

Midway Village (47Lc19), a Brice Prairie-Valley View phase Oneota occupation in La Crosse County, was initially excavated by the Milwaukee Public Museum in 1929. Since that time Midway has undergone numerous additional excavations including several salvage operations by the Mississippi Valley Archaeology Center (MVAC) during the 1980s. This study deals with the faunal materials recovered from the 1985 MVAC excavations. Overall, large mammals were found to be a major source of useable meat. Midway's Oneota occupants also appear to have emphasized the exploitation of the smaller bodied animal resources of the adjacent Mississippi River floodplain.

Scuilin, Michael (Mankato State University) (Professional) GROWING CORN IN THE UPPER MIDWEST [16]

Com grown by Indians throughout the Upper Midwest at the time of contact with Euro-Americans was Northern Flint — an extremely variable plant. The plant is short, busy, and tough, it grows rapidly and produces even under adverse conditions. Because of the nature of the plant special methods of cultivation were a necessity. Hilling is mentioned frequently in historic and ethnographic accounts; ridging, although fairly widespread, is not. Modern com-belt maize is neither ridged nor hilled. Why did some Indians invest the considerable time and effort necessary to produce either hills or ridges? Why bother with Northern Flint?

Seeman, Mark F. (Kent State University) and N'omi B. Greber (Cleveland Museum of Natural History) (Professional) [12] FLAMES OF REVERENCE: VARIATIONS IN THE USE OF PREPARED CLAY BASINS WITHIN OHIO HOPEWELL

The use of large, formally constructed clay basins was a distinctive aspect of Ohio Hopewell ceremonialism. These basins were often intensively burned and were closely associated with parts of activities performed on the floors of enclosed ritual spaces. Examples from Mound City and the Hopewell site itself are compared with respect to their morphology, contents, and contexts. The distinctiveness of the patterns at each site reflects a distinctiveness seen in other artifactual and constructional remains. A preliminary estimate of the function(s) of these facilities in their associated societies is presented.

Shott, Michael J. - see Simons, Donald B.

Simons, Donald B. (Michigan Archaeological Society) and Michaet J. Shott (University of Northern Iowa) (Professional)

THE BUTLER SITE: A GAINEY PHASE PALEO-INDIAN OCCUPATION IN SOUTHEASTERN MICHIGAN

Recent excavations at the Butler Site in southeastern Michigan have revealed a Gainey Phase Paleo-Indian assemblage that includes at least seven fluted bifaces—one from secure feature context—other bifaces, and 30+ unifaces. This paper forms a preliminary report on the investigation and results. Butler enhances our understanding of Gainey Phase occupation in the region, and the circumstances of its discovery and investigation carry important implications for avocational-professional collaboration and a set of methodological issues concerning replicated surface collection and the correspondence of surface and subsurface artifact distributions.

Smart, Tristine Lee (University of Michigan) SYMPOSIUM ORGANIZER: [9]
FORGING LINKS BETWEEN COMMUNITIES: EXAMPLES OF ARCHAEOLOGISTS AND
NATIVE AMERICANS WORKING TOGETHER IN THE MIDWEST

Archaeologists are being urged to work more closely and communicate more effectively with Native American communities. How can we accomplish this? In this symposium, archaeologists and cultural anthropologists who have worked with Native Americans in the Midwest will talk about what they have done and how they did it. These projects include research conducted at the request of Native Americans, Native American participation in archaeological research, and educational activities aimed at sharing information about the past. A general discussion will conclude the symposium, with Native American panelists providing their views on how archaeologists can work more effectively with Native American communities.

Staeck, John Paul (Rutgers University) (Professional) [16]
NEW DIRECTIONS IN INTERPRETATION: CHIWERE MYTH TRADITIONS AND THE
LATE PREHISTORIC OF THE WESTERN GREAT LAKES

The myth traditions of the Winnebago and the closely related Chiwere-speaking populations are examined. These traditions contain information of potential value to archaeologists interested in studying political and social interactions during the Late Prehistoric and Early Historic periods of the Western Great Lakes. In particular, the myths make consistent references to hierarchical forms of political organization and matrilineal descent. The potential presence of such traditions has important implications for archaeologists and ethnohistorians working in the region.

