

# ITARP 2009

## Annual Report



**ILLINOIS TRANSPORTATION ARCHAEOLOGICAL RESEARCH PROGRAM**  
University of Illinois @ Urbana-Champaign



Illinois Department of Transportation

# To Our Reader

The Illinois Transportation Archaeological Research Program (ITARP) is the product of a half-century collaborative effort by the University of Illinois (UI) and the Illinois Department of Transportation (IDOT) to preserve the state's important archaeological and historic resources while enhancing the public's understanding of Illinois' rich heritage. Initiated in 1957 by Dr. John McGregor, and carried on by Dr. Charles Bareis at the University of Illinois, the program has grown in scope through the years and today is recognized as one of the premier transportation archaeology programs in the United States.

One of ITARP's primary goals is to disseminate information to both professional audiences and the public at large. Our annual report is designed to provide an overview of the program's yearly activities for IDOT and UIUC administrators, the archaeological community, and the general public. 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 do not necessarily reflect the official views or policies of IDOT.

The 2009 season provided the first extensive look at the archaeological resources located within the construction footprint of the new Mississippi River Bridge. This bridge will create an additional link between the growing American Bottom communities and metropolitan St. Louis, Missouri. Serendipitously, the touchdown areas of the bridge in each state are marked by the former locations of two Mississippian period monumental sites—the East St. Louis Mound group in Illinois and the St. Louis Mound group in Missouri. In the twelfth century A.D. these were, respectively, the second and the fourth largest mound groups in North America.

The Illinois mound group was leveled by nineteenth century industrial development in East St. Louis that included the presence of one of the largest meat-packing centers in the world, processing over 105,000 animals per day. The mid-twentieth century collapse of these industries created a decaying urban landscape closely resembling a devastated wartime city. Yet underneath the modern rubble, ITARP archaeologists have found virtually intact remains of a large Mississippian residential neighborhood occupied during the eleventh and twelfth centuries. Over one hundred structures and many huge marker posts, storage pits, and special use facilities have been uncovered to date. This ongoing excavation is truly a once-in-an-archaeological lifetime opportunity to explore a large section of one of the great early towns of Illinois.

This year also saw ITARP staff expand their already extensive volunteer and partnership activities across the state, some of the most satisfying of which have been partnerships with like-minded groups. The discovery of Fort Johnson and Cantonment Davis, heretofore “-lost” War of 1812 temporary fortifications near Warsaw, Illinois, was the result of joint efforts between vacationing Western Illinois Survey Division-ITARP personnel and local researchers. Our American Bottom staff has joined with the Brooklyn Historical Society to unravel the deep historical roots of this small Illinois town founded by freed slaves. Archival research and test excavations are well on their way to pinpointing the location of the initial 1820s African-American settlement. Cooperative endeavors by Northern Illinois Survey Division staff with the Jo Daviess Conservation Foundation and several agencies have led to the protection of the John Chapman Village and the Aiken Mound Group and the establishment of publicly accessible archaeological preserves in northwestern Illinois. An ongoing multi-year collaborative project to document private archaeological collections from east-central Illinois partners the local Illinois Association for the Advancement of Archaeology chapter and ITARP's Central Illinois Survey Division. These are only a few of the many volunteer efforts of our staff that reach out to public and private organizations and agencies to assist in the statewide protection and preservation of Illinois' endangered heritage.

IDOT's historic preservation program has again had a widespread and positive impact on archaeological resources throughout Illinois. I thank all of our staff for their professionalism, dedication, and commitment to the state's heritage. It is truly humbling to work with such a dedicated group of individuals.



Director, ITARP



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## 2009 Annual Report

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## Acknowledgements

Thanks to Dr. John Walthall, chief archaeologist at the Illinois Department of Transportation, and the Illinois Department of Transportation for their support of the Illinois Transportation Archaeological Research Program's investigations. Dr. Thomas Emerson, ITARP director provided guidance in the preparation of the 2009 annual report, the production of which is the responsibility of the Statewide Archaeological Survey Division, under the direction of Dale McElrath. Thanks to all ITARP staff members who contributed summaries of division activities, continuing surveys, and site investigations, as well as the beautiful photos included in the report.

Information on obtaining additional copies of this report, as well as other ITARP publications, is available at: [www.isas.illinois.edu/publications](http://www.isas.illinois.edu/publications).

## About the Cover

*Mississippian flint clay figurine kneeling female holding a shell cup.*

Top left: Excavation at East St. Louis site (11S706) within the former St. Louis National Stockyards.

Top right: Figurine in situ at 11S706.

Bottom left: Figurine in hand, post excavation.

Bottom right: 2009 site map of the Stockyards Tract of the East St. Louis site (11S706).

**Photo credits:** Linda Alexander, Mera Hertel, Jeff Kruchten (map), Mat Terry.



## Program Mission and Structure

### History and Mission

The Illinois Transportation Archaeological Research Program (ITARP) is the product of a five decade long cooperative effort between the University of Illinois at Urbana-Champaign (UIUC) and the Illinois Department of Transportation (IDOT), created to ensure the preservation and protection of the state's important archaeological resources in the context of transportation projects. As a part of the largest land-grant University in the state, ITARP is responsible to the citizens of Illinois for providing educational and research opportunities in order to advance our knowledge of the state's prehistory and history. This joint effort began under the direction of Dr. John McGregor and Dr. Charles Bareis in 1957 with the newly formed Illinois Archaeological Survey (IAS). It continued into the 80s when the IDOT statewide survey program was transferred to the Resource Investigation Program (RIP) within UIUC's Department of Anthropology.

The recent establishment of ITARP in 1994 was the direct result of IDOT's interest in developing a centralized program to facilitate Illinois's cultural resources protection efforts and UIUC's desire to expand its public service mission in the area of archaeology.

The mission of ITARP as a joint program of UIUC and IDOT is:

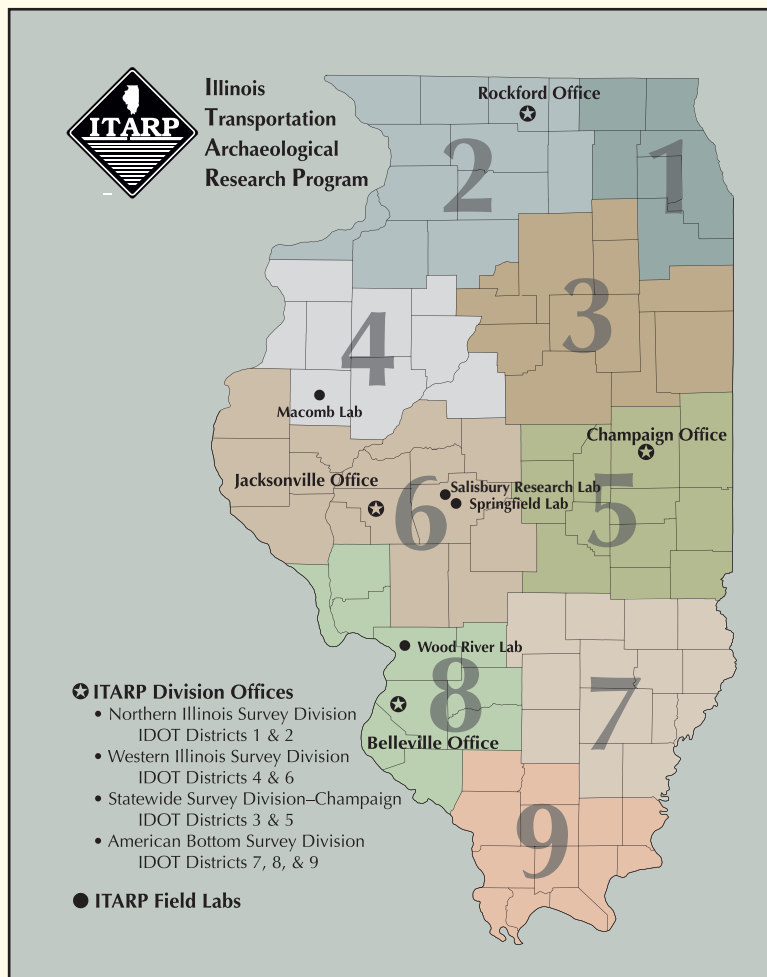
1. to assist the department in the preservation and protection of Illinois' historic and archaeological resources,
2. to carry out research activities that enhance the educational and public service mission of the University of Illinois, and
3. to promote and ensure professional and public dissemination of information regarding the prehistory and history of Illinois.

The accomplishment of these goals is supported and funded through a wide

spectrum of sources including IDOT, UIUC, grants, and contracts with the private sector.

### Structure

The ITARP Statewide Survey Division, directed by Dale McElrath, performs the majority of Phase I archaeological surveys and Phase II and Phase III site investigations undertaken in conjunction with Illinois Department of Transportation projects. Six regional offices carry out archaeological



reconnaissance and any associated site excavations throughout the state: the Northern Illinois Survey Division (NISD) in Rockford handles the 16 counties south of Wisconsin, including the metropolitan Chicago area; the Central Illinois Survey Division (CISD) in Champaign deals with the 32 east-central Illinois counties between Chicago's collar counties and the Wabash River; the Western Illinois Survey Division (WISD) Macomb and Jacksonville Labs manage the 27 west-central Illinois counties, a region that includes the lower Illinois River valley; and the American Bottom Survey Division (ABSD) Belleville and the Wood River Labs are responsible

for the 27 counties between the Wabash and Mississippi Rivers, which encompass the archaeologically complex and rich American Bottom in southwestern Illinois.

Large, multi-year excavations and research projects are the purview of the Special Projects Division, coordinated by Dr. Andrew Fortier. These include work at the East St. Louis Mound Center, the Janey B. Goode site, and Fish Lake, all in the American Bottom near St. Louis, and the Hoxie Farm site in the Chicago area.

A number of investigations related to FAP 310 and Mississippi River Bridge projects have been underway for more than a decade.

The Program Support Division is responsible for program administration and specialist analyses that are provided by a team comprised of paleoethnobotanists, a faunal analyst, a historic archaeologist, bio-archaeologists, GIS and curation specialists, a network administrator, desktop publishers, and a graphic designer/illustrator/photographer based in the Champaign Main Office and satellite Neil Street Lab. Program Support Division staff offer paleoethnobotanical and faunal analysis, physical anthropology, historical research, digital cartographic production and GIS analysis, curation and security, and manuscript production, which includes editing, formatting, graphic design, and artwork for ITARP publication series

and public displays and exhibits. The public outreach coordinator and senior research editor are based in the Springfield/Salisbury Research Lab. Flotation labs are located in Macomb and Godfrey.

The various ITARP divisions also conduct long-term, large-scale, grant-funded archaeological research projects and selected private work that provides funding and research opportunities for UIUC students and other researchers.

### Paleoethnobotany Laboratory

The Paleoethnobotany Laboratory is located in the main offices of the Illinois



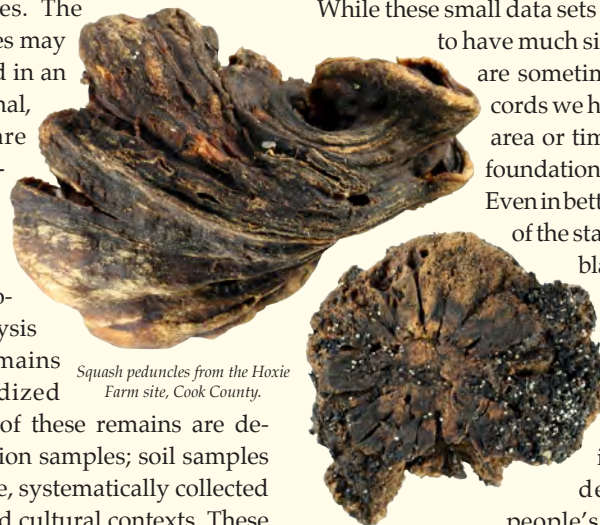
Microscopic analysis of macrobotanical sample.

