

# 2015 ISAS ANNUAL REPORT



**ILLINOIS STATE  
ARCHAEOLOGICAL SURVEY**  
PRAIRIE RESEARCH INSTITUTE



# From the Director



It is a pleasure to report that 2015 was a busy year for the Illinois State Archaeological Survey (ISAS). As one of the five state scientific surveys within the Prairie Research Institute (PRI) at the University of Illinois, ISAS is proud to be part of one of the most productive scientific research centers in the nation and proud of our continuing ability to contribute to science in the public interest.

This year we are especially pleased to have been recognized by the Shanghai Archaeological Forum for our work at the East St. Louis Mound Complex. It was named as one of the top ten field discoveries in the world in 2015.

Our archaeologists and staff provide integrated scientific information about archaeological resources that can help citizens, communities, scientists, industry, and government agencies in Illinois make better decisions about the interpretation, management and preservation of our state's cultural resources.

ISAS is also recognized as one of the premier transportation archaeology programs in the United States. Historically, archaeology and transportation have been a

strongly interwoven tradition in Illinois and exemplifies the value of governmental partnerships and their widespread and positive impact on economic development, transportation goals, and resource preservation in the state.

## 2015 ISAS Highlights

- Maize only arrives in Illinois at A.D. 900—not A.D. 200 as previously thought;
- Cahokia, North America's first city, was comprised of one-third immigrants;
- The East St. Louis site participated in early and extensive trade in pottery vessels and stone tools, housed specialized workshops, and ended in destruction by fire;
- 2000-year old native village discovered under modern-day Meredosia; and
- Reanalysis identifies a unique bob kitten burial from 2000 years ago.

## Ongoing ISAS Initiatives

- Discovering, interpreting, and managing more than 10,000 years of archaeological resources;
- Extending a successful partnership model with the Illinois Department of Transportation (IDOT) to serve the broad business community and archaeological contractors;
- Assisting in the development of communities by working with planners, landscape managers, zoning professionals, preservation groups, and developers;
- Ongoing collaboration and unique partnerships with entities like the Forest Preserves of Cook County that increase Illinois' capacity for preservation, public outreach, and smart development; and
- Working with citizens to record important Illinois artifact finds.

On the following pages, please refer to this key:

◆ = ISAS Funded project; ◆ = IDOT Funded project; ◆ = PRI Funded project;  
◆ = ISTC Funded project; ◆ = FPCC Funded project; ◆ = NEH Funded project; ◆ = Privately Funded project.



# ISAS Dedicated Retirees

Several dedicated ISAS staff members retired in 2015. Fortunately for us, most of them will continue their Survey connection by continuing their work on many of our archaeological projects. It speaks well of both their dedication and concern for the discipline. We thank them for all their years of service and commitment to Illinois archaeology and wish them a very happy retirement!



**Mark C. Branstner**  
Senior Historic Archaeologist,  
Historic Archaeology Section  
9+ years of service



**Andrew C. Fortier**  
Associate Director—  
Special Projects Division  
30+ years of service



**Wendy Smith French**  
Project Coordinator,  
Statewide Survey Division  
16+ years of service



**Dale L. McElrath**  
Statewide Survey Coordinator,  
Statewide Survey Division  
30+ years of service



**Charles O. Witty**  
District Archaeologist,  
American Bottom Field Station  
20+ years of service

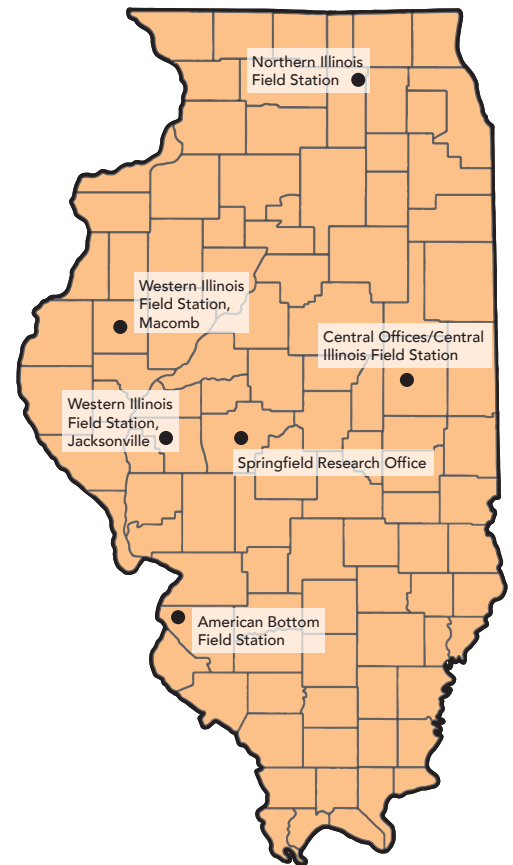
# Around ISAS

## Expanding Services

- Northern Illinois Field Station moves from Rockford to Elgin to better service the significant increase of projects in the Greater Chicago metropolitan area.
- Springfield Research Office relocates to north Springfield after the Illinois State Museum closes.
- ISAS adds Historic Architectural Compliance Specialists to expand its cultural resources compliance program.

## Publications

- 10 Technical Reports
- 6 Research Reports
- 3 Studies in Archaeological Material Culture
- 1 Studies in Archaeology
- 182 Compliance reports (ASSRs & ATSRs)
- Nearly **500 books** sold in 2015!



ISAS has eight locations around Illinois dedicated to archaeological investigation and research.

## Database Improvements

Many ISAS databases are accessible to partnering agencies and professional archaeologists working across Illinois and the Midwest. In 2015, ISAS continued updating a number of our databases in the hopes of improving data consistency and integrity and to make the databases more user-friendly.

- **The Statewide Projects Database has 4,000 ISAS-related archaeological surveys and projects.** Updates to this critical database will improve immediate access to project information, enable the direct input of Archaeological Short Survey Reports, and ultimately increase efficiency and accountability through real-time tracking of project surveys.
- **The Illinois Inventory of Burial Sites Database (IIBS) includes over 3,000 burial site records.** Since many recorded native cemetery and mound sites have been destroyed or “lost,” a re-inventory was initiated, in collaboration with IDOT and federally-recognized tribes. Structural changes to the IIBS will help maintain this historical burial site revisit data.
- **The Illinois CRM Archive Database contains 22,000+ documents relating to Illinois archaeology.** This database houses reports from Phase I surveys, Phase II testing, and Phase III excavations. Illinois archaeologists can now more easily access this archival data.



# Intro to ISAS-OISA

In 2013 the Office of the Illinois State Archaeologist (OISA) was created as part of the Illinois State Archaeological Survey (ISAS). Tasked with advocating for the public importance of the archaeological record in Illinois, the State Archaeologist is considered the authoritative spokesperson on matters of archaeological fact and policy for Illinois. OISA is also responsible for providing information about Illinois' archaeology and research to the public at large, communities, scientists, industry, and government agencies.

## Data Management

Retaining and managing archaeological databases featuring records of survey and excavation reports, photographs, burial mounds, and artifacts.

Acting as a repository of knowledge and a clearinghouse for distributing information about Illinois' rich resources.

## Education

Educating through programs like the Prairie Research Institute's *Naturally Illinois Expo*, school programs, museum exhibits, and lectures.

