

Program and Abstracts

Joint Midwest Archaeological / Plains Anthropological Conference



St. Paul, Minnesota
November 9th - 12th, 2000 A.D.

Sponsored by
The Minnesota Office of the State Archaeologist

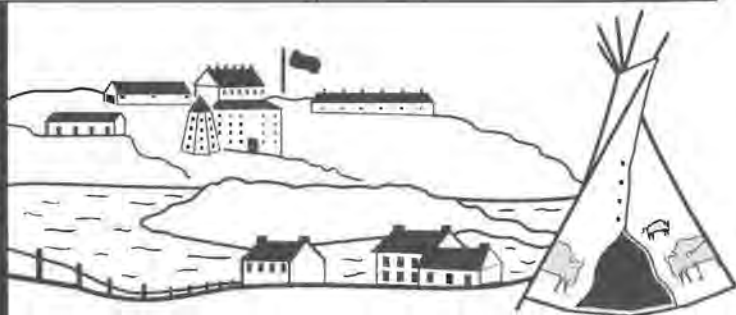
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JOINT CONFERENCE - SAINT PAUL, MINNESOTA

MIDWEST *Archaeological*

PLAINS *Anthropological*

2000 A.D.



The Joint Midwest Archaeological / Plains Anthropological Conference
Planning Committee:

- Mark Dudzik,
Joint Conference Chair, Office of the State Archaeologist
- Robert Clouse,
Midwest Program Chair, Minnesota Historical Society
- Scott Anfinson,
Plains Program Chair, State Historic Preservation Office
- Bruce Koenen,
Conference Registration, Office of the State Archaeologist
- Kim Breakey,
Program Coordinator, Hemisphere Field Services
- Pat Emerson,
Volunteer Coordinator, Department of Natural Resources

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The Joint Conference logo is based on a painting by Edward K. Thomas ("Fort Snelling", 1850; see cover: courtesy of the Minnesota Historical Society). The perspective is westward from the bluffs above the historic Sibley House, to Fort Snelling, which sits strategically above the confluence of the Mississippi and Minnesota River.

ACKNOWLEDGMENTS

The Joint Conference Chair (Mark Dudzik, OSA ★) would like to thank the following individuals for making this conference happen:

- Robert Clouse, Midwest Program Chair (Minnesota Historical Society) ★
- Scott Anfinson, Plains Program Chair (State Historic Preservation Office) ★
- Bruce Koenen, Conference Registration (Office of the State Archaeologist) ★
- Kim Breakey, Program Coordinator (Hemisphere Field Services) ★
- Pat Emerson, Volunteer Coordinator (Department of Natural Resources) ★
- Beth Nodland, Conference Support (Institute for Minnesota Archaeology)
- Rose Kluth, Ceramic Workshop Organizer (Leech Lakes Heritage Sites Program)
- Doug Birk, Bead Workshop Organizer (Institute for Minnesota Archaeology)
- Ron Schirmer, Paleoethnobotany Workshop (Hemisphere Field Services)
- Phyllis Messenger, Public Outreach Workshop (Hamline University)
- Orrin Shane, Ceramic Workshop Host (Science Museum of Minnesota)
- Anne Ketz, Local Promotions (106 Group, Ltd.)

★ *Planning Committee Members*

The Joint Conference Planning Committee wishes to thank the following organizations for their support of the conference:

- The University of Minnesota, College of Liberal Arts
- The Minnesota Humanities Commission (featured speaker)
- The Minnesota Department of Transportation
- Commonwealth Cultural Resources Group, Inc.
- BRW, Inc.
- Bear Creek Archaeology, Inc.
- Loucks & Associates
- USDA – Rural Development

Everyone wishes to thank the following organizations for their support of the Early Bird Reception!:

- Council for Minnesota Archaeology
- Robert C. Vogel & Associates
- Rivercrest Associates
- Hess, Rose and Company
- Loucks Associates
- 106 Group, Ltd.
- Cultural Resource Consultants
- Archaeological Research Associates
- Strata Morph Geoexploration

Special thanks to Drew Forsberg for his help with registration software design, and to Echo Funk, Hemisphere Field Services, who designed the conference logo!

GENERAL INFORMATION

Conference Headquarters: The Radisson Hotel St. Paul, 11 East Kellogg Boulevard, St. Paul, MN 55101; Phone: 651.292.1900 or 800.444.3344.

Parking: City parking meters are free after 4:30 PM weekdays and Saturday, through the night; free meter parking (most meters) all day Sunday. *See also map of parking locations on A Downtown St. Paul@ map in your packet - and check individual meters!*

Business/Board/Other Meetings:

Plains Board #1 - Thursday, 7:00-9:00 PM, State I Room

Midwest Business - Friday, 5:00-6:00 PM, State I Room

Plains Business - Friday, 5:00-6:00 PM, Governors I Room

Plains Board #2 - Friday, 6:00-6:30 PM, Governors I Room

Council for Minnesota Archaeology - Saturday, 5:00-6:30 PM, State I Room

Early Bird Reception: Hosted by Hemisphere Field Services. Held in conjunction with the Conference on Thursday night from 7:00 - 10:00 PM in the Capitol Ballroom

Banquet / Featured Speaker: Friday night in the Minnesota Ballroom. Banquet from 7:00-8:30 PM; Featured Speaker presentation begins at 8:30 PM.

Cash Bar: Friday night, 6:00-8:00 PM, in the Capitol Ballroom.

Book Room: Located in Governors IV-V Room. Open on Friday and Saturday, from 9:00 AM to 5:00 PM.

Poster Session: Poster papers will be exhibited in the Commons Area around the escalators on Saturday from 8:00 AM until 5:00 PM.

Conference Merchandise: Pre-paid shirts can be picked up at time of registration (Friday through Saturday), or may be ordered on site. Other merchandise is also available.

Slide Preview Room: Behind the Registration Area (access door left of Registration).

Request to Symposium, Session Chairs and Presenters: The conference is very tightly scheduled. In consideration of presenters and attendees, please adhere to the schedule! As needed, pause for the allotted period if a scheduled speaker fails to show. A few papers are only 10 minutes long; others are *not to exceed* 20 minutes in length.

THIS DOCUMENT IS AVAILABLE IN ALTERNATE FORMATS UPON REQUEST.

SCHEDULE AT-A-GLANCE**Thursday, November 9**

Ceramic Workshop, Science Museum of Minnesota	10 AM - 4 PM
Paleoethnobotany Workshop, University of Minnesota	10 AM - 4 PM
Trade Bead Workshop, Institute for Minnesota Archaeology	4 - 6:30 PM
Public Outreach Workshop, Hamline University	1 - 5 PM
Early Bird Reception, Capitol Ballroom	7 - 10 PM
<i>Plains Board Meeting #1</i> , State I Room	7 - 9 PM
Registration , Commons Area near escalator	6 - 9 PM

Friday, November 10

Concurrent Sessions	8 AM - 5 PM
Books/Exhibits, Governors IV-V	9 AM - 5 PM
<i>Midwest Business Meeting</i> , State I Room	5 - 6 PM
<i>Plains Business Meeting</i> , Governors I Room	5 - 6 PM
<i>Plains Board Meeting #2</i> , Governors I Room	6 - 6:30 PM
Cash Bar, Minnesota Ballroom West	6 - 8 PM
Banquet, Minnesota Ballroom East	7 - 8:30 PM
Featured Speaker, Minnesota Ballroom East	8:30 - 9:30 PM
Registration , Commons Area near escalator	8 AM - 5 PM

Saturday, November 11

Concurrent Sessions	8 AM - 5 PM
Poster Session, Commons Area near escalator	8 AM - 5 PM
Books/Exhibits, Governors IV-V Room	9 AM - 5 PM
<i>Council for Minnesota Archaeology Meeting</i> , State I Room	5 - 6:30 PM
Registration , Commons Area near escalator	8 AM - 5 PM

Sunday, November 12

Concurrent Sessions	8 AM - 12 Noon
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PROGRAM

FRIDAY MORNING

Session #1 **Friday Morning - Capitol Ballroom**

General Session: *PaleoIndian Research*

Chairs: Matthew G. Hill, Michael Kunz and Brian Reeves

8:00 Daniel S. Amick, Thomas J. Loebel, Matthew G. Hill, Robert F. Boszhardt and Kenneth C. Hensel

Morrow-Hensel: An Early Paleoindian Occupation of Far Western Wisconsin

8:20 Tony Baker

Folsom Point Manufacture - A Common Task Performed by All

8:40 Leland C. Bement, Brian Carter and David L. Maki

Geoarchaeological Prospecting in the Cooper Site Vicinity, Northwest Oklahoma

9:00 David A. Byers

Taphonomy of the Fetterman Mammoth

9:20 Clinton C. Crago

Folsom Points and Site Typology: An Investigation of Surface Collected Folsom Points from the Shell Village and Slag Sites, North Dakota

9:40 Erik M. Gantt

A New Method for Dealing with Collections that are Limited in Access as Applied to the A. Lynn Coffin Lindenmeier Collection

10:00 BREAK

10:40 Michael Kunz

Clovis Antecedents and Beringia: What Happened When the Water Rose?

11:00 Thomas J. Loebel, Daniel S. Amick and Rochelle Lurie

An Update on Work at 11L-344, the "Hawk's Nest" Fluted Point Site in Northeastern Illinois: Results of Continued Surface Collections and 1999 Excavations

11:20 Jack H. Ray and Neal H. Lopinot

Investigations of Pre-Clovis Age Deposits at the Big Eddy Site, Southwest Missouri

11:40 Jason M. LaBelle, Vance T. Holliday, and David J. Meltzer

Geoarchaeological Investigation of Late Pleistocene and Early Holocene Paleoindian Deposits at Nall Playa, Oklahoma Panhandle

12:00 LUNCH

Session #2 **Friday Morning - Governors Hall I**

Symposium: *Military Sites Archaeology*

Organizers: Douglas G. Scott and Mark E. Miller

8:00 **Douglas D. Scott**

The Sand Creek Massacre of 1864: Finding the Site and Resolving the Issue with Physical Evidence

8:20 **Mark E. Miller and Dale L. Wedel**

Continuing Archaeological Investigations at Fort Fred Steele State Historic Site, Wyoming

8:40 **Michael Pratt**

The Fallen Timbers Site: A New Location for the Old Battlefield

9:00 **David Bush**

Investigations of the Johnson's Island Civil War Confederate Cemetery

9:20 **Todd Kapler**

High Status and Lower Status Women at Fort Sisseton as Seen in the Archaeological Record

9:40 **Marsha King**

Archaeological Search for the Original Flagpole, Fort Hays State Historic Site (14EL301), Hays, Kansas

10:00 BREAK

10:20 **John Weymouth and Ken Karsmizki**

Four Seasons of Magnetic Surveys at Fort Clatsop National Memorial, Oregon

10:40 **Ann Kern**

Search for the Stable: A Multidisciplinary Investigation of the Cavalry Stable, Fort Larned National Historic Site, Kansas

11:00 **Timothy R. Nowak**

Archaeological Manifestations of the Army's First Use of Portable Cottages

11:20 **A. Dudley Gardner and Martin Lammers**

The 1857 and 1858 Fortifications at Fort Bridger Wyoming

11:40 **Robert A. Clouse**

Identifying the Feminine Gender in a 19th Century Military Context

12:00 LUNCH

Session #3 Friday Morning - Governors Hall II & III

Symposium: 10,000 Years of Population Relationships and Human Adaptation in Minnesota and the Upper Midwest: A Bioarchaeological Perspective

Organizers: Susan M. T. Myster and Kathleen T. Blue

8:00 **Susan M. T. Myster**

Ten Thousand Years of Population Relationships at the Prairie-Woodland Interface: Cranial Morphology in the Upper Midwest and Contiguous Areas of Manitoba and Ontario

8:20 **Marcia H. Regan**

Death and Reverence in Prehistoric Minnesota: The Evidence from the River Hills Site

8:40 Kathleen T. Blue

Osteological Analysis of the Human Skeletal Remains from the Gull Lake Dam Site (21CA37) Cass County, Minnesota

9:00 Andrew K. Scherer

Late Precontact Dental Morphology and Biological Distance in the Upper Midwest

9:20 Lori M. Jahnke

Paleodietary Reconstruction at the Lindholm Site (21BS3): Evidence from the Paleopathology and the Phytolith Assemblage

9:40 Barbara H. O'Connell, Lori M. Jahnke and Christine N. Gardner

Identification of Marpiya Oki Najin: Application of Osteological and Forensic Techniques

10:00 BREAK

10:20 Debra L. Gold

Bioarchaeology of Mid-19th Century St. Cloud: A Report on the Analysis of the Human Skeletal Remains from the SCSU Library Site Cemetery

10:40 John A. Williams

Markers of Occupational Stress and Disease in a Late 19th and Early 20th Century Northwestern Minnesota Cemetery Population

11:00 Kathleen T. Blue

A Demographic Analysis of an Historic Finnish Population in Northern Minnesota

11:20 Carrie C. Wright

A Trace Element Analysis of Human Remains from the Hamalainen Cemetery Site (21IC106): The Impact of Sample Selection and Analytical Technique on the Reconstruction of Past Dietary Practices

11:40 Susan M. T. Myster and Barbara H. O'Connell

Bioarchaeology in Minnesota: Past Contributions, Current Research, and Future Prospects

Session #4 Friday Morning - State I Suite

Symposium: Early Woodland in Minnesota

Organizer: Brad Perkl

8:00 Robert Boszhardt

Contracting Stems: What's the Point?

8:20 Guy Gibbon

Havana-Hopewell in Minnesota: The Howard Lake Phase

8:40 Grant Goltz

Home and Hearth: Identifying Initial Woodland Structures

9:00 David Kluth

Reevaluating the Early Woodland in Northern Minnesota

9:20 Brad Perkl

The Early Woodland in Southeastern Minnesota

9:40 Tom Pleger

New Dates for Red Ochre Complex Mortuary Associations from the Riverside Cemetery, Menominee County, Michigan

10:00 BREAK

10:20 **Carol Sersland**

Viewing Patterns of Environmental Characteristics for Early Woodland Sites Within a Locational Model

10:40 Discussant: **David Benn**

11:00 Discussant: **Guy Gibbon**

11:20 Discussant: **James Stoltzman**

11:40 Discussant: **Joe Tiffany**

Session #5 Friday Morning - State II Suite

Symposium: *Public Education and Outreach in the Plains and Midwest: A State by State Summary of Programs, Prospects, and Heritage Protection Awareness*

Organizer: **Eric J. Kaldahl**

8:30 **Eric J. Kaldahl**

Introduction: The Goals and Components of Educational Programming

8:40 **Amy L. Johnson**

Indiana's Archaeological Public Outreach and Education

9:00 **Lynn M. Alex, Mark L. Anderson and Shirley J. Schermer**

Public Education and Outreach in Iowa Archaeology: Crossing a Rubicon

9:20 **Virginia A. Wulfkuhle**

Meaningful Work for Extraordinary Volunteers

9:40 **James E. Myster and Christopher J. Evans**

Archaeology Education and Outreach in Minnesota: A Collaborative Effort

10:00 **Danny N. Walker**

Archaeological Public Education in Wyoming

10:20 BREAK

10:40 **Rob Bozell, Amy Koch and Anne Vawser**

Public Archeology in Nebraska

11:00 **Fern E. Swenson and Paul R. Picha**

An Overview of Archeological Public Education and Outreach Programs at the State Historical Society of North Dakota

11:20 **Alan C. Tonetti and Sandra Lee Yee**

An Overview and Assessment of Archaeology Public Education and Outreach Programs in Ohio

11:40 **Robert L. Brooks**

"From Mammoths to Mounds": An Overview of Public Outreach and Education in Oklahoma

12:00 LUNCH

Session #6 Friday Morning - State III Suite
Symposium: *Archaeological Collections Curation: Current Issues*

Organizer: Charles Diesen

8:00 **Donna Stubbs**

Archaeological Curation Policies

8:20 **Matt Thomas**

A Comparison of the Representation of Native American Maple Sugaring in Western Great Lakes Museums and the Archaeological and Photographic Record

8:40 **Constance Arzjian**

Curation in Wisconsin - A Taskforce Progress Report

9:00 **David Cooper**

Grand Portage: A State/Federal Curatorial Partnership

9:20 **David Mather**

Zooarchaeology and Museum Collections

9:40 **Holly Halverson**

If You Collect Them, Where Will They Go?

10:00 **Bob Thompson**

In Microscopic Things Forgotten

Session #7 Friday Morning - State III Suite
General Session: *Material Culture Research*

Chairs: Robert J. Hoard and Larry Grantham

10:40 **Robert J. Hoard**

Limestone Tempered Pottery from the Stauffer Site, Central Missouri

11:00 **Amy Marquardt**

Which Temper is Best for Pottery?: Assessing Variation of Temper Strengths Through Experimentation

11:20 **Jesse A. M. Ballenger**

Biface Variability, Raw Material Identification, and Settlement Patterns: Evidence from Three Dalton Localities in Eastern Oklahoma

11:40 **Ann C. Bauermeister**

Lithic Analysis as a Temporal Determinant: Debitage from Fort Union National Historic Trading Post

12:00 LUNCH

FRIDAY AFTERNOON

Session #1 (cont.) Friday Afternoon - Capitol Ballroom
General Session: *PaleoIndian Research*

Chairs: Matthew G. Hill, Michael Kunz and Brian Reeves

1:00 **Nancy Saxberg, Brian Reeves, Mack Shortt and Claire Bourges**

After the Flood: Archaic Hunters of the Athabasca Lowlands

1:20 **Scott Slessman**

Lithic Analysis of Agate Basin Materials from Northeastern Colorado: The Frazier Site Revisited

1:40 **Brian Vivian and Brian Reeves**

The Lust Site (EgPn-428): A Late Early Holocene Camp in the Foothills of the Bow Valley

2:00 **Nicole M. Waguespack, Todd A. Surovell and Marcel Kornfeld**

The Barger Gulch Folsom Site in Middle Park, Colorado

Session #2 (cont.) Friday Afternoon - Governors Hall I

Symposium: Military Sites Archaeology

Organizers: Douglas G. Scott and Mark E. Miller

1:00 **Danny N. Walker and Steve DeVore**

A Summary of Geophysical Investigations at Fort Laramie National Historic Site

1:20 **Ken Karsmizki and John Weymouth**

Magnetic Search for Laundresses' Privies: Evidence of the Good Life

1:40 **Charles A. Reher, Sara Sheen and Clint Crago**

Military Archaeology at Fort Hollywood

Session #8 Friday Afternoon - Governors Hall II & III

Symposium: Late Prehistoric Period Portable Art in the Northern Plains and Prairie Peninsula

Organizer: Dale Henning

1:00 **LuAnn Hudson Billeck**

Winter Games on the Plains

1:20 **R. Eric Hollinger**

Images of Power: Meaning and Social Function of Portable Art

1:40 **Tim E. H. Jones**

Objects of Late Prehistoric Portable Art Found in the Northern Plains

2:00 **James M. Collins**

Late Prehistoric Shell Masks in the Plains and Prairie Peninsula

2:20 **Dale R. Henning**

Chasing Portable Art: Evidence for Intensified Interactions in the Late Prehistoric

2:40 Discussant: **Robert Salzer**

Session #9 Friday Afternoon - State I Suite

General Session: Student Papers

Chair: Michael Michlovic

1:00 Nathan T. Banks

Differential Point Damage and Context in Clovis 'Kill' Assemblages

1:20 Jennifer L. Hawkinson

Use of a Magnetic Susceptibility Logger at a Historic Site

1:40 Anna Lenhart

An Analysis of 14BU387: A Great Bend Site in South Central Kansas

2:00 David L. Peterson

Common Ground: Analogies to the Plains and Recent Trends in the Archaeology of the Later Prehistory of the Eurasian Steppes

2:20 Paula Renaud

Sticks, Stones, and Cyberwaves: Creating an Intentional Community of Aboriginal Philosophy in the 21st Century

2:40 BREAK

3:00 Meegan Sanderson

The Effects of Trampling on the Orientation and Inclination of Experimental Lithic Raw Material

3:20 Jay T. Sturdevant

The Archeology of Typefaces and the "Frontier Scout" Newspaper from Fort Union Trading Post National Historic Site, North Dakota

3:40 Dale Elizabeth Boland

Archaeologists On Call: Bringing Archaeology to Calgary's Children

4:00 Jodi Bratch

Lithic Distribution Results from Site 12Ma648 Through Surface Collection

Session #5 (cont.) Friday Afternoon - State II Suite

Symposium: *Public Education and Outreach in the Plains and Midwest: A State by State Summary of Programs, Prospects, and Heritage Protection Awareness*

Organizer: Eric J. Kaldahl

1:00 Robert A. Birmingham

Public Education in Wisconsin

1:20 Carol Diaz-Granados

Missouri Making Progress with Public Archaeology Outreach Programs

1:40 Discussant: Phyllis Messenger

Session #7 (cont.) Friday Afternoon - State III Suite

General Session: *Material Culture Research*

Chairs: Robert J. Hoard and Larry Grantham

1:00 Paul C. Burnett, Lawrence C. Todd and Oskar Burger

Modeling Lithic Raw material Replacement Costs: A Polythetic Approach

1:20 Allison M. Byrnes and Meegan J. Sanderson

Scratching the Surface: A Preliminary Report on the Role of Atomic Force Microscopy in Identifying Use-Wear Patterns on Stone Tools

1:40 Larry Grantham and Kathy Ehrhardt

An Evaluation of Danner Ware as Seen from the Excavations at Iliniwek Village State Historic Site, Clark County, Missouri

2:00 Jennifer N. Macy

When a Point Isn't Just a Point: Lithic Tools from Medicine Creek Reservoir, Site 25FT39

Session #10 Friday Afternoon - Capitol Ballroom

Symposium: Late Woodland in Wisconsin: Current Research

Organizer: Robert A. Birmingham

2:40 Robert A. Birmingham

Human Being Effigy Mounds In Wisconsin

3:00 Reid A. Bryson and Robert U. Bryson

The History of Woodland Climatic Environments: as Simulated with Archaeoclimatic Models

3:20 George W. Christiansen III

Warfare, Torture and Cannibalism: A Slice of Life on the Northern Frontier of the Middle Mississippian

3:40 Amy L. Rosebrough

What's Wrong with this Picture?: Effigy Mound Distributions, the Myriad Forms of Madison Ware, and Taxonomic Turmoil in the Late Woodland

4:00 Phil Salkin

Cultural Complexity in the Late Woodland Stage of Southeastern Wisconsin

4:20 Robert J. Salzer

The End of the Panther's Tale: Effigy Mounds are no More

4:40 James L. Theler and Robert F. Boszhardt

The End of the Effigy Mound Culture: The Late Woodland to Oneota Transition in Southwestern Wisconsin

Session #11 Friday Afternoon - Governors Hall I

Symposium: Recent Archaeological Investigations in the Lake Mille Lacs Region of Central Minnesota

Organizers: Richard Rothaus and Debra Gold

2:20 David Mather, Joe McFarlane and Teresa Halloran

Recent Archaeological Investigations in the Mille Lacs Region

2:40 Amber DeMorett

Toward a Vegetative History of Kathio Mille Lacs

3:00 Edwin R. Hajic and Patricia Trocki

Geomorphic Contexts of Archaeology Along the Western Shore of Mille Lacs Lake, Minnesota

3:20 Debra Gold

Excavation at the Cunz Site (21ML21): Preliminary Report

3:40 Allison Devers

An Analysis of Ceramics from the Cunz Site Surface Collection

4:00 James Cummings

Science, Education and Stewardship: Public Interpretation of the Cunz Site Archaeological Excavation

4:20 Richard Rothaus

Archaeological Surface Survey at Lake Ogechie: Prehistoric and Historic Results

Session #12 Friday Afternoon - Governors Hall II & III

Symposium: *The Kensington Runestone Reexamined*

Organizer: Alice B. Kehoe

3:20 Alice B. Kehoe and Barry Hanson

History of the Kensington Runestone: Hoaxers and Pedants

3:40 Barry Hanson

Some Physical Features of the Kensington Runestone

4:00 Richard Nielsen

Recent Discoveries Concerning the Kensington Rune Stone

4:20 Jon R. Polansky

Heuristic, Scientific Appraisals of the Suggested Importance of the Kensington Runestone

Session #13 Friday Afternoon - State II Suite

Symposium: *Foodways before Marquette*

Organizers: James A. Brown and R. Eric Hollinger

2:20 James A. Brown

Subsistence Change from the Perspective of Ethnohistory and Archaeology in the Illinois Country

2:40 Terrance J. Martin

Monstrous Fish and Wild Cattle: Animal Utilization at the Zimmerman West Site

3:00 Katie Egan-Bruhy

Upper Mississippian Agriculture: Zimmerman and Beyond

3:20 R. Eric Hollinger and Terrance J. Martin

Terminal Prehistoric and Initial Historic Animal Utilization along the Central Mississippi River

3:40 L. Anthony Zalucha

Agricultural Subsistence in Southeastern Iowa: Late Woodland through Oneota at the Wever Site

4:00 R. Eric Hollinger

Terminal Prehistoric and Initial Historic Plant Utilization along the Central Mississippi River

4:20 Discussant: Constance M. Arzigian

4:40 Discussant: William Green

Session #14 Friday Afternoon - State III Suite
General Session: *Mississippian and Plains Village Studies*

Chair: Fred A. Finney

2:40 **Jesse A. M. Ballenger and Christopher Cojeen**

The Duke Site: An Early Plains Village in Central Oklahoma

3:00 **Scott D. Brosowske, Richard R. Drass and David L. Maki**

The Odessa Yates Project (OYP): Investigation of a Plains Village Period Settlement in the Oklahoma Panhandle

3:20 **Fred A. Finney**

The East St. Louis Mound Center Revisited

3:40 **Lawrence Conrad**

The Town at the Edge of the World: Excavations at the Middle/Upper Mississippian Interface

4:00 **Marjorie Duncan**

The Two Sisters Site: Subsistence and Settlement Strategies in the Oklahoma Panhandle

4:20 **Fred A. Finney**

Theodore H. Lewis and the Northwestern Survey's 1891 "Lost Survey" of Cahokia and Other American Bottom Mound Groups

4:40 **M. Kimball Banks and J. Signe Snortland**

Dam(n) the Land and Full Speed Ahead: A Case Study of the Missouri River Basin

SATURDAY MORNING

Session #15 Saturday Morning - Capitol Ballroom
General Session: *Historic Archaeology in the Midwest and Plains*

Chair: Robert Clouse

8:00 **Jared Barrett**

Water and Waste Cisterns and Privies: Making Sense of Water Collection and Disposal Features at the James and Ellen White Site 20CA118

8:20 **Jeffery A. Behm**

The Bell Site (47Wn9), Winnebago County, Wisconsin: The Grand Village of the Meskwaki from ca. 1680 to 1730

8:40 **Robert A. Clouse**

Industrial Archaeology and the Creation of Mill Ruins Park, Minneapolis, Minnesota

9:00 **John F. Doershuk and Cynthia L. Peterson**

Investigations at a Fort Atkinson, Iowa Area 1840s Trading Post and Winnebago Village

9:20 **Sean B. Dunham**

Archaeological Testing at the Stone Quarry Cottage Site, Grand Island, Michigan

9:40 William Green, Marlin Ingalls, Lance Foster, Erica Hill, Sarah Pitzen and Margot Neverett

Iowaville: An Ioway Indian Village in Southeast Iowa, ca. 1770-1820

10:00 BREAK

10:20 Misty Jackson

The Late Seventeenth Century Lasanen Site and Trade Silver in the Upper Great Lakes

10:40 Barbara Mead

Up from the Ashes: Recovery of Exhibit Artifacts from the Ruins of the Father Marquette Memorial Museum Fire

11:00 Brice Obermeyer and Scott Sundermeyer

The Coronado Expedition and The Jones and Plummer Trail: Recommendation Based on the Results of an Archaeological Survey in Southwestern Kansas

11:20 Charles Reher, Rick Weatherman, Clinton Crago, Sara Sheen, Alan Bartholomew and Robert Kelly

The Cow Lake Site (48TE1536), an Early Historic Stone Circle in Grand Teton National Park

11:40 Nancy Saxberg and Brian Reeves

The Forgotten Forts: Excavations at Edmonton House

12:00 LUNCH

Session #16 Saturday Morning - Governors Hall I

Symposium: Rock Art: Current Research in the Plains & Midwest

Organizers: Kevin Callahan and Deborah Morse Kahn

8:20 James D. Keyser and Mark Mitchell

Red Rock Ledge: Biographic Rock Art on the Southern Plains

8:40 Mavis Greer and John Greer

Boulder Rock Art of Montana

9:00 Linda A. Olson

Horses and Horned Headresses

9:20 Kevin Callahan

An Interpretation of a "Sun-Headed" and "Face-Painted" Dueling Scene, with an Associated "One-Horned" Figure at the Jeffers Petroglyphs Site in Southwestern Minnesota

9:40 Charles Bailey, Jr.

Plains Rock Art as Ritual Evidence: Possible Interrelationships

10:00 Thomas L. Sanders

The Development of Educational Programming at Jeffers Petroglyphs Historic Site

10:20 BREAK

10:40 **Brian Leigh Molyneaux**

The Politics of Vision at Devils Tower: Art, Ethnography and Tradition

11:00 **Robert Boszhardt**

Larsen Cave: A Second "Dark Zone" Pictograph Site in Wisconsin's Driftless Area

11:20 **Mary H. Pulford**

Mishipizheu of the Border Country

11:40 **John Norder**

The Role of Rock Art in Communicating Information and Marking Space in Northern Algonquian Landscapes

Session #17 Saturday Morning - Governors Hall II & III

Symposium: *Prehistory of the Lower Missouri Valley: Papers in Honor of Alfred E. Johnson*

Organizer: Brad Logan

8:10 **Brad Logan**

Opening Remarks

8:20 **Patricia J. O'Brien**

Plains Archaeology and Alfred E. Johnson

8:40 **Larry Bradley**

The Bliss Bone Deposit: Late Archaic in Southeastern South Dakota

9:00 **Mary J. Adair**

Woodland Period Farming in the Central Plains: Archaeobotanical Data and AMS Dates

9:20 **Marvin Kay**

Early Corn and Shell Tempered Pots in the Ozark Highland

9:40 **Brad Logan**

West Side (Prehi)Story: Archaeological Research in the Lower Missouri Valley, Northeastern Kansas

10:00 BREAK

10:20 **William T. Billeck**

The 1938 Excavations at the Steed-Kisker Cemetery, Platte County, Missouri

10:40 **Joe Artz, Cherie Haury, John Hedden and Larry Zimmerman**

From Diaries to Data, From Data to Models: Contributions to Glenwood Locality Archaeology

11:00 **Lauren W. Ritterbush**

Western Oneota along the Lower Missouri: Perspectives of the Leary Site

11:20 Discussant: **W. Raymond Wood**

11:40 Closing Remarks: **Alfred E. Johnson**

Session #18 Saturday Morning - State I Suite

Symposium: *The Next Step Archaeology Project: The Educational Significance of the Next Step Archaeology Project*

Organizer: Harry Murphy

8:00 **John Hale**

Beyond the Three Rs: Public Archaeology and a Well-Rounded Education

8:10 **Michele Greenan**

Balancing Professional Standards with Educational Objectives in the Field and Laboratory

8:20 **Aleta Hopkins and Harry Murphy**

Prehistoric Cultural Comparison

8:25 **Iman Abdul Raheem and Harry Murphy**

Historic Cultural Comparison

8:30 **Christopher Duke and John Hale**

Relationships in an Early Indiana Pioneer Community: Investigations at the Fletcher Cemetery

8:35 **Kyle Henderson and Luel Hill**

Site 12Ma648 Geology and Soils

8:40 **Luel Hill**

The Interpretation of Soil Profiles and Site Function

8:45 **Eric Anthony and Jodi Bratch**

Lithic Artifact Analysis of Site 12Ma648

8:50 **Jodi Ann Bratch**

Lithic Distribution Results from Site 12Ma648 Through Surface Collection

9:00 **Edwin Huggins and James M. VanderVeen**

An Analysis of the Historic Ceramic Assemblage from Site 12Ma648

9:05 **James M. VanderVeen**

Same Pots, Dissimilar Places?: A Comparison of Frontier Indiana Ceramic Assemblages

9:15 **Edward Cole and Elizabeth Jackson**

Analysis of Glass Distribution at Site 12Ma648

9:20 **Candice Jones and Elizabeth Jackson**

Analysis of Glass Function at Site 12Ma648

9:25 **Rachel Demmons and Michele Greenan**

An Analysis of 19th Century Pipes from Site 12Ma648

9:30 **Toniecia Lee Collins and Matthew Maher**

Brick Distribution at Site 12Ma648

9:35 **Daniel Gainer and Matthew Maher**

Brick and Soil Disturbance at Site 12Ma648

9:40 BREAK

10:00 **David Matthew Maher**

The Interpretation of Brick Distribution within Site 12Ma648

10:10 **Chris Kennedy and David Stinson**

Investigation of a Possible Privy at 12Ma648

10:15 **David Stinson**

Discovering Privy Boundaries

10:25 **Elizabeth Jackson**

Examining Cultural Perspectives in the Next Step Archaeology Project

Session #19 Saturday Morning - State II Suite

Symposium: *Cambria in Its Own Right*

Organizer: Ruthann Knudson

8:00 Ruthann Knudson

The Cambria Site: Year 2000

8:20 Eric C. Grimm

Environment and Climate of South-central Minnesota, AD 1000-1200

8:40 Michael Scullin

Subsistence Strategies of the Cambria Focus People

9:00 Donna Roper

Women and Cambria Pottery

9:20 John D. Richards

Aztalan, Cambria, and Mississippian Ceramic Comparisons

9:40 Roland L. Rodell

Looking West: The Red Wing Locality and Contacts with Cambria-Plains Culture

10:00 BREAK

10:20 Dale R. Henning and Dennis Toom

Cambria and the Initial Middle Missouri Tradition: An Evaluation

10:40 Joseph A. Tiffany

Mill Creek-Cambria Connections

11:20 Discussant: Scott Anfinson

11:40 Discussant: Robert L. Hall

Session #20 Saturday Morning - State III Suite

Symposium: *The Sonota Complex: An Overview and Assessment*

Organizer: Guy Gibbon

8:20 Dennis L. Toom and Michael A. Jackson

Sonota Complex Sites in Eastern North Dakota

8:40 Julieann Van Nest and J. Signe Snortland

Building Mounds the Illinois Hopewell Way in North Dakota

9:00 Brian Reeves

30 Years Later: Besant in the Northwestern Plains-Foothills

9:20 Guy Gibbon

Orwell: A Sonota Complex Site in West Central Minnesota

9:40 John A. Williams

The Bioarchaeology of the Sonota Complex

10:00 David Mather

The Headless Bison Calf from the Fingerson Mound, Pope County, Minnesota

10:20 BREAK

10:40 **Paul R. Picha and Michael L. Gregg**

Naze: A Sonota Complex Residential Site in the James River Valley of Southeastern North Dakota

11:00 Discussant: **Robert W. Neuman**

11:20 Discussant: **E. Leigh Syms**

11:40 Discussant: **W. Raymond Wood**

SATURDAY AFTERNOON

Session #15 (cont.)