Transportation Archaeological Research Program, on the UIUC campus. The Lab is under the directorship of Mary Simon, assisted by two research archaeobotanists Mary King, working full time, and Leighann Calentine, working part time. Kathryn Parker, archaeobotanist with Great Lake Ecosystems is employed on a contractual basis. Our research focuses on the analysis of plant remains from archaeological sites of both prehistoric and historic affiliation. The standard analytic protocol employed for almost all sites incorporates both identification and quantification of macrobotanicals. These basic analyses provide the foundation for our work. However, research goals extend beyond simple identification and presentation of raw data. Rather, our objective is to integrate the macrobotanical data into the entire archaeological data set, in the attempt further our understanding of the complex inter-relationships between humans and plants, whether at the biological, social, political, or economic levels. In this respect, analyses of archaeobotanical materials provide insight into tangible issues of subsistence, technology, and environment as well as to more ephemeral issues such as belief, ritual, and exchange.

Equally important to analysis of macrobotanical remains is disseminating the results of these analyses. Regardless of site size or the nature of remains, a written summary or report is prepared for all analyzed assemblages. The type of report submitted depends on a number of factors including: site complexity and extent; number of samples or features excavated; cultural affiliation; whether or not further work is to be conducted; and in some instances time constraints. At minimum, publication involves preparation of a summary table for inclusion in the final testing report, which is usually an Archaeological Testing Short Report (ATSR). These reports are available online so no longer languish in the inaccessible "grey literature." For most sites, a more detailed written report or appendix

is prepared. These can be presented as part of an ATSR or appear in a published volume. Very large sites are fully documented in report chapters in one of the ITARP publication series. The results of analyses may also be published in an appropriate journal, among which are *Illinois Archaeology* and *Midcontinental Journal of Archaeology*.

Collection, processing, and analysis of botanical remains follow standardized protocols. Most of these remains are derived from flotation samples; soil samples of known volume, systematically collected from well-defined cultural contexts. These samples are processed using water flotation to extract carbonized plant remains. In 2009, float processing took place at two ancillary "Float Labs." One is located near Alton Illinois and operates under the direction of Amanda Gifford, and one is located in Macomb and operates under the direction of Susan Nolan. Processed and dried samples



Squash peduncles from the Hoxie Farm site, Cook County.

are transported to the main lab space in Champaign for analysis. Analysis follows standardized ITARP procedures, in which dried samples are passed through a 2 mm mesh screen, and all items retained by the screen are identified and quantified by material class. The fraction of the sample that passes through the screen is scanned under low magnification and seeds, or other informative items, are removed, identified, and counted. Additionally, our staff analyzes the usually larger samples of carbonized plant materials that have been collected separately during excavations. These "hand-collected charcoal samples" can include any number of items from large pieces of wood, through caches of nuts and even burned textile pieces. The majority of our samples are carbonized residues from open-air sites, but we also provide analysis for occasional waterlogged or desiccated specimens from secure contexts.

In 2009, ITARP archaeobotanists analyzed a total of 641 flotation samples from 14 sites (Appendix, Table 6). A large number of these were from the extensive Patrick phase components at the Fish Lake and Power Line sites in the American Bottom region. In addition to flotation samples, we also analyzed 121 hand collected charcoal samples.

A summary of reports and publications prepared in 2009 is presented in Appendix, Table 7. Three of these were tables for inclusion in ATSRs. This format is typically used for small sites with few features and for which no further work is recommended.

While these small data sets may not appear to have much significance, they are sometimes the only records we have for a certain area or time, so provide a foundation for future work.

Even in better-studied parts of the state, small assemblages can be helpful, whether for supporting existing models or providing new insight into our understanding of people's use of plants in the past. Most importantly, these tables detail the raw data, making it available for future researchers.

Written reports or chapters were completed for eleven sites this year. As detailed in Table 7, reports include two separate chapters written by Kathryn Parker for the Russell site. Four chapters were for sites

that had been completely analyzed prior to 2009. Two—Tree Row and Hawkins Hollow—are long standing chapters for reports that have been in progress for several years. Ray's Bluff (11MS526) and the French Colonial Trotier (11S861) sites were more recently excavated. As of December 31, the IL 29/Caterpillar Plant Entrance project report (11P783, 11P784, and 11P786) was complete and in production. The White Bend site (11HA938) report for IL 336, Carthage to Macomb was almost completed and has a projected publication date of spring 2010. Draft reports were also finished for the Fish Lake (11M0608), Russell (11MS672), and Powerline (11MO598) sites, all of which are located in the American Bottom region of southwestern Illinois. For all three, the final archaeological reports were still in progress as of December 2009.

The components represented in the 2009 sample assemblage ranged from Middle Archaic through Mississippian in cultural affiliation and were located across the western half of the state. Some produced copious quantities of materials that included the exotic or unusual, while others produced much smaller,

more mundane assemblages. All are important for understanding prehistoric life in Illinois. A summary of the sites for which analysis was completed follows:

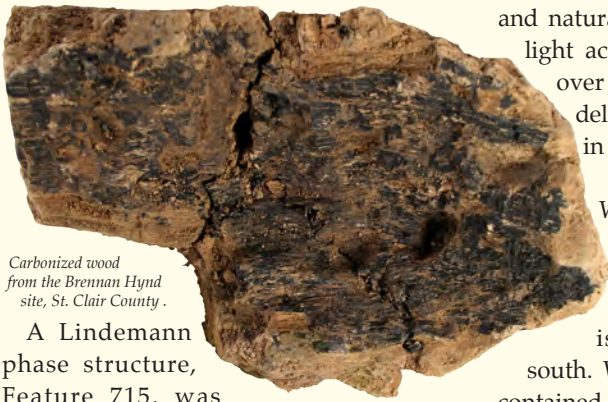
- Identified plant materials from Fish Lake Patrick phase Late Woodland features were plentiful, diverse, and dominated by seeds, especially those of cultivated Eastern Complex food staples, but also the non-food specialty plant, tobacco. The unusually high frequency and ubiquity of tobacco seeds reflect a routinely harvested and processed agricultural crop used by residents in social/ritual contexts. Tobacco also may well have been a valuable commodity produced and traded in exchange for goods that were locally scarce or unavailable. Other aspects of botanical recovery hint at unique adaptations necessitated by the remote floodplain location, and the possible development of trade with upland populations. Among the anomalies noted were extreme scarcity of wood in flotation samples, suggesting difficulty in acquiring sufficient fuel and construction material. At the same time, red cedar, a tree of dry uplands, and exceedingly rare

archaeologically in the American Bottom outside of Cahokia-related Mississippian ceremonial contexts, was present in several Late Woodland features, and almost certainly was obtained from an upland source.

Botanical remains were analyzed from two George Reeves phase features (one structure and one pit) and from nine Lindeman phase features (six structures and three pits). The resulting data provide insights into Terminal Late Woodland (TLW) II human/plant relationships, subsistence strategies and land use practices at the site that differed from those of Patrick phase predecessors. The high ubiquity of maize in TLW II features is an indicator of increasing prominence accorded this crop during the Terminal Late Woodland. While starchy grains (primarily maygrass) were also regarded as important staples based on feature ubiquity, Lindeman seed density was much lower than that of the George Reeves assemblage, a possible sign of declining use. Harvest of nut masts was also much reduced based on comparisons of nutshell frequencies between Patrick and TLWII assemblages.



*Cleaning burned cane matting from the East St. Louis site.*



Carbonized wood from the Brennan Hynd site, St. Clair County.

A Lindemann phase structure, Feature 715, was outwardly typical of a TLWII domicile in size and configuration. However, construction materials used in this building included red cedar, a wood type rarely found apart from Mississippian ceremonial contexts. Feature 715 and other structures and pits in the same cluster also harbored a unique artifact assemblage and a partial human cranium. The inclusion of red cedar wood, like the special contents of this group of features, marks an area that served a ritual function for Lindemann phase people.

Mississippian Lohmann and Moorehead phase components at the Fish Lake site were each represented by one feature. Charred botanical materials were recovered from a Lohmann phase pit (Feature 525) and a Moorehead phase wall trench structure (Feature 454), which superimposed the earlier pit. The limited botanical assemblage consisted of wood dominated by hickory, willow/poplar, and other floodplain taxa, as well as scant maize, EEC cultigens, and nutshell. The botanical evidence reflects non-intensive use of cultivated and wild plant resources during brief Mississippian occupations.

Identified wood, maize, and seeds from the Russell site Mississippian mortuary complex were comparatively sparse, especially when compared to nut remains from this area of the site. Burned nutshell masses (mainly hickory and/or black walnut), each greater than 25 g, were recovered from three features, including one burial (Feature 30) and two pits (Features 38 and 39). Nutshell masses associated with the mortuary complex and those in Mississippian domestic contexts at the site appear identical, and presumably are products of the same routine mast harvest, processing and disposal regimen and not specifically related to burial activity. Seeds and maize fragments were diffusely dispersed among features in the mortuary area. The scarcity of seeds and the mix of taxa representing crops, fruits

and naturally occurring plants suggest a light accumulation of domestic refuse over the inhabited area rather than a deliberate inclusion of plant material in mortuary rituals.

- The Power Line Late Woodland Patrick phase plant assemblage provides an interesting contrast to that from the Fish Lake site, which is located only .5 km to the south. While the 21 analyzed features contained for the most part the same types of plants, absolute and relative quantities were considerably lower than we would predict for a Patrick phase floodplain site. Like Fish Lake, members of the Eastern Agricultural Complex account for the majority of identified seed taxa. However



Examination of botanical remains.

the largest part of these comprised a seed mass of over 3,000 chenopods from pit Feature 16. This mass includes thin coated or quasi-domesticated morphs but almost half (44%) have the wild seed type morphology. Excluding this mass, seeds were scarce, as was nutshell and wood. No tobacco or other specialty plants were recovered. Although three structures were excavated at Power Line, it is apparent that the type or nature of the occupation



Squash seeds, Fifteenth Century, Hoxie Farm site, Cook County.

represented is quite different than that represented at the Fish Lake site.

The Power Line site also contained a small Lohmann phase component. The assemblage was equally sparse and consisted primarily of wood, with a few seeds and no nutshell. Interestingly, corn was also absent. As was true for the Patrick Phase component, Mississippian occupants were using this location on a temporary or short-term basis that left behind few residues of daily eating.

- The White Bend site (11HA938) is located on a south facing bluff base terrace of the La Moine River in Hancock County and provided evidence for three Archaic period occupations extending between about 5000 and 4000 B.P. The earliest Helton phase is represented by five pit features and one buried soil horizon; the following Falling Springs phase occupation comprises two pit features; and the final, Hemphill phase occupation consist of both two large deep roasting pits and associated midden. The plant assemblages from these components have similar profiles, consisting almost exclusively of abundant nutshell and wood, but with limited taxonomic diversity. Although we recognize that people living in western Illinois had begun to manipulate some common annual plant species by 4,500 years ago, there is no evidence for those practices from White Bend. Of particular interest are the two large Hemphill phase roasting pits. Fuel wood recovered from these features was almost entirely red oak and was associated with copious quantities of burned limestone and nutshell. While nutshells are indicative of nut mast processing, their abundance in the roasting pits is interpreted as reflecting their use as fuel rather than the function of the features. Roasting pits (or "earth ovens") are deep, multi-layered facilities that are traditionally used for moist cooking or steaming, neither of which are appropriate techniques for processing masses of nuts. Rather, foodstuffs that lend themselves to that kind of preparation include fleshy plant parts like tubers, as well as meat. In particular, they would be useful for cooking aquatic tubers or fish from the nearby La Moine River. Based

on plant remains, we can infer that the terrace was regularly and repeatedly visited by Archaic groups. The abundance of nutshell and location on a south facing terrace points to fall occupation when nuts were readily available and people could take advantage of warmth provided by the southern exposure.