Stephens, Jeannette E. (Center for Archaeological Investigations, Southern Illinois University,
Carbondale) (Professional) [2]
CRAB ORCHARD SETTLEMENT PATTERNS IN THE BIG MUDDY DRAINAGE OF
SOUTHERN ILLINOIS

Crab Orchard tradition sites are a prominent cultural component along the main waterways of the Big Muddy River drainage and surrounding areas of southern Illinois. They occur across diverse physiographic regions, including the rolling Mt. Vernon Hill Country, rugged Shawnee Hills, and portions of the Mississippi River Valley. Crab Orchard site distribution is assessed within and among these large-scale environmental zones. Specific locational characteristics of individual sites are related further to land-use decision-making and aspects of the local social landscape. The diversity of site structure and locational characteristics suggest that Crab Orchard settlement patterning is more complex than had been proposed in earlier models of Crab Orchard site distribution. The physical landscape was used fairly extensively, but selectively, by Crab Orchard groups.

Stephens, Jeanette E. - see also Hargrave, Michael L.

Stoltman, James B. (University of Wisconsin-Madison) (Professional)

ARCHAEOLOGY IS MORE THAN GRAVE ROBBING: INDIAN STUDENTS AND THE
FIRST SEASON OF EXCAVATION AT THE FRED EDWARDS SITE

In 1984, the first of three seasons of excavation was conducted at the Fred Edwards site in SW Wisconsin. The goal was to allow Indian youngsters to experience the benefits of archaeological research through direct participation. To accomplish this objective the project focused upon a prehistoric village whose excavation would provide basic data concerning past lifeways of its Indian occupants. In participating in these excavations it was hoped that the students would learn that 1) archaeological research is not necessarily "grave robbing". 2)

archaeology can provide a uniquely rich reservoir of information about their cultural heritage, and 3) archaeology could be a challenging and rewarding profession. An overview and evaluation of this project will be the subject of this paper.

Swan, Daniel C. (Science Museum of Minnesota) (Professional) [9]
ADDRESSING THE RESEARCH AGENDAS OF AMERICAN INDIAN COMMUNITIES: AN
EXAMPLE FROM OSAGE COUNTY, OKLAHOMA

In 1984, the author was approached by members of the Osage Chapter of the Native American Church regarding their desire to initiate a course of research designed to document the history of Peyote religion in their community. This paper will present an overview of the various methods employed and the results obtained during a two year study of the archaeological, historical, and ethnological evidence available on this topic. This effort provides a case study of the benefits to be gained by American Indian communities and scholars from collaborative research endeavors.

Swartz, B. K., Jr. - see Hapke, Russell A.; see Hurlbutt, Thomas S.

Tankersley, Kenneth B. (Illinois State Museum)
CLOVIS COLONIZATION OF THE MISSISSIPPI RIVER VALLEY

[Plenary]

This paper examines the Clovis colonization process by identifying patterns in the distribution of artifacts manufactured from specific lithic material. Colonization is suggested by two patterns: (1) the occurrence of chipped stone Clovis artifacts on sites located great distances from their source areas (up to 2,000 km); and (2) unidirectional movement of lithic materials from west-to-east and from north-to-south. These patterns are not present on post-Clovis Paleoindian sites; they display a bidirectional movement of lithic material over a much smaller area. Post-Clovis Paleoindian artifact and site distribution patterns suggest that a settling-in process had begun prior to 10,000 B.P.

Tankersley, Kenneth B., Terrance J. Martin, Dawn Harn-Sullivan (Illinois State Museum), and Edward B. Jelks (Illinois State University) (Professional)

THE WINDROSE SITE: A LATE EIGHTEENTH/EARLY NINETEENTH CENTURY HABITATION

This paper describes recent field investigations at the Windrose site (11Ka318A), late 18th/early 19th century habitation in Kankakee County, Illinois. Artifacts recovered from surface survey and test excavation include a suite of silver ornaments, European ceramics and glass, British and local gunflints, glass beads, crinoid beads, cut kettle brass and iron, lead shot, stone pipes, and a large assemblage of faunal remains. While most of the artifacts are European in origin, the presence of stone pipes, some of which are broken in manufacture, crinoid beads, and gunflints manufactured from local lithic materials demonstrates that native crafts had not been completely abandoned. Faunal analysis demonstrates an exploitation of local wild animal resources.