Saturday Afternoon - Capitol Ballroom

General Session: *Historic Archaeology in the Midwest and Plains*

Chair: Robert Clouse

1:00 **Andrew Sewell**

Results of an Archaeological Survey of 115 Historic Homesteads in Monroe County, Wisconsin

1:20 **Vicki L. Twinde**

Preliminary Report on the Excavations at Second Fort Crawford

1:40 **James Wettstaed**

Living on the Coaling Ground: Archaeological Investigations of Charcoal Worker's Houses in the Missouri Ozarks?

2:00 **W. Raymond Wood and Douglas A. Birk**

Pierre-Charles Le Sueur's 1702 Map of the Mississippi River

Session #21

Saturday Afternoon - Governors Hall I

Symposium: *Challenges and Changing Opportunities: The "SCAPE" Project*

Organizer: Bev Nicholson

1:00 **Bev Nicholson**

Introduction to the SCAPE Project

1:20 **Matthew Boyd**

Anthropogenic Burning of Prairie in Association with Sonota-Besant?: A Study from Southwestern Manitoba

1:40 **Scott Hamilton and B. A. Nicholson**

Ethnohistoric Research as Part of the SCAPE Project

2:00 **David Meyer and Dale Russell**

Precontact Economic Systems of the "Pegogamaw" Cree

2:20 **Scott Hamilton and B. A. Nicholson**

The Twin Fawns Site (DiMe-23): A Protohistoric Mortlach Occupation Within the Lauder Sandhills of Southern Manitoba

2:40 **Garry Leonard Running IV, Andrea Freeman, Dion Wiseman and Alwynne Beaudoin**

Site and Local-Scale Geoarchaeological Investigations at the SCAPE Study Localities: Methods and Results of Preliminary Reconnaissance

3:00 BREAK

3:20 **Alwynne B. Beaudoin**

SCAPE Compiling a Database of Pollen Records for the Northern Plains: Where We Are and Where We're Going

3:40 **Dion Wiseman, Garry Leonard Running IV, Andrea Freeman and Brent N. Joss**

Applications of GIS, Remote Sensing and GPS Technology for Geoarchaeological and Ethnohistorical Investigations at SCAPE Study Localities: Methods and Progress Reports

4:00 **Bev Nicholson, Harry M. Jol, Scott Hamilton and Garry Leonard Running IV**

Ground Truthing Ground Penetrating Radar at the Lowton Site

4:20 **Sylvia Nicholson and Leanne Belsham**

Archaeological Database Development for the Study of Cultural Adaptations Within the Canadian Prairies Ecozone

Session #22 Saturday Afternoon - Governors Hall II & III

Symposium: Cultural Landscapes and Problematic Sites

Organizers: Jeffery Hanson and Lori A. Stanley

1:00 **Jeffery Hanson**

Native American Perspectives and the Archaeological Record: An Example from Utah's Dry Fork Canyon

1:20 **William Kurtz**

Red, White, and the Blues, A View from the Rez

2:00 **Lori A. Stanley**

Rethinking the Archaeology of Northeast Iowa: Incorporating American Indian Perspectives on Earthworks and Rock Art

2:40 BREAK

3:00 **Margot Liberty**

Petroglyphs, Sitting Bull's Sun Dance, and the Tongue River Railroad

3:20 **Linea Sundstrom**

Blind Encounters: Archaeologists and Sacred Sites in the Northern Plains

3:40 Discussant: **Larry J. Zimmerman**

Session #23 Saturday Afternoon - State I Suite

Symposium: Northern Minnesota: From Forest to Grassland

Organizers: Susan C. Mulholland and Stephen L. Mulholland

1:00 **Stephen L. Mulholland**

A Legacy in Stone: The Paleoindian and Archaic of Northeastern Minnesota

1:20 **Susan C. Mulholland**

Why Did They Come? Different Land Use Patterns at the Fish Lake Dam Site

1:40 Robert Donahue

A Scenario for Soil Development at the Fish Lake Dam Site

2:00 Patricia Emerson

Middle River: Mid-Holocene Occupations on the Prairie-Forest Border

2:20 David Kluth

Phase II Excavations at the Donarski Site (21MA33), Marshall County, Minnesota

2:40 BREAK

3:00 Stephen L. Mulholland and A. D. Romano

The Neubauer Site: Archaic Habitation and Copper Working in Pine County

3:20 Michael A. Magner

Ceramics from the Jaskari Dam Site (21CL25)

3:40 Mary H. Pulford

Becoming Mortuary Copper in Northeastern Minnesota

Session #24 Saturday Afternoon - State II Suite

General Session: *The Many Publics in Archaeology*

Chair: Gregory R. Campbell

1:00 Gregory R. Campbell

Never Use the Generic Term for Shoshone: Lemhi Shoshone Identity and Struggle for Political Sovereignty as a Tribal-Nation

1:20 Gregory Gagnon

Take Me to Your Leader: An Inquiry into Reservation Leadership

1:40 Brian Reeves

Seeing is Believing: Blackfeet Traditional Properties? and Glacier National Park

2:00 Michelle D. Schatz

Fish Creek Provincial Park: Archaeology, Culture Heritage and Public Involvement

Session #25 Saturday Afternoon - State III Suite

General Session: *Middle Woodland Studies*

Chair: Mark Lynott

1:00 Jarod Burks and Jennifer Pederson

An Update on Non-mound Debris Studies at Hopewell Mound Group (33RO27), Ross County, Ohio

1:20 James M. Collins

The Dolomite Ridge Site: A Component on the Cusp of Havana in the Upper Mississippi Valley

1:40 Shannon M. Fie

Among Friends: Ceramic Exchange during the Middle Woodland Period

2:00 Swastika Ghosh

Hopewellian Subsistence Practices in the American Bottom

2:20 Michael J. Hambacher and James A. Robertson

Recent Investigations at the Converse Site (20KT2): A Late Middle Woodland/Early Late Woodland Occupation Area in Grand Rapids, Michigan

2:40 BREAK

3:00 Mark Lynott

Recent Research at the Hopeton Earthworks, Ross County, Ohio

3:20 Jodie A. O'Gorman

C. House and Other Small Middle Woodland Camps in the Mississippi Valley: A View from the Non-Hopewellian Landscape

3:40 Sarah J. Studenmund

An Analysis of Features from Middle Woodland Sites in Northern Illinois

4:00 William Volf

The Szalay Site: Hopewellian Occupation in Northeastern Ohio

Session #26 Saturday Afternoon - Capitol Ballroom

Symposium: *Developing a Regional Chronology for Glass Trade Beads in the Upper Midwest and the Northern Plains*

Organizers: William Billeck and Douglas A. Birk

2:40 Dean L. Anderson and Eric Perkins

Glass Trade Beads in Michigan and the Western Great Lakes Region

3:00 Michele A. Lorenzini, Jeffery A. Behm and Richard P. Mason

Middle Historic Trade Bead Classification and Chronology: The Meskwaki Occupations of the Middle Fox River Passageway

3:20 Robert Birmingham

Beads from the Eighteenth Century Component (ca. 1715-1775) of the Marina Site on Madeline Island, Lake Superior

3:40 Douglas A. Birk and Kristen M. Zschomler

Glass Trade Beads in the Minnesota Area: A Review of Sites, Collections, and Research Problems

4:00 William Billeck

A Glass Bead Sequence for Late 17th to Early 19th Century Arikara sites in South Dakota

4:20 Laurie Burgess and James Krakker

Fort George and Fort Pierre II: Working Toward a Regional Trade Bead Chronology

4:40 William Billeck

Native-made Glass Beads in the Plains

Session #27 Saturday Afternoon - State II Suite

General Session: *Archaic*

Chair: William A. Lovis

3:00 Richard L. Fishel

Investigations at 13HA385: A Preserved Middle Archaic Bone Grease Manufacturing Locality along the Iowa River in Hardin County, Iowa

3:20 Steven R. Kuehn

The Granite Falls Site (21YM47), A Prairie Archaic Bison Kill in Southwestern Minnesota

3:40 William A. Lovis, Robert Cook and Peter Cunningham

Recent Research on Terminal Archaic and Woodland Occupations at the Marquette Viaduct Locale of the Fletcher Site, Bay County, Michigan

4:00 Michael G. Michlovic

Middle Holocene Culture of the Northeastern Plains

4:20 Brian D. Nicholls

Late Archaic Mortuary Areas as Sacred Place in the Upper Midwest

Session #32 Saturday - Commons Area

Poster Session

Dawn Bringelson

Surface Collection as Remote Sensing: Using Artifact Size Distributions from Tilled Sites, An Example from the Central Plains

Richard R. Drass, Mary Ann Drass and Scott D. Brosowske

Digitizing A Dig: Putting the University of Oklahoma's 2000 Field School at the Odessa Yates Site on the Web

Judson Byrd Finley

Statistical Modeling of Post-Depositional Processes: An Example from a Rockshelter Site in the Bighorn Mountains, Wyoming

Mark D. Hanson

The University of Wyoming Archaeological Repository: Conservation and Collections

Matthew Glenn Hill and Frédéric Sellet

Refinements of Folsom Subsistence and Technological Organization at Agate Basin, Wyoming

Geoffrey Jones

A Geophysical Investigation at Duskwalker's Butte

Marcel Kornfeld, Nicole Waguespack, Todd Surovell, James Mayer, George C. Frison and Adam C. Graves

Krpmotich Site: Folsom Investigations in Southwest Wyoming

Stephen C. Lensink

Estimating Duration of Occupation for Initial Variant Sites in Iowa: A Case Study

David L. Maki

Geophysical Investigation of the Buried City Complex

Larry Todd, Oskar Burger, Paul C. Burnett, Tom Stohlgren, David Rapson and Doug Stephens

Investigating the Affects of Large Herbivore Grazing on the Discovery, Management, and Interpretation of Cultural Materials

Larry Todd, Oskar Burger, Paul C. Burnett, Tom Stohlgren, David Rapson and Doug Stephens

Implementing Nested-Sampling in Archaeological Surveys

Chris Widga and Jack Hofman

Recent Investigations at the Waugh Site in Northwestern Oklahoma

David Woodward

The Norski Site: A Laurel Habitation Site in Northeastern Minnesota

Don Johnson

Geophysical Investigations at Widely Varying Archaeological Sites

Amy Ollendorf, Richard Rothaus and Debra Gold

The St. Cloud State University and HDR Engineering, Inc. Program in Archaeology and Cultural Resources Management (PACRM)

Danny N. Walker

48FR3123: A Late Prehistoric Village Site in the Central Wind River Basin, WY.

Jack L. Hofman and Jeanette M. Blackmar

Cody in Western Oklahoma: The Flaming Site

SUNDAY MORNING

Session #28 Sunday Morning - Capitol Ballroom

General Session: Late Prehistoric Research

Chair: Thomas E. Berres

8:00 Stanley A. Ahler and Eric J. Feiler

Exploring Hidatsa Presence in the Mandan Heartland: Scattered Village, North Dakota

8:20 Thomas E. Berres

Mythical and Material Reality of the Thunderbird in the Northeast and Plains Areas

8:40 Robert A. Cook and Leah Merz

The Chronological Complexity of a Single-Component Fort Ancient Village: Using GIS to Examine the Formation of the Sunwatch Site

9:00 Richard A. Krause

Ceramics from Sites on the Fort Carson Military Base

9:20 David Lynch and J. Richard Sisson

Late Prehistory in Eastern and Southeastern Ohio: A Study of Settlement Models using a GIS System

9:40 BREAK

10:00 Natalie Neustaedter

Comparing Late Prehistoric Subsistence Strategies in the Oklahoma Panhandle

10:20 Elizabeth Prine

The Menoken GIS Project: Spatial Use in Two Late Plains Woodland Homes

10:40 Michael Strezewski

The Heaton Farm Site (12Gr122): Insights into Late Prehistoric Structures and Site Design in South Central Indiana

Session #29 Sunday Morning - Governors Hall I

General Session: Faunal and Floral Research

Chairs: Thomas E. Emerson and Robert E. Warren

8:00 Briggs Buchanan, Patrick Lewis, Eileen Johnson, Richard Strauss and Laura Gruss

Variation and Change in Late-Quaternary Bison Metapodials from Lubbock Lake

8:20 Michael Dunne

Woodland Plant Use in Southeast Iowa: Recent Paleoethnobotanical Analysis of the Gast Sites

8:40 Thomas E. Emerson, Kristen Hedman, Mary Simon and Stan Ambrose

Marginal Horticulturalists or Maize Agriculturalists? Archaeobotanical, Paleopathological, and Isotopic Data on Langford Tradition Subsistence Practices

9:00 John P. Hart, David L. Asch and C. Margaret Scarry

*The Age of Common Beans (*Phaseolus vulgaris*) in the Northern Eastern Woodlands of North America*

9:20 Mary E. Malainey, Roman Przybylski and Gregory Monks

Developing a General Method for Identifying Archaeological Residues on the Basis of Fatty Acid Composition

9:40 Terrance J. Martin, Kathryn E. Parker and Elizabeth B. Garland

Upper Mississippian Subsistence in Southwestern Michigan: New Perspectives From the Wymer West Site

10:00 BREAK

10:20 Christopher M. Nicholson and Lawrence C. Todd

Maxillary Dentition Analysis of Late Archaic Bison from the Kaplan-Hoover Site: Metrics, Ontogenetic Change, and Demographics

10:40 Trevor R. Peck

Sex, Flies and Wallowed Landscapes: The Archaeological Implication of Bison Wallows on the Northern Plains

11:00 Meghan Sittler and Kenneth P. Cannon

Fourteen Thousand Years of Rodents: A Record from Southern Jackson Hole, Wyoming

11:20 Robert E. Warren

Prehistoric Procurement and Use of Freshwater Mussels along the Missouri River in the Northern Great Plains

11:40 Chris Widga

The Logan Creek Fauna: Early Archaic Bison Hunting on the Eastern Plains

Session #30 Sunday Morning - State I Suite

General Session: Topical Studies

Chair: Jolene J. Kuehn

- 8:00 **Judson Finley, Brian Andrews and Marcel Kornfeld**
Rockshelter Research in the Bighorn Mountains of Wyoming: The Black Mountain Archaeological District
- 8:20 **Kenneth L. Kvamme and Jo Ann Kvamme**
Resistance Is Not Futile: Geophysical Survey Results at Fort Clark, North Dakota
- 8:40 **LuAnn Wandsnider and Simon J. Holdaway**
Of Pompeii and Palimpsests: Material Temporalities and Interpretative Goals in North American Plains and Mid-continental Archaeology
- 9:00 **Dale Boland and Ian Tamasi**
Culture, Context and Calgary Children
- 9:20 **Jolene J. Kuehn and Steven R. Kuehn**
Archaeology for Kids: Lessons Learned at the Aldo Leopold Nature Center Archaeology Camp
- 9:40 **David Moyer**
New Interpretations of Rock Art from the Nordstrom-Bowen Site (24YL419), Yellowstone County, Montana
- 10:00 **Alice Tratebas**
Defining Petroglyph Traditions Using Statistical Techniques

Session #31 Sunday Morning - State II Suite
General Session: Regional Studies

Chairs: Cher Burgess and Donna C. Roper

- 8:00 **Colin Betts**
Archaeological Investigations in the Upper Iowa Locality
- 8:20 **Cher Burgess**
A Summary of Theoretical Literature Pertaining to Black Hills Prehistory
- 8:40 **William B. Butler**
Seventy Years of Archaeological Research in Rocky Mountain National Park
- 9:00 **John W. Fisher Jr.**
The Marias River (Montana) as a Prehistoric Cultural Landscape
- 9:20 **Ryan Howell**
Silver Creek Revisited: Archaic and Woodland Sites from Fort McCoy, Wisconsin
- 9:40 **Mark A. Latham**
Archaeology of the Dakota, Minnesota & Eastern Railroad: A Preliminary Overview of the Proposed Railroad Rebuild in Minnesota and South Dakota
- 10:00 BREAK
- 10:20 **Donna C. Roper**
Guy and Mabel Whiteford: Early Kansas Avocational Archaeologists
- 10:40 **Jeff Overturf, Eric Feiler, Doug Bamforth and Keri Hicks**
7000 Years (or more) of Occupation at the Willow Bunker Archaeological Area, Pawnee National Grasslands, Eastern Colorado
- 11:00 **Mack Shortt**
The Canyons of the Yellowstone: 1996-2000 Museum of the Rockies Research

SYMPOSIA ABSTRACTS

Session #2. *Military Sites Archaeology*

Organizers: Douglas G. Scott and Mark E. Miller

Armed conflict and aggression are dominant themes in the long evolution of human behavior. Numerous military sites dating to the early historic period on the Plains and in the Midwest testify to this cultural pattern, and include sites ranging from battlefields to forts and prisoner-of-war camps. Recently, researchers have been investigating a variety of these different types of sites with many innovative techniques. This symposium attempts to draw together some of the current research in both the Midwest and Plains in an effort to share accumulated knowledge and open a broader dialog on common subjects between the two areas.

Session #3. *10,000 Years of Population Relationships and Human Adaptation in Minnesota and the Upper Midwest: A Bioarchaeological Perspective*

Organizers: Susan M. T. Myster and Kathleen T. Blue

The territory encompassed by present-day Minnesota has been characterized as a "land of frontiers and boundaries, both natural and cultural." In the past, populations have lived, interacted, and adapted on the frontiers of three major culture areas and three primary vegetation zones. The primary objective of this symposium is to promote a more holistic interpretation and understanding of the populations present during the pre-Contact and post-Contact periods in Minnesota and contiguous areas. Symposium participants will present research that highlights and clarifies patterns of biocultural interaction and adaptation to this area of significant cultural and environmental diversity.

Session #4. *Early Woodland in Minnesota*

Organizer: Brad Perkl

The emergence of the Woodland period in Minnesota is obscure. Traditionally, the beginning of the Woodland period has been thought to date from ca. 500 BC-ca. 100 AD, based mainly on analogy with broader regional sequences. However, the appearance of stylistically Woodland artifacts across the state does not always conform to this chronological framework. For example, Woodland characteristics appear later across much of the state, while recent studies suggest that ceramics appear ca. 1430 BC in north central Minnesota. This session attempts to address some of the Initial Woodland problems. Topics include ceramics, projectile points, GIS modeling, chronology, structures and other subjects.

Session #5. *Public Education and Outreach in the Plains and Midwest: A State by State Summary of Programs, Prospects, and Heritage Protection Awareness*

Organizer: Eric J. Kaldahl

Representatives from the Midwest and Plains regions summarize public education and outreach programs in their respective states. Participants discuss the goals of various programs, and the future directions and needs that public outreach programs should address. Whenever possible, the impact of public education efforts on public awareness and on the politics of heritage resource protection are discussed.

Session #6. *Archaeological Collections Curation: Current Issues*

Organizer: Charles Diesen

This Symposium will address several issues centered on curated collections including: The management of archaeological collections; the problem of storage space shortages; the use of collections for research and the quality of collections/documentation used for research. How do repositories best serve the public, academic and private contract communities?

Session #8. *Late Prehistoric Period Portable Art in the Northern Plains and Prairie Peninsula*

Organizer: Dale Henning

Objects of portable art, most notably but not restricted to pipestone tablets, have been identified with Oneota components dating from ca. 1350 into the early contact period. Research on the tablets has resulted in extending the range, both culturally and geographically, the materials used and the motifs characteristically found on objects characterized as portable art.

Session #10. *Late Woodland in Wisconsin: Current Research*

Organizer: Robert A. Birmingham

Papers focus on current Late Woodland research in Wisconsin.

Session #11. *Recent Archaeological Investigations in the Lake Mille Lacs Region of Central Minnesota*

Organizers: Richard Rothaus and Debra Gold

Archaeology in the Lake Mille Lacs region dates back at least 100 years. Recent work in the area by archaeologists associated with the Minnesota DNR, the Mille Lacs Band of Ojibwe, the Minnesota Department of Transportation and St. Cloud State University has renewed interest in this area. This symposium presents preliminary results from recent archaeological research in the Mille Lacs region including landscape studies, surface survey, shovel testing and excavation. This symposium also emphasizes the importance of cooperation between public and private sector archaeology and the involvement of public education and interpretation in archaeological projects.

Session #12. *The Kensington Runestone Reexamined*

Organizer: Alice B. Kehoe

Recent reexamination of the Kensington Runestone by two avocational scholars with strong scientific backgrounds, one in extended consultation with Scandinavian and British rune scholars, suggests the dismissal of the runestone as a hoax has been premature. Linguistic, archival, and physical data will be presented to outline the present evidence and scheduled laboratory tests.

Session #13. *Foodways before Marquette*

Organizers: James A. Brown and R. Eric Hollinger

Early French ethnohistorical accounts of Illinois Indian subsistence practices have long provided a benchmark from which to interpret the pre-contact archaeological record in the Prairie Peninsula. Projects focusing on two separate research areas have built a subsistence history from a component each dating to the Marquette expedition horizon. Information from these two contact components has been used to as points for compari-

son with two or more pre-contact components as early as about A.D. 1200. Research from both the Starved Rock and Des Moines River mouth regions disclose these Upper Mississippian components to have been far more dynamic than hitherto recognized.

Session #16. *Rock Art: Current Research in the Plains & Midwest*

Organizers: Kevin Callahan and Deborah Morse Kahn

This session reports ongoing research into the personal, cultural, educational, proxemic and recordation aspects of rock art in the Plains and Midwest regions.

Session #17. *Prehistory of the Lower Missouri Valley: Papers in Honor of Alfred E. Johnson*

Organizer: Brad Logan

Al Johnson is retiring at the end of this year as Professor in the Department of Anthropology and Director of the Museum of Anthropology at the University of Kansas. In honor of his many significant contributions to the archaeology and anthropology of the Great Plains over the past 35 years, this symposium focuses on the prehistory of a region that was the focus of much of his research. Papers by his colleagues, including some of his former students, present the results of recent research into adaptations of the Lower Missouri Valley from the Late Archaic to the Late Prehistoric periods.

Session #18. *The Next Step Archaeology Project: The Educational Significance of the Next Step Archaeology Project*

Organizer: Harry Murphy

There is a need to reduce the number of low-income and minority students who, in secondary and undergraduate school, abandon their dreams of becoming scientists. Providing a research experience in archaeology that can open doors in academia and employment is the 'Next Step.' Archaeology provides a means of sensitizing people to cultural diversity and complexity in a manner that has relevance to their lives. Often overlooked however, is the integral role that the sciences play in the interpretation of data in the research process. This symposium will highlight the Next Step Archaeology Project students' and staff's research contributions.

Session #19. *Cambria in Its Own Right*

Organizer: Ruthann Knudson

The Cambria Focus in southwestern Minnesota has been known for a century, including the large Jones Village or Cambria site (21BE2) and the nearby Price site (21BE36). These and related sites date to around AD 1200, a period of climatic variability, and reflect both the local Woodland adaptations and ceramic design influences from the Mississippian and perhaps Middle Missouri complexes. The role of women in this ceramic tradition merits attention. This symposium is a review of currently known information about Cambria Focus materials and their natural and sociocultural context in both the prehistoric past and current archeological systematics and syntheses.

Session #20. *The Sonota Complex: An Overview and Assessment*

Organizer: Guy Gibbon

Sonota is a Plains Middle Woodland complex defined by Robert W. Neuman (1975) from burial mounds along the Missouri River in northern South Dakota and southern

North Dakota and along the Sheyenne River in southeastern North Dakota. Mounds combine Hopewell-like and Plains traits and date between ca. A.D. 1 – 450. Some archaeologists have expanded the complex to include occupation sites in the Northwestern Plains with Besant points. The purpose of this symposium is to review and assess the present state of Sonota complex studies.

Session #21. Challenges and Changing Opportunities: The “SCAPE” Project

Organizer: Bev Nicholson

The SCAPE project (Study of Cultural Adaptations within the Prairie Ecozone) is an interdisciplinary research project, which attempts to understand the importance to Aboriginal Groups, of areas with high bio-diversity, within the Canadian Prairie Ecozone. The research is based upon problem oriented Archaeology but incorporates Paleobotany, Paleoentomology, Geoarchaeology, Geomatics, Ethnohistory, Toponymy, and First Nations Oral Traditions. This is a five year research project with major funding from the Social Sciences and Humanities Research Council.

Session #22. Cultural Landscapes and Problematic Sites

Organizers: Jeffery and Lori A. Stanley

This session explores how certain “problematic” archaeological sites, such as stone features, alignments, rock art and earthworks can be interpreted using ethnographic and Native perspectives. These two perspectives, though they often contrast with an archaeological one, can provide meaning about the nature and function of sites and the landscape within which they are found. Pragmatically, while archaeological and ethnographic/Native perspectives might differ, both points of view dovetail in calling for the preservation of these sites as cultural resources and contemporary ethnographic places.

Session #23. Northern Minnesota: From Forest to Grassland

Organizers: Susan C. Mulholland and Stephen L. Mulholland

Northern Minnesota covers about 250 miles east to west, spanning the environmental range from coniferous forest to tall-grass prairie; in addition, the boundaries between the environmental zones have shifted greatly throughout the Holocene. A wide range of adaptations therefore can be seen in the archaeological record both at any one time period across the region and throughout time at a single site. Recent research illustrates the connections between and within both the forest and grassland ecosystems.

Session #26. Developing a Regional Chronology for Glass Trade Beads in the Upper Midwest and the Northern Plains

Organizers: William Billeck and Douglas A. Birk

During the contact period, one of the most common objects of trade between Europeans and Native Americans were glass beads. As more and better dated sites are studied and trade records are examined, knowledge of glass bead form, color, and manufacture types and their chronological placement has increased. This session brings together studies of glass beads assemblages from 17th through 19th century Native American sites and European trading posts in the Upper Midwest and Northern Plains with the goal of improving bead typologies and developing regional chronologies.

PAPER ABSTRACTS

Adair, Mary J. (University of Kansas) - LOWER MISSOURI (17)

Woodland Period Farming in the Central Plains: Archaeobotanical Data and AMS Dates

One characteristic often used to describe the Woodland period on the Central Plains is the introduction or increased use of cultivated plants. This paper examines the variety of cultivated and wild plants (archaeobotanical data) recovered from Early Woodland, Middle Woodland and Plains Woodland sites located within the eastern portion of the central Plains. With the aid of recent AMS dates, the temporal and spatial distribution of this archaeobotanical data, and in particular, the domesticated species, is discussed. Models for agricultural development are evaluated.

Ahler, Stanley A. and Eric J. Feller (PaleoCultural Research Group) - GENERAL - LATE PREHISTORIC (28)

Exploring Hidatsa Presence in the Mandan Heartland: Scattered Village, North Dakota

Hidatsa oral traditions describe migration from eastern lands and residence for a period of time at a village in the Mandan heartland, near the mouth of the Heart River, North Dakota. Material remains salvaged from Scattered Village, now beneath the city of Mandan, may provide a partial record of such large-scale immigration and whole community adaptation. Sparse trade artifacts place occupation around AD 1600. Extensive stone and pottery assemblages, now partially studied, document technologies at Scattered Village standing apart from analyzed records at On-A-Slant Village and other nearby communities in the Mandan cultural tradition.

Alex, Lynn M. (Office of the Iowa State Archaeologist/University of Iowa), Mark L. Anderson (Office of the Iowa State Archaeologist/University of Iowa), and Shirley J. Schermer (Office of the Iowa State Archaeologist/University of Iowa) - PUBLIC EDUCATION (5)

Public Education and Outreach in Iowa Archaeology: Crossing a Rubicon

Public education in Iowa archaeology is over a century old. Since the 1950s, the Office of the State Archaeologist, initially partnering with the Iowa Archeological Society, and more recently with other state and tribal agencies, has taken the lead in educational outreach for schools, civic groups, and the general public. Despite limited time, funding, and professional priorities usually directed elsewhere, these efforts have successfully expanded, keeping pace with an increasing demand. While viewing strong public educational outreach as crucial to the documentation and protection of Iowa's cultural heritage, these efforts demand reliable funding and personnel devoted specifically to this goal.

Ambrose, Stan; see Emerson, Thomas E.

Amick, Daniel S. (Loyola University), Thomas J. Loebel (University of Illinois-Chicago), Matthew G. Hill (University of Wisconsin-Madison), Robert F. Boszhardt (Mississippi Valley Archaeology Center/ University of Wisconsin, La Crosse), and Kenneth C. Hensel (River Falls, WI) - GENERAL - PALEOINDIAN (1)

Morrow-Hensel: An Early Paleoindian Occupation of Far Western Wisconsin

The Morrow-Hensel collection comes from an eroded plowed terrace adjacent to streams on the Upper Mississippi floodplain in the Driftless Area. Repeated collections by avo-

cationals revealed a pure fluted point assemblage made almost exclusively of Hixton sili-cified sandstone found 130 km to the ESE. Core and tool debris includes 59 fluted bifaces, 40 bifacial blanks, 2 adzes, 107 endscrapers, 49 sidescrapers, 20 scraper frag-ments, 2 flake scrapers, 16 flake graters, 4 bipolar cores, and 2 hammerstones. Hixton is very brittle and the waste flakes include 12,422 pieces of which 78% are broken without platform. Biface thinning and tool retouch represent about 60% of platform remnant-bearing flakes (including 13 channel flakes).

Amik, Daniel S.; see Loebel, Thomas J.

Anderson, Dean L. (Michigan Historical Center) and Eric Perkins (Michigan Historical Center) - BEADS (26)

Glass Trade Beads in Michigan and the Western Great Lakes Region

Archaeologically, glass trade beads are commonly the most numerous artifact type found on Native American sites and European trading post sites in the western Great Lakes region. Along with metal implements such as knives, axes, kettles and firearms, beads are considered to have been among the most high demand trade items. This paper first examines French period merchant invoices for the sale of trade goods in an effort to broaden our perspective on the trade for beads compared to the trade for other goods. Second, this paper also looks at glass bead assemblages from several archaeological sites in Michigan in an effort to trace change in the types of beads traded over time.

Anderson, Mark L.; see Alex, Lynn M.

Andrews, Brian; see Finley, Judson

Anthony, Eric (Arsenal Technical High School/Martin University) and Jodi Bratch (Indiana University Purdue University at Indianapolis) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Lithic Artifact Analysis of Site 12Ma648

The analysis of lithic artifacts allows knowledge to be gained about past human activities. Studying the human manipulation of chert into stone tools is one such analysis. This project will take into account previous finds by Gray and Pape in 1994, and the 1999 Martin University Archaeology Project of site 12Ma648 in Fort Harrison State Park, Indiana. During the 1999 field season, a diagnostic projectile point dating to the Middle Archaic around 3,700 BC to 3,000 BC, was discovered. The material recovered during the 2000 field season supports the conclusion that site 12Ma648 was a tool maintenance site.

Artz, Joe Alan (University of Iowa), Cherie E. Haury (University of Iowa), John G. Hedden (University of Iowa), and Larry J. Zimmerman (University of Iowa) - LOWER MISSOURI (17)

From Diaries to Data, From Data to Models: Contributions to Glenwood Locality Archaeology

The earthlodges of the Glenwood locality, Iowa, are the easternmost extent of the Central Plains Tradition. In the 1970s, Zimmerman developed a computer simulation of earth-lodge settlement in this locality. The quality of archaeological data has since improved through additional research, including an examination of the writings of avocational

archaeologist Paul Rowe. In this paper, four former students of Alfred E. Johnson re-examine Zimmerman's simulation using current data and Geographic Information Systems (GIS) technology. The authors benefited from Johnson's approach to teaching Plains archaeology. He encouraged exploring new technologies and interdisciplinary approaches but never ignored the insights of earlier researchers.

Arzigian, Constance (Mississippi Valley Archaeology Center/University of Wisconsin-La Crosse) - COLLECTIONS CURATION (6)

Curation in Wisconsin - A Taskforce Progress Report

Currently curating a collection in Wisconsin poses ongoing difficulties. There are no statewide repositories, and most of the regional repository facilities are full. A taskforce of the Wisconsin Archeological Survey is working for short and long-term solutions to the problem, including funding for regional and state-wide repository agreements, coordination on collection standards, and a state-wide conservation lab facility. The paper will present an update on the process of resolving the curation crisis.

Asch, David L.; see Hart, John P.

Bailey, Charles Jr. (Prairie Smoke Press/Upper Midwest Rock Art Research Association) - ROCK ART (16)

Plains Rock Art as Ritual Evidence: Possible Interrelationships

This presentation will explore two key uses of inscribed rock imagery by Plains Indian cultures: (a) the uses of seemingly simple and often highly abstract imagery to convey complex religious and cosmological ideas, and (b) a possible insight into the ubiquitous phenomenon known as "grooving." Both of these forms of rock art are routinely passed over in analysis by investigators. The proposal here is that we strive first to identify, and then preserve and respect these sites for what they are - evidence not only of past rituals but of the ongoing use of some rock art sites for religious purposes by Native Americans.

Baker, Tony - GENERAL - PALEOINDIAN (1)

Folsom Point Manufacture - A Common Task Performed by All

Recent computer modeling of the Folsom fluting process indicates that fluting with high-angle-percussion can yield almost "automatic" success across considerable variation in input variables. This process is simple and can be learned by anyone with knapping skills. The implication of the "automatic" process is that Folsom point manufacture was probably a common task performed by all hunters in lieu of the product of a single craftsman in the group. This paper will discuss the results of the computer modeling and how they match the archaeological record.

Ballenger, Jesse A. M. (University of Arizona) - GENERAL - MATERIAL CULTURE (7)
Biface Variability, Raw Material Identification, and Settlement Patterns: Evidence from Three Dalton Localities in Eastern Oklahoma

An important premise of lithic analysis is that stone tool technology is a reductive process. This observation has encouraged a logical assumption about the relationship between tool stone, time, and space. Cores, scrapers, projectile points, and other curated tools are expected to become reduced, exhausted, and eventually discarded as they were carried between successive tasks or camps. Using Kuhn's model of potential, expended, and

residual utility, as well as raw material identification, more than 300 Dalton points from three localities were analyzed. This analysis indicates that the relationship between stone tools and settlement patterns is far more complicated than some may recognize.

Ballenger, Jesse A. M. (University of Arizona) and Christopher Cojeen (CAS, Norman, OK) - GENERAL - MISSISSIPPIAN AND PLAINS VILLAGE (14)

The Duke Site: An Early Plains Village in Central Oklahoma

Discovered in 1999, the Duke site represents an early Plains Village occupation along the Canadian River in central Oklahoma. Three AMS dates indicate occupations between A.D. 800 - 1250, during the Woodland - Washita River phase transition. Trash-filled pits demonstrate a strong reliance on bison and the presence of corn. Comparison with other Plains Village sites sheds light on the clinal variation of Plains Villages in central and western Oklahoma.

