

2017 Illinois State Archaeological Survey Annual Report



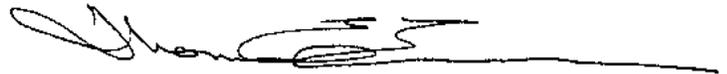
From the Director



Pictured (left to right) are Illinois State Senator Scott Bennett, Dr. Mark Ryan, Dr. Thomas Emerson, and Dr. Timothy Pauketat at the Allerton Park joint field school.

This year has been one of challenges and opportunities. For almost a decade, the Illinois State Archaeological Survey (ISAS) has been involved in unusually large-scale District 8 projects that entailed the construction of the Stan Musial Veterans Memorial Bridge and extensive associated infrastructure development. During this period, we excavated nearly 7,000 prehistoric features at the Janey B. Goode site as part of the Route 3 relocation and revealed striking new evidence for the existence of North America's first native city in East St. Louis. These have been exciting opportunities and ISAS staff members continue to carry out the analyses and reporting of these discoveries. One more time, IDOT's award-winning Cultural Resources program has made major contributions to our understanding of the past in the course of complying with the Historic Preservation Act's Section 106 requirements. As we move forward, our compliance efforts will be returning to a more typical situation of working on local road and moderate highway construction projects. This will require significant changes in our organization and a shift in both our Statewide and Local Roads compliance process strategies and everyday logistics. These changes will provide both IDOT and ISAS with continuing opportunities to hone and sharpen the operation of our 60-year partnership in cultural resource preservation, protection, and compliance.

Despite challenges in 2017, ISAS was able to explore new partnership opportunities with Illinois State University, Parkland College, and Allerton Park and Retreat Center. These partnerships allowed us to be part of exciting field schools and demonstrate our value to the general public and decision makers. ISAS was also able to make new discoveries in archaeological research, most notably, rewriting the history of maize and when it was first cultivated in the American Bottom. ISAS is looking forward to 2018 when we host the Ancient Cahokia Future Visions Conference (April 27, 2018). This conference is part of the University of Illinois's 150th anniversary and is sponsored by the Office of the Vice Chancellor for Research. The Ancient Cahokia Future Visions conference will bring together leading experts and advocates to talk about Cahokia's past and future.

A handwritten signature in black ink, appearing to read "Shawn [unclear]", written in a cursive style.

Partnerships and Progress



The Illinois State Archaeological Survey (ISAS) is part of the Prairie Research Institute at the University of Illinois. For over 60 years the University has partnered with the Illinois Department of Transportation (IDOT) on thousands of projects that have advanced Illinois's transportation goals while managing impacts on the state's past. Almost all the cultural resource knowledge about Illinois is because of this partnership. Today ISAS is recognized as one of the premier transportation archaeology programs in the United States. The ISAS-IDOT partnership preserves Illinois's important archaeological and historical resources while supporting transportation infrastructure. 🌱

American Bottom Field Station crew conducting a survey in southern Illinois.

ISAS BY THE NUMBERS



8 OFFICES



118 PROJECTS RECEIVED



129 BURIAL SITE REVISITS



154 REPORTS GENERATED



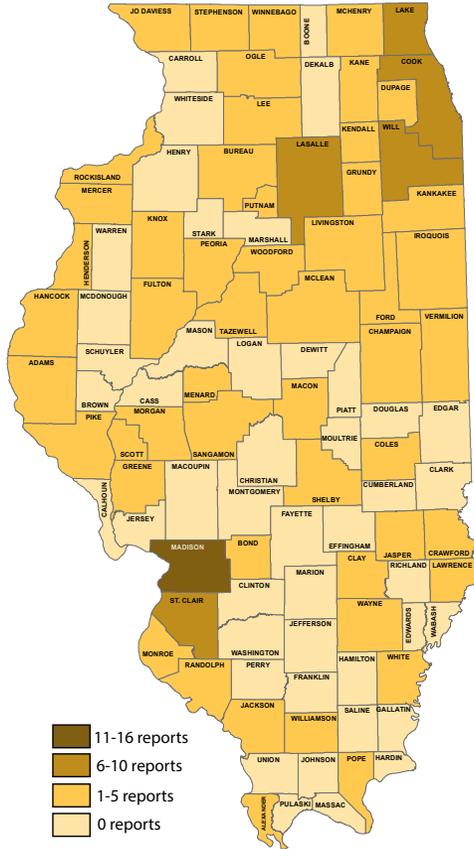
366 SITES VISITED/REVISITED



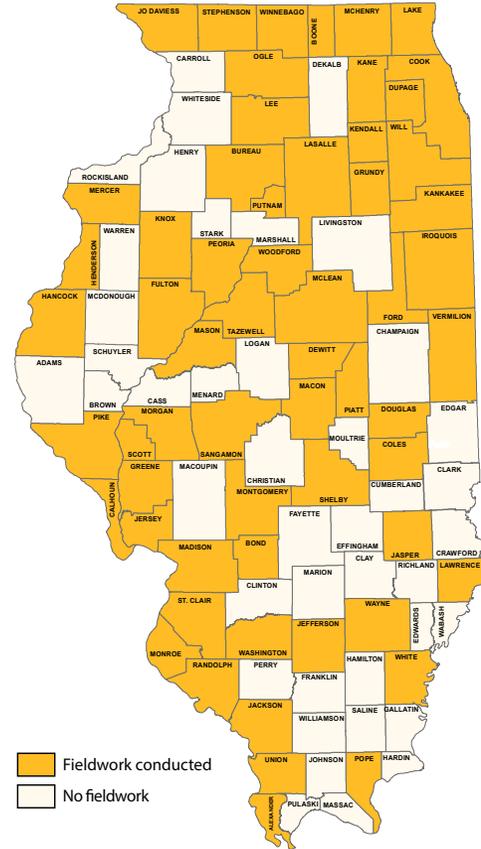
1,987 TRIBAL CONTACTS

Partnerships and Progress

IDOT reports produced by ISAS by county in 2017. 



IDOT field work conducted by ISAS by county in 2017. 



American Bottom Field Station (ABFS)

During the past year, the ABFS has been involved with 47 IDOT statewide projects, 27 new archaeological sites, and the revisit of 19 previously recorded sites. Many of the newly discovered archaeological sites were deemed National Register of Historic Places eligible, such as the Rick Brown site in Randolph County, where 12 Late Woodland pits and a structure basin were found. Other interesting sites included the Vulture Ridge site in Lawrence County, where more than 15 probable Archaic period pits were defined and excavated. The resurvey of known cultural resources at Mid America St. Louis Airport led to the reassessment of 11 sites, including those with Late Woodland and Mississippian components. One of the most interesting finds was a cache of 13 probable Late Woodland Bailey chert preforms at the Jalbert Cache site in Jackson County. Through the cooperation of local residents and landowners, the ABFS field crew documented the condition of 10 prehistoric burial sites, 9 of which possessed earthen mounds, within a 2-mile radius of IDOT projects. Additionally, 7 historic period cemeteries were recorded as archaeological resources. Information on each site was submitted to the Illinois Inventory of Burial Sites (IIBS) to aid in future preservation efforts. 🌿



*Matt Holschen and Anna Poling
defining Archaic pit features*



*Central Illinois Field Station at
Johnson Cemetery–Fandel site.*

Central Illinois Field Station (CIFS)

The CIFS conducted archaeological investigations in several counties this year, including Coles, Douglas, DuPage, Ford, Iroquois, Jasper, Kankakee, Kendall, LaSalle, McLean, Vermilion, and Will. These projects ranged from small bridge-crossing improvements to a 13-mile long survey corridor along Illinois Route 53 in Will County. As a result of these projects, the CIFS discovered or revisited a total of 74 sites by October 5, 2017. In addition to the submission of several reports this year, 12 reports were completed and submitted for projects conducted in 2016, including the results of additional archaeological investigations at the Delaware Town site in McLean County. Field survey in Jasper County along the Embarras River, an archaeologically poorly known area, led to the discovery of three prehistoric sites, including one with Late Woodland ceramics.