Tankersley, Kenneth B. - see also Koldehoff, Brad

Taxman, Steven Mark (Pennsylvania State University) (Student)

NON-METRIC TRAIT VARIATION IN THE ADENA PEOPLES OF THE OHIO RIVER

DRAINAGE

Skeletons from four mounds in eastern Kentucky are used to determine the degree of biological affinity among Adena peoples living north and south of the Ohio River. From forty-two cranial and post-cranial non-metric traits, nineteen "clean" traits are identified. The mean measure of divergence in conjunction with multidimensional scaling analysis shows that there were two distinct mating networks in the Ohio Valley. This conclusion is in direct opposition to the longstanding view of Adena as a unified culture. Additional osteological analyses suggest the

environment played a minimal role in affecting the morphological divergence between the two regions.

Taxman, Steve - see also Milner, George R.

Theler, James L. (University of Wisconsin-La Crosse) HOPEWELL IN THE UPPER MISSISSIPPI RIVER VALLEY [Plenary]

The character of Hopewellian mortuary behavior is described within the context of Woodland societies for portions of the Upper Mississippi River Valley (UMRV). The expression of Hopewell along the UMRV is believed to have its origin in the Havana Tradition of Illinois, appearing in western Wisconsin at circa A.D. 200 or A.D. 300. The reasons for the northward spread of Havana Hopewell are uncertain, but may have focused on extending or solidifying riverine trade routes that carried certain exotic raw materials (e.g., Knife River Chalcedony) important in the Hopewell value system. Wisconsin participants in Hopewell exhibit distinct regional patterns of artifact types, styles and burial customs that are perhaps consistent with groups marginal to centers of ideological developments.

Theler, James L. (University of Wisconsin-La Crosse) (Professional)
ONEOTA ANIMAL RESOURCE UTILIZATION IN WESTERN WISCONSIN

[13]

The analysis of faunal remains from Oneota sites in La Crosse County, Wisconsin, document the use of a wide array of animal species for food and as a source of bone for the manufacture of tools. An interpretation of distinctive seasonal patterns of habitat exploitation is discussed in relation to depositional context and archaeological recovery methods.

Tomak, Curtls H. (Indiana Department of Transportation) (Professional)

THE MOUNT VERNON SITE: A HOPEWELL CEREMONIAL/BURIAL SITE IN POSEY
COUNTY, INDIANA

The Mount Vernon site is a large Hopewell mound which was found during borrow work for road construction in 1988, but unfortunately the discovery was not reported to archaeologists or to the Indiana Department of Transportation. By the time the Department discovered the location of the site, it had been severely disturbed by borrowing and by artifact collecting. Arrangements were made with the property owner, General Electric, and I conducted an excavation at the mound for the Department in 1988. Thousands of Hopewell artifacts had been taken from the mound by collectors prior to our work, and a variety of such artifacts were recovered by our excavation. Among the materials from the site are thousands of chert bifaces; large points/blades of chert, obsidian, quartz crystal, and cannel coal; copper celts; copper covered wooden artifacts; a silver covered copper earspool; other silver, mica; pearls; shell beads; leather objects; worked human mandibles; bear canines; and human bone. Various agencies, including the FBI, have investigated the looting of the site, and to date one person has been charged with an ARPA violation. General Electric has been very cooperative, and the site is well protected.

Tomak, Curtls H. (Indiana Department of Transportation) (Professional)

THE JERGER PHASE AND EARLY ARCHAIC MORTUARY CEREMONIALISM IN
SOUTHWESTERN INDIANA

The Jerger phase is defined from sites in Greene, Daviesa, and Knox counties in the lower valley of the West Fork of White River. Habitation sites are known essentially from occasional finds of the diagnostic MacCorkle-like bifurcated base points. However, one habitation site appears to be predominantly a Jerger phase site. Most of the data regarding the Jerger phase has been derived from two cemeteries, the Jerger and the Steele sites, at which I have conducted excavations. Most of the burial artifacts have been damaged or altered by heat, presumably from the crematory fires. The Jerger and Steele sites document mortuary ceremonialism at an early date of between 6000 and 7000 B.C.