Bamforth, Doug; see Overturf, Jeff

Banks, Kimball M. (U.S. Bureau of Reclamation, Dakotas Area Office) and J. Signe Snortland (U.S. Bureau of Reclamation, Dakotas Area Office) - GENERAL - MISSISSIPPIAN AND PLAINS VILLAGE (14)

Dam(n) the Land and Full Speed Ahead: A Case Study of the Missouri River Basin

The Missouri River basin is the largest drainage in the United States and the most managed with seven dams on the mainstem and more than 60 on the tributaries. The biggest impact to archaeology is in the Dakotas Middle Missouri area. Reservoir and riverbanks hold inundated, eroding, and endangered sites that are the ancestral legacy of the Arikara, Mandan, and Hidatsa. Managing these cultural heritage resources is a financial, legislative, and cultural challenge for federal agencies.

Banks, Nathan T. (University of Texas at Arlington) - STUDENT (9)

Differential Point Damage and Context in Clovis 'Kill' Assemblages

Review of noted impact damage to Clovis points and site context reveals substantial distinction between bison and mammoth-associated assemblages. Bison-associated points feature impact fractures at last use in the proportions expected as a result of a kill event, while mammoth-associated points rarely contain impact fractures at last use. Analysis of impact-occurrence and associations reflects a pattern that supports the necessity of a revision in the interpreted nature of Clovis-mammoth interactions.

Barrett, Jared (Western Michigan University) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Water and Waste Cisterns and Privies: Making Sense of Water Collection and Disposal Features at the James and Ellen White Site 20CA118

During the Western Michigan University 2000 Field School at the James and Ellen White Site, 20CA118, we encountered several features that were associated with the house on the site. These features dealt with the collection and disposal of water for the residents at this house. The purpose of this paper is to explain when and how these features were constructed, the function of these features, the use of these features, and reasons explaining why and how these features were abandoned. Also, these features will help explain how landscape and space were utilized at the site.

Bartholomew, Alan; see Reher, Charles

Bauermeister, Ann C. (University of Nebraska/National Park Service) - GENERAL - MATERIAL CULTURE (7)

Lithic Analysis as a Temporal Determinant: Debitage from Fort Union National Historic Trading Post.

Fort Union National Trading Post National Historic Site is a multicomponent site located in northwestern North Dakota in Williams County. The National Park Service conducted large-scale excavations in 1986 through 1988, which yielded a considerable artifact assemblage relating to the 1828-1867 occupation. In addition to the historic component of the site, a less obvious and earlier element of the site was noted. Relatively low numbers of diagnostic stone tools and aboriginal pottery created the need to look elsewhere for temporal verification. This paper utilizes quantitative data to assess the variability of lithic debris in relation to temporal placement. Comparing intact strata to mixed and focusing on specific lithic analysis patterns show, if in fact, one can discern which flakes are older.

Beaudoin, Alwynne B. (Provincial Museum of Alberta) - SCAPE (21)

Compiling a Database of Pollen Records for the Northern Plains: Where We Are and Where We're Going

One component of SCAPE highlights Holocene landscapes and vegetation. Pollen records yield information about past vegetation and, by inference, climate and resources. Of ca. 230 palaeoenvironmental records from the Prairie Provinces in the database, about 80 fall within the prairie ecozone. Some deal with pollen; others focus on diatoms, ostracodes, geochemistry, pigments, or plant macroremains. These data need evaluation for species-dependent response to environmental changes, variable migration rates, and local factors (e.g., substrate type) affecting distributions. Evaluation must also include variable chronologic control, different taxonomic exactitude of pollen identifications, and difficulty of obtaining raw pollen counts. Powerful desktop analysis tools (GIS, spreadsheets, Tilia.Graph) should generate regional pictures of landscape change.

Beaudoin, Alwynne; see Running IV, Garry Leonard

Behm, Jeffery A. (University of Wisconsin-Oshkosh) - GENERAL - HISTORIC ARCHAEOLOGY (15)

The Bell Site (47Wn9), Winnebago County, Wisconsin: The Grand Village of the Meskwaki from ca. 1680 to 1730

The Bell site, located on the Fox River Passageway in east-central Wisconsin, is the Grand Village of the Meskwaki. Occupied between ca. 1680 and 1730, it is a large (18 hectares), complex site, with a fortified (wooden palisade) area (6 hectares). Year-round occupation, by at least a portion of the population, was concentrated inside the palisade, with activity areas and refuse disposal outside the palisade. A wide range of Native American, European, and Euro-American artifacts have been recovered from the site. Changes in the community plan and artifact trends during the half century of occupation have been identified.

Behm, Jeffery A.; see Lorenzini, Michele A.

Belsham, Leanne; see Nicholson, Sylvia

Bement, Leland C. (Oklahoma Archeological Survey), Brian Carter (Oklahoma State University), and David L. Maki (Archaeo-Physics LLC) - GENERAL - PALEOINDIAN (1)

Genarchaeological Prospecting in the Cooper Site Vicinity, NW Oklahoma

Systematic coring over a 60,000 square meter area in NW Oklahoma identified paleo-arroyos similar to that employed to kill bison at the nearby Folsom age Cooper site. Radiocarbon assay on sediments indicate some of these buried arroyos filled during the Late Pleistocene and early Holocene. Bison bone eroding from a modern arroyo contained the remains of at least 3 *Bison antiquus*, resharpening flakes, and a flake knife. Coring revealed bison bone in a buried arroyo adjacent to this bone pile. Any associations between this site (Jake Bluff site) and the kills at the Cooper site remain to be established.

Berres, Thomas E. (Northern Illinois University) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Mythical and Material Reality of the Thunderbird in the Northeast and Plains Areas

This paper presents new insights into the richness of thunderbird symbolism in Oneota and Historic Native American societies. Symbols associated with the mythical thunderbird, as an eagle-like creature, are ancient and enduring across the Plains and Northeast. This is indicated by a cross-cultural comparison of ethnohistoric artwork to the archaeological evidence. Ethnographic and ethnohistoric sources show that the thunderbird was associated with the upperworld and the benevolent, fertile forces of rainfall, as well as the life-threatening powers of tornadoes, lightning, hail, and floods. The power of the thunderbird was often opposed, yet complementary, to the great underworld beings.

Betts, Colin (Luther College) - GENERAL - REGIONAL STUDIES (31)

Archaeological Investigations in Upper Iowa Locality

During the summer of 2000, the Luther College Archaeological Research Center conducted a field school in the Upper Iowa Locality of northeastern Iowa. Survey and test excavations were carried out at a series of prehistoric sites near the confluence of Waterloo Creek and the Upper Iowa River. In particular, the results of testing at sites 13AM18A&B as well as the results of detailed mapping at the New Galena Enclosure (13AM73) will be presented.

Billeck, LuAnn Hudson - PORTABLE ART (8)

Winter Games on the Plains

The presence of ice gliders, occurring at early historic sites in the upper Plains, can be used to infer winter occupations. These feathered bone artifacts were slid along flat expanses of ice or snow in a game of skill. Ice gliders first appear at early 18th century sites and increase in frequency through time, becoming the dominant bone artifact at some 19th century sites. Published accounts are reviewed and additional specimens are identified, expanding the number of sites and revealing temporal and tribal differences in ice glider design and decoration.

Billeck, William T. (Smithsonian Institution) - LOWER MISSOURI (17)

The 1938 Excavations at the Steed-Kisker Cemetery, Platte County, Missouri

Repatriation legislation requires the evaluation of cultural affiliation of human remains and funerary objects from Native American sites and repatriation to culturally affiliated groups. These evaluations have led to the reexamination of many collections, including the Steed-Kisker cemetery. The human remains and objects from Waldo Wedel's 1938 excavations at the Steed-Kisker cemetery (A.D. 1000-1250) were inventoried and reexamined after a repatriation claim by the Pawnee Tribe. Although Wedel identified the skeletal remains of 85 individuals in his published descriptions of his excavation, the exposed bone was in poor condition and few of the remains were collected. The entire inventory of objects collected from the cemetery is described for the first time.

Billeck, William T. (Smithsonian Institution) - BEADS (26)

A Glass Bead Sequence for Late 17th to Early 19th Century Arikara sites in South Dakota
Glass trade bead assemblages from Arikara sites from along the Missouri River in South Dakota dating from the late 17th to early 19th century are reviewed, concentrating on large collections from the Sully, Larson, Mobridge, Leavitt, Cheyenne River, and Leavenworth sites. The sites are ordered in time by their glass bead assemblages and the assemblages described.

Billeck, William T. (Smithsonian Institution) - BEADS (26)

Native-made Glass Beads in the Plains

The Arikara and several other tribes in the Northern Plains are reported by Lewis and Clark, and other explorers and traders to have made glass objects by grinding glass trade beads into a powder, forming the powder into beads, pendants and effigy shapes; and fusing the powder in a fire. Few native-made glass beads have been identified in the archaeological literature and the few identified beads are crudely made. Large numbers of well-made native-made glass beads are present at the Arikara Leavenworth site in South Dakota and appear to be a early 19th century innovation. Criteria for the identification of native-made beads are defined.

Birk, Douglas A. (Institute for Minnesota Archaeology) and Kristen M. Zschomler (Institute for Minnesota Archaeology) - BEADS (26)

Glass Trade Beads in the Minnesota Area: A Review of Sites, Collections, and Research Problems

The study of glass trade beads has been a low priority in the Minnesota area. Excavations there seldom emphasize the systematic recovery of beads and most analyses have been descriptive treatments. This paper reviews the historical introduction of glass beads to the Minnesota area, surveys the major sites and collections containing glass beads, discusses some of the strengths and weaknesses of existing collections, and suggests methods for conducting advanced studies. This research is preliminary to developing a bead typology and chronology that can be used with similar information from adjoining areas to date and identify regional archaeological contexts.

Birk, Douglas A.; see Wood, W. Raymond

Birmingham, Robert (State Historical Society of Wisconsin) - BEADS (26)

Beads from the Eighteenth Century Component (ca. 1715-1775) of the Marina Site on Madeline Island, Lake Superior

The Marina Site is a multi-component Chippewa and Euro-American site located on Madeline Island (La Pointe) in Lake Superior. The island was a major fur trading center from the late 17th to mid 19th centuries. This paper describes trade beads recovered from an 18th century Chippewa village component.

Birmingham, Robert A. (State Historical Society of Wisconsin) - PUBLIC EDUCATION (5)

Public Education in Wisconsin

This paper discusses the public education activities of the Office of the State Archaeologist at the State Historical Society of Wisconsin. Grass roots public education is facilitated by a network of regional archaeologists, as well as public education components in federal subgrants. State wide efforts include a public oriented new book on Wisconsin Archaeology, a children's book on archaeology with classroom lesson plans, and a website. As with other states, the office coordinates a annual Archaeology Week. In all efforts, partnerships are developed and used.

Birmingham, Robert (State Historical Society of Wisconsin) - LATE WOODLAND IN WISCONSIN (10)

Human Being Effigy Mounds in Wisconsin

Effigy mounds in the shape of human beings occur largely in the southwestern part of Wisconsin. Nine have been recorded. This paper describes human being mounds in Wisconsin and their environmental and cultural contexts. Attention is focused on 3 human mounds among the spectacular effigy mound groups in Eagle Township along the lower Wisconsin River.

Blackmar, Jeannette M.; see Hofman, Jack L.

Blue, Kathleen T. (University of Chicago) - 10,000 YEARS (3)

Osteological Analysis of the Human Skeletal Remains from the Gull Lake Dam Site (21CA37) Cass County, Minnesota

The Gull Lake Dam site (21CA37) was interpreted in 1971 as being a two component site, with an earlier Malmo focus occupation dating between 800 BC-200 AD and a later occupation, characterized by Brainerd Ware and St. Croix dentate pottery, dating between 600-900 AD. Primary burials in pit features were believed associated with the earlier period, while bundle burials placed on the original soil surface and covered by mound fill were attributed to the later occupation. Analysis of the human remains, in conjunction with recent work on ceramic and site chronology, has led to a re-evaluation of the original interpretation.

Blue, Kathleen T. (University of Chicago) - 10,000 YEARS (3)

A Demographic Analysis of an Historic Finnish Population in Northern Minnesota

The 1985-86 excavation of Hamalainen Cemetery in northern Itasca County, Minnesota, provides a unique opportunity for assessing the health and demographic composition of an early twentieth-century immigrant population in Minnesota. Through the use of skeletal analysis, paleodemographic reconstruction, historical documents and oral histories, the physical and social factors affecting the Finnish community that utilized the cemetery can be determined. Four of the most significant factors - tuberculosis, influenza, child mortality and dental health - are examined in depth. Comparisons with other populations help

to place the immigrant experience in Minnesota within the continuum of past and present human morbidity and mortality.

Boland, Dale Elizabeth (University of Calgary) - STUDENT (9)

Archaeologists On Call: Bringing Archaeology to Calgary's Children

The addition of an archaeological component to Calgary children's education began with a cooperative program in Spring 1999. The University of Calgary's Department of Archaeology became involved with the Faculty of Education and Calgary's school boards in an effort to include archaeology in the classroom. The ongoing program, effectively run by a team of undergraduate archaeology students, includes teachers' workshops, classroom visits, field trips and simulated dig exercises. The goals of the program as well as highlights from the 2000 Teachers' Workshop and selected classroom visits are detailed in this paper, in order to evaluate and improve the program's development.

Boland, Dale (University of Calgary) and Ian Tamasl (University of Calgary) - GENERAL - TOPICAL STUDIES (30)

Culture, Context and Calgary Children

Teaching archaeology to children is becoming an increasingly effective avenue for public outreach educators. Although criticized by some archaeologists, the objectives of such work are directed toward stewardship and a public awareness and appreciation for cultures past and present. This paper details the efforts of Calgary's newest public archaeologists, the lessons we have used to convey archaeological messages and suggestions we have exploited to improve the programme. In teaching "what we know," the lessons include extra-curricular contacts like expositions and day camps, in an attempt to instill a stewardship ethic to the greatest number of children.

Boszhardt, Robert (Mississippi Valley Archaeology Center/University of Wisconsin-La Crosse) - ROCK ART (16)

Larsen Cave: A Second "Dark Zone" Pictograph Site in Wisconsin's Driftless Area

In 1998 Arnold Cave became the first deep cave archaeology site known in the Upper Midwest, with well over a hundred pictographs, many of which are beyond natural light. Subsequent survey in the region located Larsen Cave, which is larger than Arnold. Larsen Cave contains a number of pictographs and some petroglyphs. These include black drawings of antlerless deer and red drawings of headless birds and human arms. Recordation and test excavations were undertaken in the spring of 2000.

Boszhardt, Robert (Mississippi Valley Archaeology Center) - EARLY WOODLAND IN MINNESOTA (4)

Contracting Stems: What's the Point?

Projectile point sequences for much of the Midwest at the end of the Archaic often reveal a pattern of relatively large side-notched points followed by smaller corner notched or expanding stemmed forms. Some have suggested that the small Late Archaic types may represent early arrow tips. However, these interpretations do not account for the subsequent incorporation of relatively large straight and contracting stemmed points during the Archaic-Woodland transition. Preliminary data from the Driftless Area of southwestern Wisconsin supports an alternative hypothesis for interpreting small points of the Late Archaic. It is suggested that the small points served as dart tips that were fixed to wood-

en foreshafts. These were replaced by larger, straight and contracting stemmed forms that served as composite foreshafts and tips.

Boszhardt, Robert F.; see Amick, Daniel S.

Boszhardt, Robert F.; see Theler, James L.

Bourges, Claire; see Saxberg, Nancy

Boyd, Matthew (University of Manitoba) - SCAPE (21)

Anthropogenic Burning of Prairie in Association with Sonota-Besant?: A Study from Southwestern Manitoba

Despite recent interest in the North American Holocene fire record, evidence for the deliberate burning of prairie by Plains hunter-gatherers has not previously been demonstrated. Through the analysis of phytoliths preserved in a sequence of dated paleosols in the Lauder Sandhills, Southwestern Manitoba, a local grassland fire record is reconstructed for the past ~ 4000 years. Rather than suggesting climatic 'forcing', an apparent peak in fire frequency shortly after ~ 2500 BP may correspond to the deliberate burning of prairie by Sonota-Besant hunter-gatherers. This practice, which is clearly documented in the historic record, may have functioned as a means of making bison herd movements more predictable.

Bozell, Rob (Nebraska State Historical Society), Amy Koch (Nebraska State Historical Society), and Anne Vawser (Midwest Archaeological Center, National Park Service) - PUBLIC EDUCATION (5)

Public Archeology in Nebraska

An active program of public involvement in Nebraska archeology is limited but stems largely from productive cooperative ventures between the Nebraska Association of Professional Archeologists (NAPA) and several state and federal agencies. Most of Nebraska's public programs have developed since 1989. Small scale efforts include a variety of lectures and workshops provided to teachers, school children, and other public groups. Efforts that are more intensive include a (nearly) annual amateur excavation and publication of a popular oriented series titled "Explore Nebraska Archeology." Nebraska's lack of a strong and consistent public archeology program is directly related to the absence of a state funded state archeology office. Efforts are ongoing to pass a state archeology bill which would among other goals fund a public archeologist position.

Bradley, Larry (University of South Dakota) - LOWER MISSOURI (17)

The Bliss Bone Deposit: Late Archaic in Southeastern South Dakota

Excavations over the past decade at 39CL10, a Late Archaic bison procurement and processing station near Vermillion, South Dakota produced evidence of hunting strategies employed 3200 years ago near the edge of the Missouri River Valley. The deeply buried site was originally noted at the base of a steep cut bank of the Vermillion River after flooding had stripped vegetation from the shoreline. Subsequent testing and excavation shows that a discontinuous layer of bone extends several hundred meters in all directions between the cut bank and a steep bluff at the edge of the Missouri River floodplain. Materials recovered from the site include modern bison elements, butchering tools and a

consistent series of projectile points whose size range suggests use of the bow. The impact of one of the small points penetrated the most massive part of a scapula to a depth of 2 cm. Reconstructed landscapes for the area indicate that the bison were taken in a narrowing between a steep bluff edge and the Vermillion River.

Bratch, Jodi Ann (Indiana University/Purdue University at Indianapolis) - NEXT STEP ARCHAEOLOGY PROJECT (18) & STUDENT (9)

Lithic Distribution Results from Site 12Ma648 Through Surface Collection

During the 1999 and 2000 field season of the Martin University Project, a 100% surface collection method was conducted of site 12Ma648 at Fort Harrison State Park, Indiana. The results yielded that the site was a tool maintenance site because of subcortical flakes recovered and the lack of decortication flakes. Another element that contributed to this conclusion was the limited number of formal tools found. The methodology employed by the project permits an expansive overview of the site and acknowledges the importance of its preservation.

Bratch, Jodi; see Anthony, Eric

Bringelson, Dawn (Midwest Archaeological Center, National Park Service/University of Washington) - POSTER (32)

Surface Collection as Remote Sensing: Using Artifact Size Distributions from Tilled Sites. An Example from the Central Plains

Even though systematic collection of tilled surfaces offers a potentially inexpensive and innocuous way to interpret archaeological site structure, its use is often bypassed in favor of excavation, including the stripping of the plowzone as a single unit, or "overburden." This implies that the plowzone is a homogenous unit with little informative potential; surface collections are commonly used only to provide nominal information about artifact content, and to determine excavation procedures. Concepts vital to the goal of using surface assemblages themselves for interpretation are outlined and tested with data derived from a late prehistoric site in northeastern Nebraska.

Brooks, Robert L. (University of Oklahoma) - PUBLIC EDUCATION (5)

"From Mammoths to Mounds": An Overview of Public Outreach and Education in Oklahoma

Oklahoma has developed a number of special programs for addressing public interest in our state's heritage. This has come about because of the limited community of professionals and also because of the large and diverse resident population of Native Americans. This paper presents an overview of the constraining factors in our outreach efforts as well as the special involvement of native interests; the philosophy guiding our efforts; current programs, and future directions in outreach.

Brosowske, Scott D. (University of Oklahoma), Richard R. Drass (Oklahoma Archaeological Survey), and David L. Maki (Archaeo-Physics, LLC) - GENERAL - MISSISSIPPIAN AND PLAINS VILLAGE (14)

The Odessa Yates Project (OYP): Investigation of a Plains Village Period Settlement in the Oklahoma Panhandle

Odessa Yates (34BV100) is one locality within a large Plains Village settlement (ca. A.D.

1300) approximately 8 km long in Beaver County, Oklahoma. 34BV100 is characterized by its large size (40 ha.), the presence of semi-subterranean pithouses, a subsistence economy based on intensive horticulture and bison hunting, and abundant evidence for involvement in interregional interaction. The OYP enters its third year of existence and represents a cooperative research venture between the University of Oklahoma, Oklahoma Archeological Survey, and local residents. Appropriately, research goals are multifaceted and serve to meet the needs of both professional archaeologists and local avocationalists. This paper provides an overview of recent investigations.

Brosowski, Scott D.; see Drass, Richard R.

Brown, James A. (Northwestern University) - FOODWAYS (13)

Subsistence Change from the Perspective of Ethnohistory and Archaeology in the Illinois Country

Archaeology conducted at Upper Mississippian and Illini villages in Illinois, Missouri, and Iowa offers the opportunity to examine broad changes in subsistence patterns over a span of 500 years until the visitation of Illini villages by Marquette and LaSalle in the 1670s and 80s. Despite inter-assemblage differences, significant developmental change is indicated by more intensive use of certain food resources. Consideration of these events and the possible effects of the Little Ice Age goes far to enhance our interpretation of the semi-sedentary and mixed agricultural and bison hunting economy described ethnohistorically.

Bryson, Reid A. (University of Wisconsin) and Robert U. Bryson (University of Wisconsin) - LATE WOODLAND IN WISCONSIN (10)

The History of Woodland Climatic Environments: as Simulated with Archaeoclimatic Models

Exploration of the past climates of the Woodland area suggests that the climatic environment has varied significantly in time and space. While the timing of climatic changes were coherent over this region, their local expressions were diverse. For instance, the mid-Holocene drought was apparently most intense in the northwest and non-existent or wetter in the southeast. Late Woodland time in the Wisconsin-Minnesota area was likely preceded by a wetter interval characteristic of closed canopy forest, but was itself a period of oak savanna type climate. It was followed by the cooler, drier time that culminated in the "Little Ice Age".

Bryson, Robert U.; see Bryson, Reid A.

Buchanan, Briggs (University of New Mexico), Patrick Lewis (Duke University), Eileen Johnson (Museum of Texas Tech University), Richard Strauss (Texas Tech University), and Laura Gruss (Duke University) - GENERAL - FAUNAL AND FLORAL RESEARCH (29)

Variation and Change in Late-Quaternary Bison Metapodials from Lubbock Lake

A sample of 318 bison metapodials spanning the period from 11,500 BP to 100 BP recovered in 5 different strata from Lubbock Lake, on the Southern High Plains, were analyzed for changes in size and shape over time. Eleven measurements, including cortical bone thickness obtained from x-ray films, were used for the analysis. Principal component analysis and multivariate analysis of variance tested for significant differences in metapo-

dials between different strata. A significant size decrease was found in most characters of both elements between approximately 8,000 BP and 6,500 BP. Shape of the elements remained stable through this size change, however, and did not alter significantly until after 4,500 BP.

Burger, Oskar; see Burnett, Paul C.

Burger, Oskar; see Todd, Larry

Burgess, Cher (University of Wyoming/Black Hills National Forest) - GENERAL - REGIONAL STUDIES (31)

A Summary of Theoretical Literature Pertaining to Black Hills Prehistory

A selection of readily available literature pertaining to the prehistory of the Black Hills of South Dakota and Wyoming was examined to ascertain subject matter and theoretical viewpoint. The exterior and the southern Black Hills have been more thoroughly studied than either interior areas or the northern Black Hills. The culture-historical approach reveals the necessity of using a more inclusive chronology than Northwestern Plains. Various processual, structural and symbolic approaches provide information about Black Hills prehistory and create a foundation for future inquiries.

Burgess, Laurie (Smithsonian Institution) and James Krakker (Smithsonian Institution) - BEADS (26)

Fort George and Fort Pierre II: Working Toward a Regional Trade Bead Chronology

The glass bead collections from Fort George and from Fort Pierre II, two South Dakota trade forts, are being compared to help establish a regional bead chronology for the nineteenth century on the Plains. The two fort sites are tightly dated: Fort George operated from 1842 to 1845, and Fort Pierre II existed from 1857 to 1863. The two bead collections will provide insight into bead types encountered on the northern Plains during these time periods.

Burks, Jarrod (Hopewell Culture National Historical Park) and Jennifer Pederson (Hopewell Culture National Historical Park) - GENERAL - MIDDLE WOODLAND (25)

An Update on Non-mound Debris Studies at Hopewell Mound Group (33Ro27), Ross County, Ohio

Since 1998 archeologists at Hopewell Culture National Historical Park have been studying non-mound debris at the Hopewell Mound Group. In this paper we summarize the results of this work and present an analysis of the materials recovered from these frequently overlooked low-density debris scatters. Thus far, this research has yet to locate "village-like" archeological deposits within the vicinity of the earthworks. Rather, a scatter of low-density clusters of prehistoric debris has been found throughout the surveyed areas. This paper further explores the relationship between a selection of non-mound debris scatters and the earthworks at this important Hopewell site.

Burnett, Paul C. (Colorado State University), Lawrence C. Todd (Colorado State University), and Oskar Burger (Colorado State University) - GENERAL - MATERIAL CULTURE (7)

Modeling Lithic Raw Material Replacement Costs: A Polythetic Approach

Lithic raw material source distances are important to consider when using lithic data to interpret prehistoric behaviors, because raw material replacement costs are highly variable and will influence the reduction techniques used to produce tools. This research uses lithic debitage data to model the relative raw material replacement costs per material type in an assemblage. The hypothesis presented here is that by combining lithic attributes of unique materials into a polythetic analysis of an assemblage, differences in lithic curation dependent on replacement costs and source distances will emerge, allowing for more detailed interpretations of the prehistoric manipulation of chipped stone.

Burnett, Paul C.; see Todd, Larry

Bush, David (Heidelberg College) - MILITARY (2)

Investigations of the Johnson's Island Civil War Confederate Cemetery

Even before abandonment in 1866, the Johnson's Island Confederate Cemetery had been altered to the point that the current configuration of grave markers did not reflect what actually happened. During the Civil War, the cemetery was "straightened out" and the headboards moved. After the war, the federal government abandoned the cemetery, and it fell into disrepair. Almost thirty years later, and when many of the headboards were illegible, a citizen's group tried to recapture the cemetery, replacing the wooden headboards with Georgia marble tombstones. Two hundred and six tombstones are present, 54 of which have the word Unknown inscribed on them. Through historical research, the use of ground penetrating radar, and electromagnetic conductivity, we have tried to better understand this cemetery.

Butler, William B. (Rocky Mountain National Park) - GENERAL - REGIONAL STUDIES (31)

Seventy Years of Archaeological Research in Rocky Mountain National Park

Archaeological inventories began in the 1920s, but by 1995 less than 100 prehistoric sites had been documented in the 450 square mile area of the Park. After three years of field work, the Systemwide Archeological Inventory Program has resulted in the documentation of 275 prehistoric, 400 historic, 50 protohistoric, and 40 prehistoric and historic archeological sites ranging in time from Clovis to historic mining and resorts. The concurrent paleoenvironmental studies are clarifying the relationship between adaptation and environmental changes. The number of sites is now sufficient in terms of numbers and quality to begin investigating the cultural-ecology, i.e., land-man relationships, utilizing a cultural landscape framework.

Byers, David A. (University of Wyoming) - GENERAL - PALEOINDIAN (1)

Taphonomy of the Fetterman Mammoth

Excavated in eastern Wyoming, the Fetterman Locality produced the remains of a single sub-adult mammoth and a small lithic assemblage. A variety of taphonomic agents have imprinted their signatures on the faunal assemblage. This paper assesses the effects of two of these processes, bone transport and differential weathering, to investigate the events responsible for the creation of the deposit. These same taphonomic agents are then considered to assess the association of the lithic artifacts with the faunal assemblage. With this information, a formational history is reconstructed accounting for both the mammoth remains and cultural artifacts.

Byrnes, Allison M. (University of Wyoming) and Meegan J. Sanderson (University of Wyoming) - GENERAL - MATERIAL CULTURE (7)

Scratching the Surface: A Preliminary Report on the Role of Atomic Force Microscopy in Identifying Use-Wear Patterns on Stone Tools

In this paper, we will explore the potential applications of Atomic Force Microscopy (AFM) for determining the nature of use-wear on stone tools. The examination of experimentally-generated stone tools via the Atomic Force Microscope has allowed us to compare high-magnification scans of tool edges that have been used to process a variety of materials, to varying degrees of intensity and duration of use. We will present our observations, as well as the address possible contributions and limitations of AFM for future assessment of use-wear patterns on flaked stone artifacts.

Callahan, Kevin (University of Minnesota/Upper Midwest Rock Art Research Association) - ROCK ART (16)

An Interpretation of a "Sun-Headed" and "Face-Painted" Dueling Scene, with an associated "One-Horned" Figure at the Jeffers Petroglyphs Site in southwestern Minnesota

Some common elements of Omaha, Pawnee, Dakota, and other Plains Indian legends, hairstyles, and warrior society stories, appear to be represented in the Station 7 rock art panel at the Jeffers Petroglyphs site. In addition to these specific design elements, however, one of the figures is clearly holding an atlatl with a large bannerstone, suggesting the possibility of significant time depth for some of these stories and markers of ethnicity and social organization. All three of the figures appear to have been made by the same rock artist and have distinctly large round heads, linear downturned arms, stick figure bodies, and associated darts.

Campbell, Gregory R. (University of Montana) - GENERAL - MANY PUBLICS IN ARCHAEOLOGY (24)

Never Use the Generic Term for Shoshone: Lemhi Shoshone Identity and Struggle for Political Sovereignty as a Tribal-Nation

On October 17, 1994, Lemhi Shoshone descendants filed for and received a Certificate of Incorporation from the Department of State of Idaho. The purpose of incorporating themselves was to begin proceedings to seek federal re-recognition. Despite acknowledgment from some state and Fort Hall Reservation tribal authorities that the Lemhi constitute a distinct tribal-nation, their attempts toward complete political and cultural sovereignty has been met with staunch resistance on a number of fronts. Their presentation use ethno-genetic theory to interpret Lemhi Shoshone political history to comprehend the sociological dynamics and the perpetuation of Lemhi Shoshone identity through time that enabled them to establish themselves as a unique sociological and political entity to the present.

Cannon, Kenneth P.; see Sittler, Meghan

Carter, Brian; see Bement, Leland C.

Christiansen, George W. III (Archaeological Research, Inc.) - LATE WOODLAND IN WISCONSIN (10)

Warfare, Torture and Cannibalism: A Slice of Life on the Northern Frontier of the Middle Mississippian

A recent diachronic study of evidence of violent conflict in southern Wisconsin and adjacent Illinois suggests that warfare played a significant role in the dynamic socio-political landscape of AD 750 - 1250. Nowhere is the evidence stronger for this form of interaction than at the Late Woodland/Middle Mississippian village of Aztalan in Jefferson County, Wisconsin. A macro-regional study suggests that Aztalan emerged as one of many competing polities in Wisconsin and that the site location and contents of the site indicate a very sophisticated approach to warfare that is mirrored in later Mississippian societies of the Southeast.

Clouse, Robert A. (Minnesota Historical Society/University of Minnesota) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Industrial Archaeology and the Creation of Mill Ruins Park, Minneapolis, Minnesota

Mill Ruins Park, a collection of the remains of industrial structures built along the banks of the Mississippi River in Minneapolis, is in its initial stages of development. Minneapolis, dubbed "Mill City," lead the world in flour production from 1880 to 1930. The most recent archaeological excavations, removing nearly 100,000 cubic yards of overburden and demolition debris, have exposed structural elements that will become the core of an archaeological park interpreting the industrial history of the region. The findings of a series of archaeological excavations spanning more than 15 years are presented.

Clouse, Robert A. (Minnesota Historical Society) - MILITARY (2)

Identifying the Feminine Gender in a 19th Century Military Context

Military sites during the 19th century, by their nature, were largely occupied by the male gender. However women were and continue to be an integral part of the military. More than just wives of officers, women played an important role in the daily requirements for officers and enlisted personnel. Their roles in the maintenance of social relationships are frequently visible from the presence of material culture such as fine tablewares and teawares. Personal possessions and objects of personal adornment also help define the contexts within which women lived. But officer's wives were not the only females present at military installations. Military regulations permitted if not encouraged the employment of women in the roles of hospital matrons, cooks, and laundresses. Others were often employed as servants for officer's families. The presence of other women is confirmed in historic documents, even at such remote 19th century posts as Fort Snelling. Their visibility in the archaeological record, however, depends on a purposeful and careful reading of the material culture record. Evidence of their existence comes from unlikely associations of specific artifact categories with the living and servile quarters of these women.

Cojeen, Christopher; see Ballenger, Jesse A. M.

Cole, Edward (Broad Ripple High School/Martin University) and Elizabeth Jackson (Butler University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Analysis of Glass Distribution at Site 12Ma648

The historic glass found at Site 12Ma648 provides valuable information regarding the history of the Fort Harrison State Park research area. The distribution maps found in the 1999 field report indicate that a structure was present on this site. Based on the information gathered in 1999, the hypothesis stated that any window glass recovered from the site would be located in concentration around construction materials. The data from the dis-

tribution maps from the 1999 and 2000 field season are significant in determining the perimeter of the structure.

Collins, James M. (Office of the Iowa State Archaeologist) - GENERAL - MIDDLE WOODLAND (25)

The Dolomite Ridge Site: A Component On The Cusp of Havana In The Upper Mississippi Valley

Excavations were conducted at the Dolomite Ridge site preliminary to reconstruction of U.S. 52, the Great River Road, in Dubuque County, Iowa. The earliest significant component, radiocarbon dated to ca. cal B.C. 128, represents an indigenous Early Woodland population living on the cusp of Havana Tradition expansion into the Upper Mississippi River valley. The people inhabiting the site at that time were heavily involved in regional and extra-regional commodity trading, representing a nodal population within a larger interactive network. Data from the site is interpreted from a perspective of cultural interaction and change.

Collins, James M. (Office of the Iowa State Archaeologist) - PORTABLE ART (8)

Late Prehistoric Shell Masks in the Plains and Prairie Peninsula

Marine shell masks, while rare, are found in a broad range of contexts in Late Prehistoric Plains and Prairie Peninsula sites. The locations and contexts of these objects are reviewed. Variations in the elements employed are discussed.