Informing other agencies about current legislative changes and programs, regulatory information, and best practices in cultural resources management.



## Preservation

Identifying, evaluating, and planning for the management and preservation of public and private archaeological sites and cultural landscapes in Illinois.



Working with public and private entities in order to preserve significant cultural resources in Illinois.

## Research

Directing and conducting archaeological research in Illinois, ISAS' Ancient Technologies and Archaeological Materials (ATAM) program facilitates interdisciplinary research within the Prairie Research Institute and the University of Illinois.

Focusing on research with a direct economic impact on Illinois' citizens, emphasizing "Smart Development" and helping preservationists and developers cooperate in achieving their goals.



# Partnerships

For more than half a century ISAS has successfully worked with public and private partners to preserve the archaeology of Illinois, educate the public about their state's history and prehistory, and balance the state's need for progress. Looking forward, ISAS hopes to extend these successful partnerships in pursuit of the goals of preservation, education and progress.

## UNIVERSITY OF ILLINOIS

Since the 1920s, the University of Illinois has been a leader in developing archaeological methodology and theory. Partnering with the University has helped ISAS become the internationally recognized archaeology program it is today, and ISAS remains an integral part of the University's land grant mission to facilitate the stewardship of Illinois' cultural resources.

## FOREST PRESERVES OF COOK COUNTY

As part of a 5-year grant beginning in 2014, ISAS continues to work closely with the Forest Preserves of Cook County (FPCC) helping to shape their Natural and Cultural Resources Master Plan, participating with the FPCC in outreach events, and launching a pilot internship program partnering with both the FPCC and GreenCorps Chicago helping spur interest in Illinois cultural resource management.

**46%** of the recorded archaeological sites in Cook County are on FPCC lands.

## MUSEUM OF THE GRAND PRAIRIE

ISAS collaborates with the Museum of the Grand Prairie by developing exhibits—including the loan of four handmade dioramas for an exhibit about reconstructing Illinois' past; supervising archaeological activities for visitors during the Museum's fall Prairie Stories event; and presenting several talks for the Museum's 2015 Archaeology Lecture Series.







## PRAIRIE RESEARCH INSTITUTE

Since 2010 the Illinois State Archaeological Survey has been a part a partnership with the Prairie Research Institute helping the University with the continued preservation of Illinois' archaeological heritage and promotion of sustainable economic development. ISAS continues to play a major role in PRI's multi-disciplinary research approach to solving critical issues around the state.

## ILLINOIS DEPARTMENT OF TRANSPORTATION

Since 1956 ISAS has partnered with the Illinois Department of Transportation (IDOT) on thousands of Illinois transportation projects. IDOT was an early leader in the effort to preserve and interpret our national heritage, and for more than half a century, the ISAS-IDOT partnership has helped improve and transform Illinois' transportation infrastructure while also helping to discover, interpret, and manage 10,000 years of Illinois' archaeological resources.

**350+** newly discovered archaeological sites!

**183** IDOT projects completed!

## ILLINOIS STATE MUSEUM

ISAS and the Illinois State Museum (ISM) have a long-standing partnership: ISAS locates, excavates and studies Illinois archaeological sites threatened with destruction, while the ISM curates and evaluates many of those sites' archaeological remains. This ISAS-ISM partnership helps scholars at both institutions maximize their research potential and results.



# Field Station Highlights



## The Armour Meatpacking Plant: Wonder in Dereliction

In 2015, ISAS began researching an unusual historic landmark: the abandoned Armour meatpacking plant located just north of East St. Louis. Given the possibility that it would be impacted by the IDOT relocated Route 3 project, ISAS investigated the plant's eligibility for listing on the National Register of Historic Places (NRHP). Rising 310 feet tall, the plant's original smokestack and a second stack added in 1937, are two of the first things seen when crossing the I-70 New Mississippi River Bridge into Illinois.

When this mammoth facility was opened by Armour & Company in 1903, it was perhaps the most technologically advanced packing plant of its time. By incorporating assembly-line methods pioneered by Company founder Philip Armour, the plant used unskilled labor to repeatedly perform each part of the complex meat butchering process. Often seen as an archetypical robber baron of the Industrial Revolution, Armour was also an innovator whose company found ways to make profitable products like margarine, gelatin, and even Dial soap from slaughterhouse waste. Armour famously boasted that he used every part of the pig "but the squeal."

In its heyday, the Armour plant employed thousands of workers; part of an extensive meatpacking industry surrounding the National Stockyards. Built in 1873, the Stockyards formed a national network connecting eastern consumers with western meat, using centralized markets at terminal railheads like those at Chicago and East St. Louis. As truck transport grew, railroad transport became less relevant. And, with the advent of cheap, nonunion labor, the relocation of many slaughterhouses to rural areas became more attractive. As a result, the Armour plant was the first in the area to close in 1959, due to obsolescence. The rest of the industry would not wind down until the 1970s and 1990s, eliminating the largest source of employment in East St. Louis and surrounding communities.

Thus far work on the project has included photo documentation of the crumbling buildings, as well as extensive archival and historical research. One remarkable discovery was of previously unknown plans and engineering drawings of the Armour plant from the early to mid-20th century. These documents were found rolled up and tucked away in unlabeled map drawers in the abandoned Stockyards' offices. ♦



## The “Old Urbana Cemetery” in Leal Park Urbana-Champaign, Champaign County

In 2015, archaeologists from the Central Illinois Field Station (CIFS) surveyed a stretch of land along University Avenue in Urbana, Illinois, in the middle of present-day Leal Park. Since there had been several reports over the years of human remains being exposed when work was done in or near the Park, ISAS archaeologists employed geophysical sensing equipment in an attempt to “see” what was below the surface.

The area of Leal Park had formerly been the “Old Urbana Cemetery,” an early pioneer era cemetery in use from the 1830’s to the late 1850’s. Never properly platted, many of the Cemetery’s occupants were buried without regard to name or family connection. As a result, we still do not know what the Cemetery’s actual boundaries are or the number of graves it holds. We do know that at least 125 of the Cemetery’s burials were supposedly removed and relocated in the past, but there may be as many as twenty-five to thirty graves remaining in Leal Park, each, it is said, with their tombstone laid

flat and buried over. The non-invasive techniques of geophysical survey, which do not require digging, may help archaeologists in the future to investigate such sensitive areas where burials may be present without disturbing them. ♦

## Prehistoric Sites in Allerton Park Monticello, Champaign County

Also in 2015, at the request of the Robert Allerton Park and Retreat Center, CIFS archaeologists and crew surveyed twenty-nine locations along a bluff overlooking the Sangamon River in Allerton Park near Monticello, Illinois. Subsurface testing identified two new prehistoric sites within this area of rich biodiversity. Additionally, GIS specialist Michael Farkas was able to use LiDAR (Light Detection And Ranging) and satellite imagery analysis to pinpoint the location of a group of prehistoric burial mounds within the Park. These mounds, first identified and recorded in 1965, are now once again under the watchful supervision of Allerton Park personnel. ISAS archaeologists are hoping to return in 2016 to continue investigations within the Park. ♦