- Three sites (11P783, 11P784, and 11P786) were located along a large terrace in the Illinois River floodplain during survey at the Caterpillar Plant. Although 11P784 and 11P786 are multi-component, at all three the main occupations represented date to the poorly known, early Late Woodland, Myer-Dickson phase (about A.D. 400–600). The Myer-Dickson phase plant assemblages are internally consistent and are dominated by wood and nutshell. The recovery of maygrass and squash rind, albeit in very low counts, reflects use of cultivated crop plants. In view of the plant use record for this part of the state, this finding conforms to prior assumptions. However, the natures of the assemblages as a whole are consistent with interpretations of these sites as being short-term occupations. To date, these three assemblages are the only ones we are aware of that have been analyzed and reported from Myer-Dickson phase sites in this part of west central Illinois. Thus, while assemblages are not particularly notable in any respect, they provide an important basis for future study.

Most of the work done in 2009 involved analysis of either flotation samples or hand-collected charcoal samples. As is invariably the case, however, we were also fortunate to be able to work with some unique and unusual botanical artifacts. Included is the large, very thin and slightly curved piece of carbonized wood recovered from a

## Woven Matting

Among the more unusual and exciting finds of 2009 is a large piece of carbonized, woven matting, recovered from the floor of burned structure, Feature 181, at the East St Louis site in the American Bottom. This matting is made of split cane, woven in a probable 5 over 5, twill pattern. Twilling, or plaiting, was a common method used prehistorically and historically for the construction of mats, baskets, or similar implements and enjoyed widespread use across North America. Nonetheless, traces of the art are rarely recovered from archaeological sites in the Midwest. Although difficult to determine with certainty, it appears that one end of the East St. Louis piece is unwoven, and, in situ, the ends appear to be draped over a large piece of red cedar wood. However because of the piece's fragility, it is not possible to determine if this is a fortuitous occurrence or if the two were somehow associated. Careful removal of surrounding dirt revealed numerous small, intact, cane stem fragments in the adjacent soil matrix, suggesting that the matting could have been a piece in progress when the structure burned.

Archaeologist and textile expert, Jeff Illingworth of Mercyhurst Archaeological Institute, Mercyhurst College, Erie Pennsylvania, visited ITARP on September 14, 2009 to examine the fragment. During that time, ITARP also produced a short video discussing the woven matting. The video, which includes shots of the East St. Louis mat fragment, is available for viewing at [http://www.isas.illinois.edu/public\\_engagement/videos.shtml](http://www.isas.illinois.edu/public_engagement/videos.shtml). Textiles and matting fragments are rarely preserved in archaeological context, particularly from open-air sites. Those that are found are the consequence of fortuitous incidences of preservation, particularly catastrophic and rapid conflagration episodes, as was apparently the case for Feature 181. The excellent preservation afforded in this case is also evidenced in the presence of in situ fragments of wall posts, which have yet to be analyzed. The East St. Louis basketry joins textiles from the Janey B. Goode site (excavated in 2005), as among the few examples of an extensive, important, but poorly represented, prehistoric industry.

mortuary context at the Brennan Hynd site. This piece was identified as white oak, but its presence in a possible mortuary feature remains enigmatic. Simon has continued to work with the non-carbonized squash seeds from the Hoxie Farm site. Numeric analysis of the domesticated *C. pepo* seeds suggests that two or more varieties maybe represented. A manuscript detailing the results of these analyses is in preparation

for publication, with a projected date of 2010. By far the most unusual and unique material recovered in 2009 was large piece of burned cane matting found on the floor of a burned structure at the East St. Louis site (11S706). This work is further detailed above.

Public outreach remains an important part of our mission. In 2009, Dale McElrath, Mary Simon, Alice Berkson, and others completed work on the Illinois archaeology



curriculum for the Illinois Master Naturalist Program. This program is offered to interested adults through the University of Illinois Agricultural Extension Center (UIUC Extension). The archaeology module will be incorporated as part of the greater Master Naturalist training program. It is an excellent way to introduce adults to the prehistory of Illinois and to the scope and importance of archaeological work in the state. Along these same lines, ITARP has renewed its overall efforts to inform and educate the general public about archaeology. To further his objective,



*Stripping siding from 1830s timber frame residence, Yorkville.*

Simon worked with McElrath in writing two articles for the *Illinois Steward*, published quarterly by UIUC Extension. The first article appeared in the Spring 2009 issue and was entitled “Prehistoric Use of the Prairie.” The second, an overview of the Early Archaic period in Illinois, was published in the Fall 2009 issue. The latter is the first in a series of articles about Illinois culture history planned for the next several issues. The next, covering the Middle and Late Archaic, is planned for the Spring 2010 issue. All these activities and programs are integral to our efforts in educating the public about Illinois prehistory and the importance of archaeology.

### **Historic Archaeology Laboratory**

Under the direction of Mark Branstner, and with the assistance of Lauren Bridges and Wade Tharp, the primary mission

of the Historic Archaeology Laboratory (HAL) is the identification, evaluation, and documentation of historic period archaeological resources from sites distributed throughout Illinois. In this capacity, the staff participates at all levels—from initial historical research through project planning and implementation, testing and evaluation, and ultimately, the mitigation of significant sites.

As usual, a significant amount of effort was expended relative to the planning process, with prefield research focusing on a wide range of documentary resources, including deed and tax records, maps and atlases, county histories, and any other sources that would provide information relevant to the development history and resultant archaeological sensitivity of specific project areas. These data provide the foundation for the initial survey efforts

and ultimately, for the interpretation of all results, from Phase I survey through Phase III mitigation efforts, with more than 200 new survey projects undertaken during the 2009 field season, as well as continuing coordination with ongoing research efforts throughout the state of Illinois.

In terms of major survey projects, the HAL contributed background research and site summary data for the recently completed Phase I survey for the new IL 336 (FAP 315) corridor between Peoria and Macomb, and assisted in the ongoing US 51 corridor survey. In addition, a number of older projects were either completed or moved toward completion, including mitigation reports for three pre-Civil War farmsteads. These included the Rimfire site (11GE675) in Greene County, the Frozen Ground site (11MG268) in Morgan County, and the Excelsior site (11BR429) in Brown County.

In addition to our normal research mandate, which is dominated by the study of archaeological deposits relating to the nineteenth century agrarian development of Illinois, this season marked a significant extension of our work into areas that have been only rarely addressed—the archaeology of standing structures and urban archaeology of the farmore recent past.

Building on our recent work with the discovery and documentation of the ca. 1830 timber-framed DeBaun house in Madison County, similar methods were applied to another early structure in northern Kendall County. Historically documented as one of the earliest frame structures in the town of Yorkville, controlled demolition of this ca. 1830 residence revealed a surprisingly complex construction history, one that began with a relatively small 1½ story timber frame structure, but reached its ultimate expression as a far more elaborate two-story upright-and-wing residence of the Classical Revival period. Later in



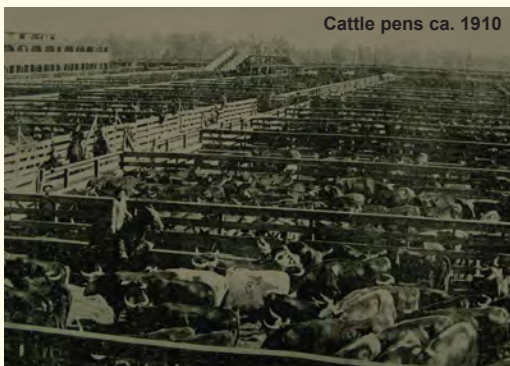
*Early Nineteenth Century Staffordshire pitcher fragment, DeBaun site, Madison County.*



## Hog Capital of the Nation: The Rise and Fall of the East St. Louis Stockyards

Opened in 1873 and incorporated as National City, Illinois in 1907, the Saint Louis National Stock Yards represented one of the largest livestock processing facilities in the world. At its peak, the facility encompassed 650 acres, employed more than 10,000 workers, and had the ability to process 25,000 cattle, 25,000 sheep, 5,000 horses and mules, and 50,000 hogs daily, fully justifying its status as *Hog Capital of the Nation*. Abandoned in 1997, the last vestiges of the complex will soon be replaced by the new I-70 Mississippi River Bridge.

While the physical remains of the stockyard add little to our understanding of its operations through time, its construction—and in particular, the addition of several feet of fill to the overall area—inadvertently preserved extensive and highly significant deposits relating to the previous Native American settlement of the site. By the end of 2009 field season, at least 566 prehistoric features have been excavated including posts, large post pits, pits, hearths, and 111 typical Missippian structures. Expansion of the archaeological investigations into the surrounding neighborhoods has revealed the presence of more than 100 features that reflect the lives of the area's working class residents, with a particularly strong emphasis of the period ca. 1880–1930.



Cattle pens ca. 1910



JFK campaign at the stockyards ca. 1960



Current excavations

the same season, a similar “excavation” of the second DeBaun residence—a Classical Revival I-house presumably dating to the 1840s—revealed a very similar development history, with a much smaller 1½-story timber-framed residence at its core.

If our interest in standing structure archaeology is generally consistent with the focus on Illinois’ pre-Civil War history, ITARP’s recent work in association with the site of the old East St. Louis Stockyards represents something of a departure. Founded in 1873, the stockyards evolved into one of the largest livestock processing facilities in the United States, employing more than 10,000 workers at its peak. While little of archaeological or

architectural significance relating to the stockyards remained extant, mitigative excavation of the surrounding working class neighborhoods has revealed extensive deposits relating to their presence, from the late nineteenth century through at least the 1930s. As of the close of 2009, more than 80 trash pits, privies, cisterns, wells, and cellars have been excavated. It is expected that these deposits, and additional deposits to be excavated in 2010, will provide a new and perhaps unique glimpse into the daily lives of another segment of Illinois’ under-documented working class population.

In addition to the incidental research work undertaken in 2009, Branstner presented a number of papers at both national and

regional venues. Of these, perhaps the most significant were a series of papers covering ITARP’s recent work at the ca. 1830–60 DeBaun farmstead site (11MS2258) in northern Madison County, which were presented at *the Annual Meeting of the Society for Historical Archaeology* in Toronto, Canada; *the Symposium on Ohio Valley Urban and Historic Archaeology* at Ball State University in Indiana; and *the Conference on Illinois History* in Springfield.

Professional publications included an *Illinois Antiquity* article summarizing ITARP excavations and recoveries at the ca. 1815–30 Buckmaster homestead site (11MS2254) in Madison County and con-

tributions to the archaeology section of an Illinois Master Naturalist curriculum guide.

Outreach activities included a presentation at the local chapter of the *Illinois Association for the Advancement of Archaeology* (IAAA) and continued cooperation with the ITARP-sponsored testing of the War of 1812 Fort Johnson site. The latter resulted in a joint presentation at the *Midwest Archaeological Conference* in Des Moines, Iowa.