Collins, Toniencia Lee (Arsenal Technical High School) and Matthew Maher (Missouri Western State College) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Brick Distribution at Site 12Ma648

Gray and Pape's Phase I survey and Martin University's 1999 field season Phase II investigation indicated the presence of an abundance of historic brick, as well as other construction materials at site 12Ma648. These investigations suggested that a structure might have stood at this site. Brick, as well as other construction material collected during the 2000 field season add to the evidence that indicates a structure stood on the site. Through distribution analysis, which considers count, weight, and soil probing, some indication of a more precise location may be determined.

Conrad, Lawrence A. (Western Illinois University) - GENERAL - MISSISSIPPIAN AND PLAINS VILLAGE STUDIES (14)

The Town at the Edge of the World: Excavations at the Middle/Upper Mississippian Interface

Excavations at the Hildemeyer or Ten Mile Creek site, the northernmost platform mound site in the Illinois Valley, revealed an assemblage of Middle and Upper Mississippian elements. A large aboriginal pit through midden was filled with a dense deposit of well-preserved material. The incompletely processed sample includes high percentages of deer and fish bones and mussel shells, along with elk bones. Shell-tempered, cord-marked jars heavily dominate the ceramics with a few plates, beakers, bowls, bottles and Langford jars. Non-ceramic artifacts include triangular arrowheads; hump-backed knives; shell spoons; antler arrowheads and counters; and fenestrated bone ear plug faces.

Cook, Robert A. (Michigan State University) and Leah Merz (Michigan State University) - GENERAL - LATE PREHISTORIC (28)

The Chronological Complexity of a Single-Component Fort Ancient Village: Using GIS to Examine the Formation of the Sunwatch Site

It has been repeatedly shown the Sunwatch village site—located near Dayton, Ohio—contains the remains of a single Fort Ancient occupation. However, the chronological complexity of the site may be greater than previously thought. In this paper, time-sensitive indicators are examined in detail using a GIS. Conclusions are that shell tempered pottery and larger structure sizes occur more frequently in certain portions of the site, suggesting that later Fort Ancient characteristics were spatially differentiated in this single population. These data suggest that the site contains more temporal depth than recognized, allowing for new analyses of cultural change through time.

Cook, Robert; see Lovis, William A.

Cooper, David (National Park Service, Grand Portage National Monument) - COLLECTIONS CURATION (6)

Grand Portage: A State/Federal Curatorial Partnership

For nearly eighty years, the Minnesota Historical Society (MHS) has been actively involved in the study and preservation of Grand Portage in northeastern Minnesota. Since its establishment as a national monument in 1958, the majority of Grand Portage's archaeological collections have been curated and managed through a partnership between the National Park Service and the MHS. This arrangement has been formalized through a memorandum of understanding, tailored to meet the legal requirements of federal collection managers and the needs of researchers and exhibitors. The results have been a cost-effective and mutually beneficial solution to collection management needs.

Crago, Clinton C. (University of Wyoming) - GENERAL - PALEOINDIAN (1)

Folsom Points and Site Typology: An Investigation of Surface Collected Folsom Points from The Shell Village and Slag Sites, North Dakota

The function and typology of an archaeological site can be determined from the artifacts found within it. More specifically, Folsom sites are often categorized into classes such as procurement sites, camp sites, and kill sites based on the projectile points and fragments recovered from them. Presented is an analysis conducted on twenty-three surface collected Folsom points from two sites in west-central North Dakota. The breakage patterns and portion present of the assemblages suggest that one site is a procurement/tool manufacturing site, and the other is a field/hunting camp.

Crago, Clint; see Reher, Charles

Crago, Clint; see Reher, Charles A.

Cummings, James (Minnesota Department of Natural Resources) - MILLE LACS (11)
Science, Education and Stewardship: Public Interpretation of the Cunz Site Archaeological Excavation

The Cunz Site (21ML21) is on private land, surrounded by the 10,000-acre Mille Lacs Kathio State Park and within the Kathio National Historic Landmark District. Although

Fletcher Cemetery, a pioneer cemetery located just north of the boundary of Fort Harrison State Park in Marion County, Indiana, was used between 1827 and 1903. In our investigation of Site 12Ma648, the cemetery provided invaluable information about the residents of Lawrence Township, specifics about the ownership of the land that encompasses the site and the ties that bound those owners. In further explicating the relationships during the 2000 field season, we were able to clarify the manner in which property changed hands, and in turn come to a greater understanding of how the township and Indiana as a whole were settled.

Duncan, Marjorie (Oklahoma Archeological Survey) - GENERAL - MISSISSIPPIAN & PLAINS VILLAGE (14)

The Two Sisters Site: Subsistence and Settlement Strategies in the Oklahoma Panhandle
The Two Sisters site is a Late Prehistoric, Antelope Creek Phase site in the Oklahoma Panhandle that was occupied between about A.D. 1330 and 1430. Excavations conducted in the summers of 1972 and 1973 by University of Oklahoma field school participants yielded cultural remains that are providing clues about the subsistence and settlement strategies employed by these people. This paper will discuss some of these preliminary implications.

Dunham, Sean B. (Commonwealth Cultural Resources Group, Inc.) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Archaeological Testing at the Stone Quarry Cottage Site, Grand Island, Michigan
Archaeological testing was recently conducted at the Stone Quarry Cottage Site on Grand Island, Alger County, Michigan. The site is a mid-nineteenth century homestead situated on the shore of Lake Superior. The original cabin still stands on the site and represents one of earliest Euroamerican homesteads on Grand Island (1840-1873). The recent rehabilitation of the cabin by the U.S. Forest Service allowed the placement of archaeological excavation units within the footprint of the cabin. This paper will outline the results of the archaeological testing and offer some discussion concerning the interpretation of the site.

Dunne, Michael (University of Iowa) - GENERAL - FAUNAL AND FLORAL (29)

Woodland Plant Use in Southeast Iowa: Recent Paleoethnobotanical Analysis of the Gast Sites
In the early 1990s, excavations at the Gast Spring and Gast Farm sites uncovered evidence of prehistoric occupation spanning the Middle Archaic through Woodland periods. Recent analysis of flotation samples from Terminal Archaic/Early Woodland, Middle Woodland, and early Late Woodland components of these sites has documented local participation in the development of the eastern North American pre-corn agricultural complex. In addition to providing evidence for evolution within Stoltman and Baerreis' Cultivating Ecosystem Type, this analysis is useful in linking Woodland agricultural developments in the rest of the Midwest with those of the eastern Plains.

Egan-Bruhy, Katie (State Historical Society of Wisconsin) - FOODWAYS (13)

Upper Mississippian Agriculture: Zimmerman and Beyond

In comparison to the Mississippian, the nature and importance of agriculture among Upper Mississippian/Oneota populations in the Upper Great Lakes is poorly understood. The floral assemblage from the Zimmerman West site, whose occupational history extends from the Late Woodland to the Historic Period, affords an opportunity to exam-

ine the changing role of agriculture among Upper Mississippian populations adapting to a specific environmental context. The subsistence trends observed will then be compared to data from both southern and northern contexts, and the environmental, social, and botanical correlates of the observed strategies will be examined.

Ehrhardt, Kathy; see Grantham, Larry

Emerson, Patricia (Minnesota Historical Society) - NORTHERN MINNESOTA (23)
Middle River: Mid-Holocene Occupations on the Prairie-Forest Border

In 1997, the Minnesota Department of Natural Resources Forestry Heritage Resources Program conducted an archaeological survey of 150 acres of public land located on a Lake Agassiz beachridge in the northwestern corner of Minnesota. The survey resulted in identification of a site complex that reflects occupation during the Late Archaic and Initial Woodland Periods, with Late Paleoindian presence also suggested. Recovered artifacts include projectile point types associated on the Northern Plains with the McKean and Oxbow cultural complexes. Methods included intensive controlled surface collection, coupled with CAD and GIS applications that were used to create detailed site maps and analyze patterns of artifact distribution.

Emerson, Thomas E. (Illinois Transportation Archaeology Research Program), Kristin Hedman (Illinois Transportation Archaeology Research Program), Mary Simon (Illinois Transportation Archaeology Research Program), and Stan Ambrose (University of Illinois) - GENERAL - FAUNAL AND FLORAL (29)

Marginal Horticulturalists or Maize Agriculturalists? Archaeobotanical, Paleopathological, and Isotopic Data on Langford Tradition Subsistence Practices

Langford Tradition subsistence and culture has long been viewed as representing a marginalized "degenerate" form of Middle Mississippian lifeways, i.e., essentially a simplified adaptation to the less friendly landscapes of northern Illinois. This image of Langford subsistence has been perpetuated by a reliance on analogies to the practices of historic period Algonquin migrants in the area. Like many historic prairie natives, Langford peoples were viewed as semi-sedentary horticulturalists who lived on wild game and plants with maize grown as a supplement, perhaps even participating in seasonal long-distance bison hunts. In this first systematic examination of the physical evidence of Langford subsistence from archaeology, paleopathology, archaeobotany, and isotopic studies we demonstrate that these people more closely resemble their Mississippian neighbors than later Algonquin migrants and are best characterized as full-time maize agriculturalists.

Evans, Christopher J.; see Myster, James E

Feiler, Eric; see Overturf, Jeff

Feiler, Eric J.; see Ahler, Stanley A.

Fie, Shannon M. (Loyola University Chicago) - GENERAL - MIDDLE WOODLAND (25)
Among Friends: Ceramic Exchange during the Middle Woodland Period

Studies of Middle Woodland exchange have traditionally focused on goods associated with the Hopewell Interaction Sphere. This emphasis, however, fosters a perception that

educational public tours were a priority during recent excavation, concerns included control of public access to private property, visitor safety, and time management for the Site Director. These concerns were successfully addressed by the continuing research partnership between SCSU and Mille Lacs Kathio State Park. Public visitation was limited to tours organized, publicized and conducted by the park's Chief Interpreter. Goals and objectives were developed collaboratively by the Site Director and the Chief Interpreter, who also participated in all aspects of the field school excavation.

Cunningham, Peter; see Lovis, William A

Demmons, Rachel (All Saints High School/Martin University) and Michele Greenan (Indiana State Museum) - NEXT STEP ARCHAEOLOGY PROJECT (18)

An Analysis of 19th Century Pipes from Site 12Ma648

Previous investigations at site 12Ma648 located 10 pipe fragments. Through analyzing the form, style, and composition of the fragments, we located possible manufacture companies, or origins of the molds that created the pipes. With the addition of other pipe fragments found during the recent investigations in 2000, we hypothesized that settlers had brought the pipes from areas closer to the manufacture into site 12Ma648. This added greatly to the information concerning who lived at the site. Furthermore, the location of the fragments provide valuable clues to where a structure would have been found.

DeMorett, Amber (St. Cloud State University) - MILLE LACS (11)

Toward a Vegetative History of Kathio Mille Lacs

Analysis of satellite imagery, field investigations and usage of historic documents has allowed a tentative reconstruction of the vegetation history of portions of Mille Lacs Kathio State Park. The technique, based on projection backwards in time using generalized vegetation succession patterns is not definitive, but yields consistent results suitable for modeling. Several discrete periods of anthropogenic influenced vegetation coverage are postulated, with an overall picture of stability since the last glaciations, interrupted by severe modification by logging and recent fire suppression practices.

Devers, Allison (Minnesota Historical Society) - MILLE LACS (11)

An Analysis of Ceramics from the Cunz Site Surface Collection

For several decades, informal surface collection of ceramics and lithics has occurred on the Cunz Site (21ML21), helping to identify the site, and ear-marking it for further study. However, due to considerable 20th century disturbance, the improbability of an intact site, and relatively low artifact density, the contents of the landowner's private collection hold particular interest. Making up a significant percentage of the total ceramic assemblage of the site, the private ceramic collection is varied, allowing for type identification, attribute analysis, rim profiling, and comparison to other ceramic analyses of the Mille Lacs region.

DeVore, Steve; see Walker, Danny N.

Diaz-Granados, Carol (Washington University-St. Louis) - PUBLIC EDUCATION (5)

Missouri Making Progress with Public Archaeology Outreach Programs

Missouri has been slow to jump on the bandwagon of statewide public outreach archaeology. A few projects have taken place, but it wasn't until 1996 that "statewide" came into Missouri's public archaeology vocabulary. This September celebrated Missouri's 4th

statewide Archaeology Month event. Along with Missouri Archaeology Month, a new program is in the works titled "Archaeology Challenge." These two programs along with a few site specific programs will be reviewed.

Doershuk, John F. (Iowa Office of the State Archaeologist) and Cynthia L. Peterson (Iowa Office of the State Archaeologist) - GENERAL - HISTORIC ARCHAEOLOGY (15)
Investigations at a Fort Atkinson, Iowa Area 1840s Trading Post and Winnebago Village
 The Summer 2000 University of Iowa field school on archaeological methods and American Indian concerns was conducted at two historic Winnebago-related sites in Northeast Iowa: a House of Ewing trading post and a Winnebago village. Both locations yielded large numbers of 1840s artifacts. At the trading post, remains of a storage house and dwelling were discovered. A clay-lined storage pit was identified several hundred meters from the village proper. Preliminary findings at both sites will be discussed as will the relationship of these sites to the wider context of the Winnebago removal from their ancestral homes to the Neutral Ground.

Donahue, Robert (University of Minnesota-Duluth) - NORTHERN MINNESOTA (23)
A Scenario for Soil Development at the Fish Lake Dam Site

The Fish Lake Dam site north of Duluth partly occupies a ridge overlooking the Fish Lake Reservoir. This ridge is a glaciofluvial braided stream and esker complex, probably from the St. Croix phase of the Superior lobe. Lithic analysis suggests at least two occupations, Late Paleoindian and Middle Archaic. Laboratory analysis of sediment columns, including grain size and organic carbon content, suggests soil development in two stages. A thin soil developed on glaciofluvial sediment after the retreat of the Superior lobe. During the Hypsithermal, aeolian deposition of fine sands and silt from the nearby Brimson outwash plain provided a surface for Archaic occupation.

Drass, Mary Ann; see Drass, Richard R.

Drass, Richard R. (University of Oklahoma), Mary Ann Drass (University of Oklahoma), and Scott D. Brosowske (University of Oklahoma) - POSTER (32)
Digitizing A Dig: Putting the University of Oklahoma's 2000 Field School at the Odessa Yates Site on the Web

A Web site (<http://www.ou.edu/cas/archsur/>) was established and maintained during a three-week archeological field school at the Odessa Yates site in the Oklahoma Panhandle. The Web site provided weekly information on the progress of the excavations and proved to be an excellent vehicle for dissemination of information to the general public, interested professional archeologists, and local residents of the area. Photographs using a digital camera were taken during excavation and lab processing to document the field session. These photographs were edited and placed on the Web by transferring files to a University of Oklahoma site through a local Internet provider.

Drass, Richard R.; see Brosowske, Scott D.

Duke, Christopher (Arsenal Technical High School/Martin University) and John Hale (Ball State University) - NEXT STEP ARCHAEOLOGY PROJECT (18)
Relationships in an Early Indiana Pioneer Community: Investigations at the Fletcher Cemetery

Middle Woodland exchange centered on formal economic, political, and/or ceremonial relationships. The current study, in contrast, addresses Middle Woodland exchange through an analysis of ceramic sherds. Using compositional and stylistic data, this study documents the presence of foreign vessels and their itinerant manufacture within the Lower Illinois Valley. From these results it is inferred that Middle Woodland interaction included less-structured networks that linked small family groups through visitation and the exchange of subsistence-maintenance goods.

Finley, Judson Byrd (Washington State University) - POSTER (32)

Statistical Modeling of Post-Depositional Processes: An Example from a Rockshelter Site in the Bighorn Mountains, Wyoming

Post-depositional processes have long been recognized as a significant factor to consider in the examination of archaeological deposits. Statistical models provide a useful means for assessing the integrity of complex cultural stratigraphy, aiding in subsequent interpretations of the material record. This presentation incorporates high resolution data recovery techniques with statistical modeling to assess the vertical distribution of artifacts within a stratigraphic profile. Data from five cultural levels of BA Cave, a rockshelter site located in the Bighorn Mountains of Wyoming, are evaluated using analysis of variance (ANOVA) and clustering techniques. These procedures identify zones within the profile exhibiting high integrity as well as those with potential for mixing due to post-depositional processes.

Finley, Judson (Washington State University), Brian Andrews (Southern Methodist University) and Marcel Kornfeld (University of Wyoming) - GENERAL - TOPICAL STUDIES (30)

Rockshelter Research in the Bighorn Mountains of Wyoming: The Black Mountain Archaeological District

Investigations at the Black Mountain Archaeological District (BMAD) in the Bighorn Mountains of northcentral Wyoming have been in progress since 1993. BMAD, consisting of a large surface raw material procurement area and at least a dozen associated rockshelters, offers a significant glimpse into Northwest Plains Prehistory. Excavations of two shelters incorporate high resolution data recovery techniques, providing a level of interpretation heretofore unknown for rockshelter sites in the region. The BMAD research design is an integrated approach seeking to understand the intensive, repeated cultural occupation of a site utilized primarily for chipped stone procurement and tool production. Additional questions address the sedimentary history of the rockshelters, placing formation processes as well as the occupational history within an appropriate paleoenvironmental framework. This paper presents the preliminary results of these investigations.

Finney, Fred A. (Illinois Transportation Archaeological Research Program) - GENERAL - MISSISSIPPIAN AND PLAINS VILLAGE (14)

The East St. Louis Mound Center Revisited

In 1999-2000 ITARP investigated the East St. Louis Mound Center, second largest Mississippian mound center in the American Bottom. Excavations took place near its central plaza area. Approximately two meters of historic fill was removed to reveal a stratified, heretofore unrecognized Mississippian plaza and mound complex. Elements of this complex are over 220 features comprising mound bases, rebuilt plazas, wall trench and single post structures, post-pits, pits, and posts positioned outside the structures. The bulk

of the archaeological deposit dates to the Stirling phase. A Lohmann phase occupation occurs at the base of the plaza area. The youngest materials excavated in 1999 are Moorehead phase in age.

Finney, Fred A. (Illinois Transpiration Archaeological Research Program/University of Illinois at Urbana-Champaign) - GENERAL - MISSISSIPPIAN AND PLAINS VIL-LAGE (14)

Theodore H. Lewis and the Northwestern Survey's 1891 "Lost Survey" of Cahokia and Other American Bottom Mound Groups

Archaeologists working in the Upper Mississippi Valley are familiar with the Northwestern Archaeological Survey (NAS). Until now, it has escaped attention that Theodore Lewis conducted an American Bottom survey for the NAS. In 1891 Lewis sequentially visited the East St. Louis, Fairmont City, Cahokia, Emerald, Pfeffer, Mitchell, Theis, Rathmeyer, Hoeffken, and West sites. Lewis' description of East St. Louis includes previously undocumented mounds. At several sites, e.g., Cahokia, Mitchell, Emerald, and Pfeffer, Lewis recorded mounds no longer visible. For other sites, e.g., Pfeffer and Theis, it is their only mention in the nineteenth century. Finally, the data on mound shapes adds new information to virtually all sites.

Fishel, Richard L. (Office of the Iowa State Archaeologist) - GENERAL - ARCHAIC (27)

Investigations at 13HA385: A Preserved Middle Archaic Bone Grease Manufacturing Locality along the Iowa River in Hardin County, Iowa

The Iowa Office of the State Archaeologist conducted Phase III data recovery at site 13HA385 in Hardin County, Iowa in the fall of 1999. Excavations concentrated on a Middle Archaic component located 70 cm below ground surface. This component contains Tama and Raddatz points as well as numerous metates, hammerstones, and fire-cracked rock. Two features, both bone grease manufacturing areas, are associated with this component. One of these features produced a radiocarbon date of 6959 ± 70 RCYBP. This paper describes the Middle Archaic assemblage and explores the position of 13HA385 relative to the Middle Archaic lifestyle of the Midwest.

Fisher, John W. Jr. (Montana State University-Bozeman) - GENERAL - REGIONAL STUDIES (31)

The Marias River (Montana) as a Prehistoric Cultural Landscape

The Marias River in north-central Montana has incised a deep, steep-sided valley into soft sediments of the rolling plains. Fieldwork in 1999 and 2000 along a 1-km stretch of the river some 25 km upstream of its confluence with the Missouri River reveals various prehistoric archaeological manifestations. These include multiple bison bone beds (Late Prehistoric Period), and three different types of undated features (a hearth, and possible roasting and stone boiling features). Stone artifacts are uncommon. We seek to understand the attractions of the Marias River valley bottom to prehistoric peoples, and the nature of subsistence/settlement activities.

Foster, Lance; see Green, William

Freeman, Andrea; see Running IV, Garry Leonard

Freeman, Andrea; see Wiseman, Dion

Frison, George C.; see Kornfeld, Marcel

Gagnon, Gregory (Univ. of North Dakota) - GENERAL - MANY PUBLICS IN ARCHAEOLOGY (24)

Take Me to Your Leader: An Inquiry into Reservation Leadership

The Bureau of Indian Affairs required collaboration in the governance of the reservations. Indian cooperation required accommodation between Bureau and American Indian leaders. Many scholars have described the search for accommodation as conflict between traditional Indian leaders and their conquerors. However, a close reading of Bureau of Indian Affairs records and ethnographies reveals the existence of an additional dynamic. Leaders emerged among reservation Indians who had the means to affect Bureau procedures and these were often "mixed bloods" and/or schooled Indians who worked "for" and around the Bureau officials. This category of leadership has gone nearly un-remarked in the research literature for several reasons including the myopia of ethnocentric Bureau staff, the focus on full-bloods by ethnographers, the incorporation of the idea that mixed bloods and/or formally educated Indians were antithetical to efforts to maintain control by traditional leaders, and the need to emphasize traditional behaviors for contemporary issues of sovereignty and recognition. This paper examines Bureau records and published studies to offer a description of non-traditional reservation leadership.

Gainer, Daniel (Manual High School) and Matthew Maher (Missouri Western State College) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Brick and Soil Disturbance at Site 12Ma648

The results of the 1999 Martin University field season suggested that subsurface soil disturbances are correlated with the distribution of brick within the 30 meter by 30 meter test grid. However, the extent of the soil disturbances was not determined, therefore the correlation between the brick distribution and disturbed soils has not been confirmed. The objective of this research is to expand the number of soil probes in transects intersecting the areas of brick concentration and soil disturbance. It is hypothesized that this additional testing will confirm a correlation between brick concentrations and soil disturbances.

Gantt, Erik M. (Colorado State University) - GENERAL - PALEOINDIAN (1)

A New Method for Dealing with Collections that are Limited in Access as Applied to the A. Lynn Coffin Lindenmeier Collection

Access to privately held collections of artifacts is sometimes limited due to poor relationships between professional archaeologists and collection owners. Such was the case with the A. Lynn Coffin collection, which is still privately held. However, a 32-hour window of access to the collection proved to be enough for basic documentation of 1,125 artifacts from the Lindenmeier site. This proved possible through the use of the image processing software SigmaScan Pro. Presented here is the methodology used, statistical analysis of the accuracy and precision of the methodology and an overview of the results of analysis of the collection.

Gardner, A. Dudley (Western Wyoming College), and Martin Lammers (Western Wyoming College) - MILITARY (2)

The 1857 and 1858 Fortifications at Fort Bridger Wyoming

Since 1990 there have been on going excavations at Fort Bridger. One of the features we have encountered shows the military fortifications constructed in 1857 and 1858. This paper will focus on the stone construction methods used in building fortification walls, lunettes, and structures at Fort Bridger. We will also show how the archaeological excavations have helped illuminate why some of these construction methods were flawed and led to the abandonment of several of the structures at Fort Bridger.

Gardner, Christine N.; see O'Connell, Barbara H.

Garland, Elizabeth B.; see Martin, Terrance J.

Ghosh, Swastika (University of Illinois at Urbana-Champaign) - GENERAL - MIDDLE WOODLAND (25)*Hopewellian Subsistence Practices in the American Bottom*

The transition from the early Middle Woodland to the middle Middle Woodland period in the American Bottom represents a sharp discontinuity in terms of plant-related subsistence practices. Remarkable changes, particularly in the area of domesticated plant use, appear during the Holding phase (Hopewell) in this region between roughly AD 50-150. This paper examines the evidence of these changes in the archaeobotanical remains from nine sites in the Edelhardt Meander locality of the northern Bottom and the Hill Lake locality of the central Bottom. Holding phase subsistence practices are especially diverse and appear to relate directly to concomitant settlement complexity in the Edelhardt Meander locality.

Gibbon, Guy (University of Minnesota) - EARLY WOODLAND IN MINNESOTA (4)*Havana-Hopewell in Minnesota: The Howard Lake Phase*

The presentation reviews the clearest expression of the Havana-Hopewell complex in Minnesota, the Howard Lake phase. Among the topics reviewed are site distributions and contexts, excavations and surveys, and radiocarbon dates. A main conclusion of the review is that while the Howard Lake phase retains many Havana-Hopewell ceramic and burial mound features, it was a distinctive adaptation to the local environments of southeastern Minnesota.

Gibbon, Guy (University of Minnesota) - SONOTA (20)*Orwell: A Sonota Complex Site in West Central Minnesota*

The Orwell site (21OT7), which is located in Ottertail County, Minnesota, was extensively excavated in 1965 by a University of Minnesota field school under the direction of Professor Elden Johnson. Orwell contains 13 earthen burial mounds and a shallow, circular ditch enclosing a possible ceremonial area. A distinctive feature of the Orwell site is the presence of bison skulls and other bison remains in the excavated mounds. Radiocarbon dates of A.D. 400 \pm 100 and A.D. 530 \pm 100 were attained for two of the mounds. These dates and the presence of bison suggest that the site is a component of the contemporaneous Northern Plains Sonota complex. This report describes the excavation of the site, the recovered materials, and the cultural context of Orwell in the northeastern Plains.

Gold, Debra L. (St. Cloud State University) - 10,000 YEARS (3)*Bioarchaeology of Mid-19th Century St. Cloud: A Report on the Analysis of the Human Skeletal Remains from the SCSU Library Site Cemetery*

In January 1999, human skeletal remains were uncovered during the construction of the new Learning Resources Center on the campus of St. Cloud State University. The site was identified as a mid-19th century European-American cemetery. Although the cemetery was removed in 1864, some graves remained. Excavation revealed evidence of 26 grave shafts; 13 of these contained human bone. This paper presents the results of a comprehensive bioarchaeological analysis of the 9 adults and 4 subadults from the site. Information on demography and pathology from this cemetery population enhances our understanding of pioneer life in mid-19th century Minnesota.

Gold, Debra (St. Cloud State University) - MILLE LACS (11)

Excavation at the Cunz Site (21ML21): Preliminary Report

During summer 2000, St. Cloud State University excavated the Cunz Site (21ML21), a multi-component prehistoric site on private land within the boundaries of Mille Lacs Kathio State Park. As the first research-oriented field project in the area in nearly two decades, this project was designed to determine site boundaries, explore the relationship to nearby known sites, and most importantly to determine the extent of intact site beneath the shallow plow zone. Although there is a large and varied artifact collection from the site, excavation revealed that due to slow soil deposition and significant 20th century disturbance, little of the site remains intact below the plow zone.

Gold, Debra; see Ollendorf, Amy

Goltz, Grant - EARLY WOODLAND IN MINNESOTA (4)

Home and Hearth: Identifying Initial Woodland Structures

Discerning structures in the archaeological record has always been difficult, particularly in the Great Lakes region. Problems in recognizing structural remains are identified on both theoretical and methodological levels. Two examples of structures dated to the Initial Woodland are used to illustrate the need for both rethinking the nature of the archaeological evidence and for altering field methods in order to detect structural evidence.

Grantham, Larry (Missouri Department of Natural Resources) and Kathy Ehrhardt (New York University) - GENERAL - MATERIAL CULTURE (7)

An Evaluation of Danner Ware as Seen from the Excavations at Iliniwek Village State Historic Site, Clark County, Missouri

For years, the excavations at the Zimmerman Site and at Starved Rock in Illinois formed the only major components with Danner wares. As such, the ceramics recovered from these sites defined what constituted Danner and La Salle. With the discovery and subsequent excavations at Iliniwek Village State Historic Site, Clark County, Missouri, a new component was available to explore the range of inclusion and the types included in Danner ware. Some of the types present at the Zimmerman Site are not well represented at Iliniwek, and some at Iliniwek are not present at Zimmerman. However, the bulk of the ceramics are very similar. We have examined the various types in terms of the definitions and the range of variability, defined some new types, and posited some ramifications for inter- and intra-site differences.

Graves, Adam C.; see Kornfeld, Marcel

Green, William (The University of Iowa), Marlin Ingalls (The University of Iowa), Lance Foster (National Park Service), Erica Hill (Southern Illinois University at Carbondale), Sarah Pitzen (The University of Iowa), and Margot Neverett (The University of Iowa) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Iowaville: An Ioway Indian Village in Southeast Iowa, ca. 1770-1820

The Ioway (Iowa; Baxoje) Indians, now with reservations in Kansas/Nebraska and Oklahoma, once lived in numerous locations throughout the state of Iowa and nearby regions. From the 1770s to the 1820s, one of the major Ioway villages was located on the lower Des Moines River in southeast Iowa. This location became known as Iowaville. Later occupations by the Sac and Meskwaki and by non-Indians also occurred in the locality. Although no controlled excavations have been conducted, surface collections contain large quantities of material from Iowaville. A collection made in the early 1970s, which appears to derive principally from the Ioway component, has been part of the State Archaeological Repository at the Office of the State Archaeologist. We are analyzing this collection in the context of Ioway history and regional relationships in order to address the following topics: (1) the age of the occupation, (2) native styles of artifact manufacture, (3) styles of native modification of European goods, (4) trading networks in which the Ioways participated, (5) local subsistence practices, and (6) the nature of technological and economic change through the historic era.

Greenan, Michele (Indiana State Museum) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Balancing Professional Standards with Educational Objectives in the Field and Laboratory

Archaeological field programs can be an effective means to invoke interest in science generally, and archaeology specifically, to high school students. In Martin University's Next Step Education through Archaeology Project, the majority of the students had not been introduced to archaeology and could not see how their own work and research formed an integral part of the program's archaeology goals. Through heightened efforts to integrate educational goals with archaeological goals, students became more aware of their role in the program and the project became a more effective tool for educating high school students in the sciences.

Greenan, Michele; see Demmons, Rachel

Greer, John; see Greer, Mavis

Greer, Mavis (Greer Services) and John Greer (Greer Services) - ROCK ART (16)
Boulder Rock Art of Montana

Rock art sites of northeastern Montana are characterized by petroglyph boulders. Boulder rock art occurs in two basic forms - individual figures placed on the surface of the rock or the rock itself shaped into a figure. The kinds of figures occurring on boulders are compared with rock art figures in surrounding regions of the Northern Plains, Rocky Mountains, and Midwest. Because many different cultures are known to have lived and traveled through the area for thousands of years of rock art production, the comparison focuses on the importance of geographic locations in the kinds of figures portrayed. The northeastern Montana materials are compared for closeness of relation with adjacent

regions to the east and north, with similar geographic settings, and with adjacent regions to the west and south with more mountainous and high Plains environments.

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

Grimm, Eric C. (Illinois State University) - CAMBRIA (19)

Environment and Climate of South-central Minnesota, AD 1000-1200

The Cambria sites, which date to ~ad 1000-1200, are located in the prairie along the Minnesota River about 20 km west of the Big Woods. The most detailed proxy climate record from the region is the high-resolution reconstruction of paleosalinity from Moon Lake in southeastern North Dakota, ~430 km northwest of Cambria. This record indicates that the Cambria focus, which was coeval with the Medieval Warm Period, existed during a period of extended drought. A major shift from drier to wetter climate occurred at ~ad 1200.

Gruss, Laura; see Buchanan, Briggs

Hale, John (Ball State University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Beyond the Three Rs: Public Archaeology and a Well-Rounded Education

The value of an education which includes the humanities is that it produces students with a larger perspective and a richer understanding of the world and their places within it. As public schools shift toward more technologically-oriented education, public archaeology programs have an important educational role for students who have lacked exposure to the humanities. No other discipline offers the blend of the sciences and humanities that archaeology offers, nor can they compete with the relevance of archaeology in communicating the wondrous diversity of human existence.

Hale, John; see Duke, Christopher

Halloran, Teresa; see Mather, David

Halverson, Holly (University of Minnesota/BRW, Inc.) - COLLECTIONS CURATION (6)

If you collect them, where will they go?

Currently, there are no standard artifact collection or sampling guidelines for historic farmstead sites in Minnesota. Farmsteads dating to the late 19th and early 20th Centuries, in particular, can pose problems for archaeologists and curators alike, due to the quantity and bulk of archaeological deposits. At odds are archaeologist's data needs and available storage space at a curation facility. This paper will address the need for both data from and adequate storage space for recovered artifacts.

Hajic, Edwin R. (Foth & Van Dyke, Inc.) and Patricia Trocki, (Foth & Van Dyke, Inc.) - MILLE LACS (11)

Geomorphic Contexts of Archaeology Along the Western Shore of Mille Lacs Lake, Minnesota

A Phase I archaeological survey was conducted for MnDOT on beach ridges and morainal remnants along bays and headlands of the western shore of Mille Lacs Lake. Fourteen of 21 newly discovered cultural deposits lie on relic beach ridge complexes, with the balance of sites situated on higher morainal remnants. Initial radiocarbon ages from peats overlying and underlying beach ridge sand, coupled with Middle Woodland and younger ages

of beach ridge scatters, indicate at least some of the earlier beach ridges formed during or prior to the middle Holocene. Substantial beach ridge formation ceased by about 2,300 B.P. All but the latest of Archaic-age deposits in low-lying landscape positions would have been buried by beach ridge migration or destroyed by lake transgression coupled with seasonal grounded ice. Woodland and younger cultural deposits could have been buried where late Holocene peat laps onto distal beach ridge flanks and lagoonal margins.

Hambacher, Michael J. (Commonwealth Cultural Resources Group, Inc.) and James A. Robertson (Commonwealth Cultural Resources Group, Inc.) - GENERAL - MIDDLE WOODLAND (25)

Recent Investigations at the Converse Site (20KT2): A Late Middle Woodland/Early Late Woodland Occupation Area in Grand Rapids, Michigan

The Converse Mound Group (20KT2) represents the largest concentration of Hopewellian Mounds in Michigan and one of its most poorly understood sites. Although the mounds had been destroyed by the mid-nineteenth century, archival research and limited testing prior to the reconstruction of the US-131 S-Curve Bridge indicated that significant Middle Woodland habitation deposits were preserved within the limits of the project area. As a result, CCRG was contracted by the Michigan Department of Transportation to conduct data recovery excavations in the area of two of the proposed bridge piers. These excavations provided a unique opportunity to gather the first systematically collected data from the type site for the late Middle Woodland Converse Phase (ca. AD 200-400) in western Michigan. Excavation of approximately 425 m² of area recovered a large number of artifacts, features, and post molds associated with Early Woodland, Middle Woodland, early Late Woodland, and Contact era occupations. These excavations provide a rare opportunity to retrieve data from a habitation area associated with a large Hopewellian mound group in Michigan. This paper will present a preliminary report on the excavations, the types of materials recovered, and some preliminary thoughts on its contribution to our understanding of Middle Woodland lifeways of the Converse Phase.