# Field Station Highlights

## Prehistoric Village Located During Fieldwork In West Ridge Nature Preserve

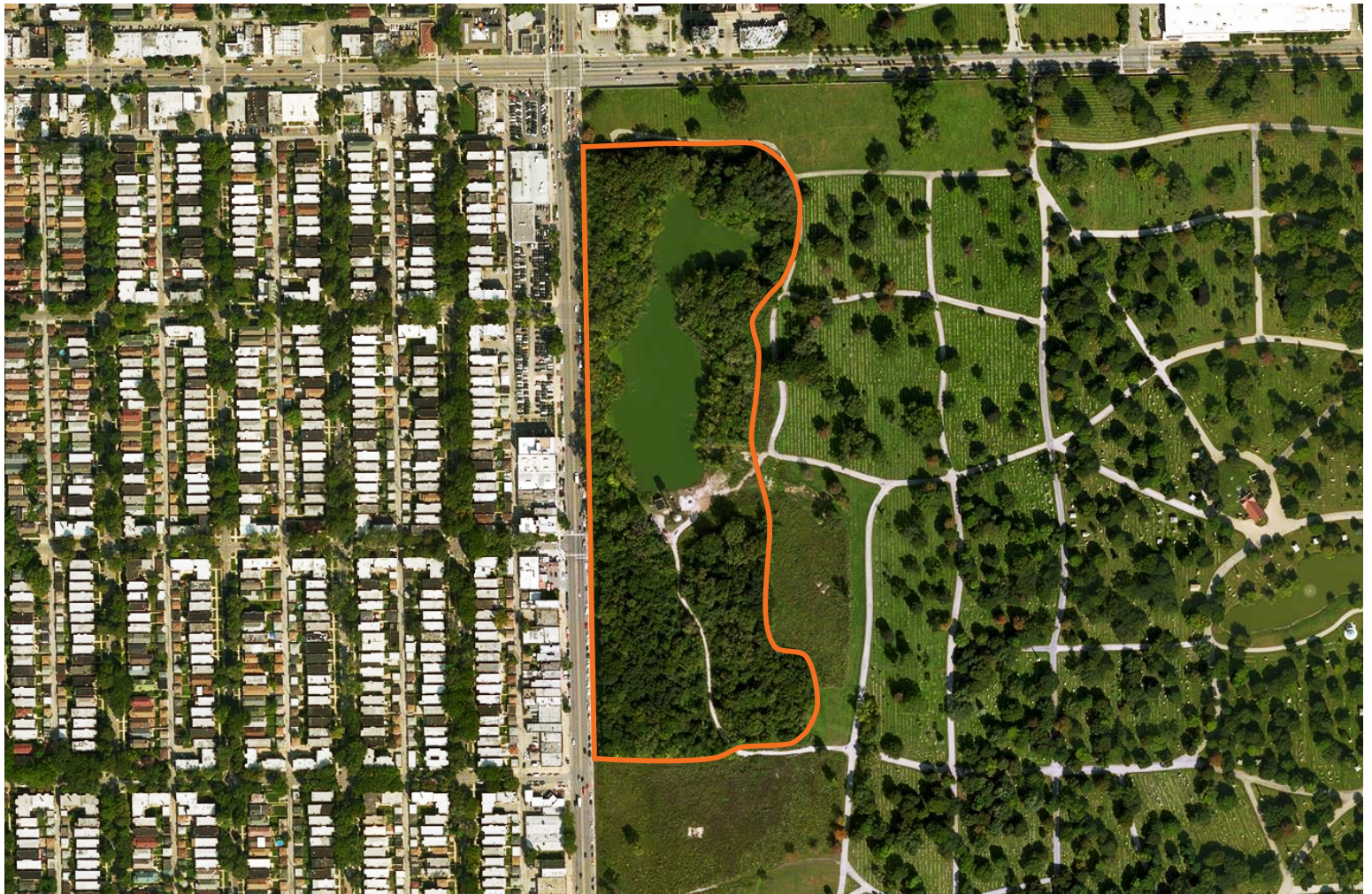
In 2015, archaeologists from the Northern Illinois Field Station (NIFS) completed an archaeological survey next to present-day Rose Hill Cemetery, located in the Chicago Park District's West Ridge Nature Preserve. What they found was a new prehistoric site ("Roe's Hill") containing information about some of Chicago's earliest inhabitants as well as the many changes that have occurred along Chicago's Lake Michigan shoreline over the years.

The neighborhood containing the site was originally named "Roe's Hill" in reference to pioneer and moonshiner, Hiram Roe, who sold his spirits from a cabin in what was then the village of Bowmanville —now Edgewater. Bowmanville was named after a disreputable land speculator who came to the area in 1850, bought a large tract of land, sold parcels of that land, jilted his clients of their down payments on those parcels, and then skipped town. The name

"Roe's Hill" was later changed to Rose Hill likely as a way to soften the infamous image of the area.

Significantly, the "Roe's Hill" site lies physically close to an historically documented Indian village identified by Albert Scharf in 1901 and later studied by Fenner in 1961; and, the site's physical proximity to the Indian village suggests a probable close cultural affiliation with it. Additional support for this theory comes from the fact that the "Roe's Hill" site is located on the 11,000-year-old Rose Hill Spit, a unique landform historically supporting a diverse array of plants and animals and creating a highly attractive settlement area for native populations.

The "Roe's Hill" site's likely connection to historic Native Americans, its unique geographic location, and the potential for new information the site may provide about the early human occupation and use of Rose Hill Spit, make "Roe's Hill" a likely candidate for listing on the National Register of Historic Places (NRHP). ♦







## Peeling Back the Pavement: Searching for Moline’s Earliest Inhabitants

During the summer and fall of 2015, Western Illinois Field Station (WIFS) archaeologists investigated seven city blocks in downtown Moline before the start of an IDOT bridge construction project over the Mississippi River.

During the late 18th and early 19th centuries, before being forcibly removed and relocated across the River, the Sac and Meskwaki (Fox) native peoples called this area home. Later, Moline, which began as an historic mill town, also became part of this complicated landscape—one that may have been used as the location of an earlier Native American village. ISAS archaeologists, armed with 20/20 hindsight acquired from other successful urban research projects, such as French Peoria, East St. Louis, and Meredosia, used a combination of targeted documentary research, geo-coring, and machine-aided survey to explore modern-day Moline’s asphalt parking lots, residential yards, and abandoned industrial/commercial properties.

Their work revealed that the project area was located on an 18,000- to 20,000-year-old slackwater terrace surface covered by several feet of 19th and 20th century demolition waste and rubble fill. This led ISAS archaeologists to the conclusion that prior episodic cycles of urban building, demolition, and modernization may have destroyed evidence for earlier prehistoric and historic archaeological occupations. And, while WIFS archaeologists discovered thin, stratified Early Woodland (Black Sand, ca. 500 B.C.) and Archaic period (10,000–1500 B.C.) deposits in an alluvial fan, as well as some scattered pre-Civil War era historic materials (possibly associated with the founding of Moline), none of the finds proved eligible for listing on the National Register of Historic Places.

While heavily urbanized settings like Moline are, more often than not, fertile grounds for potentially significant archaeological sites, sometimes a project just doesn’t yield any. Nevertheless, this case still resulted in a successful outcome, advancing an important regional highway project designed to alleviate traffic congestion. ♦

# Research Section Highlights

Under the general management of the Ancient Technologies and Archaeological Materials (ATAM) program, the Office of the Illinois State Archaeologist (OISA) sponsors, directs, and conducts research into the archaeology of Illinois, encouraging “smart development” and helping preservationists and developers to cooperatively achieve their goals.