The CIFS assisted with geophysical investigations at Samuel's Mounds in Allerton Park and Retreat Center and also helped run the Parkland College archaeological field school at the site. In addition, the CIFS staff participated in the Allerton Family Campout, leading a hike to Samuel's Mounds and instructing campers in the use of the atlatl, or spear thrower. The CIFS staff also assisted the Illinois State University field school at the Noble-Wieting site in McLean County. The CIFS assisted with remote-sensing projects at the Orendorf sites and at the Cundiff Cemetery in Weldon Springs State Park. 🌿



Bannerstone recovered by CIFS during pedestrian survey in northern Illinois.



NIFS crew at Jackson Park.

Northern Illinois Field Station (NIFS)

The NIFS completed surveys of 26 IDOT projects covering approximately 959 acres; investigations for an additional 9 projects are ongoing. Survey crews identified 24 new archaeological sites and revisited 46 previously recorded sites; crews also documented the condition of an additional 34 mound sites and 4 historic cemeteries located within a 2-mile radius of IDOT projects. Several projects along Illinois 2 in Winnebago and Ogle counties have yielded important information about the prehistoric use of landforms within the Rock River drainage.

Our most recent survey along a 10.6-mile stretch of Illinois 2 investigated 9 previously recorded sites and identified 12 new sites. Sites present include four mound groups and one historic cemetery, 13 short-term campsites, one large Late Woodland/Upper Mississippian village, one large Late Archaic/Early Woodland/Late Woodland/Upper Mississippian habitation site, a shell midden, and one historic site. A preservation plan was developed for the Johns Mounds Group (11WO3), which contains 22 mounds (2 panther, 6 linear, 12 conical, and 2 indeterminate) and two borrow pits. The NIFS completed topographic mapping for 13 mounds and 2 borrow/depressions (including one of the panther mounds) within the present IDOT right-of-way and assessed the condition of the other 9 mounds.

Jackson Park Project

From mid-November to early December 2017, NIFS staff undertook fieldwork in Jackson Park as part of the larger Section 106 process related to the proposed construction of the Obama Presidential Center, removal or replacement of the Clarence Darrow Bridge, associated road realignments or removals, and associated

road underpass construction. This high-profile undertaking is under the oversight of FHWA, and lies within the Jackson Park National Historic Landscape District in the Hyde Park neighborhood of Chicago. Jackson Park is the site of the 1893 World's Fair, and the park has been an open space landscaped for public use since the 1870s. Thus, the project area has the potential for buried features associated with the World's Fair as well as the potential to contain intact prehistoric surfaces. Concerns regarding damage to the present park and landscaping, together with the known depth of post-fair landscaping fill, made standard Phase I shovel testing methods impractical. Therefore, fieldwork included geomorphological coring by Stratamorph Geoexploration Inc. to characterize the subsurface sediments, and excavation of hand units in areas where coring suggested that subsurface features or buried land surfaces might be present. 🌿

Paula Bryant working with total station at Johns Mounds Group.



From Our Field Stations



Western Illinois Field Station (WIFS)

The WIFS completed the survey of three US 34 alignment alternatives associated with the proposed Mississippi River valley crossing in Henderson County. This project will upgrade 8 miles of the current two-lane roadway to a four-lane limited-access highway, ultimately linking US 67/I-74 at Monmouth, Illinois, to the Avenue of the Saints (formerly US 61) in Burlington, Iowa. Most of the IDOT study area crosses low-lying bottomland terrain and an extensive, high sandy terrace remnant that rises 25 ft or more above the floodplain. The ISAS survey of 856 acres resulted in documentation of 116 archaeological sites and revisits to 15 aboriginal mound groups and 3 historic cemeteries. A wide range of prehistoric occupations were identified that are attributable to Dalton (ca. 10,000 years before present [YBP]) through late prehistoric Oneota (ca. 650–400 YBP) groups.

Selected artifacts from the Mary A. Hard site (11SG1420) in Sangamon County. These were recovered during testing for the FAU 8048, Woodside Road project and reflect a temporally discrete artifact assemblage dating from the 1830s to the early part of the 1840s. The refined ceramics are dominated by numerous green transfer printed (clobbered) tea cups and saucers, but redware, edged whiteware, some pearlware, and limited numbers of ironstone fragments are also present. These artifacts represent a fairly short-term (ca. one decade) occupation. 



Jenny Goldman excavating a well-preserved C-shaped soft brick fireplace foundation at the Mary A. Hard site; part of a suite of intact subsurface features associated with this short-term, early-to-middle nineteenth century rural farmstead.

One of the more interesting findings is that the floodplain surface near the western end of the project area seems to date no earlier than the terminal Archaic/Early Woodland period (ca. 3500–2200 YBP). However, older buried occupational surfaces were identified several feet below this as a result of systematic geo-coring. The most complex surface site appears to represent a Weaver-age (ca. 1650–1400 YBP) ring-midden village likely consisting of multiple circular house basins surrounding an open plaza or courtyard space. 🌀

Historic Architecture

1895 archival image of Chicago grain elevators and a whaleback shipping vessel on the Chicago River.