Hamilton, Scott (Lakehead University) and B. A. Nicholson (Brandon University) - SCAPE (21)

Ethnohistoric Research as part of the SCAPE project

Archival records play an important role in reconstructing past physical environments and human adaptations. For example, modeling of the biological and hydrological capacities prior to homestead settlement relies heavily upon the 19th Century records of the Dominion Land Survey branch. Manuscript maps, dating to the 18th and 19th Centuries, document important landscape features, and reveal information about travel routes, important landmarks, and place names. These data contribute to our understanding of the cultural landscape as it was perceived by Aboriginal and European people. These data will be expanded using land use information from surviving oral traditions collected from Elders. This information syntheses will be used to document the 18th Century physical environment, and the general patterns of Aboriginal land use. In turn, it will contribute to models of northern Plains land use in the recent past that will be assessed archaeologically when our research efforts shift to middle and early Holocene northern Plains occupation.

Hamilton, Scott (Lakehead University) and B.A. Nicholson (Brandon University) - SCAPE (21)

The Twin Fawns Site (DiMe-23): A Protohistoric Mortlach Occupation within the Lauder Sandhills of Southern Manitoba

The Twin Fawns Site is found in a small meadow protected by stabilized sand dunes within the Lauder Sandhills of southwestern Manitoba. This Mortlach affiliated site is on the eastern limits of this northern Plains culture. Faunal recoveries indicate a heavy reliance upon bison, but the site placement does not conform with conventional site selection by Mortlach people. While a calibrated AMS radiocarbon date is compromised by multiple intercepts, the site appears to date to the comparatively recent past. Estimates suggest an occupation at some time between the late 1600s and the early 1700s, based upon the recovery of a bison rib handle inset with a brass sheet metal fragment. No conventional 18th or 19th century fur trade goods have been recovered to date, and the artifact inventory includes a wide range of traditional stone, ceramic and bone artifacts. This suggests a time when European technology was only marginally available, and that the site occupants may have been the "end users" of European technology deriving from the early Aboriginal Middleman fur trade.

Hamilton, Scott; see Nicholson, Bev

Hanson, Barry (Lakota Scientific, Inc.) - KENSINGTON RUNESTONE (12)

Some Physical Features of the Kensington Runestone

Eleven specific recommendations are made for study of the physical features of the Kensington Runestone. Weathering of the greywacke within and on the edges of the runes will be particularly observed. The author examined the Runestone under 126x zoom magnification to develop testing protocols, and has arranged for geologists, a geochemist, and a laboratory for the tests, scheduled for November.

Hanson, Barry; see Kehoe, Alice B.

Hanson, Jeffery (University of Texas-Arlington) - LANDSCAPE (22)

Native American Perspectives and the Archaeological Record: An Example from Utah's Dry Fork Canyon

Studies in rock art have received significant attention from archaeologists in recent years. Most, if not all, interpretations have been based upon assumptions derived from natural laws and archaeological theory. Much less attention has been paid to Native American interpretations of these images on stone, which rely less on science and more on spirituality. In this paper I contrast archaeological and Native perspectives of petroglyphs from Dry Fork Canyon, Utah. In marking these contrasts, I also discuss how the two differing paradigms dovetail into a common call for site preservation and protection.

Hanson, Mark D. (Office of the Wyoming State Archaeologist, University of Wyoming) - POSTER (32)

The University of Wyoming Archaeological Repository: Conservation and Collections

The University of Wyoming Archaeological Repository (UWAR), located in Laramie, Wyoming, is the largest repository in the state. A component of the Office of the Wyoming State Archaeologist, UWAR is federally designated. UWAR conserves 1.5 million artifacts from 30,000 Wyoming sites. Originating from federal, state, and private lands, UWAR's collections span Paleoindian to historic times. Most importantly, UWAR is dedicated to

actively conserving archaeological material. Climate and pest monitoring, museologically appropriate storage, artifact tracking software, and meticulous attention to detail, preserve not only artifacts, but the associated data. The result is a complete and accurate collection of archaeological material, significant and viable for research and education.

Hart, John P. (New York State Museum), David L. Asch (Illinois State Museum), and C. Margaret Scarry (University of North Carolina at Chapel Hill) - GENERAL - FAUNAL AND FLORAL (29)

The Age of Common Beans (Phaseolus vulgaris) in the Northern Eastern Woodlands of North America

Recent AMS dating of common beans (*Phaseolus vulgaris*) from purportedly early contexts in the Northeast indicates that they do not become archaeologically visible there until c. A.D. 1300. To place those dates in a broader context, early beans and associated maize samples from over 20 sites in the Ohio and Illinois river basins were submitted for AMS dating. The results of this dating program provide a better understanding of the history of this crop in the northern portion of the Eastern Woodlands of North America.

Haury, Cherie E.; see Artz, Joe Alan

Hawkinson, Jennifer L. (Minnesota State University Moorhead) - STUDENT (9)

Use of a Magnetic Susceptibility Logger at a Historic Site

A magnetic susceptibility logger designed for archaeological application provides a relatively non-invasive means for identifying and exploring buried sites and cultural deposits. The instrument was field tested at an Early Plains Archaic site with an intact living floor. It was then used at a historic site in northwestern Minnesota where it successfully identified areas of artifact concentration and soil transition. Advantages of this device are ease of application, simplicity of interpretation, rapidity of measurement, and the ability to measure very detailed changes in site layering (2 cm increments).

Hedden, John G.; see Artz, Joe Alan

Hedman, Kristin; see Emerson, Thomas E.

Henderson, Kyle (Lawrence Central High School/Martin University) and Luel Hill (Martin University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Site 12Ma648 Geology and Soils

The geologic soil profile of an archaeological site provides information on the evolution and utilization of the site. It is hypothesized that the soil disturbances found through controlled soil probing of site 12Ma648 will be correlated with the distribution of other historic debris recovered from the site. This information may allow a more detailed analysis of the function of the site.

Henning, Dale R. (Illinois State Museum) - PORTABLE ART (8)

Chasing Portable Art: Evidence for Intensified Interactions in the Late Prehistoric

Study of Oneota tablets and the distribution of the tablets and other objects across the northern Plains and Prairie Peninsula tends to reaffirm the possibilities that a resurgence of cross-cultural interaction may characterize the Late Prehistoric period in these areas and beyond.

Henning, Dale R. (Illinois State Museum) and Dennis Toom (University of North Dakota) - CAMBRIA (19)

Cambria and the Initial Middle Missouri Tradition: An Evaluation

The Initial Middle Missouri Tradition (IMMT) has been subject to evaluation and re-evaluation over the past decade with only passing consideration of known Cambria sites. This authors offer a review of current thinking about the IMMT and an evaluation of Cambria assignment to that Tradition.

Hensel, Kenneth C.; see Amick, Daniel S.

Hicks, Keri; see Overturf, Jeff

Hill, Erica; see Green, William

Hill, Luel (Martin University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

The Interpretation of Soil Profiles and Site Function

The analysis of the information collected through the systematic gathering of data about the soil stratigraphy of site 12Ma648 may provide information about the depositional history of the site and the possible function of the site. These interpretations are however, often complicated by numerous activities that resulted in a variety of soil disturbances. Site 12Ma648 stratigraphic profiles suggest that the whole of the site is disturbed and that the original correlation between soil disturbance and the concentration of brick and other historic artifacts is coincidental.

Hill, Luel; see Henderson, Kyle

Hill, Matthew G.; see Amick, Daniel S.

Hill, Matthew Glenn (University of Wisconsin) and Frédéric Sellet (The Journey Museum) - POSTER (32)

Refinements of Folsom Subsistence and Technological Organization at Agate Basin, Wyoming

The Agate Basin site (Frison and Stanford 1982) is a cornerstone around which broad interpretations of Paleoindian adaptations on the Great Plains of North America have been built. Reanalyses of the Main Folsom component (10,690 \pm 70 BP) archaeofauna and lithic assemblage refines extant interpretations of Folsom subsistence and technological organization at a late winter-early spring camp site. Of particular interest are: 1) the conditions affecting changes in prey choice and inclusion of lower ranked resources in the diet; and 2) tool-kit production, maintenance, and discard strategies. Analytical interplay of these data sets enhance our knowledge of regional Folsom settlement-subsistence dynamics.

Hoard, Robert J. (Kansas State Historical Society) - GENERAL - MATERIAL CULTURE (7)

Limestone Tempered Pottery from the Stauffer Site, Central Missouri

Pottery containing limestone fragments, known by the names Boone, Moreau, and Maramec, dominates Late Woodland sites in central Missouri. Pottery from the Stauffer site, 23CO499, is remarkably homogeneous and reaffirms a trend toward thinner pottery

through time. But Stauffer pottery also raises issues about limestone-tempered ware in Missouri: Is limestone being crushed and added to the clay or is limey clay being used? Thin section analysis suggests the latter. If this is true, are the differences between the widely recognized types significant?

Hofman, Jack; see Widga, Chris

Hofman, Jack L. (University of Kansas) and Jeannette M. Blackmar (Nebraska State Historical Society) - POSTER (32)

Cody in Western Oklahoma: The Flaming Site

In 1972, Steve Flaming found two Cody projectile points in the upper reaches of a tributary of the Washita River in western Oklahoma. The site is interpreted as a probable kill and holds implications for land use during Cody time. Long distance movement of lithics is indicated by the presence of obsidian and Edwards chert. Paleoindian use of obsidian in the region and Cody evidence from the Southern Plains is summarized. We suggest the site may provide evidence of a link between Great Basin and Southern Plains Cody people.

Holdaway, Simon J.; see Wandsnider, LuAnn

Holliday, Vance T.; see LaBelle, Jason M.

Hollinger, R. Eric (Peabody Museum of Archaeology and Ethnology, Harvard University) - PORTABLE ART (8)

Images of Power: Meaning and Social Function of Portable Art

The role of late prehistoric engraved objects, such as engraved pipestone tablets, and the symbolic meaning of the iconography they possess have long been mysteries. A range of interpretation has been offered, including their use as decorated tobacco cutting boards, objects of art for art's sake, and representations of visions. A review of possible explanations suggests magico-religious functions for many of these objects with emphasis on sympathetic magic, including hunting and war magic. Some images may be representations of mythical beings and surrogates of real beings.

Hollinger, R. Eric (Peabody Museum of Archaeology and Ethnology, Harvard University) - FOODWAYS (13)

Terminal Prehistoric and Initial Historic Plant Utilization Along the Central Mississippi River

Analyses of paleoethnobotanical assemblages from terminal prehistoric (A.D. 1580-1640) Oneota contexts in southeastern Iowa and initial historic (A.D. 1640-1683) Iliniwek contexts in northeastern Missouri illustrate the dynamic character of Native American plant use before and after European contact. Whereas Iliniwek plant use is comparable to French ethnohistoric accounts, pre-contact Oneota plant use differs significantly from the post-contact ethnohistoric and archaeological data. Both groups emphasized corn, beans, and cucurbits. However, Oneota farmers relied extensively on North American domesticates, whereas Iliniwek farmers rapidly embraced Old World crops.

Hollinger, R. Eric (Peabody Museum of Archaeology and Ethnology, Harvard University) and Terrance J. Martin (Illinois State Museum) - FOODWAYS (13)

Terminal Prehistoric and Initial Historic Animal Utilization Along the Central Mississippi River

Analyses of faunal assemblages from terminal prehistoric (A.D. 1580-1640) Oneota contexts in southeastern Iowa and initial historic (ca. A.D. 1640-1683) Iliniwek contexts in northeastern Missouri provide foundations for evaluating interpretations of aboriginal animal exploitation before and after French contact. While some hunting practices revealed in the archaeological samples are consistent with those described in ethnohistoric accounts, differences, such as an increasing emphasis on bison over time, are suggested. Consideration of both sources of information demonstrate the importance of identifying possible regional, temporal, and/or cultural variations in animal exploitation practices that may not be revealed in historic accounts.

Hopkins, Aleta (Broad Ripple High School/Martin University) and Harry Murphy (Martin University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Prehistoric Cultural Comparison

The objective of this research is to make a comparison of prehistoric sites in a defined research area to other prehistoric sites within Fort Harrison State Park. The hypothesis is that organizing the prehistoric sites chronologically and by geographic location will provide the information needed to understand the cultural change that occurred within the research area.

Howell, Ryan (Fort McCoy Archaeology Laboratory) - GENERAL - REGIONAL STUDIES (31)

Silver Creek Revisited: Archaic and Woodland Sites from Fort McCoy, Wisconsin

William M. Hurley's (1974) description of the Silver Creek sites located in Monroe County, Wisconsin remains a primary source for understanding the prehistoric occupations of Western Wisconsin's "Driftless Area". Since Hurley's initial work most archaeological investigations in the surrounding area have been the result of CRM-based surveys and testing carried out for Fort McCoy, a United States Army installation. Archaeological investigations have been carried at Fort McCoy since the mid-1980's and have recently culminated in Phase II evaluations of nearly 40 prehistoric sites. This paper summarizes the data gained from these excavations and, using Hurley's initial work as a foundation, constructs a more detail cultural history of the Silver Creek area and the greater Upper LaCrosse River Valley region.

Huggins, Edwin (Northview High School/Martin University) and James M. VanderVeen (Indiana University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

An Analysis of the Historic Ceramic Assemblage from Site 12Ma648

Site 12Ma648, in Fort Harrison State Park, Marion County, Indiana, contains a wealth of historic household artifacts dating prior to the founding of the township. Recovered ceramics were classified by decoration styles and body type. Analysis of designs provided clues to manufacture dates and the function of the vessel in the household. The majority of the sherds were found to be concentrated near the probable area of the house foundation, in conjunction with higher concentrations of glass and brick material. It was determined that the site encompasses a residential homestead occupied primarily during the middle to late 19th century.

Ingalls, Marlin; see Green, William

Jackson, Elizabeth (Butler University) - NEXT STEP ARCHAEOLOGY PROJECT (18)
Examining Cultural Perspectives in the Next Step Archaeology Project

The Next Step Archaeology Project is set up to target urban high school students from low-income and predominately minority families. The goal of this project is to make science accessible to these students and stimulate their interest in further education. In this project, differing cultural perspectives have become an important issue. Two project assessments of the 1999 field season have been compared to the 2000 field season assessment in order to identify common culturally based perceptions among both groups. The effect of these common perceptions on the overall project success was then examined.

Jackson, Elizabeth; see Cole, Edward

Jackson, Elizabeth; see Jones, Candice

Jackson, Michael A.; see Toom, Dennis L.

Jackson, Misty (Michigan State University) - GENERAL - HISTORIC ARCHAEOLOGY (15)

The Late Seventeenth Century Lasanen Site and Trade Silver in the Upper Great Lakes

It is generally accepted that trade silver is indicative of what has been referred to as the Late Historic period, 1760 to 1820, in the Upper Great Lakes region. This artifact group has even been referred to as an "ideal chronological indicator". However, evidence from the Lasanen site, as well as silversmith lists, suggest otherwise. One question this raises concerns why trade silver became so popular after the mid-eighteenth century. In addition, while dating of sites is best conducted by considering the artifacts as an aggregate, this can obscure the date ranges of individual artifact groups.

Jahnke, Lori M. (Tulane University) - 10,000 YEARS (3)

Paleodietary Reconstruction at the Lindholm Site (21BS3): Evidence from the Paleopathology and the Phytolith Assemblage

The nature and definition of the Cambria Phase in southwestern Minnesota is fraught with ambiguity. Sites such as the Lindholm Site (21BS3) create cultural and material discontinuity within the phase prompting some archaeologists to suggest their segregation into the Big Stone Phase. This study combines the paleopathology data with phytolith analysis to help reconstruct paleodietary patterns of the individuals interred at the Lindholm Site (21BS3). Patterns of skeletal and dental pathologies suggest a mixed economy primarily focused on hunting and gathering and possibly contacting larger population centers through trade.

Jahnke, Lori M.; see O'Connell, Barbara H.

Johnson, Amy L. (Indiana Department of Natural Resources) - PUBLIC EDUCATION (5)

Indiana's Archaeological Public Outreach and Education

Archaeological public education initiatives in Indiana take a variety of forms and are

actively being conducted by the Division of Historic Preservation and Archaeology (Indiana's state archaeology office), universities, museums, and many other groups and individuals. This paper will address the most far reaching statewide program, Indiana Archaeology Week, as well as numerous other educational activities, products, and publications. The goals and strengths of these types of programs and materials will be presented, and trends for education and archaeology outreach in Indiana's future will be discussed. Examples of successes in archaeological education and outreach, and their impacts, will be highlighted.

Johnson, Don (Hemisphere Field Services) - POSTER (32)

Geophysical Investigations at Widely Varying Archaeological Sites

Each archaeological site has a unique combination of surface, subsurface, and targeted features. Geophysical survey methods are sufficiently versatile to meet project objectives at most sites. Results at three different sites are shown here. A resistivity survey at Fort Buford State Historic Site in North Dakota was conducted to map foundations of a barracks constructed in the 1860's. Multiple geophysical methods were used to map graves at a 19th century family cemetery in Barboursville, W. Virginia. Features at Fort Ancient village in Dayton, Ohio were mapped by magnetometer survey.

Johnson, Eileen; see Buchanan, Briggs

Jol, Harry M.; see Nicholson, Bev

Jones, Candice (Manual High School/Martin University) and Elizabeth Jackson (Butler University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Analysis of Glass Function at Site 12Ma648

Site 12Ma648, located at Fort Harrison State Park, contains a variety of historic glass. Based on the data from the 1999 field season the glass recovered was expected to consist mainly of window glass, which could indicate that a structure was present. The glass collected was analyzed to determine a date range. These dates were expected to span 1840-1870, proving that the site was inhabited at that time. The function of the glass also provides clues as to the nature of the structure at site 12Ma648.

Jones, Geoffrey (Archaeo-Physics, LLC) - POSTER (32)

A Geophysical Investigation at Duskwalker's Butte

A geophysical investigation was conducted at Duskwalker's Butte in the Badlands, an Early Historic Hidatsa Village in western North Dakota. The investigation consisted of electrical resistance and magnetic field gradient surveys of the site of the historic village. The resistance survey was successful in identifying numerous anomalies caused by the subsurface remains of earth lodges. These features show that the top of the butte was very densely settled. Several resistance anomalies appear to be associated anomalies in the magnetic data, but any cultural features (which are generally subtle) were obscured by the highly magnetic lava flow which caps the butte.

Jones, Tim E. H. (Saskatchewan Archaeological Society) - PORTABLE ART (8)

Objects of Late Prehistoric Portable Art Found in the Northern Plains

A number of objects of portable art, often made of pipestone probably derived from the

quarries in southwestern Minnesota, have been recorded in the northern Plains. These objects are discussed along with contextual data and comparable objects found in the northwestern Prairie periphery.

Joss, Brent N.; see Wiseman, Dion

Kaldahl, Eric J. (Old Pueblo Archaeology Center) - PUBLIC EDUCATION (5)

Introduction: The Goals and Components of Educational Programming

This introductory paper discusses some of the most cited goals in the public education and outreach initiatives of archaeologists. It considers the essential elements of educational programming to provide a framework for the discussion and evaluation of the archaeological community's programming efforts. The paper also introduces the work of the symposium's participants.

Kapler, Todd (Cultural Heritage Consultants) - MILITARY (2)

High Status and Lower Status Women at Fort Sisseton as Seen in the Archaeological Record

In most complex societies, material culture represents a visual indicator of one's place in that society. Groups displaced over time and space from their parent society often use material goods as status indicators to mimic the social indices of the dominant mainstream culture. This paper will examine women associated with the frontier army during the Indian Wars period (1866-1891). Specifically, how, and to what extent, did female groups use material goods to replicate Victorian values, behaviors, and social stratification in a vastly different physical landscape? Although hundreds of scholarly publications have addressed male personnel and strategic planning during the Indian wars period, comparatively little research focuses on the women who accompanied soldiers westward. As such, it is unclear if limited social mobility and restricted access to the mainstream society's symbols of status created an alternative class structure or if these women used artifacts as a link, a material reminder that they were only physically, not culturally separated from their parent society. Using recovered material culture known high status groups (officers' wives) and known low status groups (laundresses) from army forts, this study will examine the extent to which artifacts were used to reinforce societal association and maintain social stratification.

Karsmizki, Ken (Museum of the Rockies/Montana State University) and John Weymouth (University of Nebraska) - MILITARY (2)

Magnetic Search for Laundresses' Privies: Evidence of the Good Life

Fort Ellis, Montana was the typical frontier military post of the Plains Indian Wars. It had the usual complement of soldiers and the usual compliment of laundresses. Military records provide a surprising comparison of the income of the soldiers and washer women, \$13 and \$21 per month respectively. This disparity in income should provide the women with a considerably higher standard of living. Does the archaeological evidence support this hypothesis? A typical archaeological strategy would be to inventory the contents of the privies and see if there is a substantial difference in variety and quality of refuse. But first, the laundress privies must be found. Geophysical survey, a search with proton magnetometers in particular, was the strategy used at Fort Ellis to locate the privies. Finding privies enabled excavation and data collection which assess evidence that the laundresses lived "the good life."

Karsmizki, Ken; see Weymouth, John

Kay, Marvin (University of Arkansas) - LOWER MISSOURI (17)

Early Corn and Shell Tempered Pots in the Ozark Highland

A case now can be made for the related development of corn agriculture and shell-tempered ceramic cooking technology of ca. 1600 B.P.

Kehoe, Alice B. (University of Wisconsin-Milwaukee) and Barry Hanson (Lakota Scientific, Inc.) - KENSINGTON RUNESTONE (12)

History of the Kensington Runestone: Hoaxers and Pedants

Published literature on the Kensington Runestone reveals a lineage of citations to selected "authorities" pronouncing the Runestone a hoax, with surprising little reference to direct examination of the Runestone or to scholars who considered the possibility the Runestone is genuine. Archival material from geologists examining the Runestone and from local residents, and older and contemporary arguments on the authenticity of rune variations, dispute the facile claim of hoax. This paper lists irrelevant issues as well as substantive material pertinent to the question of inscription's age, context, and Norse entradas into continental America.

Kelley, Robert; see Reher, Charles

Kennedy, Chris (Broad Ripple High School/Martin University) and David Stinson (Martin University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Investigation of a Possible Privy at 12Ma648

The objective of this research project is to investigate a possible privy located on site 12Ma648. In addition to proving or disproving the existence of a privy on the site, the boundaries of the suspected privy will be located. Soil stratigraphy and any artifact distribution will also be recorded.

Kern, Ann (Midwest Archeological Center/National Park Service) - MILITARY (2)

Search for the Stable: A Multidisciplinary Investigation of the Cavalry Stable, Fort Larned National Historic Site, Kansas

Fort Larned (1859-1878) was a Plains post established to guard the Santa Fe Trail. To aid in protection of the trail, Company A of the newly formed Tenth Cavalry, an African-American regiment, was detailed to the fort in 1869. The mysterious burning of the cavalry stable in 1869 may have been the function of a racial incident. The stable and its association with the Black cavalry has long fascinated Fort Larned staff and researchers. A review of the previous archeological work at the site, a detailed analysis of the historical literature, and two geophysical surveys were recently conducted in an attempt to locate the stable for potential interpretation. The historical evidence supports the suggestion that the burning was associated with a racial incident. Documentary research uncovered new details regarding the building and its construction. The review of previous archeological research and the geophysical surveys did not definitively locate the site, but the data provide new directions for future research.

Keyser, James D. (USDA Forest Service) and Mark Mitchell (USDA Forest Service) - ROCK ART (16)

Red Rock Ledge: Biographic Rock Art on the Southern Plains

During the summers of 1998 and 1999 the Red Rock Ledge petroglyph, on the Purgatoire River in southeastern Colorado, was discovered and recorded. The site is a small, lightly scratched narrative petroglyph of the Biographic art tradition. Showing a warrior advancing from a tipi village and taking an enemy's coup stick, the scene is like many others in Biographic art media from the northern and central Plains. Stylistic clues and the superimposition by a date of 1878 indicate that the scene was drawn in the first half of the 19th century by a warrior from the Cheyenne or Comanche tribes.

King, Marsha (Kansas State Historical Society) - MILITARY (2)

Archeological Search for the Original Flagpole, Fort Hays State Historic Site (14EL301), Hays, Kansas

Between 1996 and 1998 archeologists with the Kansas State Historical Society conducted investigations on the parade ground at Fort Hays State Historic Site (13EL301) in Hays, Kansas, in an effort to identify the location and remains of the post's original flagpole. The base of the fort's original 1867 flagpole was located and partially excavated. While no intact vertical section of the flagpole was found, significant buried structural remains were encountered. The flagstaff's subterranean support system included intact heavy planking, a badly deteriorated splintered section of the flagpole, and other wood elements probably used as bracing in the construction. Evidence of original construction methods and later removal of this flagpole were also documented. This paper describes the methods, progress, and results of this fieldwork.

Kluth, David (Leech Lake Heritage Sites Program) - NORTHERN MINNESOTA (23)

Phase II Excavations at the Donarski Site (21MA33), Marshall County, Minnesota

Excavations at the Donarski site (21MA33), a multi-component Paleoindian and Archaic site, identified intact cultural deposits below the plowzone. This site is located on the Campbell beachridge in the prairie region of northwestern Minnesota. Excavations identified horizontally separate Archaic and possible Paleoindian occupation areas, as well as thousands of lithic artifacts. A bison tooth, located in the Archaic deposits, was radiocarbon dated to 1410-1263 B.C. This paper presents the results of the Phase II fieldwork at this site.

Kluth, Dave (Leech Lake Heritage Sites Program) - EARLY WOODLAND IN MINNESOTA (4)

Re-evaluating the Early Woodland in Northern Minnesota

Excavations at Early Woodland sites in Northern Minnesota over the last seven years have produced a body of data from which archaeologists have begun to define the culture history of this period. This paper examines the evidence to date and tries to clarify certain inconsistencies within the written record. The goal is to redefine the Early Woodland period in Northern Minnesota by incorporating and discussing this most recent archaeological data.

Knudson, Ruthann (California Academy of Sciences/National Park Service) - CAMBRIA (19)

The Cambria Site: Year 2000

The Cambria or Jones Village site (21BE2) in southern Minnesota along the Minnesota River was excavated in 1913 and 1916 by Nickerson and then in 1938 and 1941 by Wilford who subsequently used it to characterize the Cambria Focus. The collections

were analyzed by Knudson and Watrall in the 1960s. The site has been related to both the Mississippian and Initial Middle Missouri, but probably merits more attention as an indigenous development at around AD 1200 (proto Oneota?) that may have been a key element in a trade network between the major riverine valleys to the east and west.

Koch, Amy; see Bozell, Rob

Kornfeld, Marcel (University of Wyoming), **Nicole Waguespack** (University of Arizona), **Todd Surovell** (University of Arizona), **James Mayer** (University of Wisconsin-Madison), **George C. Frison** (University of Wyoming), and **Adam C. Graves** (University of Wyoming) - POSTER (32)

Krmpotich Site: Folsom Investigations in Southwest Wyoming

The Krmpotich Site in southwest Wyoming represents one of a few known buried Folsom components in the Middle Rocky Mountains. Several seasons of investigation are beginning to define the horizontal and vertical distribution of the buried deposit. The 2000 field season exposed a small contiguous block area showing spatial artifact variation suggesting the location of different activity areas. In this presentation we discuss the current state of investigation of the Krmpotich site, artifact distribution at several spatial scales, as well as Folsom raw material procurement strategies in southwest Wyoming.

Kornfeld, Marcel; see Finley, Judson

Kornfeld, Marcel; see Waguespack, Nicole M

Kraker, James; see Burgess, Laurie

Krause, Richard A. (The University of Alabama) - GENERAL - LATE PREHISTORIC (28)
Ceramics From Sites on the Fort Carson Military Base

An analysis of 1,052 specimens representing 56 archaeological sites on the Fort Carson Military base indicates that a single base forming technique (i.e., excavated and mass modeled), and two separate body forming techniques (i.e., coiled and mass modeled) are present. Since rim and lip forming techniques on mass modeled specimens are virtually identical to those from late Woodland and early Upper Republican ceramics in western Kansas and Nebraska it is suggested that mass modeling, the earliest body forming technique in the Fort Carson area, was introduced from the northeast. Coiling seems to be a later development introduced from the southwest.

Kuehn, Jolene J. (Aldo Leopold Nature Center) and **Steven R. Kuehn** (State Historical Society of Wisconsin) - GENERAL - TOPICAL STUDIES (30)

Archaeology for Kids: Lessons Learned at the Aldo Leopold Nature Center Archaeology Camp

Public education is a significant aspect of modern archaeology. Interactive, hands-on activities are a valuable means of introducing children to archaeological methods, techniques, and theory. In 1998, Aldo Leopold Nature Center held its first Archaeology Camp for Kids. Since then, this popular program has expanded to include full and half-day camps, school programs, and related presentations. This paper will discuss the program's on-going development, activities and approaches used, what we hoped to accomplish, and our actual results. The pros and cons of specific activities are discussed, as well as theoretical issues currently being debated among educational archaeologists.

Kuehn, Steven R. (State Historical Society of Wisconsin) - GENERAL - ARCHAIC (27)
The Granite Falls Site (21YM47), A Prairie Archaic Bison Kill in Southwestern Minnesota
Discovered in 1988, the Granite Falls Bison Kill site is one of only a small number of excavated bison kill sites in Minnesota. Test excavations between 1988 and 1990 recovered several side-notched points, a series of ca. 7000 B.P. radiocarbon dates, and a large number of bison remains. Despite its significance, to date only preliminary, incomplete reports have been available. The goal of this paper is to provide an overview of the renewed research currently in progress. The artifactual and faunal data are discussed in detail, and comparisons made with the Cherokee Sewer and Itasca sites.

Kuehn, Steven R.; see Kuehn, Jolene J.

Kunz, Michael (Bureau of Land Management-Alaska) - GENERAL - PALEOINDIAN (1)
Clovis Antecedents and Beringia: What Happened When The Water Rose?
Outside of Beringia, few sites in the Western Hemisphere are demonstrably older than Clovis. Those that are appear to be cultural isolates in that they don't represent a suite of technologically similar sites. The geographic extent of Clovis suggests that its parent culture ought to be visible in the archaeological record. To date such evidence has not appeared and the question of a Clovis progenitor has been addressed primarily through speculation. The Beringian pre-Clovis and Clovis age sites appear to be an exception to this circumstance and may present a case for Clovis antecedents that is more substantive than speculative.

Kurtz, William (Standing Rock Tribal Archaeologist) - LANDSCAPES (22)
Red, White, and the Blues: A View from the Rez
Archaeology was founded in the United States on Indian sites by non-Indian scholars, often with racist ideas. Archaeologists usually excluded Indians from involvement in their history, which led to a contentious relationship. Recently, due to the passage of the Native American Graves Protection and Repatriation Act (NAGPRA), and Amendments to the National Historic Preservation Act, Indian Tribes are now much more involved in Archaeology. This has opened up an opportunity for a more enriching relationship between Archaeologists and Indians. This paper gives the views of a Tribal Archaeologist and describes how Archaeology on the Reservation often differs from off the Reservation.

Kvamme, Jo Ann; see Kvamme, Kenneth L.

Kvamme Kenneth L. (University of Arkansas) and Jo Ann Kvamme (University of Arkansas) - GENERAL - TOPICAL STUDIES (30)
Resistance Is Not Futile: Geophysical Survey Results at Fort Clark, North Dakota
Magnetic, electrical resistance, ground penetrating radar, and conductivity surveys were carried out at Fort Clark State Park, North Dakota, in four distinct study areas. At the Fort Clark Trading Post and at Primeau's Trading Post walls and rooms were precisely located. In the Euro-American cemetery a number of graves were revealed. At the Mandan village of *Mit-tutta-hang-kush* (later occupied by the Arikara) known houses indicated by surface depressions exhibited geophysical contrasts, and a number of previously undiscovered houses are suggested. The data also reveal hearths, storage pits, possible post holes, the presence of iron artifacts, and instances of overlapping houses.

LaBelle, Jason M. (Southern Methodist University), Vance T. Holliday (University of Wisconsin-Madison), and Meltzer, David J. (Southern Methodist University) - GENERAL - PALEOINDIAN (1)

Geoarchaeological Investigation of Late Pleistocene and Early Holocene Paleoindian Deposits at Nall Playa, Oklahoma Panhandle

Geoarchaeological investigations conducted over the last three years at the Nall site (34CI134) have revealed a series of buried paleosols spanning the late Pleistocene through early Holocene, mantling the adjacent playa lake. Fieldwork has included test and block excavations, backhoe trenches, and Giddings sediment cores. Buried soils and associated radiocarbon dates aid correlation of sedimentological units across the site and with the playa and adjacent uplands. Paleoindian cultural materials, recovered from both surface collection and excavation, are situated on the margins of the playa lake, with middle to late Holocene sands mantling the cultural materials and buried paleosols.

Lammers, Martin; see Gardner, A. Dudley

Latham, Mark A. (Burns & McDonnell, Inc.) - GENERAL - REGIONAL STUDIES (31)

Archaeology of the Dakota, Minnesota & Eastern Railroad: A Preliminary Overview of the Proposed Railroad Rebuild in Minnesota and South Dakota

This paper describes the methods and preliminary findings of the archaeological investigations of the Dakota, Minnesota & Eastern Railroad (DM&E) proposed rebuild project in Minnesota and South Dakota. The discussion will be an overview of the consultation process, field methods, and preliminary findings of the areas investigated to this point. Among the items covered will be the complex consultation with concerned Native American tribes, including the monitoring program involving all archaeological fieldwork. A discussion of the fieldwork requirements and phases of investigation resulting from these consultations will outline the complexity of the project and the requirements or concerns of the tribes and Federal and State agencies. Finally, a brief overview of the sites investigated and the integrity of the cultural deposits will be presented. The goal of this paper is to present an update on the project and inform those interested in the prehistoric village sites along the Missouri River and the numerous historic railroad whistle stops along this old Chicago & Northwestern line that stretches from the Mississippi River to the Black Hills.

Lenhart, Anna (Wichita State University) - STUDENT (9)

An Analysis of 14BU387: A Great Bend Site in South Central Kansas

14BU387 is a Great Bend Aspect site first discovered in 1998. This site was discovered at a waste treatment facility in Augusta, Kansas. It is located near the convergence of the Walnut and Whitewater rivers in the Flint Hills of the Great Plains. Lithics and ceramics from the surface collection indicate a Great Bend Aspect site more closely associated with the Little River Focus. Artifacts include historic debris, lithic debitage, lithic artifacts, ceramics, faunal material and groundstone artifacts.