## Bioarchaeology

### Strontium (Sr) Analysis ♦♦

- Identified immigrants within Cahokia.
- Suggest most sacrificial individuals may have been local to Cahokia or its outlying communities.
- One mass burial of men and women appears to represent the violent death of members of a single community.
- Sr analysis of animal teeth from other regions may help identify possible homelands of these Mississippian immigrants.

### The Broglio Site—Williamson County ♦

- 19 late Middle Archaic (4500–3500 B.C.) burial features.
- Skeletal pathologies: injury, infectious disease, and periodic nutritional stress.
- Flexed- or semi-flexed human burials.
- Grave objects associated with relatively few individuals.
- A lightning whelk pendant and tube-shaped marine shell beads may indicate trade in exotic artifacts.

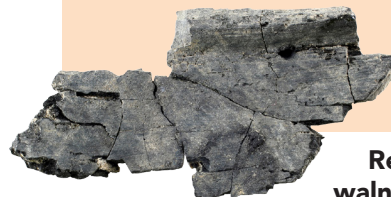
### The Tree Row Site—Fulton County ♦

- Late Archaic (~3500–2500 B.C.) habitation and mortuary features.
- 72 burial features and an estimated 124 individuals.
- Flexed burials, with children most often interred with an adult or another child.
- Secondary burials of multiple people, most typically children and adolescents.

## Archaeobotany

- An unusually high number of seeds from the Marseton II Site (Mercer County), showed a reliance on horticulture by people in Western Illinois as early as A.D. 600. ♦
- Plant remains from the Quarry Road, Bland, and Tena Deye sites further confirm the absence of maize in pre-900 A.D. American Bottom economies. See page 14 for more. ♦

- Analysis of wood and thatch samples from buildings at the East St. Louis site provided important information about how raw material was used by elites and non-elites in the area. ♦



**Relief carved, burned walnut bowl fragment from the East St. Louis site.**

## Fauna

### The Marseton II Site—Mercer County

- Analyzing one of the largest Weaver (ca. A.D. 350–800) faunal assemblages ever reported (**300,000+ pieces**) revealed significant information about diet, procurement patterns, refuse disposal, and ritual and ornamental use of bone and shell. ♦

### The Halliday Site—St. Clair County

- Examining faunal exploitation, ritual significance, and dietary patterns of an early Mississippian (ca. A.D. 1050–1100) settlement in the American Bottom uplands near Cahokia. ♦

### The East St. Louis Site

- Finding, analyzing, and reporting unusual discoveries in the East St. Louis Mounds site faunal assemblage. See page 15 for more. ♦



## Curation

- Curates 800–900 cubic feet or about 900 boxes of new artifacts each year.
- Supports independent archaeological research and public outreach activities.
- Preserves information from IDOT-driven archaeological investigations.

### ISAS Curation Houses:

- **22,000** boxes of artifacts;
- **95,125** prints, negatives, and slides;
- **22,819** oversized documents; and,
- **550** boxes of Cahokia-related artifacts.

## Lithics

### The Fisher Site—Will County

- Pieced together evidence from diverse sources to form a cohesive picture of the Upper Mississippian (ca. A.D. 1100–1500) lithic assemblage. ♦

### The Vasey Site—Madison County

- Supported the theory of initiation of general Archaic lifestyle patterns as early as 9500–8500 cal B.C. ♦

### The Orendorf Site, Settlement D—Fulton County

- Analysis of the lithic assemblage produced a wealth of information about this Spoon River Mississippian (A.D. 1150) town where responsibilities of ritual administration may have been shared among numerous community leaders. Food processing was undertaken at a household level, and some community members participated in the game of “Chunkey.” ♦

**Chunkey stone from the Orendorf site.**



## Historics

- Analyzing the Hawkeye site in Henderson County, an unusual pre-Civil War rural brick-making facility. ♦
- Discovering that a mid-19th century patent consumption medicine bottle found in Meredosia contained tar, naphtha and camphor, as well as heavy metals, other carcinogens, and even “controlled” substances. ♦
- Publishing a landmark reanalysis of the Zimmerman site (LaSalle County), that has led to a clearer understanding of native culture in Illinois immediately before 17th century French exploration. ♦
- Using our new metals conservation operation at the Springfield Research Lab to analyze artifacts from a mid-19th century blacksmith shop. ♦

**Thompsons Compound Syrup of Tar for Consumption Philadelphia bottle from Meredosia.**



## Ceramics

- Completed reports on 1,200-year-old Late Woodland sites in the American Bottom region. ♦
- Currently analyzing and illustrating a key Terminal Late Woodland population in the Cahokia region that helps characterize social conditions immediately prior to the Mississippian explosion. ♦
- Analysis of Upper Mississippian Palos site ceramics appears to reveal Huber Phase materials comingled with 17th century European trade items. ♦

# Archaeological Discoveries in Illinois

## Establishment of a Strontium Database for the Midcontinental Mississippi Valley from Minnesota to Mississippi

A key to studying human migration in prehistory in the midcontinent is the establishment of a spatial map of bedrock strontium variation across the area. The ability to create such a map has long been considered impossible from regional researchers given the region's geology.

In 2009 our researchers conducted a pilot study demonstrating such a project was feasible. Current testing of animal strontium levels from Minnesota to Mississippi involving samples provided by nearly two-dozen organizations and universities has confirmed that strontium variation can be mapped across the area. The creation of this regional database is a major contribution to studying native migration. ♦

## Maize Arrives in Illinois at A.D. 900— Not A.D. 200 as Previously Thought

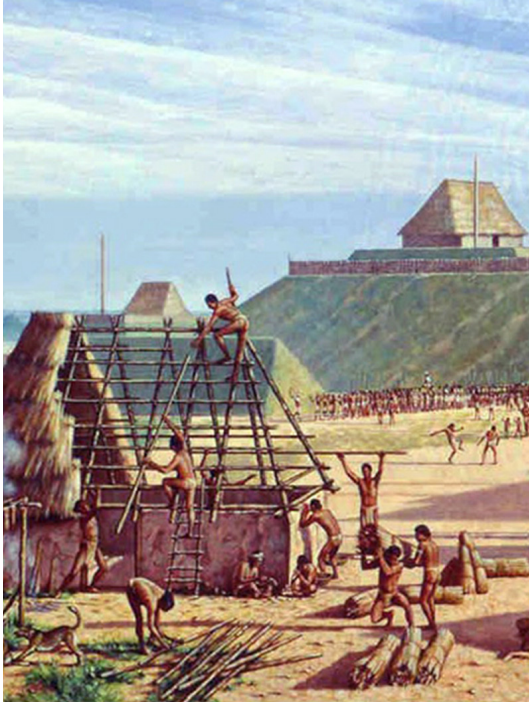
For over a decade researchers have been conducting stable isotope analyses to determine the dietary patterns of native inhabitants of Illinois between the time of Christ and A.D. 1500. The existing model argued for the gradual dependence on corn over an 800-year period.

Recently combining the evidence of isotopic studies of human and dog diets with new AMS radiocarbon dating and archaeological field data, investigators have shown there is no evidence for maize consumption prior to A.D. 900.