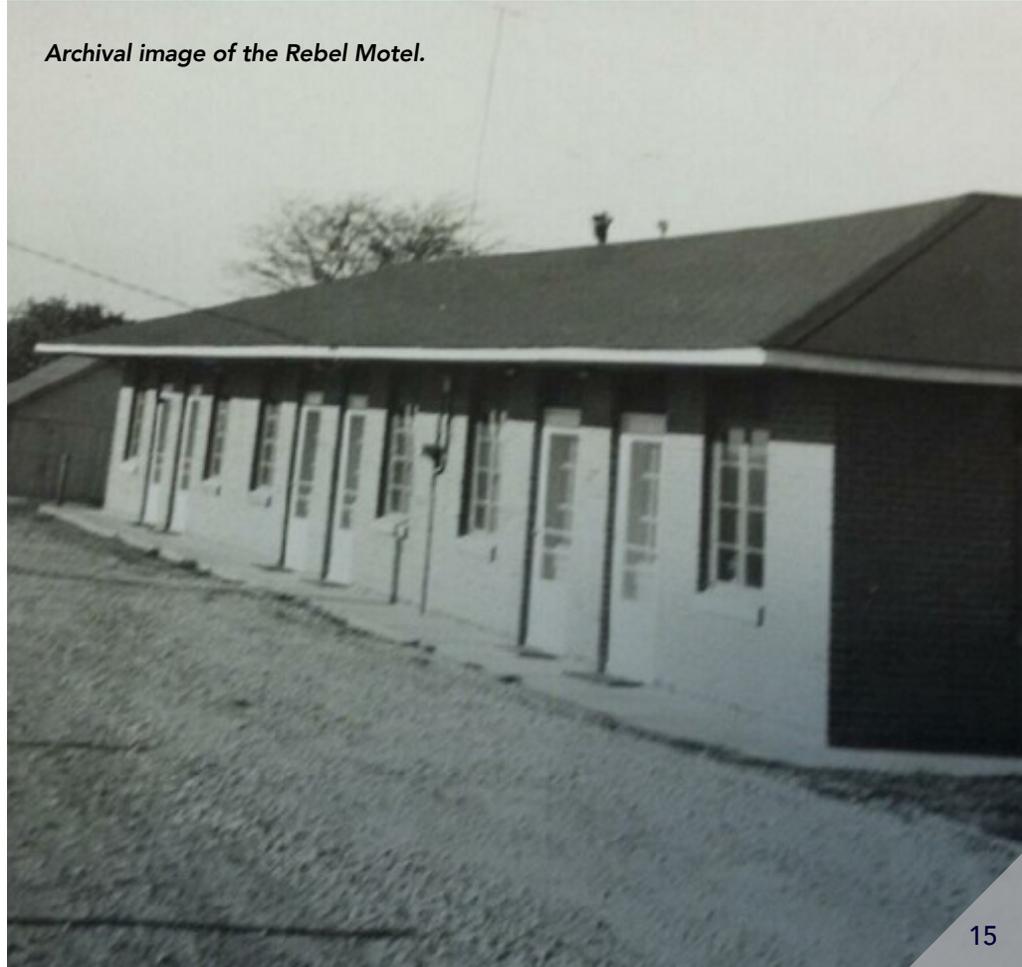
The Historic Architecture Section helps preserve Illinois's architecture and historic cultural identity by documenting, researching, and evaluating historic and architectural resources across the state in partnership with IDOT, including historic sites, buildings, districts, and bridges. ISAS historic architectural compliance specialists Emilie Land and Megan Gilbert were joined this year by Michael Smith, a cultural resource specialist, to help ISAS further uncover evidence about the fabric, density, construction methodologies, and occupants of many of Illinois's historic buildings. In 2017, ISAS participated in multiple compliance assessments for over 500 IDOT projects.

One of the IDOT projects undertaken by the ISAS Historic Architectural Section is a determination of eligibility for US Route 34 in Henderson County. Seven properties within the Area of Potential Effects were each noted as "Warrants National Register of Historic Places

(NRHP) Consideration,” while thirteen properties could not be assessed from the right-of-way. Of the seven properties, the Rebel Motel is being recommended NRHP eligible, under Criterion C, as a local example of a midcentury roadside motel.

The ISAS Historic Architectural Section is also working on two digital heritage projects focused on the Chicago Shipping Industry and an ESRI story map Reenvisioning Greater Cahokia. The Chicago Shipping Industry project will cover the beginning of the Port of Chicago and Chicago Harbor, shipping vessel types and freight, the Great Chicago Fire of 1871, the Calumet Harbor, and the current state of the Port of Chicago and Calumet Harbor. The Reenvisioning Greater Cahokia story map details the importance of the Greater Cahokia story, ISAS’s involvement, and the site’s future preservation. 🌀 ◆

Archival image of the Rebel Motel.



Special Projects



Dan Smith helping Special Projects with an electromagnetic induction survey.

The Special Projects division conducted a number of geophysical surveys throughout the state. This is an exciting development because traditionally archaeologists have had to excavate sites to learn about past peoples. In contrast, geophysical surveys allow researchers to see beneath the ground without having to dig. This year we used geophysical techniques to identify individual grave shafts in historic period cemeteries, define the layout and extent of Mississippian temple towns, locate Native American structures around a historic period fort, and examine the internal structure of several Middle Woodland burial mounds. Not only are these surveys a much more cost-effective way to learn about the past but they also help us plan for mitigation efforts and better imagine how we can protect and preserve these important places for future generations. 🌀

CULTURAL RESOURCE MANAGEMENT (CRM) ARCHIVE DATABASE

HOLDS **24,895**
ARCHAEOLOGICAL
REPORTS

1,154
NEW DOCUMENTS
ADDED IN 2017



ILLINOIS INVENTORY OF BURIAL SITES (IIBS)

3,189
BURIAL SITES
RECORDED

3,660
RECORDS DETAILING
REVISITS

163
DOCUMENTED REVISITS
IN 2017

(*Numbers from 2017 are based on data from Jan-Oct.)

Curation

The ISAS stewards cultural material and documents representing a century of archaeological investigations in Illinois. As an organization, our mission is to preserve and interpret the irreplaceable, nonrenewable cultural resources of the state and to make these resources and records available to both the professional community and the people of Illinois. Integral to this mission is the curation of extensive archaeological research and museum-quality collections that include artifacts, photographs, and paper and digital records from approximately 6,000 archaeological sites. Our primary partner and funding source is the Illinois Department of Transportation. 

Dr. Thomas Loebel uses the Diagnostic Type Collection, one of several research collections curated by ISAS.





ISHRAB funding allows Dr. Kristin Hedman and Mary Hynes to work with original records of early Cahokia investigations.

Illinois State Historical Records Advisory Board (ISHRAB) Grant

ISAS curates materials generated between 1922 and 1939 by the UIUC Cahokia Mounds Exploration conducted under the direction of Warren K. Moorehead and the Illinois River Valley Mound Survey directed by J. L. B. Taylor and A. R. Kelly. These explorations documented numerous sites that are foundational to our understanding of Illinois prehistory. These collections include material artifacts, over 4,000 photographic images, and 10 linear feet of documents, including field records and correspondence between excavators, directors, and sponsors. As legacy collections, funds for their curation are limited. In 2017, ISAS was awarded a one-year \$5,000 (matching) grant from the Illinois State Historical Records Advisory Board (ISHRAB) allowing us to scan documents, rehouse paper and photographic documents, create descriptions for scanned images, and ultimately create an online exhibit to educate the public and highlight the significance of these early investigations, the personalities involved, and the cultural prehistory of our state. ♦

ISAS Rewrites History of Corn

Edited text from University of Illinois News Bureau

Article by Diana Yates

A new study contradicts decades of thought, research, and teaching on the history of corn cultivation in the American Bottom, a floodplain of the Mississippi River in Illinois. The study refutes the notion that Indian corn, or maize, was cultivated in this region hundreds of years before its widespread adoption at about AD 1000.

The findings, reported in the journal *American Antiquity*, are important in understanding how and why Cahokia, the first major metropolitan center in North America, arose. "There is broad agreement that corn was cultivated in this region at about 1000 and widely consumed by the people of this time period," [Dr. Thomas] Emerson said. "Corn fragments, including cobs and kernels, show up in sites dating to 1000 or later. Skeletal analyses from bodies buried at Cahokia also reveal the devastating impact of corn on people's teeth. These signs, as well as chemical signatures of corn consumption in the teeth and bone, also date to 1000 and after," he said. ♦

Read the full article here <https://news.illinois.edu/blog/view/6367/463236>



Illinois State Archaeological Survey archaeobotanist Mary Simon, with ISAS director Thomas Emerson, is correcting misconceptions about the earliest cultivation of corn in Illinois. (Photo by L. Brian Stauffer, University of Illinois News Bureau)