Lensink, Stephen C. (University of Iowa) - POSTER (32)

Estimating Duration of Occupation for Initial Variant Sites in Iowa: A Case Study

Recent investigations by the author and Lynn M. Alex at the Double Ditch site (13OB8), an Initial variant site in Northwest Iowa, indicate that the site was occupied for a only a short time. This poster paper examines two absolute methods of measuring site occupa-

tional duration (soil from lodge demise and ceramic vessel breakage) and one relative method (ceramic density per unit area). Five Initial sites are compared with occupations varying from nearly 100 years to only a few months. In the case of the Double Ditch site, data from all three methods are needed to estimate site longevity.

Lewis, Patrick; see Buchanan, Briggs

Liberty, Margot (Sheridan, WY) - LANDSCAPES (22)

Petroglyphs, Sitting Bull's Sun Dance, and the Tongue River Railroad

An outcropping of yellow stone on the Rosebud Creek near Lame Deer—known as the Deer Medicine Rocks—has been known for two centuries as a place sacred to equestrian Plains tribes. Its petroglyphs reach back to an earlier period of perhaps several hundred years. No professional archeological work at the site has ever been done. The Deer Medicine Rocks are four or five miles upstream from the place where Sitting Bull held his famous 1876 Sun Dance, predicting the defeat of Custer two to three weeks later. It was also the site of a Sitting Bull Sun Dance in 1875 which is generally little known. Through the years much folklore and many beliefs have developed concerning the sacred power of this site among those tribes which fought in the battles of 1876. Today it is figuring in archeological assessment of the area prior to the building of the Tongue River Railroad. Factors affecting this question will be updated and discussed.

Loebel, Thomas J. (University of Illinois-Chicago), Daniel S. Amick (Loyola University), and Rochelle Lurie (Midwest Archaeological Research Services, Inc.) - GENERAL - PALEOINDIAN (1)

An Update of Work at 11L344, The "Hawk's Nest" Fluted Point Site in Northeastern Illinois: Results of Continued Surface Collections and 1999 Excavations

Earlier reports of work at 11L344, "Hawk's Nest", a fluted point site northwest of Chicago are updated. 1992-1999 controlled surface collections produced 152 chipped stone tools, 6 cores, 10 channel flakes, and 604 waste flakes mainly diagnostic of the Gainey Complex, a Clovis variant found around the Great Lakes. Test excavations of 70 square meters conducted in 1999 prior to site development produced 11 chipped stone tools, 6 channel flakes, and 458 waste flakes. While most of the artifacts are contained within the plowzone, materials recovered below the plowzone suggest small pockets of Clovis artifacts may still remain in situ.

Loebel, Thomas J.; see Amick, Daniel S.

Logan, Brad (University of Kansas) - LOWER MISSOURI (17)

West Side (Prehi)Story: Archaeological Research in the Lower Missouri Valley, Northeastern Kansas

Until 1980, investigations of Middle Woodland and Late Prehistoric sites in the lower Missouri Valley (Kansas City locality) focused generally on those along its eastern side. The few known contemporary sites on the western side of the trench were seen as anomalies and interpreted accordingly. This paper reviews the findings of surveys and excavations undertaken in northeastern Kansas since that time that provide sufficient data for revision. Particular reference is made to the DB, Quarry Creek, and Zacharias sites near Leavenworth, Kansas as their Woodland-Late Prehistoric components reflect settlement pattern variability in the Kansas City locality.

Lopinot, Neal H.; see Ray, Jack H.

Lorenzini, Michele A. (Parsons Engineering Science Inc.), Jeffery A. Behm (University of Wisconsin-Oshkosh) and Richard P. Mason (Wisconsin Archeological Society) - BEADS (26)

Middle Historic Trade Bead Classification and Chronology: The Meskwaki Occupations of the Middle Fox River Passageway

The Bell site, located on the south shore of Big Lake Butte des Morts in east-central Wisconsin, was the Grand Village of the Meskwaki between ca. 1680 and 1730. This half century occupation is a critical window into the Middle Historic Period in the Western Great Lakes Region. The large variety of glass trade beads from the Bell site is an especially sensitive and important temporal tool for cross-dating other assemblages. Comparison of the Bell site assemblage with two contemporary but short-term Meskwaki occupations provide the opportunity to further refine the chronology of Middle Historic trade beads

Lovis, William A. (Michigan State University), Robert Cook (Michigan State University), and Peter Cunningham (Michigan State University) - GENERAL - ARCHAIC (27)

Recent Research on Terminal Archaic and Woodland Occupations at the Marquette Viaduct Locale of the Fletcher Site, Bay County, Michigan

Michigan State University excavated 200+ m² at two sites in Bay City, Michigan; 20BY387, on an Algoma terrace, and 20BY28, the Fletcher site. Upwards of 140 pit, hearth, and burial features were recovered. 20BY387 is a limited activity logistic site with evidence of retooling and maintenance. A pit field in aeolian context is aligned with the former lakeshore, and dates ca. 3000 B.P. on the basis of the afinis Dustin assemblage. Site 20BY28 is multicomponent, with Satchell, Meadowood, and Late Woodland occupations. The Archaic occupation occurs in partially stabilized lakeshore and riverfront contexts, suggesting fluctuation of Lake Huron levels ca. 3000 B.P.

Lurie, Rochelle; see Loebel, Thomas J.

Lynch, David (Ohio State University) and J. Richard Sisson (Ohio State University) - GENERAL - LATE PREHISTORIC (28)

Late Prehistory in Eastern and Southeastern Ohio: A Study of Settlement Models using a GIS System

An ArcView GIS Database of 133 Late Prehistoric sites (circa AD 1050-1650) was constructed for a study area encompassing 19 counties in eastern and southeastern Ohio. This database, particularly information about site occurrence on differing land forms, generalized soil type, distance to drainage, available radiocarbon data and other temporal indicators, was utilized to examine settlement patterns in the study area. Results were compared to previously proposed models of Late Prehistoric settlement patterns in the Ohio Valley.

Lynott, Mark J. (National Park Service) - GENERAL - MIDDLE WOODLAND (25)

Recent Research at the Hopeton Earthworks, Ross County, Ohio

Geophysical survey and subsequent strategic test excavations have yield new information about the nature of prehistoric activities at the Hopeton Earthworks at Hopewell Culture National Historical Park. The paper describes research conducted between 1994 and 1998

in an area called the Triangle tract. Fieldwork in this area was designed to locate evidence of the parallel walls mapped by Squier and Davis in 1846, and to determine the nature of Hopewellian occupation in this area of the National Historic Landmark.

Macy, Jennifer N. (University of Kansas) - GENERAL - MATERIAL CULTURE (7)
When a Point Isn't Just a Point: Lithic Tools from Medicine Creek Reservoir, Site 25FT39
Excavations at Medicine Creek Reservoir, in Frontier County, Nebraska, have led to a greater understanding of the Upper Republican cultural complex over the last few decades. Recent work at 25FT39 has unearthed a large amount of lithic material, comprised primarily of local jasper and flattop chalcedony from eastern Colorado. The presence of aberrant forms from the usual Upper Republican tool types make this an important site for our understanding of lithic use and re-use, as well as the movement of raw materials. An examination of tools from the site promises to reveal a greater complexity to the Upper Republican occupation at Medicine Creek.

Magner, Michael A. (Minnesota Historical Society) - NORTHERN MINNESOTA (23)
Ceramics from the Jaskari Dam Site (21CL25)
The Jaskari Dam site (21CL25), a Native American heritage site in east-central Minnesota, was identified and tested prior to proposed timber harvesting activities. Shovel testing and subsequent site testing uncovered a rich cultural deposit which yielded several distinctive ceramic wares. The varied and unique Jaskari Dam ceramic assemblage, representing cultural traditions heretofore unrecognized in the area, is the focus of this discussion. The assemblage, which includes ceramics that appear to relate to wares best known from the Mississippi Headwaters and Snake River areas, will be discussed in its local context, as well as from a regional perspective.

Maher, David Matthew (Missouri Western State College) - NEXT STEP ARCHAEOLOGY PROJECT (18)
The Interpretation of Brick Distribution Within Site 12Ma648
It is important to use caution not to jump to the conclusions that the presence of brick means that a structure was present or that the soil disturbances associated with concentrations of brick indicated the existence of a foundation. The distribution of disturbed soils and brick at site 12Ma648 originally was interpreted as evidence for an early structure. This interpretation has been called into question based upon new investigations during the 2000 field season.

Maher, Matthew; see Collins, Toniecia Lee

Maher, Matthew; see Gainer, Daniel

Maki, David L. (Archaeo-Physics, LLC) - POSTER (32)
Geophysical Investigation of the Buried City Complex
The Buried City is a complex of Plains Village sites located on the Southern Plains in the Texas Panhandle. Despite nearly 100 years of archaeological investigations at the site, very little is known about the settlement pattern or intra-site patterning. Large area geophysical investigation using magnetic field gradient, electrical resistance, and ground penetrating radar survey techniques have begun to shed light on these questions, often with rather star-

ling results. This poster is an attempt to present our results for detailed study, in the hope of facilitating discussion concerning the internal patterning of these sites.

Maki, David L.; see Bement, Leland C.

Maki, David L.; see Brosowske, Scott D.

Malalney, Mary E. (Brandon University), Roman Przybylski (University of Manitoba-Winnipeg) and Gregory Monks (University of Manitoba) - GENERAL - FAUNAL AND FLORAL (29)

Developing a General Method for Identifying Archaeological Residues on the Basis of Fatty Acid Composition

Lipid residues are often preserved in the matrix of archaeological materials associated with food processing. The fatty acid compositions of residues extracted from clay pots, burned rocks and grinding stones are determined using gas chromatography. Criteria for broadly classifying these residues have been established. Recently, experimental cooking residues of foods utilized on the Northern and Southern Plains were prepared and subjected to conditions which simulate soil microbial and long term decomposition processes. By carefully tracing fatty acid decomposition pathways, a general method for more finely classifying the material of origin of archaeological residues is being developed.

Marquardt, Amy (Iowa Archaeological Society/Mediapolis Middle School) - GENERAL - MATERIAL CULTURE (7)

Which Temper is Best for Pottery?: Assessing Variation of Temper Strengths Through Experimentation

Analysis through experimental archaeology shows that shell temper is superior to grass, grit, limestone, sand and grog tempers. This research indicates that shell temper produces pottery that is both lighter and stronger than pottery made with other temper materials. These characteristics increased the portability of vessels as suggested by the increased use of handles on shell tempered pottery. Although a wide range of experimentation has been previously conducted on ceramics, few studies have focused on pottery strength. The results of these experiments suggest reasons for the eventual adoption of shell tempering over other tempers by Native Americans throughout the Midwest.

Martin, Terrance J. (Illinois State Museum) - FOODWAYS (13)

Monstrous Fish and Wild Cattle: Animal Utilization at the Zimmerman West Site

Northwestern University's investigations of the Zimmerman West site (La Salle County, Illinois) from 1991 to 1994 resulted in a large faunal assemblage from features ranging in age from the twelfth through seventeenth centuries. Together with work at the Grand Village of the Illinois and ethnohistoric accounts, there are significant data with which to view long-term trends in animal exploitation patterns in the Upper Illinois River Valley. Of particular interest is the relative importance of bison and local aquatic resources to Native Americans before and after French contact.

Martin, Terrance J.; see Hollinger, R. Eric

Martin, Terrance J. (Illinois State Museum), Kathryn E. Parker (Great Lakes Ecosystems), and Elizabeth B. Garland (Western Michigan University) - GENERAL - FAUNAL AND FLORAL (29)

Upper Mississippian Subsistence in Southwestern Michigan: New Perspectives From the Wymer West Site

Investigations of the Wymer West Knoll (20BE132) by Western Michigan University in 1991 and 1998 revealed more than 170 features, the majority of which are associated with an Upper Mississippian component in the St. Joseph Valley. Plant remains from domestic and wild resources are characterized by high taxonomic diversity combined with low density and ubiquity. Animal remains reflect the importance of spring-spawning fish in addition to terrestrial resources. Whereas initial impressions underscored similarities to the Moccasin Bluff site, we now suggest that Wymer West was a warm season habitation that was possibly ancillary to the well-known agricultural village.

Mason, Richard P.; see Lorenzini, Michele A.

Mather, David (University of Minnesota) - SONOTA (20)

The Headless Bison Calf from the Fingerson Mound, Pope County, Minnesota

Fingerson is a single, round mound about four miles southwest of Glenwood in Pope County, Minnesota. During excavation by the University of Minnesota in 1938, a rock cairn, uncharred wooden poles, several human secondary burials, and bison bone were found. Two small Woodland potsherds, a few chips of flint and quartzite, and a concretion of iron carbonate were the only artifacts found in the mound. This report describes the contents and architectural features of the mound, with special attention given to the bison remains.

Mather, David (Loucks Associates/University of Minnesota) - COLLECTIONS CURATION (6)

Zooarchaeology and Museum Collections

Curated museum collections hold rich potential for zooarchaeological and paleoenvironmental research. Following a summary of issues unique to zooarchaeology, comparative osteology and museum collections, the value of curated faunal materials is highlighted through two examples. The first involves the use of archaeological sturgeon bone in a genetic study of Rainy River lake sturgeon populations. The second focuses on the use of museum collections in the United States, Sweden, Finland and Ireland in the investigation of archaeological bear ceremonialism.

Mather, David (Loucks Associates), Joe McFarlane (Loucks Associates) and Teresa Halloran (Loucks Associates) - MILLE LACS (11)

Recent Archaeological Investigations in the Mille Lacs Region

Recent years have seen a resurgence of archaeological investigations at the Mille Lacs locality. The studies described here have added significantly to our knowledge of habitation and mortuary practices, and bear ceremonialism during the Woodland tradition Rum River and Shakopee phases in particular. Ongoing projects focus on the Lake Onamia area and the paleolandscapes of Shah-bush-kung Bay. Investigation of historic sites regularly includes oral history interviews with Ojibwe and Euroamerican elders. All of the projects summarized here reflect the increasing leadership of the Mille Lacs Band of Ojibwe in the heritage management of the Mille Lacs locality.

Mayer, James; see Kornfeld, Marcel

McFarlane, Joe; see Mather, David

Mead, Barbara (Office of the Michigan State Archaeologist) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Up from the Ashes: Recovery of Exhibit Artifacts from the Ruins of the Father Marquette Memorial Museum Fire

On March 9, 2000, the Father Marquette Memorial Museum in St. Ignace, Michigan burned to the ground. Archaeological techniques were used to recover 17th century artifacts from the ruins. Observations were made on the behavior of exhibit cases and artifacts when exposed to temperatures of over 2000 degrees F. A large percentage of artifacts were found, many still suitable for study and display. This unusual project demonstrated the effectiveness of applying archaeological methods for the controlled recovery of objects as a component of disaster mitigation.

Meltzer, David J.; see LaBelle, Jason M.

Merz, Leah; see Cook, Robert A.

Meyer, David (University of Saskatchewan) and Dale Russell - SCAPE (21)

Precontact Economic Systems of the "Pegogamaw" Cree

In the mid and late 1700s the forks of the Saskatchewan River and the parkland to the west was occupied by a Cree band known as the "Pegogamaw." There are sufficient historical observations of the Pegogamaw to allow some description of their lifeways, especially their economic system. The Pegogamaw band ceased to exist following the smallpox epidemic of 1781-82, but remnants of this group, together with Cree and Ojibwa immigrants from the east formed the basis of the reconstituted Cree society, which was present in this region by the early 1800s. Many of their descendants came to form the Cree bands on the two reserves in our Forks study region, Muskoday and James Smith. We are in the process of reconstructing the pre-reserve lifeways and band territories of these peoples on the basis of historical documents and information provided by elders. The Pegogamaw band, and their descendants, are of particular interest since, historically, they utilized both the boreal forest to the north and the parklands to the south. Our focus is to determine whether this dual utilization can be traced back through time, and if it pre-dates the European-based fur trade. Ultimately, we wish to find if the archaeological evidence indicates that a similar utilization characterized the pre-cursors of the Crees in our study area.

Michlovic, Michael G. (Minnesota State University Moorhead) - GENERAL - ARCHAIC (27)

Middle Holocene Culture on the Northeastern Plains

Several Early Archaic sites have been excavated in Middle Holocene deposits on the Northeastern Plains. These sites are relevant to the ongoing debate in archaeology about the extent and nature of human use of the Plains environment during the Altithermal. The geomorphic context of sites is discussed in relation to the question of the "cultural hiatus." Lithic resource use, technological innovation, subsistence and mobility patterns are characterized for this period in Plains prehistory, with special emphasis on the excavated materials from the Rustad site.

Miller, Mark E. (Office of the Wyoming State Archaeologist) and Dale L. Wedel (University of Wyoming) - MILITARY (2)

Continuing Archaeological Investigations at Fort Fred Steele State Historic Site, Wyoming

The archaeological record at Fort Fred Steele has been the subject of study by the Office of the Wyoming State Archaeologist since the late 1970s. Most recently, efforts have been directed toward the investigation of a deeply buried military trash midden dating prior to 1880, and the search for three target ranges. These investigations have helped establish the vertical and horizontal extent of the fort's archaeological remains. This paper provides a brief overview of the history of investigations at the site, and a more focused summary of the findings pertaining to trash disposal and target practice between 1868-1886.

Mitchell, Mark; see Keyser, James D.

Molyneaux, Brian Leigh (University of South Dakota) - ROCK ART (16)

The Politics of Vision at Devils Tower: Art, Ethnography and Tradition

The strange dark outline of the great volcanic anomaly commonly known as Devils Tower, in northeastern Wyoming, has drawn people to its rocky flanks for at least 10,000 years. The tower's archaeological record, rock art and oral traditions provide evidence of how the perception and use of the tower have changed over the millennia, in response to social, political and environmental change

Monks, Gregory; see Malainey, Mary E.

Moyer, David (Office of the Iowa State Archaeologist) - GENERAL - TOPICAL STUDIES (30)

New Interpretations of Rock Art from the Nordstrom-Bowen Site (24YL419), Yellowstone County, Montana

The Nordstrom-Bowen site contains a pictorial record of prehistoric and protohistoric life on the Northwestern Plains. The site contains numerous examples of ceremonial and biographical rock art including zoomorphs, v-necked and shield bearing anthropomorphs, and abstract images. This study focuses on certain triangular and trapezoidal images commonly interpreted as tipis or structures. Comparison of these images with similar depictions found at other locations throughout the Plains suggests that they may actually represent early depictions of armored horses. If so, these images hold the potential to increase our understanding about a dynamic and temporally sensitive period of cultural change.

Mulholland, Stephen L. (University of Minnesota-Duluth) - NORTHERN MINNESOTA (23)

A Legacy in Stone: The Paleoindian and Archaic of Northeastern Minnesota

Over the past twenty-five years, what was thought to be an archaeological back-water has seen a blossoming of research and investigation in the Paleoindian and Archaic periods. Examination of the lithic materials and site locations, collected by both professional and avocational archaeologists, suggests utilization patterns that vary over time and space. These data are indicative of temporal affiliations when diagnostic artifacts are absent and absolute dating methods cannot be obtained. In addition, information derived from the analysis of diagnostic artifacts suggests the potential of examining the changes in cultural interactions across the region.

Mulholland, Stephen L. (University of Minnesota-Duluth) and A. D. Romano (Pine City, MN) - NORTHERN MINNESOTA (23)

The Neubauer Site: Archaic Habitation and Copper Working in Pine County

The Robert and Debra Neubauer site yielded extensive materials including Late Paleoindian, Archaic and Woodland diagnostics, with the majority from the Middle and Late Archaic. Numerous basalt and granitic rocks suggest intensive site activities using durable stone. Experimental copper working has reproduced a probable copper digging stick tip; wear patterns on site hammerstones are correlated to various copper working tasks as well as knapping. Copper tool manufacturing appears to have been a significant activity at this site and probably correlates to the Archaic "Old Copper" industry.

Mulholland, Susan C. (University of Minnesota-Duluth) - NORTHERN MINNESOTA (23)

Why Did They Come? Different Land Use Patterns at the Fish Lake Dam Site

The Fish Lake Dam site, a multi-component site in the Cloquet River drainage, indicates different intensity and location of occupation through time. The Late Paleoindian component appears focused on the highest elevation, although some use is suggested for the riverside as well. The Middle and Late Archaic components are found throughout the site, including both sides of the river and the hilltop. The Woodland appears the most localized; ceramics are abundant only in one spot to date. Shifts in subsistence patterns based on changing environmental parameters may explain the apparent differences.

Murphy, Harry; see Hopkins, Aleta

Murphy, Harry; see Raheem, Iman Abdul

Myster, James E. (Hamline University) and Christopher J. Evans (Hamline University) - PUBLIC EDUCATION (5)

Archaeology Education and Outreach in Minnesota: A Collaborative Effort

This paper will provide an overview of public education and outreach activities in Minnesota archaeology. The history and current direction of Minnesota Archaeology Week will be discussed, as will be outreach programs and goals of the State Historic Preservation Office, the Office of the State Archaeologist, and other educational organizations in the state. For example, Hamline University's Center for Anthropology and Cultural Heritage Education (CACHE) collaborates with Hennepin Parks and other agencies on community based archaeology projects. The Chippewa National Forest, as a participant in the Passport in Time Program, and the Institute for Minnesota Archaeology (IMA) provide opportunities for volunteers and avocational archaeologists. These and other programs provide numerous opportunities for raising the awareness of Minnesotans about their cultural heritage and the importance of stewardship of the past.

Myster, Susan M. T. (Hamline University) - 10,000 YEARS (3)

Ten Thousand Years of Population Relationships at the Prairie-Woodland Interface: Cranial Morphology in the Upper Midwest and Contiguous Areas of Manitoba and Ontario

The Upper Midwest was an area of significant cultural and environmental diversity during the precontact period. Archaeological research has focused on reconstructing the cul-

ture history and the nature and extent of relationships between contemporaneous archaeological manifestations and across major environmental biomes throughout the region's 10,000 year history. Multivariate statistical analysis of cranial morphology of individuals recovered from archaeological sites dating between the Paleoindian and early Post-contact period in Minnesota and surrounding border areas provides insight into the degree of genetic continuity among groups, biological homogeneity of defined archaeological manifestations and burial complexes, and evaluation of proposed transformation models.

Myster, Susan M. T. (Hamline University) and Barbara H. O'Connell (Hamline University) - 10,000 YEARS (3)

Bioarchaeology in Minnesota: Past Contributions, Current Research, and Future Prospects

In 1997 a bioarchaeology database and summary of substantive research in Minnesota was published as part of an overview of the Central and Northern Plains region. The database lists 485 sites and over 3,000 individuals that represent nearly every defined archaeological manifestation. Recent completion of the NAGPRA inventory has added to the database and facilitated systematic collection of osteological data. An overview of the archaeological units represented by human remains samples, a summary of bioarchaeological research, and the contribution of osteological data to questions of human adaptation and interaction and a more holistic interpretation of past lifeways will be presented

Neustaedter, Natalie (University of Oklahoma) - GENERAL - LATE PREHISTORIC (28)
Comparing Late Prehistoric Subsistence Strategies in the Oklahoma Panhandle

The analysis of faunal remains from storage/refuse features has provided new information regarding subsistence activities at the Two Sisters Site (ca. A.D. 1400), a Late Prehistoric homestead site attributed to the Antelope Creek Phase. Faunal remains provide a descriptive account of taxonomic abundance and dietary reconstruction while indicating seasonal resource procurement decisions. Initial results comparing storage/refuse pit features at Two Sisters and Odessa Yates (ca. A.D. 1300) a nearby large aggregated Plains village site will be presented. These results are part of a more extensive research project which examines subsistence strategies among Southern Plains village populations practicing different settlement and mobility patterns.

Neverett, Margot; see Green William

Nicholls, Brian D. (University of Wisconsin - Milwaukee) - GENERAL - ARCHAIC (27)
Late Archaic Mortuary Areas as Sacred Place in the Upper Midwest

Research conducted on several Late Archaic mortuary sites found in Wisconsin and the Upper Peninsula of Michigan has documented a range of characteristics that pertain to each of the site populations. As is usually the case, this type of research is primarily limited to the mortuary characteristics of the skeletal populations found at each site. Little information is gathered addressing the relationship between the sites to the landscape. This paper looks at the development of sacred landscapes as mortuary disposal areas in the Late Archaic.

Nicholson, B. A.; see Hamilton, Scott

Nicholson, Bev (Brandon University) - SCAPE (21)*Introduction to the SCAPE Project*

"From the Beginning", Archaeologists have attempted to understand the record of the past through examination of material culture deposited by past groups. Numerous theoretical paradigms have emerged, enjoyed their time in the academic spotlight, endured vigorous debate, been amended and modified and usually been quietly dropped as a new vision of the proper way to understand the past is promulgated by a new band of researchers. All of these paradigms have contributed to our understanding of the past and under examination have prompted the discipline to move forward towards new and more comprehensive theoretical constructs and towards development of more sophisticated and rigorous methodologies. The SCAPE project has responded by putting together a research team drawn from a variety of academic backgrounds ranging from the Humanities and Social Sciences to the biological and earth sciences. We believe that by constructing cultural contexts, as well environmental contexts, we will be able to more effectively interpret the archaeological record.

Nicholson, Bev (Brandon University), Harry M. Jol (University of Wisconsin-Eau Claire), Scott Hamilton (Lakehead University) and Garry Leonard Running IV (University of Wisconsin - Eau Claire) - SCAPE (21)

Ground Truthing Ground Penetrating Radar at the Lowton Site

The Lowton Site, located in Southwestern Manitoba, has provided many artifacts including ceramics that suggest a connection to horticultural groups in the Eastern Woodlands of the U.S. Test excavations in 1992 recovered an intact basin hearth dated to 510 \pm 110 B.P. (on associated bone). A test GPR survey to locate additional buried features was conducted in 2000. Numerous GPR reflection patterns indicative of subsurface disturbances were interpreted. Preliminary excavation of the GPR anomalies has revealed a four pits – one being a boiling pit, coarse clasts within till, and auger test holes from the 1992 survey.

Nicholson, Christopher M. (Colorado State University) and Lawrence C. Todd (Colorado State University) - GENERAL - FAUNAL AND FLORAL (29)

Maxillary Dentition Analysis of Late Archaic Bison from the Kaplan-Hoover Site: Metrics, Ontogenetic Change, and Demographics

Maxillary dentitions of 44 bison (*Bison bison bison*) crania have been recovered from the Late Archaic (2700 B.P.) Kaplan-Hoover (5LR3953) arroyo trap in Northern Colorado. Analysis of 17 of these crania has yielded data comparable to those derived from a previous study of mandibular dentitions, which indicated an autumn catastrophic mortality pattern. Metric attributes of the maxillary teeth are investigated in relation to ontogenetic change and demographic patterns (determined by craniometrics) in order to gain a better understanding of variation in bison maxillary dentition and its paleoecological significance.

Nicholson, Sylvia (Brandon University) and Leanne Belsham (Brandon University) - SCAPE (21)

Archaeological Database Development for the Study of Cultural Adaptations within the Canadian Prairies Ecozone

An electronic database has been developed for the archaeological investigations of the SCAPE project. The database is a crucial component for the management of archaeo-

logical data from sites in three provinces and covering five time periods. The database had to meet several criteria: manage large amounts of recovered data; accommodate the time/space needs of the data; be relatively easy to modify; useable by undergraduates; have graphics and mapping capabilities; accept additional modules for data analysis; reflect the differing regions under study and preferences of the primary researchers. The database was developed with Access, a popular database program that is available to all the researchers.

Nielsen, Richard (Nielsen Engineering, Inc.) - KENSINGTON RUNESTONE (12)

Recent Discoveries Concerning the Kensington Rune Stone

Recent discoveries support a 14th-century explanation for the Kensington Rune Stone's apparent oddities: pendantic numbers and the 1362 date, origin of the runes, and Old Swedish. Pendantic numbers can be shown to have been used in medieval dating similarly to those on the Kensington Rune Stone. The runes originated from rune-rows used on the Island of Gotland, as shown in publications between 1968 -1972. The language is entirely Old Swedish, of which over a dozen words on the Kensington Rune Stone have been published in the Old Swedish Dictionary (1925-1975) only after the finding of the Rune Stone in 1898.

Norder, John (University of Michigan) - ROCK ART (16)

The Role Of Rock Art In Communicating Information And Marking Space In Northern Algonquian Landscapes

This paper examines Canadian Shield rock art in the context of a culturally constructed landscape. Sites are viewed as intentionally located and the art on them as communicating specific information that would have been differentially understood by Algonquian peoples throughout the region, depending on factors of social status. In particular, social categories such as male, female, individual, medicine person, inter- and intra-community membership would allow for or hinder the ability of someone to understand the information communicated by the rock-art site with location being an additional factor. Information would potentially include, but not be restricted to, territorial ownership, resource location or mapping, historical narrative event, personal dreaming experiences, etc.

Nowak, Timothy R. (USDI Bureau of Land Management) - MILITARY (2)

Archaeological Manifestations of the Army's First Use of Portable Cottages

Following the Mexican War (1846-48), the U.S. War Department began to consider the use of portable structures for service at posts in barren regions where building materials were not readily available. The Sioux expedition to the Northern Plains provided the Army the opportunity to test these "portable cottages" during the severe winter of 1855-56 while encamped at Ft. Pierre Chouteau in the upper Missouri River country. This paper describes the types, distribution, and adequacy of these structures at Ft. Pierre and their subsequent transfer and employment at Ft. Randall, where physical remains of these structures have been documented.

Obermeyer, Brice (University of Oklahoma) and Scott Sundermeyer (University of Oklahoma) - GENERAL - HISTORIC ARCHAEOLOGY (15)

The Coronado Expedition and The Jones and Plummer Trail: Recommendations Based on the Results of an Archaeological Survey in Southwestern Kansas

This is a presentation of the results of an archaeological survey designed to test the hypothesis that the Jones and Plummer trail was actually the historic reconstruction of a prehistoric trade route. It is my argument that if the Jones and Plummer trail can be shown to be prehistoric in origin, it would have been the most probable route for Coronado to have followed on his journey to Quivira. From the results of the survey, I conclude that although prehistoric sites were located in the proximity of the Jones and Plummer trail, the sites were not diagnostic of large, late prehistoric village sites which might have indicated a probable trade route.

O'Brien, Patricia J. (Kansas State University) - LOWER MISSOURI (17)

Plains Archaeology and Alfred E. Johnson

Like Waldo Wedel, Alfred Johnson was born in central Kansas and like Wedel he devoted most of his professional career to the archaeology of the state. He has done original research, most especially on Kansas City Hopewell and the Plains Archaic, and has directed many theses and dissertation on those subjects and others in Kansas prehistory. He has created an important anthropological museum at his alma mater, Kansas University, and made significant service contributions to Plains and New World archaeology as editor of *Plains Anthropologist* and secretary of the Society for American Archaeology.

O'Connell, Barbara H. (Hamline University), Lori M. Jahnke (Tulane University), and Christine N. Gardner (Memphis, TN) - 10,000 YEARS (3)

Identification of Marpiya Oki Najin: Application of Osteological and Forensic Techniques
On December 26, 1862, 38 Dakota men were hanged in Mankato, MN, in the largest execution in United States history. Shortly after burial the graves were disinterred. The disposition and repatriation of these remains has been a continuing concern for Dakota people. In 1993, three human skulls were presented to the Hamline University Osteology Laboratory for determination as to whether they could be identified as one of the 38 warriors, Marpiya Oki Najin (One Who Stands on a Cloud), or ruled out as being that person. The results of the application of standard forensic techniques of identification including 1) osteological techniques for racial identification 2) photo-superimposition and 3) facial reconstruction will be discussed.

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

O'Gorman, Jodie A. (Michigan State University) - GENERAL - MIDDLE WOODLAND (25)

C. House and Other Small Middle Woodland Camps in the Mississippi Valley: A View from the Non-Hopewellian Landscape

Excavations at the C. House site and several other small encampments, together with intermittent surveys of the region, form our perception of Middle Woodland in the Sny Bottom of the Mississippi River valley as not fully participatory in the Illinois Valley exchange networks. Data from recent research at C. House provides new information on the use of this region. Placing the encampments within the broader cultural and natural contexts, we explore additional considerations for understanding the Middle Woodland landscape.

Ollendorf, Amy (HDR Engineering Inc.), Richard Rothaus (St. Cloud State University), and Debra Gold (St. Cloud State University) - POSTER (32)

The St. Cloud State University and HDR Engineering, Inc. Program in Archaeology and Cultural Resources Management (PACRM)

St. Cloud State University (SCSU) and HDR Engineering, Inc. (HDR) have created the Program in Archaeology and Cultural Resources Management (PACRM) with a vital linkage to industry and business. PACRM will provide practical and sophisticated training for undergraduate and graduate students. The mutually beneficial goal of the PACRM partners is to prepare SCSU students for careers in archaeology and CRM while providing HDR with a steady stream of qualified personnel. Similar cooperative arrangements are commonplace between private enterprises and engineering programs nationwide. The PACRM formalizes a relationship that has grown informally out of mutual interest.

Olson, Linda A. (Minot State University) – ROCK ART (16)

Horses and Horned Headresses

This report presents a preliminary investigation into the Tolar Petroglyphs, an early historic petroglyph site located in southwestern Wyoming. Possibly one of the most significant aspects of the Tolar Petroglyphs is the multitude of techniques used to manufacture the petroglyphs. Elements contain abraded areas and features, pecked additions to the deeply incised figures that make up the majority of the site's elements and finely incised details. Some of the fine incising is all but invisible, only seen in optimum lighting conditions—usually the brightest reflected light—but sometimes in cross light, sometimes showing more by a slight color difference rather than depth. Several theories about the manufacturing techniques used to produce petroglyphs have been proposed. Others have proposed the use of specific types of quartzite tools. This paper will share evidence confirming the manufacture of tools and techniques used to produce the Tolar Petroglyphs.

Overturf, Jeff (Arapahoe-Roosevelt National Forest/Pawnee National Grasslands), Eric Feiler (PaleoCultural Research Group), Doug Bamforth (University of Colorado) and Keri Hicks - GENERAL - REGIONAL STUDIES (31)

7000 Years (or More) of Occupation at the Willow Bunker Archeological Area, Pawnee National Grasslands, Eastern Colorado

The Willow Bunker Archeological Area consists of several sites within a ca. one-square mile area on Willow Creek in the Pawnee National Grasslands. Previous fieldwork (1998 and 1999) has revealed Early Archaic through Late Prehistoric occupations. Year 2000 fieldwork expanded 1999 excavations at a Late Prehistoric (possibly Dismal River) campsite/bison-butcher locality, and opened small excavation blocks at a dense lithic workshop/campsite that produced McKean artifacts. Two possible Late Paleoindian hearths of clearly different structure were also salvaged from an eroding cutbank. The hearths and two pit features at the McKean site are slated for radiocarbon dating.

Parker, Kathryn E.; see Martin, Terrance J.