This strongly suggests that the rise of Cahokia was intimately associated with the appearance of population nucleation and political complexity. ♦♦



Courtesy of Cahokia Mounds State Historic Site, Painting by Michael Hampshire.



## Cahokia, North America's First City, was Comprised of One-Third Immigrants

Strontium is absorbed into the human body from the underlying bedrock through the consumption of local animals and plants. Since the levels of strontium vary across the midcontinent depending on the local geology the level of strontium absorbed by individuals also varies.

Investigations of the strontium levels of the remains of individuals who died at Cahokia between A.D. 900 and 1350 indicate that fully one-third of these people were foreigners from outside the immediate vicinity of Cahokia.

This suggests that Cahokia could not rely on traditional kin-based political and social models but likely had to "invent" new ways of social and political control and population management.

For more information on strontium isotopes and East St. Louis, please visit <https://www.youtube.com/watch?v=4Ndzg5WWUzo>. ♦

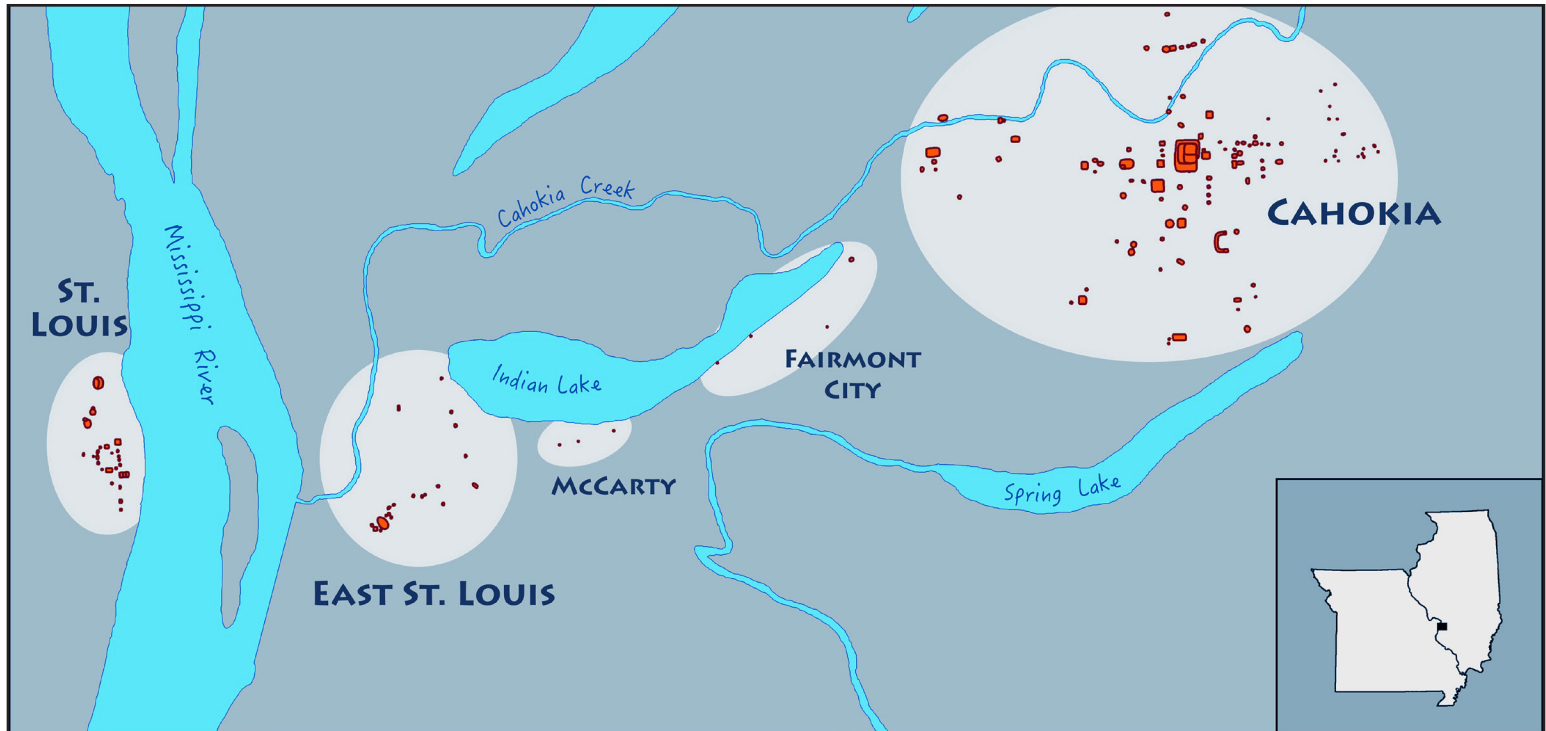


## East St. Louis Mound Complex Analysis Continues to Yield New Information

From 2008 through 2012, ISAS archaeologists excavated the second-largest mound group in the eastern United States buried beneath modern-day East St. Louis, now known as the East St. Louis Mound Complex. Crews unearthed nearly 1,300 buildings occupied between A.D. 900 and 1200 as well as a plaza, ceremonial posts, a buried mound base, human burials, and numerous storage and trash pits—uncovering and discovering what is believed to be the first known evidence of prehistoric specialized workshops for shell beads, axe making, pipestone figurines and ear spool manufacturing at Cahokia.

### Interesting Finds

- “Foreign” artifacts—possible evidence of trade with or the actual influx of immigrants from the lower Mississippi River Valley and the Caddo area of Oklahoma.
- Evidence that dogs were domesticated and used as pack animals, and possibly even sacrificed.
- Unique animal remains including a pronghorn tooth and several elements from a giant catfish.
- Osteological evidence of trophy taking and scalping, culturally modified bones, grooves and notches cut into central incisors, and even a fragment of human cranial bone modified after death and used in the manufacture of an ear spool.
- Skeletal evidence of infection and diseases including tuberculosis, blastomycosis, and congenital anomalies.
- Varying mortuary practices including a mound, charnel structures, cemeteries and isolated graves, primary articulated burials, and bundled secondary burials, as well as defleshing of the dead and the use of ossuaries.



### Mysterious Ending?

Around A.D. 1200, something traumatic happened to the East St. Louis Mound Complex—something that resulted in a dramatic end to and ultimately an abandonment of the Complex—whether this end was the result of violence, ritual, or accident remains a mystery. ◆

# Archaeological Discoveries in Illinois

## Recent Geophysical Investigations Confirm Location and Reveal Details of Earlier Wooden Fort at the Fort de Chartres State Historic Site

In the early 1700s the French government established a major political capital in the heartland of Illinois. Named Fort de Chartres after King Charles, the process culminated in the construction in 1753 of a major stone walled fortification. Records show earlier wooden forts had existed but their locations were unknown.

A new comprehensive geophysical investigation by ISAS in collaboration with the Illinois Historic Preservation Agency this summer provided the first detailed information confirming the location of the 1732–1753 wooden Fort de Chartres III. ♦



## 2000-Year-Old Native Village Discovered Under Modern-Day Meredosia

Excavations as part of a new IDOT bridge project at Meredosia revealed prehistoric storage and trash pits under the modern city. The location of historically recorded but now destroyed mounds and the presence of the recovered pottery, animal bones, and stone tools indicate a major settlement dating to the Middle Woodland period between 200 B.C. and A.D. 300 once occupied the area.