### **Ancient Technologies and Archaeological Materials (ATAM)**

The Program on Ancient Technologies and Archaeological Materials (ATAM), an archaeological science program, is a division of ITARP primarily funded by UIUC and directed by Dr. Sarah Wisseman.

Research continued in the areas of sourcing pipestone, experimental archaeology, and analyses of ancient materials.

Our pipestone project focused on tracing the use of Minnesota catlinite in different parts of the Midwest, especially Iowa, and tracking down additional quarries of carvable rock. Publications were completed (to proof stage) on Iowa red pipestones from Oneota villages (with Rich Fishel), quarry usage (in a symposium proceedings volume for the *Implementation Petrology Group of York, England*), and an electronic proceedings for the



*Pottery-working tools and ceramic reproductions.*

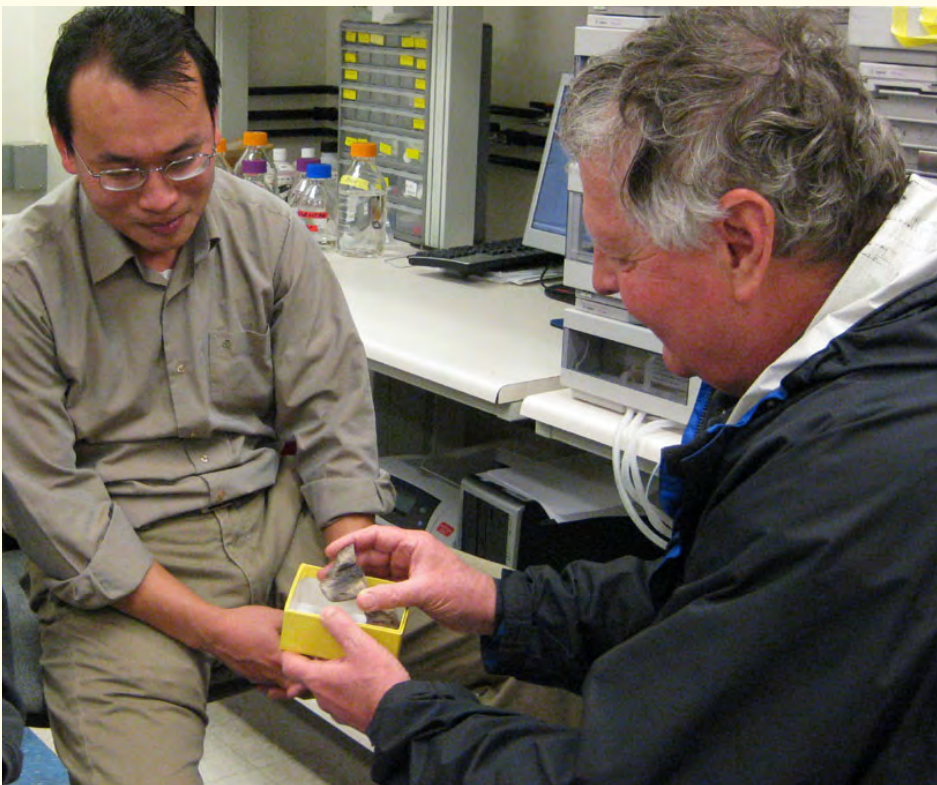
*International Symposium on Archaeometry* held in Siena, Italy in May 2008.

Experimental archaeology work with Alexey Zelin (ITARP Special Projects) included making and testing tiles and rods from clay obtained from the Sartorius site (11HA360) in Hancock County and firing them to various temperatures to determine the cause of warping of ceramic materials recovered from the site. X-ray

diffraction work by Mauro Sardela of the Materials Research Laboratory at UIUC detected high silica content, which means that the clay turns glassy (and warps) at relatively low temperatures. Wisseman also completed an article on corn and lime processing for *Illinois Archaeology*.

With Dale McElrath, we tested a sooty deposit inside a Prairie Lake phase pipe from the Missouri-Pacific #2 site (11S46) for the earliest tobacco use in North America. Dr. Lucas (Zhong) Li and Alexander V. Ulanov in the Metabolomics Center (Biotechnology and Chemistry, UIUC) extracted a tiny sample for GC-MS (gas chromatography/mass spectroscopy), an analytical technique used to identify organic residues from antiquity; however, they were unable to detect nicotine.

Outreach activities included a presentation on "Writing and Communicating your Research" by Wisseman at the *Undergraduate Research Symposium* sponsored by the Provost's Office in February 2009 and working with Central High School intern Allie Huber during the spring semester through the Education to Careers Program (Champaign Public Schools). Huber toured ITARP facilities, studied and wrote a paper on PIMA spectroscopy, and completed a hands-on project replicating Greek black and red ceramics under Wisseman's supervision. Wisseman also participated in a public workshop on mummies at the Spurlock Museum in August 2009.



*Gas chromatography/mass spectroscopy analysis of soot residues in 3,000 year old pipe.*



# Pottery Workshop

On November 11, 2009, ATAM and ITARP co-sponsored a very successful event with Joan Molloy Slack, a potter, tile maker, and teacher. Slack, who directs the Riverrun Center for the Arts in northern Wisconsin, is an expert on making replicas of North American prehistoric pottery (<http://www.riverrunarts.com>). Slack presented a full-day workshop that combined slide shows of construction and decorating techniques from around the world interspersed with hands-on pottery-making sessions. Slack encouraged ITARP archaeologists and UIUC Anthropology faculty

and graduate students to “think like a potter” and produce round-bottomed pots using bowl-shaped molds and body parts (for example, elbows and knees).

After making the base of each pot, the clay was allowed to partially dry before adding coils to form the shoulders and rims. Each coil was merged with the one below by smoothing with shell scrapers and fingers until the joins were invisible. Participants discovered that the combination of a mold-formed base and a coiled top is a much more efficient way to produce quantities of handmade pottery than using coils alone.

Participants then experimented with variety of surface impressions using simple tools (twined fiber, cord-wrapped sticks, sharp-pointed twigs, shells, etc.) and burnishing their pots with smooth pebbles. After following Slack’s suggestion to further enhance some pots with a red iron-oxide wash, Sarah Wissemann and several eager ITARP volunteers helped fire the class pots in Wissemann’s backyard, using sawdust to create a reducing environment. This method produced variegated colors and marked sooting patterns on the pottery.



ATAM’s biggest event of the year was an all-day workshop with Wisconsin potter, Joan Slack, presented to enthusiastic participants from ITARP and the UIUC Anthropology Department (see article above).

## Production

Production manager, Mike Lewis, and staff members—including photographer/illustrator, Linda Alexander, and production coordinators, Sarah Boyer, Corinne Carlson, and Angie Patton—comprise the Production staff.

Two thousand nine saw the publication of approximately seven IDOT compliance reports, *Illinois Archaeology* (vol. 21), the *2008 ITARP Annual Report*, as well as the completion of the highly anticipated publication *Archaic Societies:*

*Diversity and Complexity across the Mid-continent* (see accompanying article).

Photography completed during 2009 included but was not limited to Hoxie Farm large and small ceramics, seeds, corn kernels, and a shell paddle; logs from the Brennan Hynd site; dog burials from the Crawford Farms site; the Robert Reber private lithic collection; a selection of Tree Row site projectile points; a selection of Cass site lithics; the Janey B. Goode site fabric mat; the Rhodes site historic collection; Buffalo Chip site ceramics; and the Fish Lake site lithic material (inclusive).

Graphic design in 2009 included three major posters. The Production Division created a large poster for the *Public Engagement and Technology Showcase* held at the Illini Union. This was designed by Linda Alexander and Corinne Carlson in

coordination with Laura Kozuch for the Preservation Working Group (UIUC). A large back-lit poster was created for the *Greater Rockford Regional Airport Shumway Site Exhibit* by Mike Lewis and Linda Alexander. A third oversized poster was created for IDOT Career Day 2009 (Springfield) by Linda Alexander and Corinne Carlson and detailed the scope of work and responsibilities at ITARP.

In February 2009, ITARP received a request from the Chicago Rockford International Airport to create an interpretive display in their terminal to highlight archaeological work done at the airport.

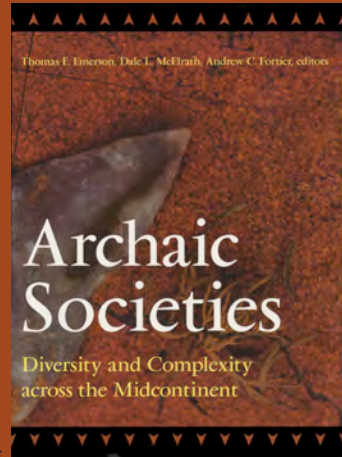
The setting of the Rockford airport, at the confluence of the Kishwaukee and Rock Rivers, has an over 8,000 year history of human habitation. It’s rich aquatic and terrestrial resources attracted the region’s

# Archaic Societies

## Diversity and Complexity across the Midcontinent

During 2009, the long awaited *Archaic Societies: Diversity and Complexity across the Midcontinent* saw its debut. This exhaustive look at chronologies and cultures in the midcontinent during the Archaic period is the direct result of statewide overviews, presented by over 40 regional experts and specialists at the Urbana Archaic Conference held at the Levis Faculty Center on the UIUC campus in December, 2004. The best testimonial we can find for the volume is provided by Gary Dunham, editor for the State University of New York Press, who advertises the volume as follows:

*Sweeping and detailed, this long awaited volume is an indispensable guide to the Archaic period across the midcontinent. Archaeologists throughout the region share the latest excavation results and analytical perspectives to reveal and reinterpret the worlds of those Native peoples who lived there for some 9,000 years (up to about 3,000 years ago). Of particular concern is the establishment of relative and absolute chronologies for the Archaic period, the relationships between the artifacts left behind and the peoples who made and used them, and the changing interactions between cultures, climate, and landscape. Archaeologists offer useful, up-to-date overviews of Archaic societies, assessment of stratigraphic sequences, and detailed discussions of finds and interpretations from the Mississippi and Ohio river regions and the Great Lakes. Comprehensive and accessible, this landmark book is a must for anyone wanting to understand a crucial but little-understood period in North America's prehistory.*



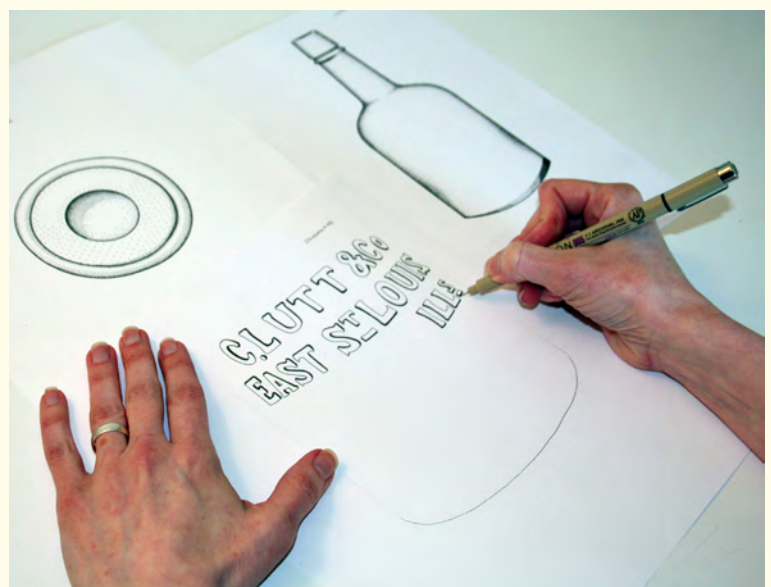
earliest hunters and gatherers and later mound building and farming peoples.