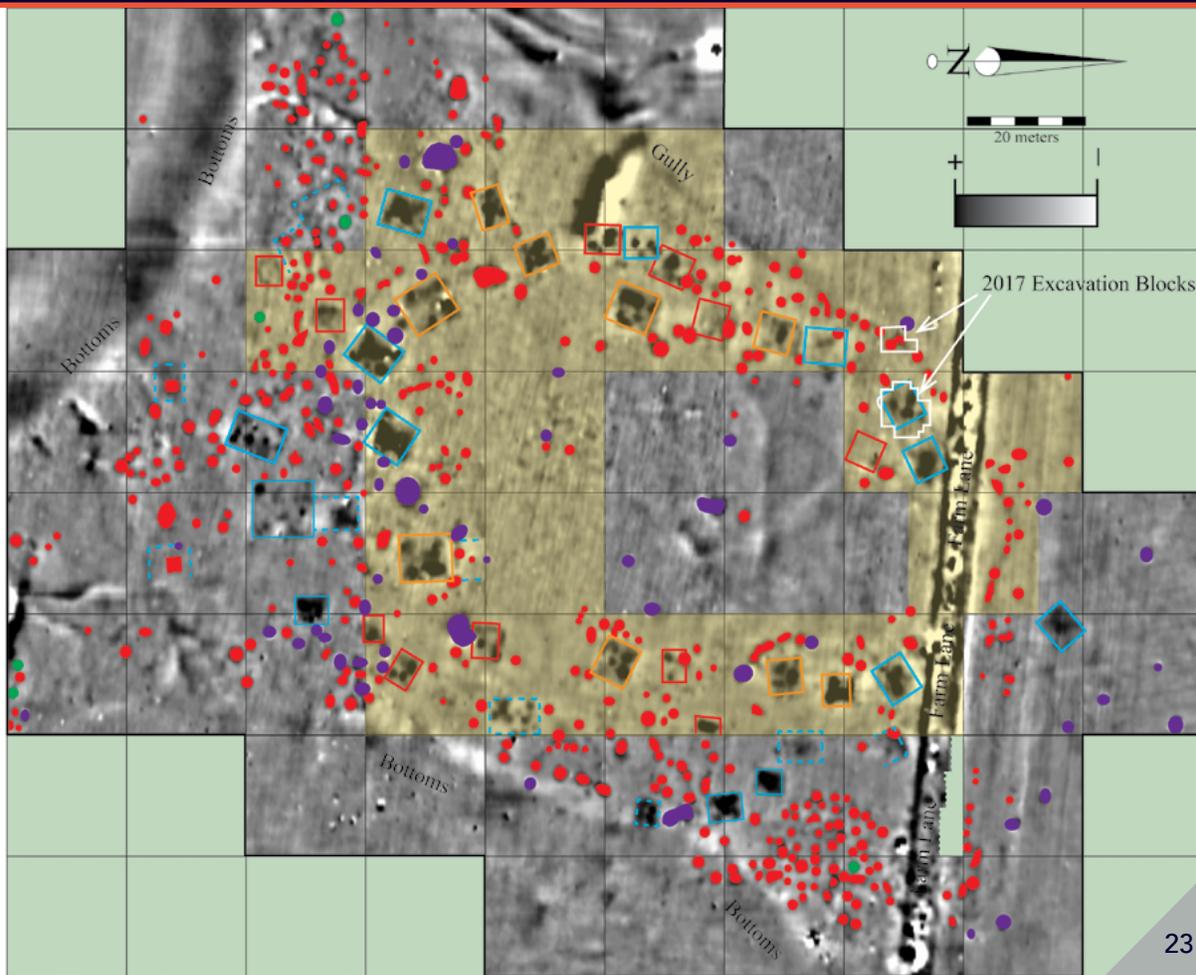
ISAS Field School with Illinois State University

Edited text from The Pantagraph

Article by Lenore Sebota

Pieces of animal bones, stone tools, ceramics and other artifacts unearthed on a farm outside Bloomington, Illinois, are providing clues to a culture that inhabited a small village more than 750 years ago. Illinois State University students, under the supervision of Dr. Logan Miller, assistant professor of archaeology at Illinois State University, and Dr. Jacob Skousen, of the Illinois State Archaeological Survey, worked on the site for three weeks as part of a month-long archaeology field school. In 2016, ISAS used remote-sensing geophysical techniques, including magnetometer imaging, to survey the site. Through the results of these techniques, ISAS learned more in four days than they had in four years. Magnetometer mapping helped identify differences in soils and minerals below the surface and uncovered evidence of a ring of houses in a plaza. The field school used the maps to help determine where they were digging. ♦

Read the full article here http://www.pantagraph.com/news/local/education/isu-students-excavate-th-century-village/article_6714660a-d67e-5a91-aa33-b421580f0aed.html



Magnetometer survey data with all anomalies outlined. These anomalies may indicate Mississippian-era features and help determine where the field school excavation blocks should be placed.



ISAS Field School with Parkland College at Allerton Park

ISAS conducted an archaeological field school at Allerton Park located in Monticello, Illinois. Erin Riggs, an instructor for Parkland College, led the field school, while ISAS staff led by Dr. Duane Esarey and Dr. Brian Adams helped guide students in best practices of field archaeology. The field school investigations centered on a village and mound group located on Allerton Park's land. The mound group, known as Samuel's Mounds, consists of ten mounds occupying roughly 1.5 acres on the upland bluff along the southern margin of the Sangamon River valley. The mounds were first documented over 50 years ago, but the site has recently been subjected to an intensive program of noninvasive documentation involving lidar, topographic mapping, and remote sensing as part of a cultural resource management review conducted by ISAS.

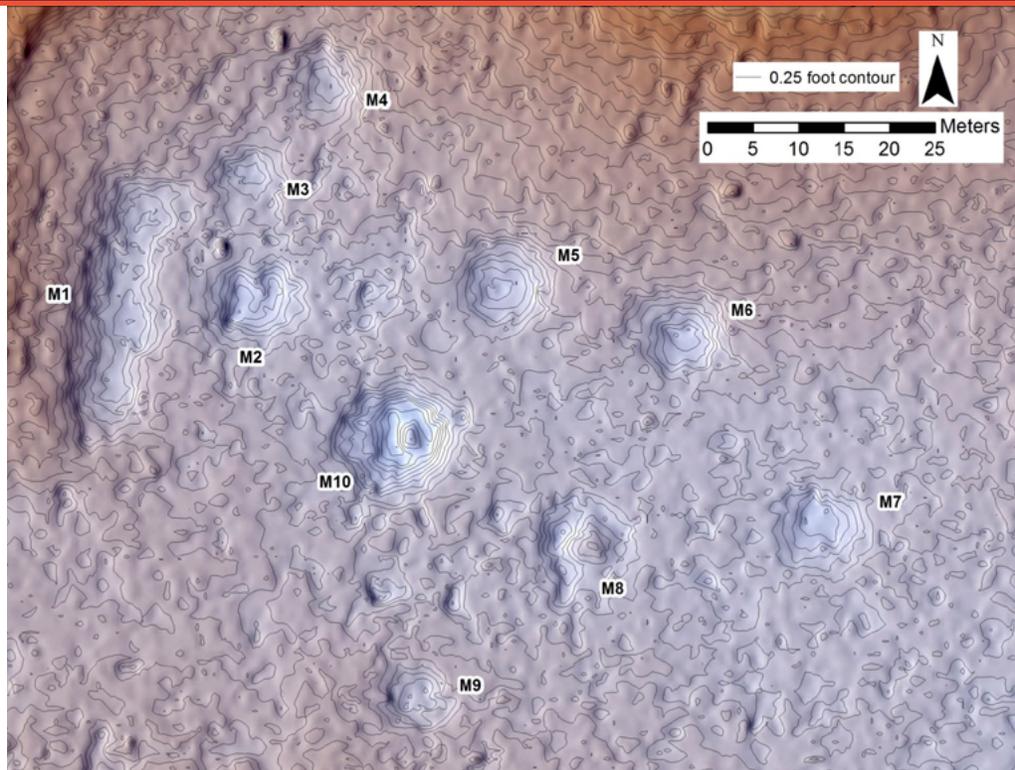
The Samuel's Mounds and Village is by far the most intact mound-village site in the middle and upper Sangamon River drainage and very likely one of the best-preserved mound groups of central Illinois. While its specific cultural origins and history are still a mystery, it is clear that the site represents a documented treasure—one to be carefully repaired, investigated, interpreted, and safeguarded for the public's benefit.