Major Illinois River mound sites were historically recorded at locations of the modern cities of Meredosia, Beardstown, Naples, and Havana but were built over and destroyed during the pioneer settlement of the state. These excavations were a singular opportunity to explore these early mound centers.

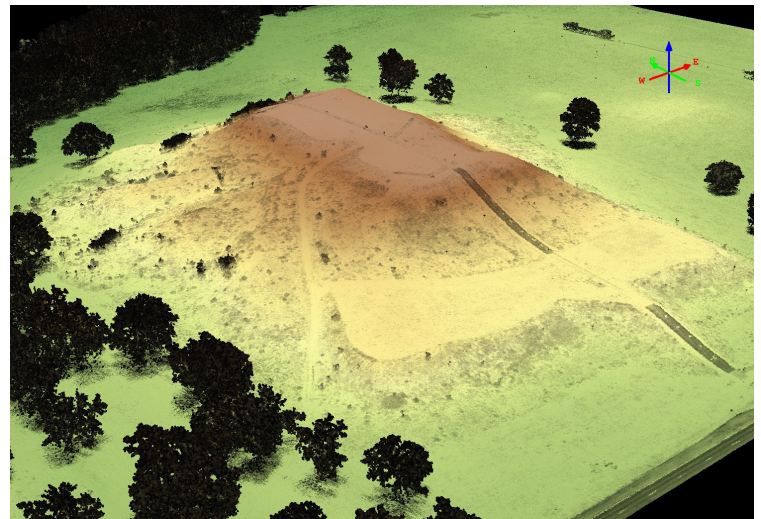
Visit our Archaeology in Minutes presentation about the Meredosia project: <https://www.youtube.com/watch?v=yYkmkSbzN1o>. ♦

## Identifying New Mound Sites and Refining Locations of Known Mound Sites

Illinois has over 3,200 recorded native cemetery and mound sites; however, during the past century many of these have been destroyed or “lost.” In collaboration with IDOT and a group of federally-recognized tribes, a statewide re-inventory of mound sites was initiated.

The implementation of LiDAR technology and analysis to the process of mound site identification within the state has revolutionized our ability to recognize such sites in a wide variety of field conditions.

Using a combination of historical documents, field investigations, and LiDAR technology, investigators relocated, described, geo-referenced, and inventoried 100+ burial sites this year. ♦





## Reanalysis Identifies a Unique Bob Kitten Burial from 2000-Years Ago

The skeletal remains of a 4–6 month old bob kitten with a necklace of pearls and canine teeth was discovered 35 years ago on the Illinois River IDOT project but were originally misidentified as those of a dog.

The new discovery was made as part of collaborative research effort by ISAS with the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany and the Illinois State Museum.

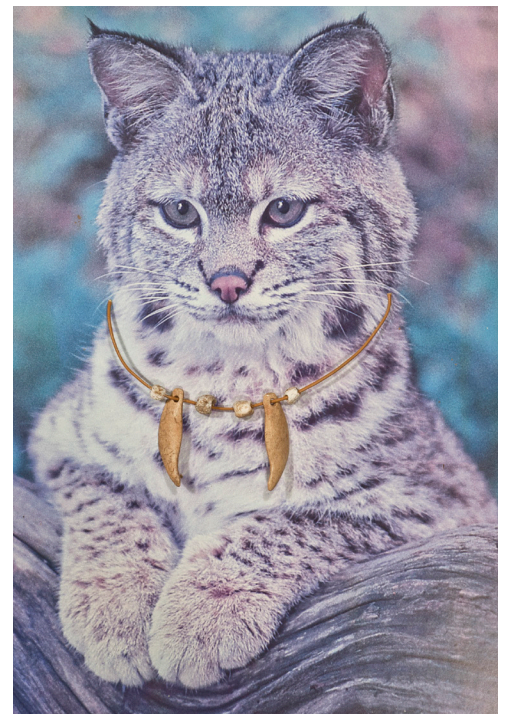
Reanalysis of other excavated contemporary tombs across Illinois revealed the mortuary treatment of a bob kitten in a manner identical to that of a human burial was a one-of-a-kind event.

This discovery made international news and wound up on two Top 10 lists. *Archaeology Magazine* and *National Geographic* listed the bob kitten discovery as one of the biggest in 2015. The researchers work was published in the *Midcontinental Journal of Archaeology*. ♦

Links to the articles can be found at

[https://isas.illinois.edu/about\\_isas/news\\_archive/2015\\_big\\_year\\_for\\_isas](https://isas.illinois.edu/about_isas/news_archive/2015_big_year_for_isas).

A video produced by ISAS can be viewed at <https://www.youtube.com/watch?v=POv6ns0jHHE>.



## The FAP-310 Project: A Long-Running Project Coming to a Close

The FAP-310 Project is an excellent example of how planning and cooperation can result in successful archaeological preservation without delaying much-needed roadway construction in Illinois. The Illinois State Archaeological Survey (ISAS), under the auspices of the Illinois Department of Transportation (IDOT), surveyed almost 30 kilometers between FAI-270 and Illinois Route 267 just north of the town of Godfrey, Illinois. The project has a long and colorful history spanning more than forty years and including extensive archaeological investigations, multiple surveys, testing, and major excavations. Well over 100 sites have been recorded, with a majority of those sites tested by excavation and published in our ISAS publications series.

Archaeological investigations along the FAP-310 corridor have given us insights into a prehistoric Illinois stretching back more than seven thousand years. The oldest discoveries include information about Early Archaic stone tool technology used by small mobile hunter-gatherer groups living in the area around 5000 B.C. These hunter-gatherers would position themselves on the bluff crests overlooking the Mississippi River floodplain which provided them with access to both the floodplain and upland prairies. Other investigations have exposed both Woodland and Mississippian period resources, including new information about technology, settlement histories and subsistence, dating from 500 B.C. to A.D. 1200. For example, we learned that corn was first introduced here in the Illinois area, not in A.D. 200, but much later, around A.D. 900. We have also been able to date the first occurrence of bow and arrow points in the Illinois region to A.D. 650. As a result, new revisions of our region's basic chronology are being made, with new evidence for contact between Woodland groups in the central Mississippi River trench and the American Bottom—contact that likely fostered interactions which in turn led to new ethnic identities, like the Sponemann culture, which first appeared at the northern fringes of the American Bottom in southern Illinois. ♦



# ISAS Public Engagement

In 2015, building upon a long-standing tradition, ISAS redefined our public engagement initiative by emphasizing digital communications, focusing on the web and social media to reach different audiences, and educating them about our archaeological research and preservation efforts.

## Social Media, Web, & Video

### Social Media and Video

2015 saw the continued expansion of ISAS' social media platforms. High profile stories generated the most social media coverage. For example, the Emerald Mound site and the bob kitten burial were ISAS' most "viral" stories. The bob kitten burial was covered around the world, landing on two 2015 international top discovery lists. Want to know more? Visit: <https://www.youtube.com/channel/UCjR-BqNx6rNkaR587rUnkZQ>.

- **10,000 views** of videos focusing on ISAS and IDOT's commitment to partnership, preservation, and research.
- **20,000 Facebook views** of the Emerald Mound site.
- **1,000+ retweets** of the bob kitten burial post.
- Double the number of Facebook followers from 2014.