Van Nest, Julieann (University of Iowa) (Professional)
ARCHEOLOGICAL GEOLOGY OF A PORTION OF THE MISSISSIPPI RIVER VALLEY
NEAR HANNIBAL, MISSOURI

At the close of the Pleistocene the Mississippi River underwent metamorphosis from a braided to an island-braided channel pattern, and during the Holocene developed an elaborate flood distributary system best described as anastomosed. This system is characterized by a hierarchy of meandering anabranch streams, crevasse splays, and extensive floodbasins. At several floodplain and terrace locales, Holocene aggradation produced important stratified Archaic and Woodland-period archeological sites. Surficial geomorphology can be a poor predictor of subsurface stratigraphy in this kind of setting because older landforms, when preserved, are often buried by veneers of late Holocene alluvium.

Vradenburg, Joseph A. (State Historical Society of Wisconsin) (Professional) [13] SKELETAL ANALYSIS OF A LATE PREHISTORIC ONEOTA POPULATION: LA CROSSE COUNTY, WISCONSIN

Recent excavation of the late prehistoric occupation of the Tremaine Oneota village site yielded the remains of ninety-two discrete individuals. Isolated skeletal elements were also present in mortuary and non-mortuary contexts. Gibbon (1988) and Withrow et. al. (1991) posit the depopulation of the La Crosse area circa A.D. 1550-1650. The paleodemographic profile, mean number/distribution of growth disruptions, based on enamel hypolesions and the rate of infectious disease will be examined in order to delineate the general health and intervals of stress for this population. Two methodologies for calculating the rate of carious activity, the prevalence of cribia orbitalia and porotic hyperostosis and one 13C value will be considered in estimating the dietary importance of maize. Incident of violent death will be briefly discussed. Data on variations, by sex and structure, in pathological occurrence and demographic profiles will be presented. When relevant, comparisons to previous studies will be made. Hopefully, the findings of this study will partially illuminate the factors leading to the depopulation of the La Crosse area by the protohistoric period.

Wagner, Mark J. (American Resources Group, Ltd.) and Mary R. McCorvie (USDA Forest Service) (Professional) [2]
FEATURE FORM AND FUNCTION AT THE HARVEST MOON SITE (24B2-181):
IMPLICATIONS FOR CRAB ORCHARD SETTLEMENT WITHIN INTERIOR SOUTHERN ILLINOIS

Archaeological investigations conducted at the Harvest Moon site (24B2-181) in the Little Muddy valley, Jackson County, Illinois, in 1986 uncovered 59 Crab Orchard pit features. Fifteen of these were large cylindrical pits that ranged in depth from 1.58 to 2.20 m below the stripped clay surface. These features may have been used to store hickory nuts, the predominant botanical material recovered at the site. The presence of numerous large storage features at site 24B2-181 argues for year round Crab Orchard occupation of the Little Muddy River valley, an interpretation that contrasts with Denny's (1972) model of seasonal mobility during the Crab Orchard period within interior southern Illinois.

Wallace, Rebecca - see Green, William

Warren, Robert E. (Illinois State Museum) (Professional)
PREHISTORIC SETTLEMENT PATTERNS IN CENTRAL ILLINOIS: THE FAP-412 SOUTH
HIGHWAY PROJECT

In 1990, the Illinois State Museum surveyed cultural resources along a 54-km stretch of U.S. Route 51 in central Illinois (FAP-412 South project). The highway corridor crosses upland prairies and forested river valleys on both the Wisconsinan and Illinoian drift plains. One hundred eight prehistoric sites were found, most of which are concentrated near forested streams or in a belt of Illinoian drift ridges near the south end of the corridor. Archaic projectile points

dominate the sample of diagnostic artifacts. Changes in the distribution of these artifacts may reflect shifting strategies of upland land use in response to environmental change.