The field school focused its efforts on investigating the village that is thought to have surrounded the mounds. Due to forest cover and a lack of any scientific investigations, no temporally or culturally diagnostic materials are known from this site. The field school excavated test squares in the village

to gather information to identify when and by whom the mounds were built. Over the next two field seasons ISAS, in cooperation with the Illinois Department of Natural Resources, will create a comprehensive plan for archaeological interpretation and restoration. Most of the mounds are in pristine condition, but lidar images revealed, as confirmed by ISAS, that at least one of the mounds had been extensively affected by historic digging. ♦ ♦

Read Dr. Thomas Emerson's, *Restoring a Lost Heritage*, on the University of Illinois News Bureau Behind the Scenes Blog <https://news.illinois.edu/blog/view/6367/541042#image-1>

Watch WCIA news segment about archaeology at Allerton <http://www.illinoishomepage.net/news/local-news/digging-school/774145650>



Lidar image of Samuel's Mounds at Allerton Park in Monticello, Illinois.

Awards and Recognition



Ken Farnsworth Receives Distinguished Career Award from the Midwest Archaeological Conference

Kenneth Farnsworth received the Distinguished Career Award from the Midwest Archaeological Conference held in Indianapolis, Indiana. The award honors those individuals that have made significant contributions to Illinois archaeology.

Farnsworth's nearly 50-year career in Illinois archaeology began with the IDOT FAI-408 Project in western Illinois. He was a Director of the Contract Archeology Program from 1974 until he joined ISAS in 1998. There he served as Senior Research Editor and Senior Research Archaeologist until his retirement in 2016.

"Ken Farnsworth has dedicated his career to Illinois archaeology by being a tireless advocate for cultural resources preservation and interpretation."

—Dr. Thomas E. Emerson



Janice Pankey received an Illinois Certified Research Administrator certificate from the SPaRC'ed program, a research administrative certification series sponsored by the Office of the Vice Chancellor for Research at the University of Illinois.

On October 24, 2017, at the University of Illinois at Urbana-Champaign Service Recognition Banquet, ISAS's graphic designer/photographer Linda Alexander was recognized for her 35 years of service at U of I. Linda started work as a graphic designer/archaeological illustrator for the Resource Investigation Program (a precursor to ISAS) in October 1981.

"At ISAS, above all else, we are a team. For 35 years, it has been a privilege to be associated with individuals who are passionate and committed to their profession."

—Linda Alexander



The Office of the State Archaeologist

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

In 2017, OISA became even more defined by adding a monthly blog and podcast: <https://illinois.edu/blog/view/7417>
The goal of this blog and podcast is to give Illinois archaeology enthusiasts a chance to hear directly from the Illinois State Archaeologist in a fun and informal way. ♦



Another addition by the Illinois State Archaeologist was the start of the ISAS Brown Bag Speaker Series. This informal speaker series gives ISAS staff a chance to present or hear about current work and research by peers. ♦

Brown Bag Speakers

- Dr. Jacob Skousen, [*Preliminary Thoughts on Cahokia's Impact in the Vincennes Region.*](#)
- Amanda Butler, PhD Candidate, *Mounds and Missions: The Archaeology of the Collins Site.*
- Erin Benson, PhD Candidate, *Composing the Late Cahokian Countryside: Preliminary Results from 2017 Excavations at the Rhea Site.*
- Dr. Timothy Pauketat, [*Archaeological Excavations at Emerald Mound from 2012–2016.*](#)
- Dr. Laura Kozuch, *Sourcing Lightning Whelk Shell.*
- Dr. Alison Kyra Carter, *Looking Beyond the Temples: Exploring the Residences of the Ancient Angkorians.*
- Jeannie Larmon, PhD Candidate, *Micromorphological Analysis from the Emerald Mound Complex, Illinois.*



Dr. Timothy Pauketat and Dr. Alison Kyra Carter at ISAS Brown Bag Speaker Series.



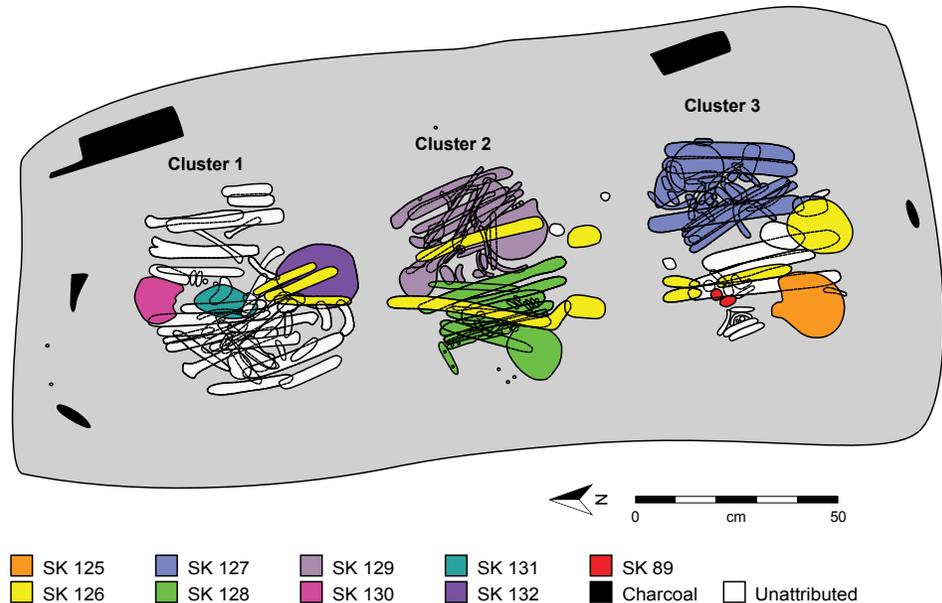
Aimée Carbaugh, ISAS skeletal analyst and University of Illinois anthropology graduate student, prepares human remains for transfer.

Bioarchaeology/Osteology Laboratory

The bioarchaeology/osteology staff work primarily out of the ISAS Killarney Research Annex in Urbana and the American Bottom Field Station (ABFS) in Fairview Heights, Illinois. Program staff are responsible for carrying out the requirements of the Human Skeletal Remains Protection Act (20 ILCS 3440 et seq.), which include excavation, technical analysis, and the reporting of human remains encountered during ISAS archaeological projects to IDOT, Illinois Historic Preservation Agency, and other local and federal agencies as required. Bioarchaeology and osteology staff members are also involved in collaborative research projects both within ISAS/UIUC and with researchers at other institutions, results of these collaborative research efforts are presented at professional conferences and in peer-reviewed journals. They also give presentations to local school groups, archaeological societies, and other organizations. 🌀 ♦

Bioarchaeology—East St Louis Mound Complex Skeletal Report Preparations

ISAS bioarchaeology staff are completing reports documenting the nearly 200 individuals and isolated elements recovered during the 2008–2012 ISAS investigations at the East St. Louis Precinct (ESTL) as part of the New Mississippi River Bridge Project (NMRB). These burials represent Terminal Late Woodland through Late Mississippian populations and will provide important new information on the life, health, and mortuary practices of residents of Greater Cahokia. Unique mortuary contexts at ESTL include remnants of a previously unreported mound; a Lohmann phase cemetery; an early Mississippian burial cluster with evidence for trophy taking and scalping; and a single Moorehead phase ossuary feature containing bundled remains of nine individuals. Upon completion of these reports, all human remains will be transferred to the Illinois State Museum. 