### Web

ISAS made posting content to our website easier by moving to a Content Management System in 2015. Website traffic has increased by **18%**.

## Education & Events

### Exhibits on Loan to the St. Louis Art Museum and the Museum of the Grand Prairie

- ISAS loaned artifacts from the Mississippian Period to the St. Louis Art Museum for their art exhibit about Ancient America.
- ISAS loaned diorama displays, created by Fred Brown, depicting different archaeological digs to the Museum of the Grand Prairie for their *Hidden Under Foot Exhibit*.

### The Naturally Illinois Expo

ISAS engaged the public with hands-on exhibits featuring many of the elements of Illinois archaeology. Hosted by the Prairie Research Institute, the 2015 Expo was a huge success, with hundreds of students and their families participating in more than 60 exhibits. As usual, ISAS was a crowd favorite.

### Harvesting the Past

ISAS educates the general public about the historical importance of private artifact collections and helps document them for posterity. In 2015, 9 private collections were documented and 4 donated to ISAS' permanent curated collection.





## Awards

### International Recognition of the East St. Louis Archaeological Project

Named one of the top ten archaeological field projects in the world, the East St. Louis Archaeological Project won the 2015 Field Discovery Award from the Shanghai Archaeological Forum (SAF). For more than four years, ISAS conducted one of the largest archaeological excavations in the nation preceding the building of the Stan Musial Veterans Memorial Bridge. See page 15 for a summary of our latest findings.

### Illinois Archaeological Society—Jeanette Stephens Award

Alli Huber (Assistant Faunal Analyst) was awarded the 2015 IAS Jeanette Stephens Award for her research on subsistence behaviors in the west-central region of Illinois. Focusing on three factors—habitat loss and resource depletion, development of a market economy, and cultural assimilation—Huber concluded that the subsistence behaviors were most consistent with an Upland South diet.

## Grants

### The Emerald Mound Site

- The John Templeton Foundation awarded ISAS a \$343,694 grant to facilitate research into the relationship between government and religion at the Emerald Mound site. This grant will also allow the public to reimagine the site by implementing interactive features including computer simulation and 3-D modeling.
- The National Endowment for the Humanities (NEH) awarded ISAS a \$386,351 grant to reanalyze excavated sites near the Emerald Mound site. U of I and ISAS archaeologists will generate a series of reports that will be made available to the public.

### 2015 ATAM Mini-Grant Recipients

- Montana Martin—*Stable Isotope Analysis of Havana and Hopewell Pots.*
- Adam Sutherland—*Diet during the Middle to Late Woodland Transition: Stable Isotope Analysis of Pottery Sherds from the Apple Creek Site, Greene County, IL.*

ATAM awarded two \$500 student mini-grants for the 2015–2016 academic year to be applied to costs of analysis.



# Looking Ahead to 2016

## ISAS Research Gets Closer to Solving Cahokia's Mystery

Using new data and research, Dr. Thomas E. Emerson and Dr. Kristin M. Hedman propose internal dissent as the probable cause of Cahokia's demise. The publishing of their chapter, *The Dangers of Diversity: The Consolidation and Dissolution of Cahokia, Native North America's First Urban Polity in Southern Illinois* in University-Carbondale Press' *Beyond Collapse: Archaeological Perspectives on Resilience Revitalization, and Transformation in Complex Societies*, confirms ISAS is still on the cutting edge of research.

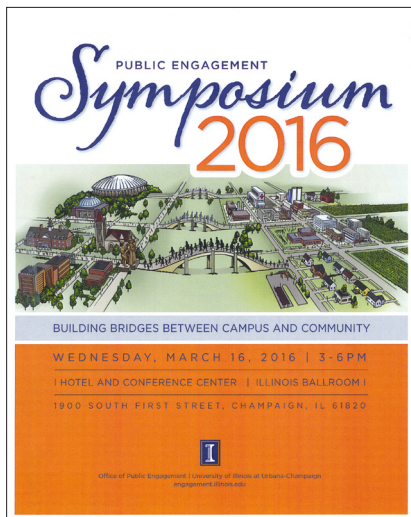


## Dr. Thomas E. Emerson is Recognized by SAA for Excellence in Cultural Resource Management Research

In the Spring of 2016, Dr. Thomas E. Emerson will be honored for his work in cultural resource management. The Society for American Archaeology's national award gives credit to Dr. Emerson's career in archaeology and his commitment to preservation and cultural resource management. This award is presented in special recognition of excellence by an archaeologist working in a cultural resource management setting, whose innovative research, or repeated and enduring contributions, have contributed significantly to archaeology.

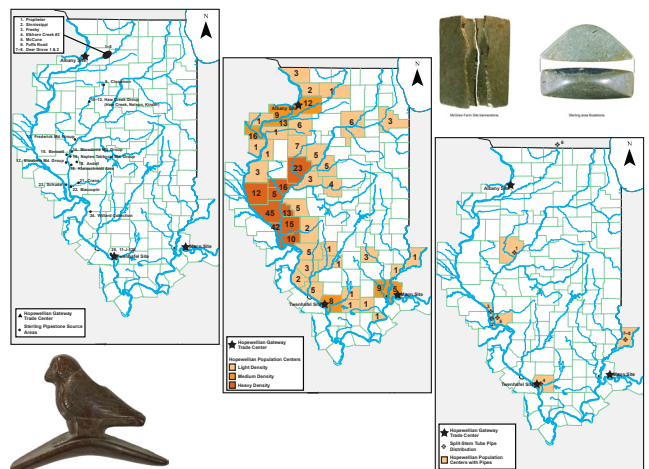
## 2016 Public Engagement Symposium

Once again ISAS will participate in the Public Engagement Symposium held at the University of Illinois. This year's theme is Building Bridges Between Campus and Community and our entry to the symposium will feature our partnership with the Forest Preserves of Cook County.



## New Publications!

ISAS production continues to release publications about our archaeological work throughout the state of Illinois. Part of ISAS' mission is the commitment to disseminating information for the public. Look for these new releases/reports: ESTL Main Street Mound and Tree Row Archaic coming in 2016!

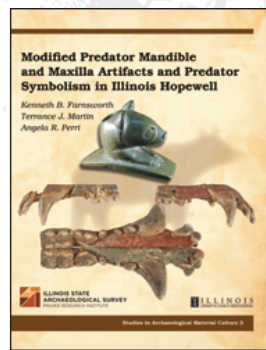
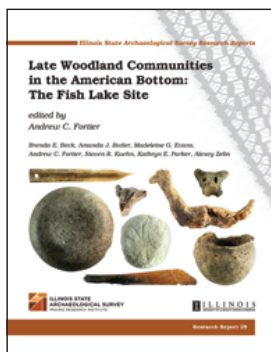
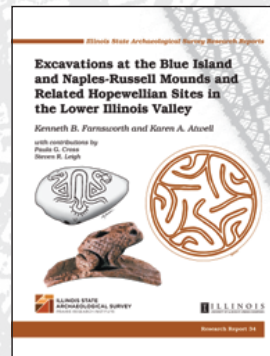
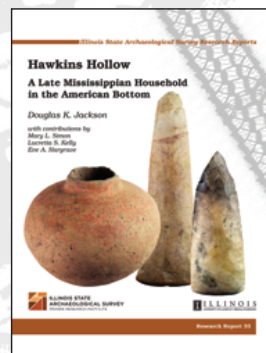
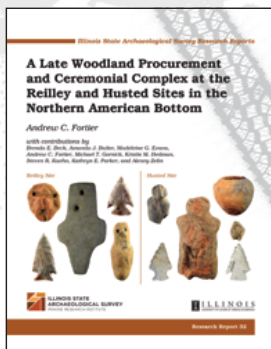