Peck, Trevor R. (University of Calgary) - GENERAL - FAUNAL AND FLORAL (29)
Sex, Flies, and Wallowed Landscapes: The Archaeological Implications of Bison Wallows on the Northern Plains

The nature of bison movements on the plains has long been a topic of contention among plains archaeologists. The interest is not the bison themselves, of course, but the impact their movements had on past peoples' subsistence and settlement patterns. This paper

argues that bison wallows are landscape features largely produced during rutting competitions for mates. Thus, the location of wallows indicate the position of bison herds during the rut (i.e., approx. August and September). The distribution of bison wallows in historic documents indicate they form a ring around the periphery of the northern plains. This distribution supports models in which large herds of bison moved into the foothills and parkland in winter and back onto the plains proper in summer.

Pederson, Jennifer; see Burks, Jarrod

Perkins, Eric; see Anderson, Dean L.

Perkl, Brad (BRW, Inc.) - EARLY WOODLAND IN MINNESOTA (4)

The Early Woodland in Southeastern Minnesota

The Early Woodland period in Southeastern Minnesota is thought to date between ca. 500 BC to 100 BC. Our understanding of this period in the region is mostly conjecture derived from Early Woodland sites in the upper Midwest and greater North America. The author will review the current evidence of the Early Woodland occupation in southeastern Minnesota. A refinement of the Early Woodland chronology in the region with a profile of the Early Woodland lifeways in this portion of the state will be presented.

Peterson, Cynthia L.; see Doershuk, John F.

Peterson, David L. (University of Chicago) - STUDENT (9)

Common Ground: Analogies to the Plains and Recent Trends in the Archaeology of the Later Prehistory of the Eurasian Steppes

Archaeologists from the US began new studies of the prehistory of the Eurasian steppes in the 1980s. Major research themes (initial population of the region, migration, and domestication of the horse) owe a heavy intellectual debt to earlier work on the "horse complex" in the North American Plains. Recently attention has shifted to the role of the forest-steppe periphery in cultural interactions and transformations during the Bronze Age, including dissertation research by the author. This paper seeks to renew dialogue between archaeologists working in the steppes and Plains, especially concerning potential analogies between Midwest-Plains and forest-steppe interactions.

Picha, Paul R.; see Swenson, Fern E.

Picha, Paul R. (State Historical Society of North Dakota) and Michael L. Gregg (New Jersey, Historic Preservation Office) - SONOTA (20)

Naze: A Sonota Complex Residential Site in the James River Valley of Southeastern North Dakota

Naze was occupied during the early Middle Plains Woodland period (100 BC – AD 200). This was a time of heightened interregional exchange of durable materials. This exchange linked groups whose territory extended from the eastern Rockies to the Ohio River valley. Excavated artifact samples from the Naze site are reviewed from the perspective of exchange relations.

Pitzen, Sarah; see Green William

Pleger, Tom (University of Wisconsin-Fox Valley) - EARLY WOODLAND IN MINNESOTA (4)

New Dates for Red Ochre Complex Mortuary Associations from the Riverside Cemetery, Menominee County, Michigan

The Riverside Cemetery (20-Me-01) is a Red Ochre mortuary site situated on the Menominee River in the Upper Peninsula of Michigan. Excavations in the 1950s and 1960s yielded over 80 features. A total of seventeen radiocarbon dates including ten new AMS dates obtained by the author are now available from the site. The dates suggest a temporal range of 1000-400 B.C. (uncalibrated) for the Red Ochre occupation. The author will discuss the significance of these dates and the artifact associations in relation to the emergence of Early Woodland cultural patterns in the western Great Lakes.

Polansky, Jon R. (University of California - San Francisco) - KENSINGTON RUNESTONE (12)

Heuristic, Scientific Appraisals of the Suggested Importance of the Kensington Runestone (KRS)

The KRS has been a source of controversy since its reported discovery in 1898. Within the past decade new linguistic/epigraphic evidence has challenged assertions that the inscription represents a 19th Century forgery. However, there appears to have been an attempt to dismiss the findings (with frequent arguments based on personal authority rather than evidence), rather than to conduct heuristic, scientific appraisals. Evidence of, and potential reasons for, this apparently unscientific behavior are discussed in terms of difficult issues that face both authors and recipients dealing with the new information. The controversy needs to be viewed in the larger context of existing paradigms within the academic archaeological/ linguistic communities that appear to limit the application of proper epistemological methodologies.

Pratt, Michael (Perrysburg, Ohio) - MILITARY (2)

The Fallen Timbers Site: A New Location for the Old Battlefield

The Fallen Timbers survey located the actual site of the 1794 battlefield. The project was a remote sensing reconnaissance survey utilizing metal detector operators and excavation crew. Approximately 23% of the 65-hectare project was sampled by 50 m. corridors placed at right angles to the proposed axis of the battle. Two different field survey strategies designed to locate and recover metallic battlefield remains were utilized. Real-time differentially corrected GPS coordinates were obtained for over three hundred battle-related artifacts. These data were converted to UTM coordinates and mapped on a digitized USGS 7.5' Quadrangle to demonstrate the distribution of artifacts and interpret the overall battle site.

Prine, Elizabeth (University of Wisconsin-Oshkosh) - GENERAL - LATE PREHISTORIC (28)

The Menoken GIS Project: Spatial Use in Two Late Plains Woodland Homes

In 1998 and 1999, two houses were excavated at the Menoken Site, a late Plains Woodland habitation site near the Missouri trench in North Dakota. The Menoken GIS Project was designed to record and analyze the spatial patterning within the two houses. This paper reports upon the completed analysis of field-identified materials, and particularly upon horizontal and vertical spatial patterning related to activity and production areas within the houses.

Przybylski, Roman; see Malainey, Mary E

Pulford, Mary H. (University of Wisconsin-Superior/Lake Superior College) – ROCK ART (16)

Mishipizheu of the Border Country

Mishipizheu is one of the Algonkian, Siouan and Iroquoian manitous or spirit-beings that form an integral part of the oral traditions of the Great Lakes region. The focus of this study is the Algonkian representation of *Mishipizheu* as it appears in the Rock Art of the Canadian Shield including the border country of Ontario and northern Minnesota. *Mishipizheu* as a manitou takes the form of a water serpent: the Underwater/Underworld Lynx, Panther, Cat. The oral legends of Algonkian speaking peoples of northern Minnesota, Wisconsin and northern Ontario speak of *Mishipizheu* as a manitou that controls the waterways. This manitou often has horns, scales on its back, and a long tail. Copper is often associated as its power source. This presentation will present examples of the *Mishipizheu* motif in Border Country rock Art.

Pulford, Mary H. (University of Wisconsin-Superior/Lake Superior College) – NORTHERN MINNESOTA (23)

Becoming Mortuary Copper in Northeastern Minnesota

Significant data have been compiled on the nature of mortuary copper in northeastern North America and particularly the western Great Lakes. Specifically this research relates to classification, form and chronology of mortuary copper such as: child and adult burials, utilitarian and non-utilitarian relationships, geographic distributions, and other topics. What is often overlooked is the actual process by which copper becomes mortuary goods. Ethnographic and ethnohistorical records illustrate the way in which copper items became mortuary goods during the Proto-Historic and Early Contact periods. Such information may be useful in building an analogy for mortuary copper for earlier time periods.

Raheem, Iman Abdul (Madrassa Tul Ilm High School/Martin University) and Harry Murphy (Martin University) – NEXT STEP ARCHAEOLOGY PROJECT (18)

Historic Cultural Comparison

The objective of this research is to make a comparison of historic sites in a defined research area to other historic sites within Fort Harrison State Park. The hypothesis is that organizing the historic sites chronologically and by geographic location will provide the information needed to understand the cultural change that occurred within the research area.

Rapson, David; see Todd, Larry

Ray, Jack H. (Center for Archaeological Research/Southwest Missouri State University) and Neal H. Lopinot (Center for Archaeological Research/Southwest Missouri State University) – GENERAL - PALEOINDIAN (1)

Investigations of Pre-Clovis-Age Deposits at the Big Eddy Site, Southwest Missouri

Work at the Big Eddy site in 1997 resulted in the discovery of Early/Middle Paleoindian artifacts stratified below Late Paleoindian artifacts. Limited work below the Paleoindian horizons also revealed possible pre-Clovis deposits. Excavations at the Big Eddy site during the summer of 1999 focused on pre-Clovis-age deposits. Although chipped-stone debitage was scarce, a manually fractured and manipulated anvilstone weighing 40 pounds

and a nearby large hammerstone were found in deposits dating 12,000-12,600 B.P. (uncalibrated). These two artifacts are interpreted as evidence of pre-Clovis anvilling/hammering activities, possibly for the processing of megafaunal bone.

Reeves, Brian (Lifeways of Canada Limited) - GENERAL - MANY PUBLICS IN ARCHAEOLOGY (24)

Seeing is Believing: Blackfeet Traditional Properties? and Glacier National Park

In 1912 Glacier National Park was carved out of a portion of the Blackfeet Reservation ceded to the U.S. Govt. in 1896. The Great Northern Railway and its subsidiary the Glacier Park Company actively promoted the Blackfeet as a symbol of park and the visitor experience. Blackfeet appeared in promotional literature, greeted visitors, erected tipi villages and danced for guests. Special events were sponsored and photographed and a number of movies filmed. Many places received Indian names. Sponsored activities ended with World War II. These image, names and writings provide younger Blackfeet with seemingly visual proof of traditional properties within Glacier National Park which have no historical validity. Selected examples drawn from a recently completed ethnographic overview of Glacier National Park are used to illustrate the implications of these changed perceptions for traditional properties management of former Blackfeet lands.

Reeves, Brian (Lifeways of Canada Limited) - SONOTA (20)

30 Years Later: Besant in the Northwestern Plains-Foothills

Archaeological studies, primarily those from the consultant community, over the last 30 years have added substantially to our knowledge of the temporal and spatial dimensions and content of the Besant Phase and its relationship to other archaeological phases of the Northwestern Plains-Rocky Mountain Foothills. This paper surveys some of the more important data sets. These data sets: further define Besant winter-spring occupancy patterns and bison pounding in the Rocky Mountain foothills of the Saskatchewan and Upper Missouri; provide evidence for winter co-residency with contemporaneous Pelican Lake Phase groups; establish traditional geographical boundaries between Besant and Foothill (winter)-Mountain (summer) Pelican Lake groups; establish Besant summer short grass plains residency and interaction patterns with eastern groups; and, with evidence from the Lower Yellowstone-Powder River region, establish a continued Besant presence as late as ca. 1000 years ago in that region. I conclude with a brief discussion of which Northwestern Plains tribal groups the Besant people were most likely ancestral to, given the present evidence.

Reeves, Brian; see Saxberg, Nancy

Reeves, Brian; see Vivian, Brian

Regan, Marcia H. (Arizona State University) - 10,000 YEARS (3)

Death and Reverence in Prehistoric Minnesota: The Evidence from the River Hills Site

Excavations at the River Hills site (21DK21) in August, 1963, recovered the remains of at least 37 individuals. Associated artifacts suggest a possible age for the site as great as 3000 BC. Physical anthropological analysis during the summer of 1989, in anticipation of repatriation and reburial, noted that several individuals exhibited signs of violence and postmortem body processing. Seven skulls had cut marks suggestive of scalping. Four vertebrae contained embedded projectile points. Many long bones contained cut marks

that are possibly related to body preparation for burial. These findings will be discussed in the context of Upper Midwest mortuary customs and warfare.

Reher, Charles A. (University of Wyoming), Sara Sheen (University of Wyoming), and Clint Crago (University of Wyoming) - MILITARY (2)

Military Archaeology at Fort Hollywood

Several battle scenes from a ca. 1930 Tim McCoy western movie were discovered during a cultural resource protection project on the Wind River Reservation. Of special interest is the main set where a large group of Shoshone and Arapahoe actors attacked a log cavalry fort, circling it at a full gallop while firing .45-70 blanks at the soldiers inside. Information is presented on the historical background, field recovery and mapping methods, and on the several hundred cartridges and other artifacts recovered. A few basic but perhaps useful insights can be offered about firing positions and other aspects of the activity structure since, for this battle, we have both the ejected cartridges and ... the video.

Reher, Charles (University of Wyoming), Rick Weathermon (University of Wyoming), Clint Crago (University of Wyoming), Sara Sheen (University of Wyoming), Alan Bartholomew (University of Wyoming), and Robert Kelly (University of Wyoming) - GENERAL - HISTORIC ARCHAEOLOGY (15)

The Cow Lake Site (48TE1536). An Early Historic Stone Circle Site in Grand Teton National Park.

A 1999 reconnaissance discovered a large number of stone circles associated with artifacts dating to at least the late-1920's. Results of an intensive mapping program during the summer of 2000 are reported, including site and feature maps, and artifacts recovered (e.g. bottles, cans, coins, decayed tipi poles and, in several of the circles, glass trade beads). The Cow Lake investigation is interesting statement on the nature of archaeological interpretation, an ongoing debate about possibilities such as an unusually late traveling or hunting camp the Bannock or Wind River Shoshone, a movie set or a camp for Native American movie extras, or a rendezvous reenactment. Historical research may provide a more definitive answer by the time of the conference.

Renaud, Paula (University of Wyoming) - STUDENT (9)

Sticks, Stones, and Cyberwaves: Creating an Intentional Community of Aboriginal Philosophy in the 21st Century

This pilot study examines the creation of an intentional community based on primitive skills and voluntary simplicity. Drawing on primitivists' literature and fieldwork experience with "Stone Age" enthusiasts, or "Abos," at their gatherings, I describe a viable American subculture. Although inspired by the acquisition of skills, the results of this ethnographic study reveal participant engagement in ritual, *communitas*, private language, and a unique economy and philosophy. Primitivists consider this lifestyle everyone's inheritance and a valuable philosophy for our progeny. Today's Abos are unlocking ancient secrets and confronting contemporary issues that may prove useful as we address future issues of sustainability.

Richards, John D. (University of Wisconsin-Milwaukee) - CAMBRIA (19)

Aztalan, Cambria, and Mississippian Ceramic Comparisons

This paper reviews and compares the grit-tempered Mississippian-like vessels present in

ceramic assemblages recovered from the Cambria site in southern Minnesota and the Aztalan site in southeast Wisconsin. Sites such as Cambria, Diamond Bluff (and related sites), in western Wisconsin, Fred Edwards in southwest Wisconsin, and Aztalan in southeast Wisconsin all evidence some degree of interaction with the American Bottom Mississippian polity of Cahokia. These sites typically exhibit archaeological signatures marked by an often-confusing admixture of Mississippian and local Woodland traits. However, differences in scale, site structure, and assemblage composition render direct comparisons between Cahokia and such sites problematic. One typical aspect of the ceramic assemblages associated with these northern peripheral sites is the presence of Mississippian vessel forms and decorative modes rendered in grit-tempered rather than shell-tempered pastes. A review of the variability among these materials suggests that comparative analysis of these ceramics may help investigators to evaluate the nature and intensity of the interaction between American Bottom Mississippian communities and sites on Cahokia's northern periphery.

Ritterbush, Lauren W. (Kansas State University) - LOWER MISSOURI (17)

Western Oneota along the Lower Missouri: Perspectives of the Leary Site

The Leary site (25RH1), located in extreme southeastern Nebraska, has been known to archaeologists of the Central Plains and Prairie Peninsula for more than 85 years. Early archaeological visitors to the site concluded that its remains were distinctly different than those from more common Central Plains tradition sites in the region. Instead, these remains compared favorably with those from Oneota sites typically found to the east. The apparent anomalous position of this Oneota settlement in the Central Plains (along with few other Oneota sites) indicates trans-Missouri movement of Oneota peoples into the Plains. This makes the Leary site significant in understanding Oneota expansion and broad regional cultural dynamics. Despite various excavations at and general discussion about the Leary site, much remains unknown about its occupants and its place in late prehistory. Renewed interest in this site promises new insights into Late Prehistoric trans-Missouri Oneota activities and potential cultural interactions.

Robertson, James A.; see Hambacher, Michael J.

Rodell, Roland L. (University of Wisconsin-LaCrosse) - CAMBRIA (19)

Looking West: The Red Wing Locality and Contacts with Cambria-Plains Culture

During the period A.D. 1000-1200 the Red Wing locality was a major hub of social interaction in the Northern Mississippi Valley. Here among the cluster of village-mound sites the most conspicuous evidence for extra-regional contacts is the presence of Middle Mississippian symbolism. Also within these site assemblages are remains identified with Cambria-Plains culture. This paper presents a review of this evidence, and suggests that Cambria-Plains culture was drawn into an extra-regional exchange network that had emerged through competition for social prestige and influence in the Red Wing locality.

Romano, A. D.; see Mulholland, Stephen L.

Roper, Donna C. (Kansas State University) - GENERAL - REGIONAL STUDIES (31)

Guy and Mabel Whiteford: Early Kansas Avocational Archaeologists

Guy L. Whiteford of Salina, Kansas is best-known for his involvement in the excavation

of the Salina Burial Pit. His legacy as a 1930s–1940s avocational archaeologist is central Kansas goes beyond this one controversial site, however, and encompasses several habitation sites, the Minneapolis site among them. Mabel Whiteford was his partner throughout these investigations, a fact that is not generally recognized. The Whitefords' work from 1934 to their departure from Kansas in the 1940s is reviewed with special emphasis given to their work with Smoky Hill phase and Great Bend aspect sites.

Roper, Donna (Kansas State University) - CAMBRIA (19)

Women and Cambria Pottery

The mixing of ceramic styles at Cambria is seen as part of a larger package of early second millennium innovations in the region. Maize agriculture was an element of the package; other changes are technological accompaniments to this new food source. The spread of this new food/technology system was relatively rapid, although measurably time-transgressive. Women are the likely agents, for it was they who would have possessed the knowledge of how to grow corn and how to manufacture the implements, including pots, most suitable to its use. Models of cultural transmission are used to pose a scenario for this change.

Rosebrough, Amy L. (Archaeological Research, Inc.) - LATE WOODLAND IN WISCONSIN (10)

What's Wrong with this Picture?: Effigy Mound Distributions, the Myriad Forms of Madison Ware, and Taxonomic Turmoil in the Late Woodland

The "Effigy Mound Culture" commonly encountered in both popular and scientific literature is here discussed as an overgeneralization produced in part by failure to adhere to the taxonomic structures proposed by either McKern or Willey and Phillips. A falsely monolithic view of the culture has been supported by a lack of regional analysis geared towards further definition of the four proposed Effigy Mound phases. Preliminary statistical studies indicate that effigy mound forms are distributed non-uniformly on the landscape and can be grouped into common mound "sets" that may reflect different interpretations of the pan-eastern Upperworld/Lowerworld cosmology. One major boundary between mound sets coincides with the currently defined Late Woodland Eastman phase/Horicon-Kekoskee phase division. Ongoing studies of variability in mound form and ceramic style hint at the need for further examination of current phase definitions and the possible creation of new Effigy Mound phases.

Rothaus, Richard (St. Cloud State University) - MILLE LACS (11)

Archaeological Surface Survey at Lake Ogechie: Prehistoric and Historic Results

Systematic surface survey in the Mille Lacs Kathio region clarified our understanding of the region. The usefulness of the methodology in the detection of settlement patterns is dictated by vegetation coverage types that are themselves indicative of historic land use. The use of surface survey in an area already investigated by excavations allows an analysis based not on arbitrary excavation boundaries but variations in the density of artifact scatters. Pre-historic activity is near ubiquitous on certain lake shores with discrete loca of intensity, and Euro-American habitation seems dictated by logging practices.

Rothaus, Richard; see Ollendorff, Amy

Running, Garry Leonard IV; see Nicholson, Bev

Running, Garry Leonard IV; see Wiseman, Dion

Running, Garry Leonard IV (University of Wisconsin-Eau Claire), Andrea Freeman (University of Calgary), Dion Wiseman (Brandon University), and Alwynne Beaudoin (Alberta Provincial Museum) - SCAPE (21)

Site and Local-Scale Geoarchaeological Investigations at the SCAPE Study Localities: Methods and Results of Preliminary Reconnaissance

SCAPE study localities exhibit exceptional ecological diversity where tight habitat and ecotone mosaics are in part a function of complex geomorphic histories. is used. Geoarchaeologists, using a high-tech, multi-disciplinary approach (GIS, dGPS, GPR, Geoprobe) focus on identifying geomorphic processes responsible for the ecological diversity characteristic of these localities. Preliminary results indicate post-glacial geomorphic processes most responsible for observed ecological diversity are: colluvial/mass-wasting at the Elkwater Lake locality (Cypress Hills, AB); fluvial, colluvial and eolian at the Forks locality (central SK); eolian at the Lauder Sandhills locality (south-western MB); and eolian and colluvial at the Tiger Hills locality (southcentral MB).

Russell, Dale; see Meyer, David

Salkin, Phil (Archaeological Consulting and Services, Inc.) - LATE WOODLAND IN WISCONSIN (10)

Cultural Complexity in the Late Woodland Stage of Southeastern Wisconsin

For a long period of time, the Late Woodland Stage in southern Wisconsin, was associated with the Effigy Mound Tradition. The definition of the complex grew to include a long period of time and many artifact types. The only other late prehistoric entity was the site of Aztalan, assumed to be an intrusive occupation of Middle Mississippi peoples. This simple construct became more complex with the identification of the phases of the Oneota Tradition. In the 1980s, the author identified another Late Woodland manifestation, the Kekoskee Phase. Unlike the Effigy Mound peoples, the Kekoskee Phase peoples were horticulturalists living in relatively stable villages. These peoples may have had a close cooperative relationship with the village of Aztalan. Continued research now suggest that the late prehistoric period in southeastern Wisconsin was one of considerable cultural complexity. At least four different lifestyles were present; the hunting-gathering Effigy Mound peoples, the horticultural Kekoskee Phase peoples, the Oneota peoples and still unique settlement of Aztalan. Further there is growing evidence for the presence of frontiers in the region, along with some of these cultures appear to have been in conflict. By 1200 AD, only site of the Oneota Tradition can be identified in southeastern Wisconsin.

Salzer, Robert J. (Beloit College) - LATE WOODLAND IN WISCONSIN (10)

The End of the Panther's Tale: Effigy Mounds are No More

Earthen mounds in the shape of animals, mythical creatures, and humans were constructed in southern Wisconsin from around A.D. 800 until about A.D. 1250. Although the origins of the mound builders are obscured by lack of data, there is an increasingly abundant body of information that bears on the end of these fascinating architectural structures. Between A.D. 900 and 1100, two events occurred that played a major role in bring about

the end of the effigies; the arrival of Mississippian peoples from the south; and, the emergence of a new cultural entity, Oneota. This paper explores this complex socio-cultural situation, brings new field data and current anthropological thinking to bear on it, and attempts to explain how and why the Panther's Tale came to an end.

Sanders, Thomas L. (Minnesota Historical Society) - ROCK ART (16)

The Development of Educational Programming at Jeffers Petroglyphs Historic Site

Public educational programming began at Jeffers Petroglyphs Historic Site by local avocational archaeologists around 1964. Since then interpretation has gone through many changes. In 1966, the Minnesota Historical Society purchased the site from W.R. Jeffers. In the early 1970's, MHS built the site's first visitor center with exhibits. A new visitor center and exhibits were completed in 1999. With each one of these events came reinterpretation of the site. This paper covers the evolution of educational programming rooted in archaeological perspectives of the 1960's to the 1990's.

Sanderson, Meegan (University of Wyoming) - STUDENT (9)

The Effects of Trampling on the Orientation and Inclination of Experimental Lithic Raw Material

This paper presents the results of a controlled experiment in human trampling designed to determine the effects of trampling on flake orientation, inclination, and edge damage. It was found that trampling does not cause a significant pattern in orientation. Although trampling does cause flake inclination to conform to that of the ground surface. Also, basalt flakes suffered a significantly higher incidence of edge damage than obsidian, with chert lying between the two.

Sanderson, Meegan J.; see Byrnes, Allison M

Saxberg, Nancy (Lifeways of Canada Limited), Brian Reeves (Lifeways of Canada Limited), Mack Shortt (Lifeways of Canada Limited) and Claire Bourges (Lifeways of Canada Limited) - GENERAL - PALEOINDIAN (1)

After the Flood: Ancient Hunters of the Athabasca Lowlands

Detail archaeological studies carried out in support of Syncrude Canada Ltd. oil sands mine on the Lower Athabasca River have identified a rich and complex record post dating and related to the impacts of the Glacial Lake Agassiz catastrophic flood of ca. 9900 years ago. The flood removed preexisting forests and glacial sediments, contoured soft bedrock into hills and bars, exposed large quantities of siliceous material, creating as the high post flood flows receded over the next ca. 1000 years a series of recessional beaches, spits and islands in a 1000km² embayment at the river's mouth. An unique mosaic of wetlands, grasslands, parklands and forests developed during the warm/dry Early Holocene. Early hunters immediately reoccupied the lands in summer using water craft, leaving behind them a well defined sequence of parallel flaked lanceolate (Agate Basin and other Pre-Cody forms), stemmed (Cody related), and later obliquely flaked lanceolate (Northern Plano) complexes dating between ca. 9900 - 7500 years.

Saxberg, Nancy (Lifeways of Canada Limited) and Brian Reeves (Lifeways of Canada Limited) - GENERAL - HISTORIC ARCHAEOLOGY (15)

The Forgotten Forts: Excavations at Edmonton House

Recent archaeological investigations on the Rosedale Site (FjPi-63) in the City of Edmonton, Alberta have revealed a long history of occupation along the North Saskatchewan River. Cultural material has been recovered from a number of buried soils on this floodplain site, the earliest under Mazama Ash. The Rosedale site is the popular location of two phases of Edmonton House/Fort Augustus, the Hudson Bay Company and North West Company fur-trading forts dating to the early 1800s, although minimal evidence of these had ever been found and records of their precise locations are scanty. During excavations in 1999 and 2000, a section of palisade and a well-preserved fort occupation level were uncovered. The site, now home to a power generating station and water treatment facility, has been central to the urban development of the City of Edmonton for almost one hundred years, resulting in considerable impacts to the site in the past. Our study has identified processes by which early contact-period and precontact archaeological materials have been preserved and we have recovered evidence from the multiple occupations on this significant site.

Scarry, C. Margaret; see Hart, John P.

Schatz, Michelle D. (Archaeological Society of Alberta) - GENERAL - MANY PUBLICS IN ARCHAEOLOGY (24)

Fish Creek Provincial Park: Archaeology, Culture Heritage and Public Involvement

The purpose of this paper is to evaluate and integrate previous archaeological investigations conducted within Fish Creek Provincial Park. This research has resulted in a comprehensive interpretation and assessment of the cultural use of the area, and was conducted in order to determine whether archaeological investigations are creating a positive or negative impact on the park and surrounding community. This paper also examines the development of a social conscience within the park by giving the public control over their culture heritage, by involving them in exploring the past through excavation.

Scherer, Andrew K. (Texas A&M University) - 10,000 YEARS (3)

Late Precontact Dental Morphology and Biological Distance in the Upper Midwest

Understanding the origins and relationships of the Late Precontact archaeological manifestations remains one of the most pressing problems in Midwest archaeology. As a supplement to traditional taxonomic approaches, dental non-metric data is utilized to explore the biological variability within and between various Midwest archaeological groups. Among the archaeological manifestations considered are the Late Woodland, Oneota, Middle Mississippian and Middle Missouri traditions. Variability in dental morphology is assessed through trait frequencies and multivariate statistical analysis. General homogeneity is found among the samples considered, with some variation observed between the Oneota and the other Late Precontact groups.

Schermer, Shirley J.; see Alex, Lynn M.

Scott, Douglas D. (Midwest Archeological Center/National Park Service) - MILITARY (2)

The Sand Creek Massacre of 1864: Finding the Site and Resolving the Issue with Physical Evidence

While the Civil War raged in the eastern states, citizens of Colorado Territory faced an uneasy

existence. Fed up with so-called Indian depredations, Governor John Evans ordered two units of the Colorado Volunteer Cavalry to subdue the hostile Cheyenne and Arapaho bands. Using cannon and small arms the Colorado volunteers charged the camp killing around 160 Indians, mostly women and children. The actual site of the event was lost to memory over the years. The National Park Service undertook a reassessment of the documentary records and concluded that the traditional monumented location was, in fact, incorrect. Using the new historical assessment archeologists sought and found physical evidence of the village and ordnance materials expended during the attack. The physical evidence shows the line of attack by the Colorado volunteers and their extensive firepower. The Cheyenne and Arapaho related evidence shows almost no evidence of resistance, rather a complete disintegration of organization and a chaotic flight for survival in the face of the attack. The physical evidence supports the contention that the Indian camp suffered a surprise attack and the evidence is consistent with the conclusion the attack was, indeed, a massacre.

Scullin, Michael (Mankato State University) - CAMBRIA (19)

Subsistence Strategies of the Cambria Focus People

A Cambria Focus site near the type site has provided a wealth of data about Cambria subsistence—the Price Site (21BE36). The Jones Site does not directly provide much evidence, but what is not there is telling. I will try to provide a fairly complete picture of the subsistence activities of the Price inhabitants who had five ecosystems into which to tap, all within a short walk. And I will also speculate on what may have been the failures of those systems by the time of the occupation of the Jones Site.

Sellet, Frédéric; see Hill, Matthew Glenn

Sersland, Carol (BRW, Inc.) - EARLY WOODLAND IN MINNESOTA (4)

Viewing Patterns of Environmental Characteristics for Early Woodland Sites Within a Locational Model

Environmental Characteristics of the Early Woodland Period in Minnesota, as determined by modeling with GIS, will be presented. Relationships between landscape features and archaeological site locations will be examined and depicted through a series of maps. Site probability patterns will be compared with past and current qualitative assumptions regarding archaeological site distributions.

Sewell, Andrew (Fort McCoy Archaeology Laboratory) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Results of an Archaeological Survey of 115 Historic Homesteads in Monroe County, Wisconsin

During the summer of 1999, 115 historic archaeological sites were inventoried on Fort McCoy, a United States Army Reserve Post in West-Central Wisconsin, and were evaluated for potential to be nominated to the National Register. The population of numerous sites of a similar nature with a large area (60,000 contiguous acres) presents an excellent opportunity for comparative and contextual studies. This paper presents the results of this project, discusses the different types of historic archaeological resources with the project area, and briefly examines the growth and development of the project area over a 90-year time span from an archaeological perspective.

Sheen, Sara; see Reher, Charles

Sheen, Sara; see Reher, Charles A.

Shortt, Mack (Lifeways of Canada Limited) - GENERAL - REGIONAL STUDIES (31)
The Canyons of the Yellowstone: 1996 -2000 Museum of the Rockies Research

A long term contract archaeological research program for the National Park Service through the Museum of the Rockies began on the Yellowstone River in Yellowstone National Park in 1996. This program has essentially completed the archaeological inventory of the river from Gardener, MT through the Black Canyon to above Tower Falls in the Grand Canyon and downstream from Yellowstone Lake through Hayden Valley to the Grand Canyon. Sites are particularly numerous in the Black Canyon and Hayden Valley. Test excavations have been carried out at a number of sites threatened with erosion in the Black Canyon. Four sites tested in the lower terrace date back to McKean Complex (ca 4500 - 3000 yrs), with more recent and intensive occupations related to the Pelican Lake (ca. 3000 - 1600 yrs) and Uinta (ca. 1600 -800 yrs) phases followed by a minor late Shoshonian occupation ca 800 -500 years ago prior to the Little Ice Age, a time when there appears to have been limited cool/warm occupation in the Park.

Shortt, Mack; see Saxberg, Nancy

Simon, Mary; see Emerson, Thomas E

Sisson, J. Richard; see Lynch, David

Sittler, Meghan (University of Nebraska/ Midwest Archeological Center, National Park Service) and Kenneth P. Cannon (Midwest Archeological Center, National Park Service) - GENERAL - FAUNAL AND FLORAL (29)

Fourteen Thousand Years of Rodents: A Record from Southern Jackson Hole, Wyoming
 Vertebrate faunal remains from terminal Pleistocene deposits have not been previously reported for Jackson Hole, Wyoming. In fact, remains from this period are generally lacking in the Greater Yellowstone Ecosystem. The lack of a faunal record from this dynamic time period is notable, considering all that is known concerning the glacial history, climate, and vegetation. Therefore, this assemblage from southern Jackson Hole provides an important opportunity for the study of rodent community patterns over the last 14,000 years. In this paper, we will present information on an assemblage of rodents from the Crescent H Ranch site (48TE1079) in the context of previous paleoenvironmental studies from the region.

Slessman, Scott (Colorado State University) - GENERAL - PALEOINDIAN (1)

Lithic Analysis of Agate Basin Materials from Northeastern Colorado: The Frazier Site Revisited

Results of a macroscopic analysis of the Frazier site lithic assemblage are provided. Specific metric and technological data are presented regarding the Frazier lithic material. Frazier Agate Basin Paleoindian land-use patterns are modeled based on raw material frequency and the distance of raw material sources from the Frazier site. Additionally, debitage and tool refitting identified specific lithic reduction events, Agate Basin technology,

separate raw material nodules, and taphonomic processes that have effected the archaeological record at the Frazier site.

Snortland, J. Signe; see Banks, Kimball M.

Snortland, J. Signe; see Van Nest, Julieann

Stanley, Lori A. (Luther College) - LANDSCAPES (22)

Rethinking the Archaeology of Northeast Iowa: Incorporating American Indian Perspectives on Earthworks and Rock Art

Until recently, archaeological investigation and interpretation in Northeast Iowa proceeded largely without input from American Indians. Contributing to this situation was the fact that the Indian nations that once lived in the area were removed or left under pressure by the early settlement era. Though some archaeological studies made use of the ethnographic literature, virtually none attempted to incorporate insights from contemporary American Indian people. This trend is beginning to change as a consequence of recent efforts to invite members of the area's "historic tribes" back to Northeast Iowa. This paper will describe those efforts and discuss the impact on archaeological interpretation.

Stephens, Doug; see Todd, Larry

Stinson, David (Martin University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Discovering Privy Boundaries

During the 1999 field season a depression was discovered on site 12Ma648. This depression was not investigated due to its location outside the study area. Prior to the 2000 field season soil cores were taken in the depression as part of a separate paleo-geology project. Due to the lack of a typical soil profile and the presence of artifacts at a depth in excess of 40 centimeters, it is hypothesized that the depression may represent a privy. During the 2000 field season the study area was expanded to include the depression.

Stinson, David; see Kennedy, Chris

Stohlgren, Tom; see Todd, Larry

Strauss, Richard; see Buchanan, Briggs

Strezewski, Michael (Glenn Black Laboratory, Indiana University) - GENERAL - LATE PREHISTORIC (28)

The Heaton Farm Site (12Gr122): Insights into Late Prehistoric Structures and Site Design in South Central Indiana

The Heaton Farm site (12Gr122) is a small Late Prehistoric village on the West Fork White River, in Greene County, Indiana. Recent excavations exposed the remains of five structures of two different types. Confounding the interpretation of these structures is the fact that ceramics from two different, but contemporary cultural traditions (Vincennes and Oliver phases) are present on the site. This paper attempts to discern the cultural affiliation and function of the Heaton Farm structures and compares them to previously excavated examples from Vincennes and Oliver phase sites. The organizational principles that guided the village layout are also discussed.