Feature 1991 is the latest burial identified at the East St. Louis Precinct during NMRB excavations. Dating to the late Mississippian Moorehead phase, this ossuary feature shows that the regional importance of the East St. Louis location continued even after the site's abandonment. This ossuary feature contains the secondary burial of at least nine individuals. Disarticulated elements had been carefully gathered into bundles each containing the remains of two to three distinct individuals. Bundles were placed on the floor of Feature 1991 and buried. Burned wood along the pit edges and charcoal in the burial fill suggest these remains may represent bodies and structural remnants of a dismantled charnel structure.



*Reconstructed ceramic vessels
from curated ISAS collections.*

Ceramics

Reports on ceramic assemblages from sites across the state, covering a broad expanse of time, have been nearing completion this past year. These include the Early Woodland Marion and Black Sand phase components as well as a minor Early/Middle Woodland Morton component at the western Illinois Tree Row site (11F53; ca. 800 BC–AD 1); the Late Woodland Mund phase (ca. AD 450–650) and the Mississippian Moorehead phase (ca. AD 1150/1200–1250/1275) components at the Russell site (11MS672) in the American Bottom; components from the thirteenth-century central Illinois River valley Mississippian occupations at the Orendorf site (11F1284) in western Illinois; and components from the late sixteenth- to early seventeenth-century Huber phase at the Palos site (11CK26) in northern Illinois. This last site has been of particular interest to our analyst Kjersti Emerson as it provides rare evidence of late

prehistoric Huber phase peoples possibly occupying the region into protohistoric times and engaging in down-the-line trade with their eastern neighbors.

Additional ongoing ceramic analyses that will continue into 2018 are primarily focused on the Late Woodland period in southern Illinois and the American Bottom. These include Dillinger phase (AD 800–1000) ceramics from the Dillinger site (11JY2), Patrick phase (AD 650–850/900) ceramics from the Clinton Silt (11JY398) and Fitzgibbons (11JY585) sites, and the Cunningham phase (AD 550–650) assemblage from the Trinity Hill site (11JY582). The latter three sites are part of Alexey Zelin's ongoing analyses of American Bottom sites excavated as part of the FAI 310 project. His work on these assemblages continues to add extensively to our knowledge and understanding of the Late Woodland period in that region. 🔍

Kjersti Emerson analyzes ISAS ceramic collections.





Dr. Clare Tolmie explains how bison scapulae were used to create hoes.

Faunal

The ISAS Faunal Laboratory is responsible for the identification, analysis, and interpretation of prehistoric and historic faunal assemblages from archaeological sites across Illinois. Faunal material, consisting of bone, teeth, antler, fish scale, mollusk shell, and eggshell, provides important information on past diet, animal exploitation and procurement strategies, habitat use and resource availability, seasonality, and butchering practices of the former residents of Illinois. In addition to the preparation of reports based on analysis of material collected in the course of IDOT projects, both past and present, the lab undertakes the maintenance and development of the ISAS faunal comparative collection at the Killarney Research Annex.

In 2017, the Faunal Lab analyzed thousands of faunal remains from nearly two dozen archaeological sites identified through IDOT projects. While most of these assemblages are from prehistoric and historic sites identified during recent or ongoing IDOT highway projects, the Faunal Lab continues to fully analyze zooarchaeological remains obtained during IDOT-related excavations conducted over the past five decades. The data obtained from these faunal assemblages provide important information on the prehistoric and historic inhabitants of Illinois. 🔄



Steve Kuehn, Faunal Lab Director,
analyzing faunal materials from an
archaeological site.



M. Alexis Volner hand excavating at the Bethel site.

Historics

One of our principal focuses in historical archaeology this year has been on the archaeological signatures of homes and businesses dating to the antebellum era. Farmsteads dating from the 1830s through the 1860s are some of our most commonly encountered historic archaeological resources, and we are currently trying to better understand how archaeology at these sites can be used to complement the rich historical record of that era. Of particular interest are the ways residents of antebellum Illinois interacted with a range of new mass-produced consumer goods and the lingering presence of traditional folk goods such as hand-forged iron and wheel-thrown pottery. We are also focusing on the nature of the archaeological deposits found in small towns and service centers, such as Bethel, Illinois—an extinct town located just west of Jacksonville in Morgan County. Thus far, the built environment and the material culture found in such towns looks surprisingly similar to that of rural farmsteads. Before the Civil War, “town life” (at least in smaller towns) doesn’t appear to have been much different than life back on the farm. 🍷

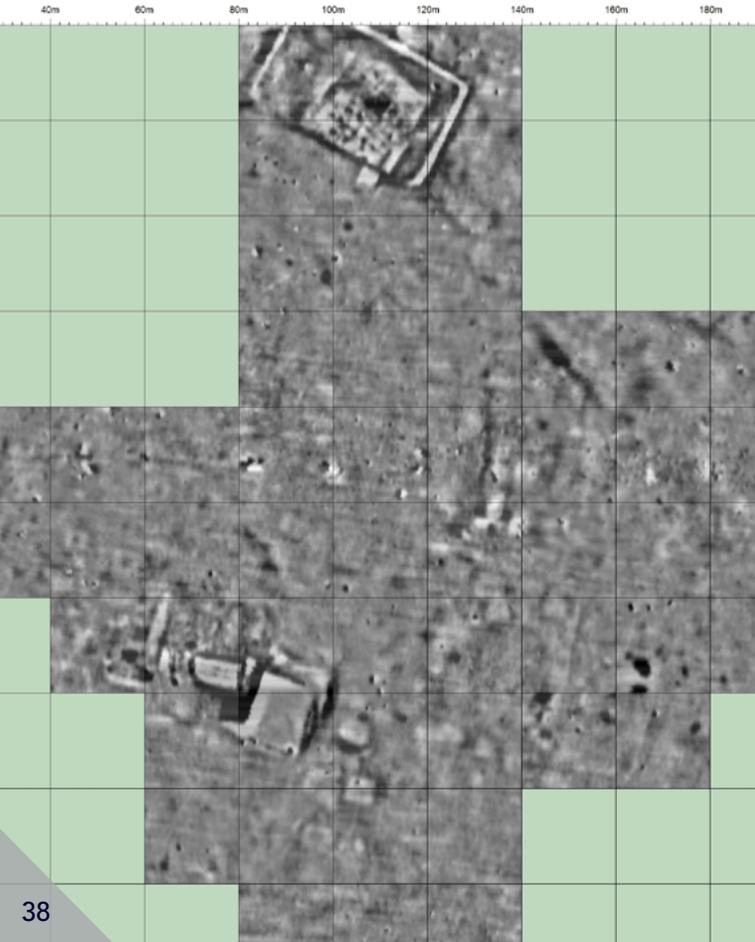
Lithics

During 2017, the Lithics Section provided analyses and descriptions of assemblages from numerous sites associated with the FAP-310, Visitors' Center, US 51/ Big Muddy Bridge, and Eldred-Hillview Road Bridge Replacement projects. Notable assemblages include two from potentially contemporaneous Patrick phase occupations near Piasa Creek in Jersey County. Dating between AD 650 and 900, one of these, the Clinton Silt site, produced several intriguing limestone discs, the function of which is unknown.