Wester, Kit W. (Wickliffe Mounds Research Center, Murray State University) (Professional) [7] LIVING HIGH: A RESIDENTIAL MOUND AT WICKLIFFE

The 1990 excavation at Wickliffe Mounds (15Ba4) resulted in a stratigraphic trench in Mound B, the smaller of the two platform mounds. The test revealed at least two middens on sealed Middle Wickliffe (ca. A.D. 1200-1250) mound summits, one of which provided enough of an artifact sample to compare to middens elsewhere in the village. As a working hypothesis, the middens may be postulated to belong to an elite family. The midden assemblage is in most respects entirely comparable to general village middens in the Middle Wickliffe period, but is distinguished by a very high ratio of serving to cooking vessels and a very low proportion of decorated ceramics.

Woods, William L - see Fowler, Melvin L.

Willis, John A. K. - see Brown, James

Yelton, Jeffrey K. (Center for Archaeological Research, Southwest Missouri State University) (Professional)

A FUNCTIONAL APPROACH TO ONEOTA POTTERY ANALYSIS

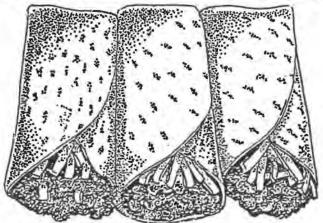
We too often ignore morphological variation in Oneota ceramic assemblages. I propose that we confront variation through modeling intended function. Data from 488 vessels from Utz, an Oneota site on the Missouri River, indicate that potters produced several vessel forms. Individuals who produced containers that at least minimally satisfied performance needs were likely to have their behavior emulated throughout a community. Thus, we can infer principal uses from vessel shape, orifice constriction, rim form, and surface treatment. Four general functions are represented at Utz: processing, heating, storage of coarse-grained materials, and storage of fine-grained materials.

Yerkes, Richard W. - see Penman, John T.

Zatucha, L. Anthony (Paleoethnobotanical Consulting) (Professional) [13]
WOOD CHARCOAL FROM THE VALLEY VIEW SITE: THE NORTHERN EXCAVATED
AREA

Wood charcoal was analyzed from a late prehistoric Orr Phase Oneota village near La Crosse, Wisconsin. Xeric and dry-mesic forest communities were the principal collection zones, although conifer swamps were also heavily utilized. The latter community is uncommon in southern Wisconsin and stands are of limited extent. This suggests that swamp trees were highly valued by the inhabitants. Diversity of taxa varies strongly across different feature types. These differences are due to cultural causes, not simply to feature size or number of strata. Wood from a burned structure suggests that oak, tamarack, and birch were the preferred building materials.

### IF THIS IS ALL YOU THINK OF MEXICAN FOOD,

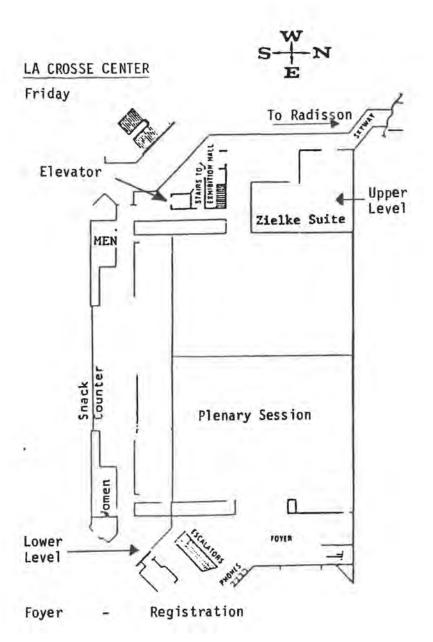


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Yes, Our Burritos Are Good. But There's More To Mexican Food Than Burritos. Let Esteban's Show You A Real Taste Of Mexico.