When airport expansion was undertaken in the mid-1990s archaeological evidence of both native and Euro-American occupation was identified. Excavations discovered native campsites as well as the 1830–50s pioneer home site of the Shumway family. The Shumways went on to create one of the largest North American seed companies in the early twentieth century. This archaeological research brought exciting new insights into native and Euro-American history in north-central Illinois.

The airport exhibit, entitled *Progress and Preservation*, contained a large backlit poster of Shumway images created by Mike Lewis and Linda Alexander. They also designed a display of artifacts from the Shumway site: thimbles, needles, buttons, tea cups, chinaware, utensils, projectile points, gun flints, pottery, and clay pipes. Robert Mazrim, ITARP outreach coordinator, created the text and selected the artifacts. This exhibit provided significant information with supportive visuals about life in the early days of Winnebago County.

In 2009, ITARP extended public outreach efforts by incorporating video into the production schedule. Short videos are available via our website. Additionally, a YouTube channel was created to host longer videos. These videos are an effective way to communicate ITARP's commitment to preserving historic and archaeological resources while educating the public about these efforts.

Short videos were made of a visiting analyst who examined prehistoric matting recovered from the East St. Louis site. Video production work began on the investigations at Fort Johnson, an early 1800s fort built during



Illustrating bottles for the upcoming volume, "Bottled in Illinois: The Embossed Bottles and Bottled Products of Early Merchants from Chicago to Cairo, 1840–1880."

the War of 1812, located near modern-day Warsaw, Illinois. These videos provide an opportunity for ITARP to share with the public excavations in progress and the resulting findings in a more accessible format.

ITARP continues to distribute IAS and ITARP publications through journal ads, the ITARP website, and regional archaeological conferences. In 2009, publications were sold at the *IAS Annual Meeting* in Springfield, Illinois and the *Midwest Archaeological Conference* in Iowa City, Iowa. In addition, ITARP started distributing the newly reprinted *Discover Illinois Archaeology*, published by the IAS and the *Illinois Association for Advancement of Archaeology* (IAAA).

The Illinois Cultural Resource Management Document Archive Project is managed and maintained by the Illinois Transportation Archaeological Research Program (ITARP), a joint intergovernmental program of the Illinois Department of Transportation (IDOT) and the University of Illinois (UIUC).

The *CRM Document Archive Project Database* went live in March of 2009, posting 12,693 documents. These archival documents contain certain restricted information on archaeological site locations which could endanger these resources if made public. Consequently,

access to the archive is restricted to professional archaeologists who meet appropriate state and federal standards.

By the end of 2009 over 17,000 documents have been scanned for inclusion in the database.

A three-year computer upgrade plan was completed in 2009. Computers that were five years or older were replaced with new Apple iMacs. The previous two years (2007, 2008) computers at ITARP main offices in Champaign, American Bottom, and the Western Illinois Survey Divisions were upgraded. This final year computers were replaced at the Northern Illinois Survey Division and the Springfield Research Office. In addition, computers and a printer were installed at the new Salisbury Research Lab.

### Cartography

ITARP's Cartography/GIS Lab, under the direction of Mike Farkas and with the assistance of Coren Buffington, provides spatial, cartographic, GIS, and site modeling support to the program. Located in the main program office on the UIUC campus, the Cartography Lab houses three PC workstations, two large format digitizing tablets, and a large format scanner. Our primary software is ESRI's ArcGIS 9.3 application suite along with proprietary

software relating to electronic data collection equipment (Trimble and Sokkia) and Quick Terrain Modeler software for use in LiDAR (Light Detection and Ranging) derived terrain visualization. We also assist with field collection of spatial data through use of GPS receivers and Electronic Total Stations. The electronic field data is integrated with other site and/or project-specific data (feature maps, ROW plans, aerial photography, remote sensed data) to create site- and project-specific GIS databases. This is used in the spatial analysis of sites and projects and to create figures for use in publications.

We also have a heavy involvement in the IDOT Project Notification System



Video recording.

(PNS). Projects received by the Statewide Survey Division are summarized and forwarded to the GIS Lab where an information packet is generated specific to each project. This consists of project location

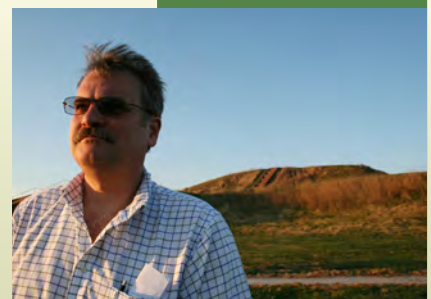
## Tribal Consultation Workshop

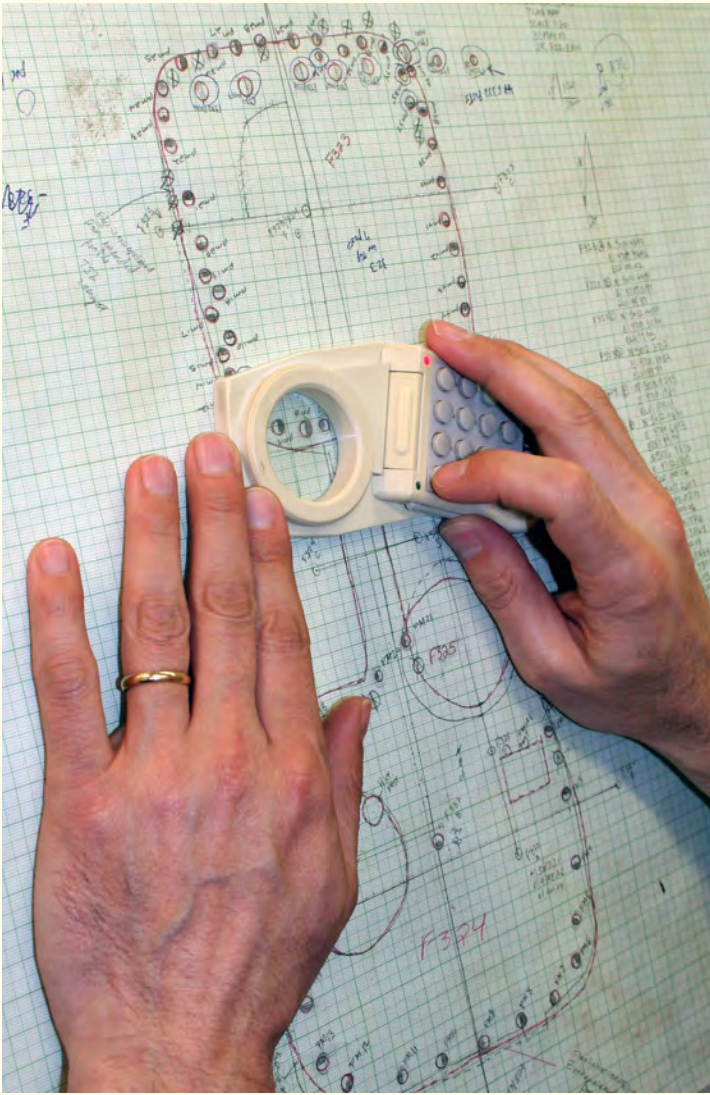
Consultation with local communities, federally recognized tribes, and other interested parties is an important part of the Section 106 compliance process of the National Historic Preservation Act. Over the past decade IDOT and the Federal Highway Administration (FHWA) have actively consulted on transportation projects with federally recognized tribes, including the Illinois (Peoria), Ho-Chunk, Kickapoo, Potawatomi, and others that ceded lands in Illinois to the federal government nearly two centuries ago. There are, however, a number of tribes that did not historically cede lands who believe they have ancestral connections to the state. In November 2008, a tribal consultation workshop was held to address issues of interest to these tribes; a follow-up workshop was held during July. The primary goal of this workshop was to develop a Memorandum of Understand (MOU) that would guide

Section 106 tribal consultation in Illinois. Invitations were extended to more than two dozen tribes, and ITARP staff provided organizational and logistical support for the workshop. Participants in the workshop included staff from ITARP, IDOT, FHWA, the Illinois State Historic Preservation Office, and the Illinois State Museum in addition to representatives from nine tribes: Absentee Shawnee, Ho-Chunk, Iowa (of Kansas and Nebraska), Kaw, Kickapoo (of Kansas), Osage, Ponca, Pokagon Band-Potawatomi, and Sac-Fox (of Oklahoma). The workshop concluded with a draft MOU that is currently being finalized.

Another product of the tribal consultation workshop was the creation of a computerized project notification system. The Project Notification Systems (PNS)—created after the first workshop for IDOT and FHWA by ITARP with technical assistance from UIUC—has become a key component of the consultation process in Illinois. The system is a web-based, interactive method of communicating with the tribes that allows the tribes to obtain project information as soon as it is available to IDOT engineers. Furthermore, it allows tribe members to immediately transmit any concerns they might have to IDOT. The PNS was used in 2009 to post more than 250 IDOT projects. At the workshop, the PNS was accepted by all in attendance as the standard method of project notification, and since the workshop, it has proved to be an extremely effective means of tribal consultation, attracting the attention of Departments of Transportation across the U.S.

One of the major concerns of tribes has been the protection and preservation of burial mounds and cemeteries. Most Illinois mound sites were reported in the 1930s and 1940s and have not been revisited since. As part of the new tribal consultation process, when feasible, native mortuary sites located within two miles of IDOT projects will be revisited to ensure that the sites are not to be impacted by IDOT projects, that their locations are correctly reported, and that their current condition is documented. This good faith effort by IDOT has demonstrated to the tribes that IDOT is being proactive in its protection of sites of importance to its former native inhabitants.





Digitizing archaeological site map.

The GIS/ Cartography Lab also provides program-wide access to the state archaeological site file database (IAS database). The archaeological sites database is maintained and provided to ITARP by the Illinois State Museum (ISM). Once received by ITARP, the data is formatted into county-specific GIS projects for use by ITARP staff. We also house and maintain the *Illinois Inventory of Burial Sites* (IIBS). The Cartography/ GIS Lab created this spatial database during 2003–04. As the name implies, it contains the locations and other attribute data of known archaeological burial and mound sites located within the state of Illinois. This dataset is continually

updated and now contains over 3,100 records. As part of the PNS system, ITARP field crews revisit known IIBS sites and update the master database with current conditions and status of each site. During 2009, we began to investigate LiDAR technology and data sources to determine their utility to ITARP. This technology shows great promise in assisting our ability

to visualize landforms and terrain and to identify subtle features of the landscape, especially burial mounds and other archaeological modifications to the landscape.

Continuing progress was made with the scanning of oversized field maps. This creates digital archival copies of our collection of archaeological field maps and will help ensure the continued preservation of these invaluable maps by using the digital copies for research while the originals remain in our curation facilities. Over 800 maps were scanned this past year.