Analysis of lithic material recovered from an FAI-270-related borrow pit at Cahokia provides a fascinating glimpse of shell-bead production in the Mississippian center. Sandstone abraders with irregular working elements suggest the shaping of strung beads. X-ray fluorescence analysis found elevated calcium levels in the composition of a white residue on the abraders, which would be consistent with their presumed use for grinding shells. These artifacts were concentrated in two pits associated with a single structure and were found along with more than 50 chert microdrills and other specialized microlith tools also used in the manufacture of shell beads. 🌀 ♦



*Upper: Groves Borrow Pit microdrills and microlith tools.
Lower: Clinton Silt site limestone discs.*



Special Projects

One of the more interesting surveys was at the Otter Pond site (11LW9), a large Mississippian period (AD 1000–1500) town in southeastern Illinois. The survey revealed that the site consisted of at least four flat-topped temple mounds, a large central plaza, and dense residential clusters. This is an important discovery in part because we know very little about Mississippian settlements in this part of the state. It is also important because, based on what we know of pre-Mississippian settlements in the area, Otter Pond is evidence of inhabitants using a new way of organizing space. This would have mattered to local populations: living in a crowded but highly structured space with temple mounds and a central plaza would have changed their perception and understanding of the world. And because the construction of towns and cities is associated with new social, political, and religious orders throughout the world, the Otter Pond site suggests that such a process may have taken place in southeastern Illinois. ♦ ♦

***Magnetometer map
of the Otter Pond site.***

Part of the ISAS mission is public education and outreach. While promoting archaeology and environmental programs, ISAS staff members volunteered 593.5 hours of their own time to inform and engage the general public about the archaeology of Illinois as well as our role in preserving the past. In 2017, ISAS outreach efforts directly reached thousands of people and professional organizations across the state and the Midwest. ISAS has utilized social media platforms to engage the general public and decision makers. Short videos posted on social media help promote ISAS while educating audiences about ISAS's important archaeological and preservation efforts. 📺 ♦

ISAS SOCIAL MEDIA BY THE NUMBERS

 2,068 page likes	 630 followers
 1,124 followers	 213 subscribers over 25 videos produced in 2017

MOST POPULAR IN 2017



OVER 200
LIKES



OVER 14K
REACHED



MOST WATCHED
VIDEO ON SOCIAL
MEDIA

OVER 5.5K VIEWS AND
OVER 18K REACHED

VIEW
MISSISSIPPIAN
EARSPOOLS
HERE
<https://www.youtube.com/watch?v=lz-DU-usxDKQ>

Partnership Spotlight



Orpheum Children's Museum

ISAS staff participated in the first annual Day of Archaeology at the Orpheum Children's Science Museum. The Day of Archaeology was made possible by ISAS, The University of Illinois Archaeology Student Society, and the Orpheum Children's Science Museum. In 2016, a permanent archaeology exhibit was built at the Orpheum Children's Science by the Archaeology Student Society. A proclamation read by Champaign Mayor Deb Frank Feinen declared the day "Archaeology Day." The first annual event included a wide range of activities for families and children to enjoy. ♦

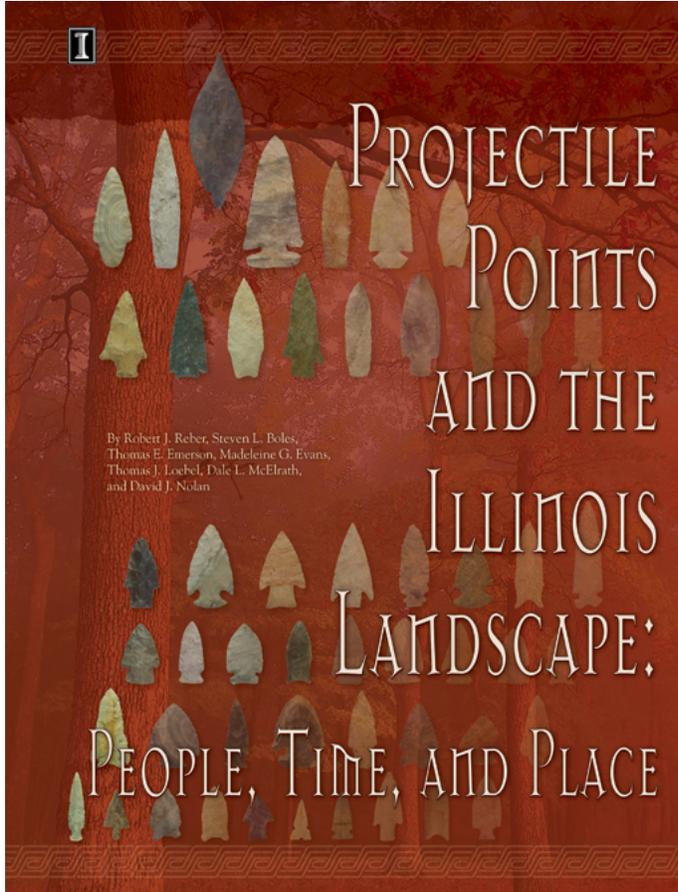
Staff from the Orpheum Museum, ISAS staff, and Mayor Deb Frank Feinen with her daughters at 1st Annual Archaeology Day.

Forest Preserves of Cook County

In 2017, NIFS staff worked on a series of outreach initiatives with the FPCC including open-to-the-public archaeological site tours of Camp Skokie Valley and the Oak Forest Heritage site, presentations at the Wild Things Chicago Conference and the Midwest Archaeological Conference, flintknapping and atlatl stations at two FPCC public events, and job shadowing with Youth Outdoor Ambassador interns. As part of compliance efforts, over 60 site documentation packets were submitted to the state associated with over 40 technical reports completed in 2017. Fieldwork included survey of 8 potential burial sites that had not yet been recorded in the state site files. Lastly, NIFS staff continues ongoing consultation with FPCC resource managers to evaluate potential habitat restoration locations including invasive species removal, bat house installation, and hydrological improvements; law enforcement concerning looting issues; and the planning and development team pertaining to the new land acquisition initiative. ♦



Youth Outdoor Ambassador interns learn about archaeology in the Chicago area while shoveling testing in the Forest Preserves of Cook County with NIFS staff member Ken Geier (center).



Our best seller, [*Projectile Points and the Illinois Landscape: People, Time and Place*](#), whose first printing was 500 copies, sold out in 6 days. The second print run of 500 copies has less than 200 left, with more selling every day. The projected date of the third printing is spring 2018. ♻️ ♦

ISAS PRODUCTION OFFICE



BOOKS
SOLD: 1,116



PAGES
PRODUCED: 4,500+

Dr. Timothy Pauketat joined ISAS as Associate Director for Research and is currently a Visiting Research Scientist. Tim is also a professor of anthropology and medieval studies at the University of Illinois. Having previously taught at the University of Oklahoma and the State University of New York, Buffalo, he has 25 years of experience working at and around the American Indian city of Cahokia and a series of related archaeological sites along the Mississippi River, from Wisconsin to Arkansas. He studies the historical relationships between religion and urbanism, inequality and government, astronomy and the senses, and climate change and culture, with a focus on understanding how materials, substances, and things shape what it means to be human. Tim is the author of numerous research papers and the author or editor of a dozen books, including *Cahokia* (2009, Penguin), the *Oxford Handbook of North American Archaeology* (2012, Oxford), and *An Archaeology of the Cosmos* (2013, Routledge). His field and lab research has been funded by the John Templeton Foundation, the National Science Foundation, the National Endowment for the Humanities, National Geographic and other agencies and institutions.