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# Staff Publications

- Branstner, Mark C. (2015) *The Chenoweth Site: A Nineteenth Century Farmstead in McDonough County, Illinois*. Technical Report 167. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Brown, Frederick M. (2015) "Good for What Ailed You" in Springfield, Illinois: Embossed Pharmaceutical Bottles Used by Springfield Druggists from the Civil War Era to the Early Twentieth Century, with Introductions by Curtis Mann and Kenneth B. Farnsworth. Studies in Archaeological Material Culture No. 2. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Brocken, Christina R., and Robert G. McCullough (2015) Ten Years of Archaeology Month Public Excavations at Strawtown Koteewi 18 Park Enhanced by Dedicated Adult Volunteers. *Indiana Archaeology* 10(1).
- Emerson, Thomas and Timothy Pauketat (2015) Identifying Black Drink Ceremonialism at Cahokia: Chemical Residue Analysis. *Illinois Antiquity* 50(3):6-7.
- Farkas, Michael (2015) LiDAR Illuminated. *Illinois Antiquity* 50(3):4-5.
- Farnsworth, Kenneth B. (2015) *Drugstore Bottles for Archaeologist: Embossed Springfield Pharmacy Glassware from the Civil War to the Roaring Twenties*. Technical Report No. 165. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Farnsworth, Kenneth B. and Karen A. Atwell (2015) *Excavations at the Blue Island and Naples-Russell Mounds and Related Hopewellian Sites in the Lower Illinois Valley*. Research Report No. 34. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fishel, Richard L., Ed. (2015) *Archaeological Investigations at Marlin Miller #2: Weaver in the LaMoine Valley of Hancock County, Illinois*. Research Report No. 35. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fortier, Andrew (2015) Preliminary Analyses of Prehistoric Dog Feces (Coprolites) from the Janey B. Goode site in St. Clair County, Illinois. *Illinois Antiquity* 50(3):16-18.
- Fortier, Andrew C., Ed. (2014) *Late Woodland Communities in the American Bottom: The Fish Lake Site*. Research Report No. 28. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fortier, Andrew C., Ed. (2015) *A Multicomponent Late Woodland Complex at the Vasey Site in the Northern American Bottom Uplands*. Research Report No. 37. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fortier, Andrew C., Ed. (2015) *A Multicomponent Late Woodland Complex at the Vasey Site in the Northern American Bottom Uplands*. Technical Report No. 164. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fortier, Andrew C., Ed. (2015) *A Late Woodland Procurement and Ceremonial Complex at the Reilley and Husted Sites in the Northern American Bottom*. Research Report No. 32. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Fortier, Andrew C., Ed. (2015) *Late Woodland Communities in the American Bottom: The Fish Lake Site*. Research Report No. 28. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Hargrave, Eve A., Shirley J. Schermer, Kristin M. Hedman, and Robin M. Lillie, Eds. (2015) *Transforming the Dead: Culturally Modified Bone in the Prehistoric Midwest*. University of Alabama, Tuscaloosa.
- Jackson, Douglas K., Mary L. Simon, Lucretia S. Kelly, and Eve A. Hargrave (2015) *Hawkins Hollow: A Late Mississippian Household in the American Bottom*. Research Report No. 33. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Jackson, Douglas K., Mary L. Simon, Lucretia S. Kelly, and Eve A. Hargrave (2015) *Hawkins Hollow: A Late Mississippian Household in the American Bottom*. Technical Report No. 159. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Kuehn, Steven R. (2015) Prehistoric Dog Pathology in the American Bottom: Evidence from the Janey B. Goode Site (11S1232), St. Clair County, Illinois. *Illinois Archaeology* 26:97-129.
- Lambert, John M. and Thomas J. Loebel (2015) Paleoindian Colonization of the Recently Deglaciated Great Lakes: Mobility and Technological Organization in Eastern Wisconsin. *PaleoAmerica* 1(3):284-288.
- McCullough, Robert G. (2015) Building Community on the White River in Central Indiana: Structures as Reflective of Societal Change at the Late Prehistoric Castor Farm Site. In *Building the Past: Studies of Prehistoric Wooden Post Architecture in the Ohio Valley-Great Lakes Region*, edited by Brian G. Redmond and Robert A. Genheimer. University of Florida Press.
- McCullough, Robert G. (2015) *Late Woodland Occupation at the Bland Site in the Northern American Bottom*. Technical Report 169. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- McCullough, Robert G., Ed. (2015) *Rosewood, Cunningham, and Sponemann Occupations at the Tena Deye Site in the Northern American Bottom*. Technical Report 163. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- McCullough, Robert, Thomas Loebel, and Robert Mazrim (2015) Glimpses of the French Colonial Capital of Illinois: Geophysics at Fort de Chartres Randolph County, Illinois. *Illinois Antiquity* 50(3):32-34.
- Mazrim, Robert F. (2015) *Protohistory at the Grand Village of the Kaskaskia: The Illinois Country on the Eve of Colony*. Studies in Archaeology No. 10. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Perri, Angela R., Terrance J. Martin, and Kenneth B. Farnsworth (2015) A Bobcat Burial and Other Reported Intentional Animal Burials from Illinois Hopewell Mounds. *Midcontinental Journal of Archaeology* 40(3):282-301.
- Slater, Philip, Kristin Hedman, and Thomas Emerson (2015) Strontium Isotope Analysis: A Tool for Assessing the Role of Immigration in the Formation of Cahokia, America's First City. *Illinois Antiquity* 50(3):26-28.
- Walthall, John A. (2015) *Queensware Direct from the Potteries: U.S. Importers of Staffordshire Ceramics in Antebellum American 1820-1860*. 2nd edition. Studies in Archaeological Material Culture No. 1. Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign.
- Walthall, John A. (2015) Seventeenth-Century Glass Trade Beads from La Salle's Fort St. Louis and the Grand Village of the Kaskaskia. *Midcontinental Journal of Archaeology* 40(3):257-281.
- Wissemann, Sarah (2015) Sourcing Pipestone Without Destroying Irreplaceable Artifacts. *Illinois Antiquity* 50(3):19-20.

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*Our Annual Report is designed to provide an overview of the Survey's yearly activities. The content of this report reflects the views of the contributors who are responsible for the facts and accuracy of the data presented herein and does not necessarily reflect the official views or policies of IDOT, the Prairie Research Institute, or the University of Illinois.*

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## OUR MISSION

To investigate, preserve, and interpret the archaeological heritage of Illinois within the contexts of long-term public needs and economic development through our scientific research, landscape preservation, public service, education, and outreach activities.

## OUR VISION

To serve as the principal repository and source of scientifically-based information and research on the archaeological resources of the state and to proactively utilize this knowledge to assist Illinois' citizens, communities, and institutions in making informed decisions on heritage interpretation, management, and preservation.

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