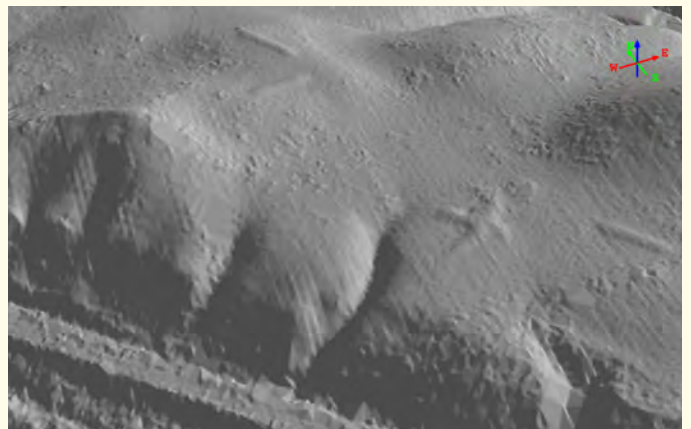
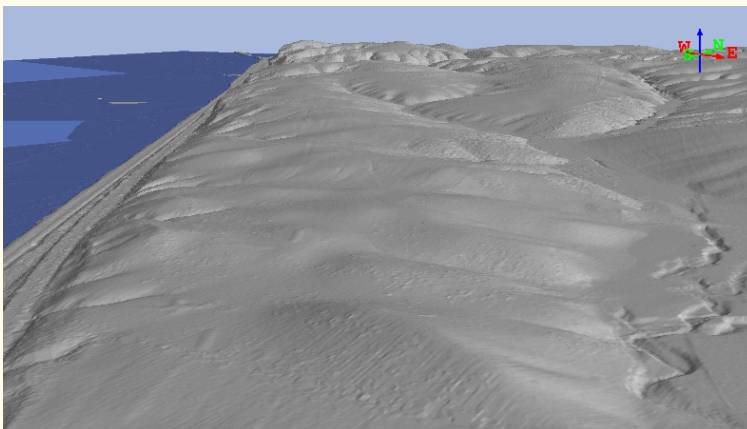
The Lab maintains the program's electronic mapping equipment, specifically, electronic Total Stations and GPS receivers and data-loggers. The Lab developed a system for sending highly accurate GPS-mapped archaeological site locational data to the ISM, thereby bypassing the need to digitize the data and eliminating the inherent introduction of spatial error. To date, ITARP is the only organization supplying such precise data to the state site files inventory.

**Curation**

Curator Dr. Laura Kozuch and a staff of seven manage ITARP collections. The curator's responsibilities include all aspects of collections management, with the attendant creation and maintenance of databases, policy writing and implementation, and the preparation of grant applications. *The Charles J. Bareis Documents Collection*, a repository of Cultural Resource Management related documents and other archaeological resources, is also under the purview of Curation.

The Curation Division provides guidance and seeks advice from professional conservators regarding ITARP collections, including the preservation of perishables; oversees transfers of large volumes of collections from other

LiDAR overview of Aiken Bluff landscape, Jo Daviess County (left); LiDAR images of bird effigy and linear mounds, Aiken Bluff, Jo Daviess County (right).



LiDAR overview of Aiken Bluff landscape, Jo Daviess County (left); LiDAR images of bird effigy and linear mounds, Aiken Bluff, Jo Daviess County (right).



Re-housed Cahokia collections (above); shell effigy, Eleventh to Thirteenth Centuries, Sawmill Mound, Cahokia (top right); earspool, Eleventh to Thirteenth Centuries, Powell Mound, Cahokia (middle right).

Illinois was accepted from the Sailor family in 2009. This donation will enhance understanding of the prehistory of a lesser-known part of the state.

Curation personnel deal with all requests to view and handle artifacts, photographs, documents, and library materials that ITARP stewards. In 2009, a total of 123 hours were spent on collections use by staff, outside researchers, and outloans. An exhibit request procedure was created to formalize ITARP staff involvement in exhibits planned with other institutions.

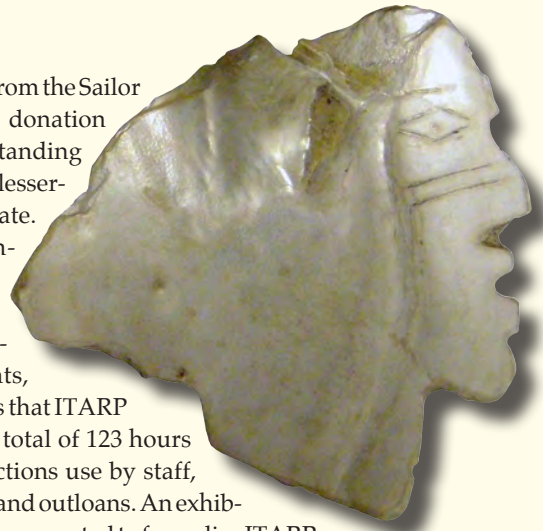
Collections specialist and lithic analyst, Stephanie Daniels, cataloged more than 800 volumes into the *Charles J. Bareis Documents Collection*, which houses more than 22,000 items. Daniels has spearheaded the digital document project since 2005 and has overseen the digitization of a variety of photographic and written documents, including slides from FAI-270 investigations undertaken in the 1970s and 1980s, documents and photos from the Fisher, Crawford Farm, and Cahokia sites, dissertations, and journal and newspaper articles. Creation of a digital database will greatly facilitate use of these important images. A total of 715 oversized documents (mostly maps) were cataloged and housed.

Kim Wurl handles the enormous backlog of documents generated by archaeological projects from the 1970s through the 1990s. Nearly 45,000 documents, including the large collection from the Historic Sites Survey, were processed and entered into the document

institutions; maintains and stores collections, using appropriate methods and containers; and monitors storage areas with respect to access, security, and proper environmental conditions to reduce pest and water damage, mold, and ultraviolet risk.

This many-faceted job necessitates cataloging old collections and re-housing them, especially if they have been stored in acidic paper bags (more information related to re-housing is found on page 14 of this report). Many important collections stored at ITARP were obtained in the early twentieth century, such as those from the Cahokia, Utica, Fisher, and Anker sites. Apropos this issue, Kozuch wrote a successful National Endowment for the Humanities (NEH) grant in 2008 to catalog and re-house ITARP's large Cahokia collection. (see accompanying article.)

Curation staff handles the accession of private donations. A collection of Iroquois County artifacts from northeastern Il-



Preparing vessel for photography, Ninth Century A.D., Range site, St. Clair County .

continued on page 15

# Cataloging and Re-Housing Cahokia Collections

## National Endowment for the Humanities Grant

In 2008, ITARP received a \$111,000 grant from NEH to help catalog and re-house its Cahokia collections. This two-year grant pays for two-thirds of all related costs including materials and staff salaries. ITARP houses approximately 550 boxes (981 ft<sup>3</sup>) of Cahokia collections. The famous Cahokia site has worldwide importance and has been widely acclaimed by its recognition as a UNESCO World Heritage site (<http://www.whc.unesco.org/en/list/198>), acknowledgement on the National Register of Historic Places (<http://www.cr.nps.gov/worldheritage/cahokia.htm>), and as a National Landmark.

During its heyday in the twelfth century A.D., Cahokia encompassed approximately five square miles. The site possessed a planned layout and included many complex architectural features. More than 100 earthen mounds dotted the Cahokia environs. Of these, the ca. 100 ft. tall Monks Mound is the largest earthen mound in North America. Calendrical devices commonly called woodhenges, consisting of upright wooden posts set in circles similar to the standing stones at Stonehenge, were erected. A wooden stockade was constructed around the central ceremonial district about A.D. 1200. Cahokia was abandoned some 100 years later in the 1300s.

The University of Illinois (UI) has been involved in Cahokia archaeology since the 1920s, and these excavations have produced the collections that are now curated at ITARP. The collection sources include: (1) privately- and UI-funded excavations in the 1920s through 1930s to either conduct research investigations ("expeditions") or to rescue the

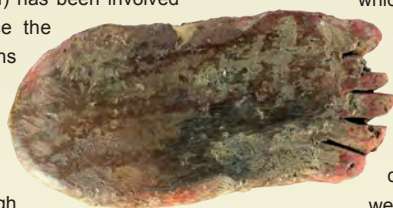
context and artifacts from mounds being destroyed; (2) archaeological field schools; and (3) highway salvage excavations undertaken in the 1960s-80s as part of IDOT construction projects. These irreplaceable collections are from renowned mounds, plazas, and habitation areas, many of which have been destroyed by modern development, and include such unique artifacts as the fenestrated shell gorget, the Birger Figurine, the Sponemann Figurine, the Grossman celt cache, the Cahokia point cache, and six ceramic shell cup effigies.



### Moorehead Collections

ITARP has most of the Cahokia collections from Warren K. Moorehead's excavations in the 1920s. He excavated portions of Edwards Mounds, Harding Mound (AKA Rattlesnake Mound), Sawmill Mound, Stock Yard Village, Tippet's Mound, James Ramey Mound, and Jesse Ramey Mound. It was largely Moorehead's efforts with the Illinois legislature that led to the creation of Cahokia Mounds State Park.

In 1930 and 1931 Powell Mound at Cahokia was destroyed for landfill (Fowler 1997:158). At the urging of Moorehead, Paul A. Titterton, Thorne Deuel, and A. R. Kelly were there to observe the destruction. The portion of land on which Powell Mound once stood was acquired by the Archaeological Conservancy in 2007. Very little of the once 40 foot high mound now remains. ITARP houses artifacts gathered during this destruction of Powell Mound, as well as artifacts from Charles H. Bareis's later excavations of areas beneath Powell Mound done with the help of UIUC field schools.



### Charles J. Bareis Collections

ITARP also houses Cahokia collections generated by the UIUC from 1960 to 1991. Excavations in the 1960s and 1970s were cooperative efforts among three major institutions, the University of Illinois, the Illinois State Museum, and Southern Illinois University, with funding from a National Science Foundation grant, IDOT, and UIUC field schools. Professor Charles Bareis was well known for training budding archaeologists, and his Cahokia field schools became a standard in the field. In addition to work at Cahokia, Bareis also directed all the highway salvage archaeological projects in Illinois during his 36 year tenure.

### Grant Highlights

- The grant will increase the visibility of ITARP to the public, resulting in an increased number of requests to view and research Cahokia collections.
- Cahokia collections will be re-housed according to modern standards for the care of archaeological collections, the most applicable of which is 36 CFR Part 79, "Curation of Federally-Owned and Administered Archaeological Collections."
- Artifacts will be re-housed from acidic paper bags into re-closeable polyethylene bags.
- The artifact catalog is an item-by-item inventory, except for bulk artifacts such as bags of soil samples or chert flakes.
- Descriptions of archived field notes, photos (year-by-year), and each project investigator will be available for download (in PDF format).
- Photographs of notable artifacts will be online as a thumbnail with the database entry.
- Kozuch, Daniels, and Lewis will present a paper about the project at the *Society for American Archaeology* annual meeting in April 2010.
- Additional personnel (three full-time and two part-time) were hired to implement the Cahokia project.
- As of December 2009, 420 of the 550 artifact boxes are complete.
- The project is running smoothly, the database is up and running and it will be complete in December 2010.



Artifacts: Mound 20 beaker (top); hooded water bottle (center); Mound 51 human foot effigy (bottom)



database this year. She also re-housed and inventoried artifacts transferred to ITARP from the Lab of Anthropology (UIUC).

Kozuch is also a member of the UIUC Preservation Working Group, a committee dedicated to the preservation of the campus' heritage collections with a strong commitment to public engagement (for more information regarding PWG, see page 30).

### Faunal Laboratory

ITARP faunal analyst, Steve Kuehn, is responsible for the identification, analysis, and interpretation of prehistoric and historic faunal assemblages from sites across Illinois. In addition to the preparation of faunal reports based on his analyses, Kuehn maintains and continues to develop the ITARP faunal comparative collection at ITARP's Neil Street Lab facility. Faunal material (consisting of bone, teeth, antler, fish scale, mollusk shell, and eggshell) is recovered from a variety of archaeological sites and can provide important information on diet, animal exploitation strategies, habitat and resource availability, seasonality, and butchery practices.