Dr. Kristin M. Hedman was named Interim Associate Director and is overseeing curation and human resources. Kris is also the associate director for the Program on Ancient Technologies and Archaeological Materials (ATAM). She is a physical anthropologist specializing in human osteology, paleopathology, and bioarchaeology. Her research interests focus on mortuary behavior and skeletal evidence of health, activity, and interaction; isotopic evidence of diet and population movement; and the social implications of cultural modification of human bone, both premortem and postmortem. Much of her research has focused on prehistoric populations of the American Bottom region in Illinois. Kristin has supervised ISAS bioarchaeology projects and staff since 1989. As Associate Director of ATAM, Kristin helps integrate and facilitate interdisciplinary scientific research projects focusing on these issues, both within ISAS and with other university units and institutions.

Mary Hynes is the newly appointed Digital Data/Documents Collections Specialist and Interim Collections Manager for ISAS. Mary has a BA in Anthropology and Latin American Studies from the University of Illinois and a Master's of Science in Information Science from the iSchool at UIUC. She has worked for ISAS since 1991 in several capacities: lab worker, lab supervisor, freelance editor, and member of the PIMA project with ATAM-ISAS-ISGS. Since 2009 Mary has served as the Bioarchaeology Collections Specialist and has provided assistance to ATAM program, responsibilities that will continue under her new position.



ISAS Staff — New Additions



*Erin Benson,
Archaeology Assistant*



*John Lambert, Visiting
Archaeological Spatial Analyst*

ISAS Staff – New Additions



*Dr. B. Jacob Skousen, Visiting Research
Archaeologist in the Special Projects Division*



*Sarah Scattergood,
Statewide Coordinator*

ISAS Staff – Additions



*Shivankit Sethi, Web
Development Specialist*



*Mike Smith, Cultural
Resource Specialist*

Robert (Bob) Monroe retired after serving 17 years at the Western Illinois Field Station of ISAS (Jacksonville Office or "Southwestern" as he called it) and the prior 8 years at the Center for American Archeology in Kampsville.

Anyone who worked with Bob can attest to the high level of craftsmanship that is evident in his exceptionally clean, straight excavation walls. Bob is also blessed with great instincts and has found, collected, and documented hundreds of sites, especially in Jersey County, where he grew up; his knowledge of the archaeology of this area is unparalleled. However, one of the things that we will miss most is his storytelling ability.



ISAS Says Goodbye



Dr. Claire Dappert-Coonrod, after several years with ISAS and most recently with IDOT in Springfield, moved on from archaeology to become a teacher at Winchester High School. ISAS featured Claire in our Women in Science blog <https://illinois.edu/blog/view/7283/524881>.

During the past 19 years Claire has been affiliated with ISAS in numerous roles ranging from a work-study student in 1999 to her current position of ISAS-IDOT compliance archaeologist. It has been a great pleasure to see Claire move through the organization from field hand to PhD in archaeology. Claire has played a significant role in developing the Survey's historic archaeology program and developing working protocols, especially in the ABFS's East St. Louis project—where she was faced with the organization and documentation of large collections from a late nineteenth–early twentieth century contexts.

Margaret “Maggie” Bareis, the wife of former director of the Resource Investigation Program (a precursor to ISAS), Charles J. Bareis, passed away in 2017. The family donated all of Charles Bareis’s research and books to ISAS, and the ISAS document collection now bears his name.



Charles and Maggie Bareis.



Ancient Cahokia Future Visions

a conference honoring 150 years of research at the University of Illinois

The Illinois State Archaeological Survey, part of the Prairie Research Institute at the University of Illinois, cordially invites you to the Ancient Cahokia Future Visions Conference. This conference is part of the University of Illinois' 150th anniversary celebration and sponsored by the Office of the Vice Chancellor for Research.

Friday April 27, 2018 at the I-Hotel on the campus of the
University of Illinois Champaign-Urbana

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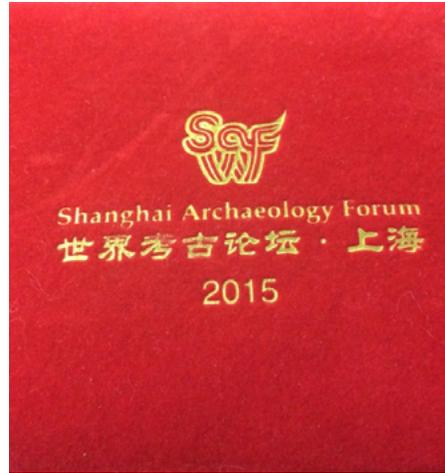
Ancient Cahokia Future Visions

ISAS celebrates the University of Illinois's 150th anniversary by hosting the Ancient Cahokia Future Visions Conference. The conference is sponsored by the Office of the Vice Chancellor for Research. The Ancient Cahokia Future Visions Conference will be held on April 27, 2018 and will bring together the leading experts, advocates, and government dignitaries to talk about Cahokia's past and future. The conference is free but advanced registration is required to attend. <https://cahokiaconference.wixsite.com/cc2018> ♦

Shanghai Archaeology Forum

In 2015, the Shanghai Archaeology Forum awarded ISAS with the Field Discovery Award for the East St. Louis archaeological project for being one of the top ten archaeological discoveries in the world.

In 2017, ISAS was nominated for a Distinguished Research Award by the Shanghai Archaeology Forum in Beijing, China. The research nominated is *New Insights into the Origins of Complexity in Eastern North America: Isotopes and Maize*. Dr. Thomas E. Emerson and Dr. Timothy R. Pauketat travelled to Beijing, China for the Shanghai Archaeology Forum Conference where the awards were presented. Dr. Pauketat also gave one of the keynote addresses at the conference. ♦



Above: 2015 Field Discovery Award from the Shanghai Archaeology Forum.

Right: Excavation and construction at the East St. Louis site.



Excavations at the East St. Louis site.



East St. Louis Reports

The New Mississippi River Bridge Project in East St. Louis was the largest archaeological excavation in the United States from 2008–2012. In 2018, the research reports will be published detailing ISAS's work and research at the site. 



"Exchange Avenue" Missouri flint clay figurine recovered from the East St. Louis site.

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Make a Donation

Your donation helps us to ensure we are able to continue our mission. To serve as the principal repository and source scientifically based information and research on the archaeological resources of the state and to proactively utilize this knowledge to assist Illinois's citizens, communities, and institutions in making informed decisions on heritage interpretation, management, and preservation.

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This 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.

Connect with Us



Acknowledgments

Sincere appreciation to all the ISAS photographers and contributors. The annual report is a collaborative effort that would not be possible without their input.

Thanks to the Illinois Department of Transportation for their support of the Illinois State Archaeological Survey investigations.

Key for budget symbols:  = IDOT funded;  = ISAS funded;  = Grant funded;  = PRI Funded;  = FPCC funded;  = OVCR funded;  = Shanghai Archaeological Forum funded.

Front cover: Hurley Hopper on the running board of a University of Illinois, Illinois Archaeology Exploration field vehicle. September 1928 photo taken at the foot of Perrin's Ledge. (Illinois State Museum—Hurley Hopper photo album.)



ISAS 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.



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