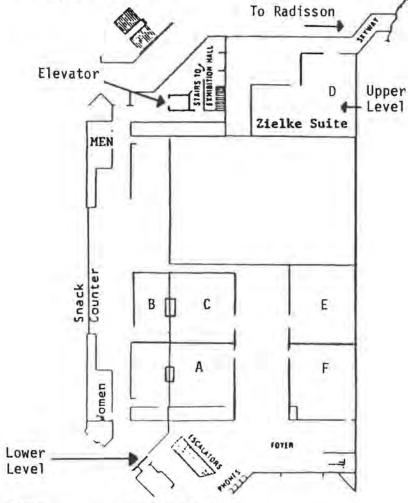


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#### LA CROSSE CENTER

Saturday and Sunday



Foyer Registration

Room A Book Exchange/Vendor Tables

Room B Slide Viewing Room

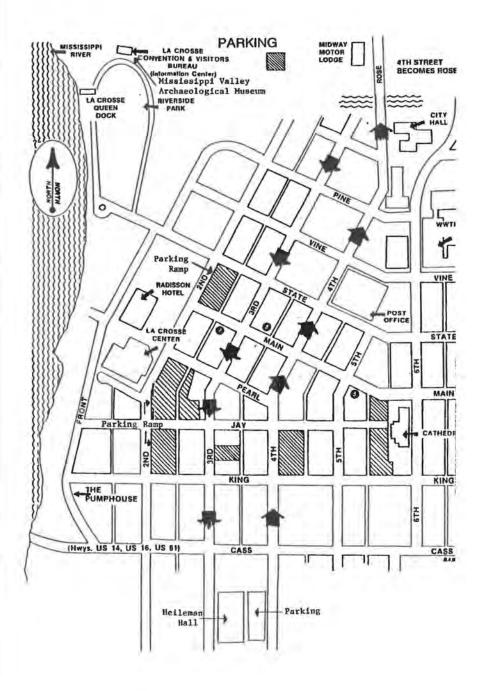
Room B Native American Reception (Saturday 5-7 PM)

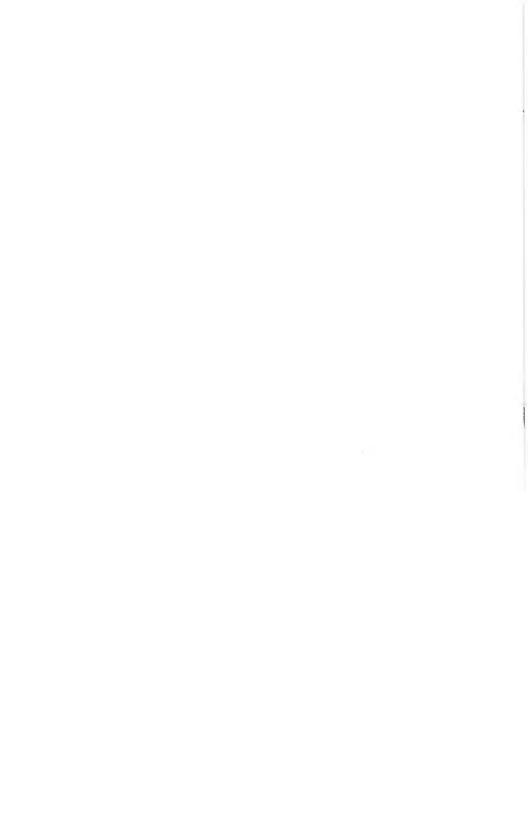
Papers

Room C Room D Papers

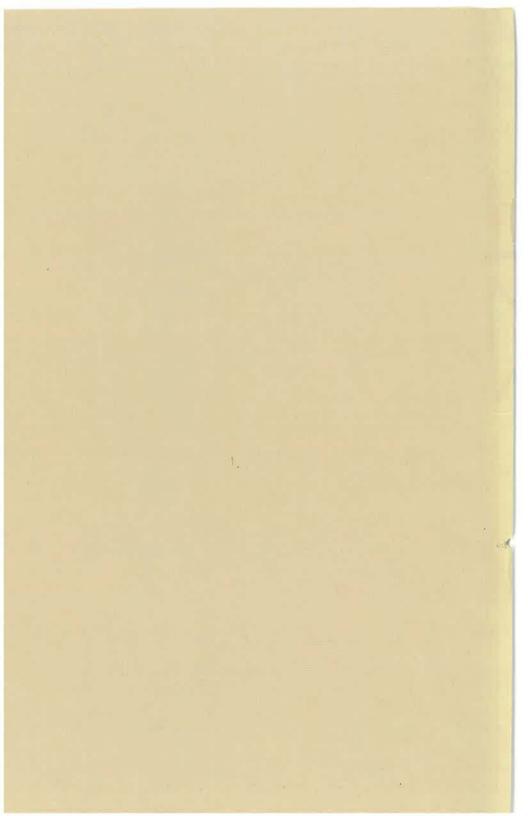
Room E Papers

Room F Papers











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