Faunal assemblages were analyzed and reports submitted for numerous sites investigated by ITARP archaeologists. Most of the work done for the Western Illinois Survey Division (WISD) was associated with Archaic and Woodland sites. Kuehn completed his analysis of the Hemphill, Helton, and Falling Spring phase faunal remains from the White Bend site (11HA938). Despite marginal preservation, deer, dog/coyote, muskrat, raccoon, beaver, pocket gopher, tree squirrel, painted turtle, softshell turtle, and freshwater drum remains were recognized.

A final report on the Weaver faunal assemblages from 11HA360 and 11HA949 was completed in 2009. Deer and aquatic resources, especially fish, were heavily utilized but as at other Weaver sites in west-central Illinois, a range of animals



*Bison scapula and bone and antler implements, Twelfth Century A.D., Orendorf site, Fulton County (above); wolf canine pendant, Ninth Century A.D., Bluff Road site, Monroe County (below).*

were included in the diet, reflecting a broad-based faunal exploitation strategy.

A series of Weaver occupation households at 11HA360 and 11HA949 produced over 4,500 pieces of bone and shell. The amount of faunal material recovered varies between households, but deer and aquatic resources (especially fish) are ubiquitous. Overall a range of taxa is represented, demonstrating the broad-based faunal exploitation strategy characteristic of other, larger Weaver sites in west-central Illinois.

Analysis of the Mary Craig (11PK1567) faunal assemblage continued in 2009, with an array of fish remains recovered, along with the bones of deer, turtle, duck, beaver, and mink. A final report

on this single component Late Woodland La Crosse phase assemblage should be completed in 2010. Small faunal assemblages from 11P783, 11P784, and 11P786 were analyzed and summary tables forwarded to the WISD Lab. Kuehn also began the analysis of faunal material from the Dobby

(11SC1134) and Rockwell Village (11MN236) sites. Dobby contains large quantities of river mussels and fish, along with deer, smaller mammals, birds, turtles, and similar taxa consistent with a Weaver occupation. The Havana-age assemblage from Rockwell Village is rife with fish remains, especially species from backwater lake habitats, as well as mussel shell and bones from waterfowl, small and medium-sized mammals, turtles, and deer.

Numerous large and small faunal assemblages from the American Bottom Survey Division (ABSD) were examined in 2009. Identifications are currently underway for the Brennan Hynd site (11S1492) and several Mississippian hamlets excavated in the Sauget Industrial Park project area in St. Clair County, Illinois. Fish predominate in the Sauget site assemblages, with relatively little deer bone recovered. Further study of the Sauget Industrial Park assemblages should provide important data on faunal exploitation at rural Mississippian settlements in the American Bottom. Specimen identifications were completed for the

*Perforated turtle shell, Ninth Century A.D., Fish Lake site, Monroe County.*



# ITARP—North To Alaska!

Archaeologists Dr. Kris Hedman and Steve Kuehn took their expertise on the road this summer as they participated in the excavation of a Late Pleistocene hunting camp in northwestern Alaska, the Raven Bluff site (DEL402), under the aegis of the Bureau of Land Management (BLM). Situated on a bedrock rise on the treeless landscape north of the Brooks Range, the Raven Bluff site was



discovered by Bill Hedman (BLM-Central Yukon Field Office Archaeologist) in 2007. Initial testing at the site recovered Paleoindian microblades and caribou (*Rangifer tarandus*) bones radiocarbon dated to 10,000 years ago. Faunal remains are incredibly uncommon at sites in this part of Alaska and in particular from sites of this antiquity.

Before heading into the bush, several days were spent in Fairbanks undergoing training in aviation safety, bear awareness and encounter procedures, and firearm safety. Doing archaeology north of the Arctic Circle presented a number of challenges not typically encountered while working in Illinois. The nearest villages and



roads were several hundred miles away, so all personnel and equipment had to be transported in via small planes and a helicopter. The crew camped on a gravel bar on the Kivalina River, near the site. One-person tents were provided in addition to several larger kitchen and supply tents. A portable electric fence around the kitchen structure kept any curious bears at bay, although everyone was cautious while walking through the willow thickets between the camp and the

site. The 24-hour sunlight made for optimum working conditions, with field days lasting 10–12 hours. Weather conditions varied considerably from near-freezing to uncomfortably warm temperatures, with occasional high winds and abrupt, heavy rainstorms. Abundant flora and fauna was encountered; delicious blueberries and bearberries covered the tundra like a carpet. Brown bears, muskoxen, arctic foxes, various raptors, and other animals were sighted, but the teeming mosquitoes were the most common by far. Clouds of these pesky insects were troublesome, but the generally low temperatures and breezy conditions kept them tolerable.

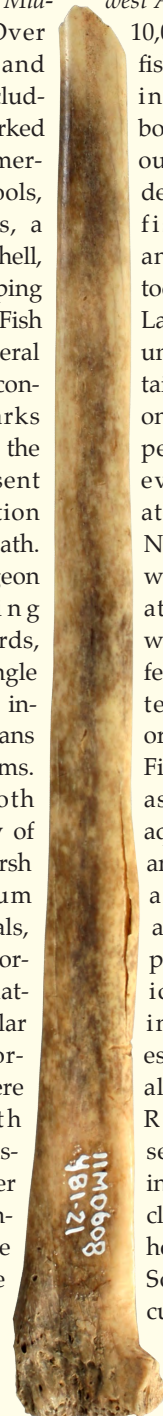
During the 2009 excavations, the base of a fluted projectile point was recovered—one of the few from Alaska found in association with datable material. Lithic artifacts were ubiquitous, with large amounts of chert debitage, microblades, bifaces, and groundstone tools recovered. The faunal assemblage, currently under analysis by Kuehn, contains primarily caribou bones, but some bird elements were also identified. Many of the caribou and large-sized mammal remains display



cut marks and evidence of breakage associated with marrow extraction. Based on the results thus far, the Raven Bluff assemblage will prove to be very significant in understanding Late Pleistocene faunal exploitation in Beringia. Future investigations at the site will undoubtedly recover important data on Paleoindian life in northwestern Alaska.

Lillie (11MS662) and Sponemann (11MS517) sites, with a full analysis anticipated for 2010. Fish and deer remains predominate in both assemblages, with a moderate amount of bird bone also found at the Sponemann site.

Analysis of the Late Woodland Patrick phase fauna from the Fish Lake site (11MO608) was completed in 2009, and the results presented in a Fish Lake symposium at the annual *Midwest Archaeological Conference*. Over 10,000 pieces of bone, shell, and recovered, including a large quantity of worked artifacts. Numerous awls and decorated and plain shuttles, a worked turtle shell, and flintknapping tools have been identified. The Fish Lake fauna also contained several unusual finds. A dog burial with cut marks on the medial surfaces, near the pelvis, which might represent ritual castration the time of death. Nearly thirty passenger pigeon wing bones, at least nine representing individual birds, were recovered from a single Lake and are interpreted as representing fans of decorative items. Fish and deer assemblages, aquatic turtles, and terrestrial and small-shellfish were of singular importance, but forest, est-edge, and prairie taxa were also utilized.



The North South Ridge assemblages at Fish Lake differ in several respects. Deer (in- were more upon on the while fish promote intense Ridge. There differences in fish consumed by the inhabitants. Catfish and bullhead remains account for about half of all fish in both assemblages, but on the South Ridge sunfish account for nearly thirty percent and suckers ten percent while on the North Ridge sunfish comprise

Shell pendant,  
Nineth Century,  
A.D., Bluff  
Road site,  
Monroe  
County.



only five percent and suckers twenty-eight percent. In addition, drum and gar are better represented in the North Ridge assemblage. Distinctions were also noted in bird exploitation, with terrestrial birds more common in the North Ridge assemblage and waterfowl and marsh birds more common in the South Ridge assemblage. While diet and the resulting faunal material is greatly influenced by local resource availability, the Fish Lake evidence suggests that other unknown factors can be a significant factor in dietary choice and faunal exploitation.

The Bluff Road site (11R579) faunal analysis was completed in 2009. Over 20,000 remains were identified in the Late Woodland Patrick phase habitation, providing new insight on faunal exploitation patterns in the southern American Bottom. The Bluff Road inhabitants relied heavily on fish, deer, and a variety of other aquatic resources (waterfowl, aquatic mammals, turtles, shellfish, and crayfish). A large quantity of worked bone and shell was recovered, including several awls, flintknapping tools, a probable wolf canine pendant, a shell pendant, and a worked phalanx from cup-and-pin game. In comparing the Fish Lake and Bluff Road assemblages, it appears that while faunal exploitation patterns were similar, some variation reflecting local resource availability and abundance is evident between these sites.

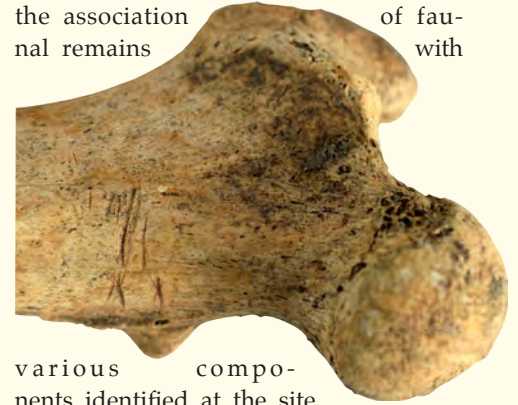
Faunal material from Historic Native American and French Colonial components at the Jarrot Nordique site (11S1741) continued to be analyzed in 2009. The data obtained are very similar to that from another French Cahokia site, Trotier (11S861), which was analyzed in 2008. The Component 1 assemblage at Nordique is associated with the Historic Illinois (Cahokia and Tamaroa bands) and dates

to ca. 1700–30. Component 2 dates to ca. 1760–80 and represents occupation by the French-Canadian Hamelin family. Both faunal assemblages have an interesting mix of traditional game resources and introduced domesticated taxa. Deer remains are plentiful, and along with black bear, elk, bison, cattle, and swine demonstrate that large mammals contributed significantly to the diet. Other mammals identified include timber wolf, cougar, beaver, raccoon, and opossum. Bird remains further demonstrate the mix of domesticated and wild taxa eaten by the site inhabitants, with chicken, teal, mallard, Canada goose, great blue heron, trumpeter swan, passenger pigeon, turkey, and greater prairie chicken bones identified. Fish were of lesser importance in the diet, with some use of larger gar, buffalo, and river catfish indicated. The dietary practices at Jarrot Nordique and Trotier are a reflection of the more intimate, fluid relationship between the Native American, French, and métis populations in colonial French Cahokia.

Kuehn continued his analysis of faunal material found in the Janey B. Goode (JBG) site (11S1232). In the future, faunal material from the hulites will also be examined as part of a long-term research project directed by Dr. Andrew Fortier. In addition, Kuehn has begun analyzing many dog burials the JBG site. This research will provide important new insight on the daily lives of dogs in Woodland communities. Gar, bowfin, catfish/bullhead, and frog/toad remains have been identified in the coprolite samples, suggesting that the JBG dogs obtained at least some food through scavenging of discarded foodstuffs. Examination of the dog skeletal remains

reveals some evidence of trauma as well as indications that they served as pack animals, used to transport items between settlements.