Stubbs, Donna (HDR Engineering, Inc.) - COLLECTIONS CURATION (6)*Archaeological Curation Policies*

The final resting place of many archaeological artifacts and collections is a curation facility. The critical need of these collections for future research mandates that we make every effort to protect and preserve these collections. In order to successfully protect and preserve collections, every curation facility must have curation policies in place. These policies, which are briefly covered in this presentation, include accessioning, conservation, deaccessioning, research access to collections, loans, and the preservation of documentation associated with collections. It is the responsibility of all archaeologists and curators to ensure that policies are in place so that archaeological collections are still available in the future.

Studenmund, Sarah J. (Illinois Transportation Archaeological Research Program) - GENERAL - MIDDLE WOODLAND (25)*An Analysis of Features From Middle Woodland Sites in Northern Illinois*

In the past two decades a number of Middle Woodland sites in northern Illinois have been excavated through CRM projects. Investigations at eight sites have yielded basic data on Middle Woodland occupations (AD 0 - AD 300) in the Spoon, Rock, Green and Mississippi River valleys. An analysis of the features has produced insights into site function and structure at these Havana-Hopewell sites. In this paper I present the results of this analysis, and compare these occupations with Havana-Hopewell sites in the lower Illinois Valley.

Sturdevant, Jay T. (University of Nebraska) - STUDENT (9)*The Archeology of Typefaces and the "Frontier Scout" Newspaper from Fort Union Trading Post National Historic Site, North Dakota*

During the nineteenth century, printed documents were an important source of information, communication, and entertainment for soldiers stationed in the American West. Archeological excavations of Fort Union Trading Post NHS in 1988 by the NPS Midwest Archeological Center recovered approximately 21 specimens of typeface used in a printing press. A small contingent of Army troops, temporarily at this fur trade post (1864-1865), produced the *Frontier Scout* newspaper. A comparative microscope was used to look at the print samples from the archaeological typefaces and the *Frontier Scout*. This provides a more complete understanding of printed documents on the American frontier.

Sundermeyer, Scott; see Obermeyer, Brice

Sundstrom, Linea (Day Star Research) - LANDSCAPES (22)*Blind Encounters: Archaeologists and Sacred Sites in the Northern Plains*

Some Plains archaeologists have readily recognized the religious aspects of sacred sites. Others have failed to recognize even the most well documented sacred sites. This failure has several causes: application of a false dichotomy between secular and religious artifacts, features, and sites; the assumption that everyday objects lacked religious meaning; marginalization of sites and site types that do not fit common functional categories; ignorance of the ethnographic literature; the belief that what happened in the past can be proven through scientific experimentation; and professional training that emphasizes stones, pots, and bones to the near exclusion of other kinds of archaeological material.

Surovell, Todd; see Kornfeld, Marcel

Surovell, Todd A.; see Waguespack, Nicole M.

Swenson, Fern E. (State Historical Society of North Dakota) and Paul R. Picha (State Historical Society of North Dakota) - PUBLIC EDUCATION (5)

An Overview of Archeological Public Education and Outreach Programs at the State Historical Society of North Dakota

Public education and outreach on archaeological and preservation matters are a primary goal of the State Historical Society of North Dakota (SHSND). The Archeology and Historic Preservation Division works in tandem with the Education and Interpretation Division at the SHSND to bring an array of programs to the public. Recent collaborative projects with other institutions and organizations include archeological field schools at Menoken and Fort Clark State Historic Sites the past three summers. Teacher education and public outreach programs have focused on the non-renewable and irreplaceable quality and value of archeological and historical resources through a variety of mediums. "Kid's Night at the Museum" and the "Highways to Prehistory" brochure are recent examples of this broad focus. Ongoing, collaborative interactive programs are key to reaching the public we serve.

Tamasi, Ian; see Boland, Dale

Theler, James L. (University of Wisconsin-La Crosse) and Robert F. Boszhardt (Mississippi Valley Archaeology Center/University of Wisconsin-La Crosse) - LATE WOODLAND IN WISCONSIN (10)

The End of the Effigy Mound Culture: The Late Woodland to Oneota Transition in Southwestern Wisconsin

Archaeological research in the Bad Axe River drainage of southwestern Wisconsin's Driftless Area has produced new data on settlement and subsistence patterns at the end of the Late Woodland "Effigy Mound Culture". The changes include a move to year-round occupation of smaller, interior valleys corresponding to a regional human population increase. Smaller valleys, like the Bad Axe, are notable for their effigy-only mound groups that seem to characterize the end of the Effigy Mound Culture. It is suggested that this period saw shifts in technology, particularly the adoption of the bow and arrow; an investment in maize horticulture; a transition from bands to tribes; and interaction with the Mississippian culture area to the south. Many small interior valleys of southwestern Wisconsin, capable of supporting residential human groups, were filled and defended. The flexible annual subsistence round of earlier centuries was broken and within decades incipient tribes would abandon the Driftless Area and nucleate at agricultural centers at Red Wing and Apple River as the Oneota.

Thomas, Matt (University of Wisconsin - Madison) - COLLECTIONS CURATION (6)

A Comparison of the Representation of Native American Maple Sugaring in Western Great Lakes Museums and the Archaeological and Photographic Record

This paper examines Native American maple sugaring museum collections from the Western Great Lakes. The process of acquisition, the motivation and directions of individuals and museum, and the biases of those making collections are specifically considered. When compared to the archaeological and photographic record of sugaring, it is apparent that nearly all Western Great Lakes museum collections of Native American

maple sugaring artifacts reflect an idealized, pre-contact, vision of Native American material culture. Moreover, the introduction of "non-Native" technology and the adaptability of Native American sugar makers, is severely underrepresented in museum collections, but well established in the archaeological record.

Thompson, Bob (University of Minnesota) - COLLECTIONS CURATION (6)

In Microscopic Things Forgotten

Food residues baked on to the interior surface of utilized ceramics, frequently ignored by archaeologists, are an important source of data on subsistence and food preparation activities. Thirty years ago, flotation was considered a novel approach to gathering plant remains. Today, no serious scholar would ignore the potential of hearth ash deposits to contain charred seeds, small bones, flakes and a wealth of important data. Food residues have the same potential for providing data. The recovery of opal phytolith assemblages has enabled the identification of wild rice, and even different varieties of corn. Phytolith assemblages locked in food residues are not susceptible to post-depositional processes, and can be recovered from archived material.

Tiffany, Joseph A. (Iowa State University) - CAMBRIA (19)

Mill Creek-Cambria Connections

This paper reviews the evidence for Mill Creek-Cambria interaction in the western Prairie Peninsula. Limited evidence in the form of Cambria trade pottery has been reported from at least five Mill Creek sites. Of interest is the extensive presence of Mississippian-inspired pottery and decorative styles at both Cambria and many Mill Creek sites, suggesting both manifestations are examples of regional Stirling horizon activity. Models for Mill Creek-Mississippian contact during the Stirling horizon are reviewed with emphasis on roles of Cambria and Mill Creek with Upper Mississippi Valley Mississippian sites in the Red Wing area.

Todd, Larry (Colorado State University), Oskar Burger (Colorado State University), Paul C. Burnett (Colorado State University), Tom Stohlgren (Natural Resource Ecology Laboratory, Colorado State University), David Rapson (University of Wyoming), and Doug Stephens (US Forest Service) - POSTER (32)

Investigating the Affects of Large Herbivore Grazing on the Discovery, Management, and Interpretation of Cultural Materials

A number of processes affect artifact visibility and movement on the landscape. Grazing by large herbivores (bison in the past, and cattle today) influences the formation and structure of the archaeological record. Current research on the Oglala National Grasslands in western Nebraska by Colorado State University and the US Forest Service is beginning to shed light on the relationships between contemporary grazing, site formation processes, archaeological survey, and cultural resource management. Numbered aluminum clasts (termed fauxbitage) are placed in replicate Modified-Whittaker plots (which also contain prehistoric chipped stone) inside a grazing enclosure and in an adjacent pasture that receives moderate annual grazing. Multi-year documentation of artifact movement, surface visibility, plant species diversity, and plant biomass can be monitored and analyzed to aid in our understanding of appropriate management and analysis of cultural materials.

Todd, Larry (Colorado State University), Oskar Burger (Colorado State University), Paul C. Burnett (Colorado State University), Tom Stohlgren (Natural Resource Ecology Laboratory, Colorado State University), David Rapson (University of Wyoming), and Doug Stephens (US Forest Service) - POSTER (32)

Implementing Nested-Sampling in Archaeological Surveys

Archaeologists frequently borrow techniques from other scientific disciplines. However, when it comes to survey design, few attempts have been made to learn from other fields which grapple with similar methodological issues. A technique recently adapted by plant ecologists at Colorado State University using a multi-scale, or "nested", design has greatly improved the quality of their species diversity surveys. The methodological hurdles faced by plant ecologists and archaeologists are actually quite similar, but archaeologists have not been as successful in developing comparable, quantifiable, and efficient survey techniques for sampling a small percentage of a large landscape. Preliminary results of use of the "Modified-Whittaker" vegetative sampling design to evaluate traditional archaeological survey methods are discussed.

Todd, Lawrence C.; see Burnett, Paul C.

Todd, Lawrence C.; see Nicholson, Christopher M

Toom, Dennis; see Henning, Dale R.

Toom, Dennis L. (University of North Dakota), and Michael A. Jackson (University of North Dakota) - SONOTA (20)

Sonota Complex Sites in Eastern North Dakota

The 1967 (1975) distribution map of Sonota complex sites in the Dakotas shows only one site beyond the confines of the Missouri River valley proper, the Baldhill Mounds in eastern North Dakota. Since 1967, a number of other Sonota complex sites have been identified, particularly in eastern North Dakota. Included among these are the Jamestown Mounds, Nage, and Akata sites on the James River, and the Horner-Kane site on Devils Lake. The goal of this paper is to begin the process of broadening the horizons of the Sonota complex by presenting information on these sites and their occupation.

Tonetti, Alan C. (ASC Group, Inc.) and Sandra Lee Yee (SunWatch Indian Village and Archaeological Park) - PUBLIC EDUCATION (5)

An Overview and Assessment of Archaeology Public Education and Outreach Programs in Ohio

There are many archaeology public education and outreach programs/activities in Ohio. Many of these are sponsored/conducted by "professional" archaeologists, but "avocational" archaeologists and collectors organize a significant number. Ohio conducted its first Archaeology Week in 1999. Prospects for the future are discussed. Some audiences critical to building support for state-sponsored archaeological programs are being neglected. Measuring the impact of archaeology public education and outreach programs on public awareness and the political process is difficult and subjective, as is determining the wants/needs of the public. Nevertheless, an attempt to do so is made.

Tratebas, Alice M. (Bureau of Land Management) - GENERAL - TOPICAL STUDIES (30)

Defining Petroglyph Traditions Using Statistical Techniques

Early petroglyphs in the Central Rocky Mountains and adjacent Plains have enough similarities that researchers may perceive them as belonging to the same style or tradition. Statistical techniques which measure similarities or dissimilarities, however, show finer-scaled distinctions. Thus, Early Hunting petroglyphs in eastern and western Wyoming may belong to different cultural entities despite their perceived similarities. Both in turn are clearly distinguished from a separate early petroglyph tradition in the same region. This analysis is a preliminary attempt to develop statistical techniques for defining rock art traditions that may ultimately help us trace the movements and divergences of cultural groups.

Trocki, Patricia; see Hajic, Edwin R.

Twinde, Vicki L. (Mississippi Valley Archaeology Center) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Preliminary Report on the Excavations at Second Fort Crawford

In 1999, foundations of Second Fort Crawford were found while monitoring road construction in Prairie du Chien, Wisconsin. Second Fort Crawford, strategically placed on the Prairie du Chien terrace, was a large military fort in operation from 1829 to the mid 1850's. Excavations at this fort were conducted in portions of both the Company Quarters and Officers Quarters, resulting in the recovery of over 45 cubic feet of non-structural artifacts. This paper will focus on the excavations at the fort and preliminary information on the artifact assemblage.

VanderVeen, James M. (Indiana University) - NEXT STEP ARCHAEOLOGY PROJECT (18)

Same Pots, Dissimilar Places?: A Comparison of Frontier Indiana Ceramic Assemblages

The presence or absence of particular ceramics has generally been considered an important factor in the assessment of socio-economic status. This portrayal of household wealth does not take into account the isolated nature of frontier communities and restrictions placed on individual choices. To address this issue, a comparison was conducted of two contemporary 19th century sites that share a common economic background. The ceramic inventories of both sites were analyzed with regard to contrast in pottery styles present. The differences in these goods were then compared to the respective local economics and ease of access to outlets of trade.

VanderVeen, James M.; see Huggins, Edwin

Van Nest, Julieann (New York State Museum, Albany) and J. Signe Snortland (Bureau of Reclamation, U.S. Department of the Interior) - SONOTA (20)

Building Mounds the Illinois Hopewell Way in North Dakota

In 1982, four of eighteen mounds were excavated at 32SN22 near Jamestown, North Dakota. Mound B dates to the 1st c. A.D. and occupies a central position within the group. It contains many elements attributable to the Sonota complex, and several exotic artifacts acquired via long-distance trade (e.g., *Busycon*, *Anculosa*, *Marginella*, copper and obsidian). In this paper, we explore earthen architectural themes that Jamestown Mound B also

shares with Illinois Hopewell mounds. Most notable is a thin prepared floor of sand and what is probably a circular aboveground earthen tomb composed of stacked blocks of sod having a distinctive trapezoidal shape in cross-section.

Vawser, Anne; see Bozell, Rob

Vivian, Brian (Lifeways of Canada Limited) and Brian Reeves (Lifeways of Canada Limited) - GENERAL - PALEOINDIAN (1)

The Lust Site (EgPn428): A Late Early Holocene Camp in the Foothills of the Bow Valley
Mitigative excavations in support of a planned subdivision development in West Calgary recovered the remains of a small (ca. 140m²) single component warm season prairie level campsite associated with a buried soil which regionally dates to ca. 8000 yrs. Mazama Ash lay above. Discrete activity areas were defined believed representative of two or more lodges located at that time on the edge of a small slough. Pine parklands rather than grasslands characterized the local vegetation. Bison, bear and wolf remains were recovered from the former slough floor to the south of the camp suggesting a discard area. Bison, sheep, deer, bear and rabbit were identified in blood trace analysis, indicative of the diverse and productive nature of the Bow Valley ecosystem at that time when the regional climate was briefly wetter and cooler. A Lusk Lanceolate point was recovered indicating an association with the Plains/Mountain Complex.

Voll, William J. (University of Nebraska/Midwest Archaeological Center, National Park Service) - GENERAL - MIDDLE WOODLAND (25)

The Szalay Site: Hopewellian Occupation in Northeastern Ohio

Excavations in 1997, 1998, and 1999 on the grounds of the Szalay House, a historic home in Everett Village, Cuyahoga Valley National Recreation Area, Ohio, uncovered portions of an intact Middle Woodland occupation of the area. While Middle Woodland habitation in Northeastern Ohio is documented, the occurrence of an intact, non-mound site is quite rare. This paper assesses the lithic and ceramic assemblages from Szalay and puts the site into a regional Hopewellian perspective.

Waguespack, Nicole; see Kornfeld, Marcel

Waguespack, Nicole M. (University of Arizona), Todd A Surovell, (University of Arizona) and Marcel Kornfeld (University of Wyoming) - GENERAL - PALEOINDIAN (1)

The Barger Gulch Folsom Site in Middle Park, Colorado

Recent investigations at the Barger Gulch site, near Kremmling, Colorado, have revealed an in-situ Folsom aged occupation. Spatial analysis of subsurface cultural material suggests minimal disturbance of the Folsom occupation level, indicating an association between chipped stone artifacts and a late Pleistocene/early Holocene paleosol across the site. The proximity of the site to an outcrop of Troublesome Formation chert, has led to previous characterizations of the site as primarily a lithic raw material quarrying locality. The excavated assemblage contains evidence that a greater range of activities occurred at the site, ranging from primary core reduction to tool refurbishing and use.

Walker, Danny N. (Wyoming State Archaeologist's Office) - PUBLIC EDUCATION (5)
Archaeological Public Education in Wyoming

Several public outreach programs are coordinated by the Department of State Parks and Cultural Resources in Wyoming, including general public presentations, class room presentations, Wyoming Archaeology Month activities, volunteer archaeological excavations, and assistance to other agencies, primarily Federal, in their outreach programs. These programs are to increase the awareness of the general public about Wyoming archaeology and why it is important for people to be aware of the topic. We see these programs increasing in the future, working more and more at hands-on types of activities, especially for the volunteer excavations and laboratory curation.

Walker, Danny N. (Wyoming State Archaeologist's Office) - POSTER (32)

48FR3123: A Late Prehistoric Village Site in the Central Wind River Basin, Wyoming

Archaeological investigations at 48FR3123 have centered on a series of activity areas characterized by two to three meter diameter depressions resembling what have been interpreted as "pit houses" or "house pits." Six of these depressions have been excavated, none of which resemble a "house pit" in its defined or inferred sense. The features range in depth from 10 cm to 30 cm, and none are similar. The more generic term of "lodge" must be used for these features at 48FR3123. Within each of these lodges can be found between zero to four or more hearth features, possibly related to meat roasting or prickly pear procurement. Based on spatial relationships of the lodges, we propose they were occupied simultaneously, and do not represent repeated occupation of the site by a small nuclear family group. This means a large group of gatherer/hunters were using the site one thousand years ago and we must re-think our concept of prehistoric human population size in the intermountain basins of Wyoming.

Walker, Danny N. (Office of the Wyoming State Archaeologist) and Steve DeVore (National Park Service) - MILITARY (2)

A Summary of Geophysical Investigations at Fort Laramie National Historic Site

Since 1994, various archaeological monitoring and excavation projects have been conducted around the historic features and buildings at Fort Laramie National Historic Site, Wyoming. These have all been preceded by a geophysical remote sensing survey using primarily soil resistivity and gradiometer instruments, although other techniques have also been used. The usefulness of the remote sensing survey has been shown to be highly beneficial on every project, resulting in large savings in both time and money, especially if the surveys are conducted early enough that construction planning can incorporate those data. With proper application and interpretation of the remote sensing techniques, the archaeology on such massive historic sites can be adequately protected, but various maintenance and construction projects are still able to proceed. The various surveys conducted at the fort are reviewed, followed by a discussion of what was found during follow-up ground-truthing or construction activities.

Wandsnider, LuAnn (University of Nebraska-Lincoln) and Simon J. Holdaway (University of Auckland, New Zealand) - GENERAL - TOPICAL STUDIES (30)

Of Pompeii and Palimpsests: Material Temporalities and Interpretative Goals in North American Plains and Mid-continental Archaeology

Most archaeologists evidence a sophisticated understanding of the palimpsest, multi-temporal nature of archaeological deposits. Nevertheless, most archaeologists also continue to seek interpretations of archaeological deposits that refer to, describe or explain human behavior in the short-term, ethnographic domain. Thus, interpretations often focus on the Pompeii-like aspects of assemblages and attempt to warrant (sometimes mistakenly so) these as congruent with short-term interpretative requirements. Using examples from North America, this paper unpacks this issue through a consideration of both specific formational temporalities of archaeological phenomenon and the temporality assumptions evident in archaeological practice. It concludes with a call for archaeologists to re-engage archaeological phenomenon in its own palimpsest terms.

Warren, Robert E. (Illinois State Museum) - GENERAL - FAUNAL AND FLORAL (29)
Prehistoric Procurement and Use of Freshwater Mussels Along the Missouri River in the Northern Great Plains

Bivalve shells from late-prehistoric villages located along the Missouri River in the northern Great Plains reflect distributions of aquatic habitats and human behavioral patterns associated with the procurement and use of freshwater mussels. In the Cannonball and Grand-Moreau regions, sites located west of the Missouri are dominated by one species (*Lampsilis siliquoidea*), while sites east of the river are dominated by another (*Pyganodon grandis*). Mussel gatherers evidently exploited a multiplicity of aquatic habitats in this area, suggesting that the Missouri River's mussel fauna was limited in abundance or limited in species diversity, or both.

Weathermon, Rick; see Reher, Charles

Wedel, Dale L.; see Miller, Mark E.

Wettstaed, James (Mark Twain National Forest) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Living on the Coaling Grounds: Archaeological Investigations of Charcoal Worker's Houses in the Missouri Ozarks ?

Previous investigations by the Mark Twain National Forest documented the presence of an extensive charcoal production complex affiliated with an iron furnace that operated in the early 1880s. This complex includes numerous charcoal pits and rock features thought to represent temporary habitations. Recent test excavations at three sites recovered relatively small, but clearly domestic assemblages. Variability is evident between the sites and at least one appears to have been occupied by a family. These results contradict some of the historical literature and provide a fuller picture of the lives of the people involved in the 19th century Missouri iron industry.

Weymouth, John; see Karsmizki, Ken

Weymouth, John (University of Nebraska) and Ken Karsmizki (Museum of the Rockies/Montana State University) - MILITARY (2)

Four Seasons of Magnetic Surveys at Fort Clatsop National Memorial, Oregon

Fort Clatsop National Memorial, Oregon is the site of Fort Clatsop erected by Lewis and Clark in 1805 when they reached the mouth of the Columbia River and wintered over. The

site has been tested by excavation at various times. There is a reconstruction of the Fort but the precise location is not known. We conducted magnetic surveys in areas around the presumed location over four seasons, 1996 through 1999. There are no clear indications of the original Fort position but we have located trenches of Schumacher's excavations. This will permit us to reestablish the trenches and the features that were reported. There are also indications of later 19th century dwellings. Since the surveys were each done separately with local coordinates in meter units and sometimes not strictly along true north we are now adjusting all data to be combined into one set in feet units and located with respect to the Oregon State Plane Coordinate System.

Widga, Chris (University of Kansas) - GENERAL - FAUNAL AND FLORAL (29)

The Logan Creek Fauna: Early Archaic Bison Hunting on the Eastern Plains

Excavations by Nebraska State Historical Society personnel in the 1950's and 1960's on Logan Creek in Northeastern Nebraska produced a series of stratified Early Archaic deposits predominated by bison bone. Analysis of these fauna suggests a riparian environment with permanent tree cover in addition to nearby, grassy uplands during the Altithermal. While dental estimates of seasonality show some clustering, it is not known whether this is due to a single kill event or simply seasonal use of the site itself. Furthermore, it is maintained that the Logan Creek occupations were bison processing events where large meat units were butchered after being transported from the kill locality. This faunal assemblage has the potential to offer information of importance to paleoenvironmental reconstruction and cultural adaptation during the Altithermal on the Great Plains.

Widga, Chris (University of Kansas) and Jack Hofman (University of Kansas) - POSTER (32)

Recent Investigations at the Waugh Site in Northwestern Oklahoma

Following its discovery in 1991, the Waugh site underwent several seasons of excavation. The mixture of Late Pleistocene/Early Holocene components present at this site make it unique in Plains Paleo-Indian studies. Locality 1 is a small bison bonebed containing approximately 5 animals. A possible hide-processing area, located immediately upslope of Locality 1, has yielded surface finds of butchering tools. Locality 3, located approximately 100 m to the south, has produced two hearth features, one of which is dated to Folsom age. The 2000 excavations by the KU/MU archaeological field school focused on exposing an 8x10 m area within the bonebed as well as the second hearth feature in area 3. The preliminary results of these investigations will be presented in this poster.

Williams, John A. (University of North Dakota) - 10,000 YEARS (3)

Markers of Occupational Stress and Disease in a Late 19th and Early 20th Century Northwestern Minnesota Cemetery Population

The Fisher Lutheran Cemetery has been in use to the present since the 1870's. Those interned at the cemetery are exclusively Caucasian and predominately of Norwegian ancestry. The relatively homogenous nature of the cemetery sample provided an opportunity to examine facets of late 19th and early 20th century life on the Northern Plains. The majority of these graves involved persons older than 60 years of age. Several adults displayed vertebral osteophytosis. Significant in this was the involvement of the cervical vertebrae and accompanying osteoarthritis of the articular surfaces. Incipient body fusion was noted as well as eburnation of the articular facets.

Williams, John A. (University of North Dakota) - SONOTA (20)*The Bioarchaeology of the Sonota Complex*

Human burials have been recovered from eight Sonota complex sites. Four of these sites (222 individuals) have received thorough osteological study. Most burials are secondary and typically commingled with one another. Burning and cut marks have been observed on some bones. One of the most telling features of the Sonota complex skeletal samples is their demographic profile. They have the overall highest crude death rate and lowest life expectancy at birth (14.7 years) of known prehistoric samples in the Northern Plains: young juveniles (<10 years) account for 58 % of all individuals. However, evidence of acute or chronic osteopathological conditions were not overtly apparent.

Wiseman, Dion; see Running IV, Garry Leonard

Wiseman, Dion (Brandon University), Garry Leonard Running IV (University of Wisconsin-Eau Claire), Andrea Freeman (University of Calgary), and Brent N. Joss (University of Regina) - SCAPE (21)

Applications of GIS, Remote Sensing and GPS Technology for Geoarchaeological and Ethnohistorical Investigations at SCAPE Study Localities: Methods and Progress Reports

The application of GIS, remote sensing and GPS technology at SCAPE study areas is being used to facilitate geoarchaeological and ethnohistorical investigations related to the selective use, perception, and alteration of these unique physiographic and biological environments. These technologies will enable SCAPE investigators to assemble, integrate, extract, and analyze a variety of information in an effective and efficient manner. Current efforts are focused on the use of these technologies for geomorphic reconstruction, paleohistoric and pre-settlement landcover reconstruction, and the integration of early Native American and European maps and aboriginal toponymy to facilitate ethno-historic investigations.

Wood, W. Raymond (University of Missouri) and Douglas A. Birk (Institute for Minnesota Archaeology) - GENERAL - HISTORIC ARCHAEOLOGY (15)

Pierre-Charles Le Sueur's 1702 Map of the Mississippi River

As part of a tercentenary observance of Le Sueur's last North American voyage, this paper reexamines the history, content, and scholarly value of his 1702 map of the Minnesota area. The map helps demonstrate how and when French colonials acquired their knowledge of people and places in the midcontinent and it also helps frame ideas that may be tested archaeologically. In the Upper Midwest, French records have been used to find and identify sites, develop historical contexts, and reconstruct cultural processes. Among the sites that await discovery is that of Le Sueur's Fort L'Huillier, built in southern Minnesota in 1700.

Woodward, David (Superior National Forest/University of Minnesota, Duluth) - POSTER (32)

The Norski Site: A Laurel Habitation Site in Northeastern Minnesota

The site is located on an esker point extending into the St. Louis River. Ceramics have been found dating to the Laurel period with distinct nonceramic levels below the Laurel occupation zones. Given the nature of the esker; there is a high probability of earlier cultural components. In addition, fire hearth and post mould features have been uncovered, leading us to believe this was a habitation site. This poster will describe the Norski Site and the nature of Laurel habitation in the area.

Wright, Carrie C. (Hamline University) - 10,000 YEARS (3)*A Trace Element Analysis of Human Remains from the Hamalainen Cemetery Site: The Impact of Sample Selection and Analytical Technique on the Reconstruction of Past Dietary Practices*

Over the past 30 years trace element research has highlighted the significant contributions of bone chemistry to the reconstruction of past dietary practices. Research has also identified methodological factors that produce contradictory results. Concentrations of strontium (Sr) and calcium (Ca) were determined for bone and dental enamel samples from four individuals recovered from the Hamalainen Cemetery site (21IC106). Bone assays using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) and Atomic Absorption Spectroscopy (AAS) produced significantly different results for both the dental enamel and bone. Results are interpreted in light of method applied, potential sources of contamination, and biological material analyzed.

Wulfkuhle, Virginia A. (Kansas State Historical Society) - PUBLIC EDUCATION (5)*Meaningful Work for Extraordinary Volunteers*

Public education/outreach is a long-standing component of the archeology program at the Kansas State Historical Society (KSHS). The Kansas Archeology Training Program has involved avocational archeologists in meaningful field and laboratory work since 1974. The Kansas Anthropological Association and KSHS are also partners in publishing "The Kansas Anthropologist," providing an outlet for amateurs and professional to report their investigations. Kansas Archeology Week was instituted in 1992, and the KSHS and its co-sponsors have disseminated posters and accompanying educational materials to schools, libraries, and other organizations. An anthropological curriculum for middle school educators, "A Place to Call Home," was produced and distributed. A brochure for landowners has been developed. Focus groups and joint committees currently are exploring strategies for broadening and better targeting education/outreach efforts.

Yee, Sandra Lee; see Tonetti, Alan C.

Zalucha, L. Anthony (Paleoethnobotanical Consulting) - FOODWAYS (13)*Agricultural Subsistence in Southeastern Iowa: Late Woodland through Oneota at the Weaver Site*

The Weaver site, in southeastern Iowa, documents Native American agriculture from Late Woodland through Oneota times. In contrast to Late Woodland contexts where maize agriculture could not be documented, maize was the most important cultigen grown by the Weaver Oneota. Statistical analysis suggests that three varieties were produced. Other Woodland cultigens recovered include the usual suite of oily and starchy seed crops. By Oneota times maize had begun to replace these resources, probably because of its much greater productivity. Maygrass was the first casualty, a pattern seen at several, although not all, contemporary sites.

Zimmerman, Larry J.; see Artz, Joe Alan

Zschomler, Kristen M.; see Birk, Douglas A.

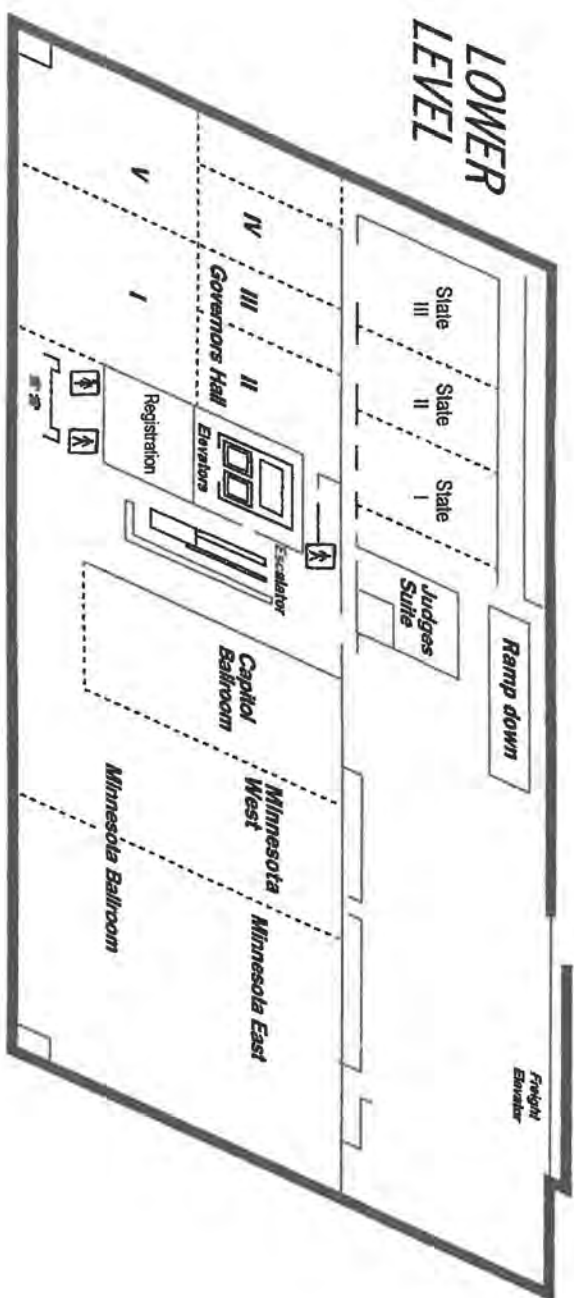
point pattern analysis

σ

σ = regular measure of dispersion

(dispersion relative to a single point)

LOWER LEVEL



2000 JOINT MIDWEST ARCHAEOLOGICAL/PLAINS ANTHROPOLOGICAL CONFERENCE – [Summary Schedule](#)

	Capital Ballroom	Governor's I	Governor's II & III	State I	State II	State III
Fr AM	<i>PaleoIndian Research</i> 8:00-12:00	<i>Military Sites</i> 8:00-12:00	<i>10,000 Years – Bioarchaeology</i> 8:00-12:00	<i>Early Woodland in Minnesota</i> 8:00-12:00	<i>Public Education</i> 8:30-12:00	<i>Collections/ Curation</i> 8:00-10:20 <i>Material Culture</i> 10:40-12:00
Fr PM	<i>PaleoIndian Research (cont.)</i> 1:00-2:20 <i>Late Woodland in Wisconsin</i> 2:40-5:00	<i>Military Sites (cont.)</i> 1:00-2:00 <i>Mille Lacs – Minnesota</i> 2:20-4:40	<i>Portable Art</i> 1:00-3:00 <i>Kensington Runestone</i> 3:20-4:40	<i>Plains Student Award Papers</i> 1:00-4:20	<i>Public Education (cont.)</i> 1:00-2:00 <i>Foodways Before Marquette</i> 2:20-5:00	<i>Material Culture (cont.)</i> 1:00-2:20 <i>Mississippian & Plains Village</i> 2:40-5:00
Sa AM	<i>Historic Archaeology</i> 8:00-12:00	<i>Rock Art</i> 8:20-12:00	<i>Lower Missouri: A.E. Johnson</i> 8:10-12:00	<i>Next Step Archaeology Project</i> 8:00-12:00	<i>Cambria in Its Own Right</i> 8:00-12:00	<i>Sonota</i> 8:00-12:00
Sa PM	<i>Historic Archaeology (cont.)</i> 1:00-2:20 <i>Trade Beads</i> 2:40-5:00	<i>The SCAPE Project</i> 1:00-4:40	<i>Cultural Landscapes & Problematic Sites</i> 1:00-4:00	<i>Northern Minnesota: Forest to Grassland</i> 1:00-4:00	<i>The Many Publics in Archaeology</i> 1:00-2:40 <i>Archaic</i> 3:00-4:40	<i>Middle Woodland Studies</i> 1:00-4:20
Su AM	<i>Late Prehistoric</i> 8:00-11:20	<i>Floral & Faunal</i> 8:00-12:00		<i>Topical Studies</i> 8:00-10:20	<i>Regional Studies</i> 8:00-11:20	

Ceramic, Paleoethnobotany, Bead, & Public Outreach Workshops on 11.09; Featured Speaker on 11.10 @ 9:20 AM; Poster Session on 11.11 from 8 AM to 5 PM