Analysis of the Cahokia Tract 15B faunal material, part of a larger research project under the direction of Dr. Tim Pauketat (UIUC Department of Anthropology), continued into 2009. The assemblage contains nearly 25,400 pieces of bone and shell recovered during salvage operations in 1960. As the feature and ceramic analyses have progressed, revisions were required in the association of faunal remains with



various components identified at the site. The majority of animal remains are associated with the Terminal Late Woodland (primarily Merrell and Edelhardt phases) and Late Mississippian (later Moorehead and Sand Prairie phases) components. A limited amount of Early Mississippian (Lohmann and early Stirling phases) and Stirling-Moorehead (later Stirling and early Mississippian phases) fauna was also present. Fish remains dominate the Terminal Late Woodland assemblage, with catfish and bullheads most common. Various bass, sunfish, suckers, bowfin, sturgeon, gar, pike, white bass, and drum remains were also identified. Numerous waterfowl and marsh bird bones were identified, further demonstrating heavy use of nearby aquatic resources. The Late



Awls, Nineth Century A.D., Bluff Road site, Randolph County (above); canid femur with cut marks, Fish Lake site, Monroe County (top right); bone awl, Nineth Century A.D., Fish Lake site, Monroe County (page 16).

Mississippian assemblage is characterized by fish and deer elements, but a broad-based faunal exploitation strategy is evident. Other taxa identified include elk, beaver, muskrat, otter, goose, swan, duck, cormorant, turkey, turtle, and freshwater and marine mollusk. The subsistence patterns seen in the Tract 15B assemblage are consistent with those evident in other assemblages from Cahokia, with some variability that warrants further examination. Possible factors responsible for these differences might include sample size, differential preservation, recovery methods, contextual issues (e.g., elite versus non-elite households; normal consumption versus ceremonial or ritual feasting; disposal issues), variations in the control and distribution of food resources, seasonality and resource availability, and the procurement of faunal resources for non-food use, among others.

The Tree Row (11F53) faunal analysis was completed early in 2009. A range of fauna was identified, with deer and fish interpreted as the primary food resources. A reliance on backwater lake, pond, and creek resources is indicated. The Late Archaic inhabitants consumed waterfowl and marsh birds, black bear, bison, mussels, and other mammals as well. Several dog burials also were identified. The Tree Row data provide important information on late Holocene subsistence adaptations in the central Illinois River valley, an area not well represented with regard for Archaic faunal material.

Analysis of the faunal remains from the Mississippian Orendorf site (11F1284) in Fulton County, Illinois continued in 2009. Completion of this report, incorporating preliminary studies of the deer, bird, and fish remains published in 1981, will prove to be an important contribution to our understanding of Mississippian faunal exploitation in the Spoon River area of the Central Illinois River Valley. Kuehn and other ITARP staff members working on the Orendorf project will be presenting preliminary reports on their research in an Orendorf symposium at the 2010 *Society for American Archaeology Conference* in St. Louis.

The Faunal Lab conducted additional studies of the Late Pleistocene mastodon and turtle remains from the Andrew Farm Locality (11A1578) in Adams County, Illinois. The probable butchery marks, first noted by project director Steve Tieken, were examined in greater detail and Kuehn began to assemble the micrograph images so they can be sent to outside experts for their consideration.

Late in 2009, Kuehn began a reanalysis of faunal material recovered during Langford's investigations at the late prehistoric Fisher site (11WI5) in Will County. Paul Parmalee prepared a preliminary analysis of the vertebrate and mollusk remains in 1962, but no detailed report has ever been produced. The complete analysis of this material will undoubtedly provide important insight on Fisher diet and procurement behavior.

Kuehn submitted and published several articles in 2009, and presented two papers at the 2009 *Midwest Archaeological Conference* in Iowa City, Iowa. He also participated in a number of outreach activities at local schools, giving talks on zooarchaeology and faunal exploitation.

The ITARP Faunal Laboratory was on the road this summer, with Steve Kuehn joining Dr. Kris Hedman on a trip to northwestern Alaska. Kuehn and Hedman participated in the excavation of a Late Pleistocene hunting camp, the Raven Bluff site (DEL402), under the aegis of the Bureau of Land Management.

### Bioarchaeology

The ITARP Bioarchaeology/Osteology Program is under the direction of Dr. Kristin M. Hedman and Eve A. Hargrave, assisted

by Julie Bukowski (physical anthropologist, ABSD), Mary Hynes (bioarchaeology curation specialist) and John DiMaggio (lab technician). Student employees this year included Jenna Mortenson, Alyson Rhode, Doreen Dong, and Dana Beehr. The primary mission of ITARP Bioarchaeology is to perform the responsibilities outlined in the Human Skeletal Remains Protection Act (20 ILCS 3440 et seq.). These duties include the excavation, technical analysis, and reporting of human remains falling under the Program's responsibilities. In addition, we are involved in collaborative research projects both within ITARP/UIUC and with researchers at other institutions. Results of these projects are presented at professional conferences and in peer reviewed journals. Public outreach is encouraged, and physical anthropologists frequently give presentations to schools, clubs, various archaeological societies, and other general public groups.

One significant change to the ITARP Bioarchaeology Division in 2009 was the hiring of a full-time bioarchaeology collections specialist. Electronic files and digital photographs are now continually monitored and are available to the bioarchaeologists via the Neil Street Lab server and in site folders for use during their analysis.



Excavation in Bioarchaeology Laboratory.



## Russell Site

The Russell site was excavated by ITARP-ABSD personnel for a private development in the fall of 2006 (ITARP Project Log #06157). During the investigations, 70 prehistoric features were identified, including 51 features from a Moorehead phase occupation and Late Woodland Mund phase pit features. The Moorehead occupation consists of four wall-trench structures and 38 pit features arranged around an open area.

North of the courtyard, a mortuary complex was identified with eight features. An additional burial feature was also located in the southeastern corner of the occupation.

Human remains were recovered from three rectilinear pit features within the mortuary complex, and from the isolated burial feature. The human remains were excavated in accordance with the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440, 17 Ill. Admin. Code 1470), under a permit issued by the IHPA (IHPA HSRPA #2006-98). Two of the rectilinear pits are primary burials of adult individuals. Isolated remains from a neonate were recovered from the third rectilinear feature, and fragmentary remains were also recovered from the isolated burial feature. Within the

mortuary complex, the rectilinear burial features superimpose

two larger rectangular features, identified as possible charnel structures or mortuary-processing areas.

One of the primary burials was identified as a young adult female, semi-flexed on the right side. Near the pelvis, an intact vessel was recovered. Fragmentary human remains of a neonate and an older adult, and a complete valve from a mussel shell were found inside the vessel. The other primary burial is that of a young adult male in an extended position. The mortuary activities at the Russell site are reminiscent of the nearby Kane Mounds (for example, vessels with mussel shell spoons), but attributes unique to the Russell site, such as charnel/processing areas and the proximity of the mortuary complex to the occupation, indicate that a degree of social individuality was maintained.

Original paper files are being reviewed and documents are being scanned for placement into the updated *ITARP Osteology* database, creating a searchable/sortable repository of information backing up our paper file system. The *ITARP Osteology* database is being reworked to operate more efficiently with data collection and information storage (and other databases), and the *Neil St. Lab Material Tracking* database constructed this past year allows for more efficient tracking of material location and project status. These implementations have greatly facilitated the management of paper, electronic, and photographic records related to skeletal collections, as well as the organization and processing of skeletal materials and the production of ITARP skeletal reports, all of which enable ITARP Bioarchaeology staff to more efficiently complete analyses, conduct research, and finish reports and publications.

In 2009, isolated human remains were recovered from the basin fill of a Lohmann phase single-post structure within the Exchange Avenue Extension project area of the East St. Louis (11S706/5) site. These fragmentary, disarticulated elements represent commingled remains of at least four individuals (neonate, infant, child, adult) that were redeposited in the house basin fill. They do not appear to represent an intentional burial. One of the recovered elements is a permanent maxillary central incisor that has been culturally modified. The tooth is filed on the occlusal edge and ground on the lingual surface. Faint traces of red pigment (ochre?) are present on the labial crown surface. In North America, tooth modification is almost exclusive to Mississippian sites in the American Bottom. The analysis and report for these remains were completed and the skeletal remains were transferred to the Illinois State Museum

(ISM) in Springfield in compliance with HSRPA guidelines (20 ILCS 3440 et seq.).

ITARP has begun the process of reassessing the status of known burial sites located in the vicinity of current IDOT archaeological projects; many of these sites have not been revisited or reevaluated for more than 50 years. The status of these sites (e.g., looted, destroyed, plowed down) is then updated in the Illinois Inventory of Burial Sites. In 2009, Bukowski and Alleen Betzenhauser conducted a survey of known mortuary sites located within a two mile radius of an Illinois Route 162 improvements project near Glen Carbon (ITARP Project Log #09029). The survey radius extended along Illinois Route 157, encompassing the well-known bluff top sites of Kane Mounds, Hill Prairie Mounds, St. Elizabeth Mound, Peter Station Mound, Sepmeyer Cemetery, Holsinger Cemetery, and Keller Mounds. Most of the sites had been either previously destroyed or mitigated; extant mounds were relocated at only three sites. Recent borrow activity at one of these mounds had impacted burials and resulted in the exposure of human remains on the eroding bluff face. Upon discovery, the IHPA was notified and met with the landowner to discuss preservation. Bukowski, along with several other ITARP staff members, assisted in the documentation of the remaining mound limits and human remains as well as the collection of the disturbed human remains. The remains were transported to the Illinois State Museum for analysis by Dawn Cobb (Human Skeletal Remains Protection Act coordinator). Ongoing assessments of such sensitive archaeological sites by ITARP crew will be an important component of discussions about site preservation throughout Illinois.

Osteological analyses were completed for several IDOT-related sites, as well as for collections recently transferred, donated, or on loan to ITARP for research purposes. These include Souffle de Caverne (11R579), Grossman (11S1131), Lonely Woman (11S697), East St. Louis (11S706/5), Cahokia 15B (11MS2), Reilley (11MS27), Trotier (11S861), Tena Dey (11MS769), West Mound (11MS76), Booker T. Washington/Stookey (11S19/20), Caterpillar, Renchville, and McDougal-Hartmann mounds (11P5/787) of the Dickison South Mound Group. Osteological analyses are in progress for Hofstetter (11S693), Cahokia SubMound 51 (11S34/2), Cahokia-Fingerhut (11S34/7), Cahokia-Gems (11MS2/1), Janey B. Goode (11S1232), and Brugger Mound (11JD84), Pittsburg Lake (11S440), Neteler Mound



Measuring remnants of Keller Mounds, Madison County (above);  
 “Enamel pearl” on molar, Eighteenth–Nineteenth Century A.D., Trotier site, French Cahokia (bottom right).

(11MN2) of the Havana Mound Group, and Fisher Mounds 5, 6, and 7 (11WI5).

This year saw the production of a new report series—*ITARP Skeletal Reports*. This limited distribution series is designed specifically to document human remains from unregistered graves in compliance with the Human Skeletal Remains Protection Act (20 ILCS 3440). Burial excavations, skeletal analyses, and report completions are conducted in accordance with HSRPA (20 ILCS 3440 et seq.). Reports were completed during 2009 for Russell (11MS672), Brennan-Hynd (11S1492), Lonely Woman (11S697), and West Mound (11MS76). Skeletal Reports and/or articles are pending publication for Centreville (11S332), Reilley (11MS27), Trotier (11S861), Tena Dey (11MS769), Booker T. Washington/Stookey (11S19/20), Souffle de Caverne (11R579), and Drda (11S32). Upon completion of each report, all human remains and copies of associated documentation for a site are transferred to the Illinois State Museum (ISM) in Springfield, in accordance with the HSRPA and programmatic agreements between IDOT, ITARP, and ISM. In 2009, human remains representing 23 sites were transferred by ITARP to ISM and several additional sites are being prepared for transfer in early 2010.

Over the last two decades, ITARP bioarchaeologists have conducted systematic osteological examinations, stable isotopic analyses and AMS dating of prehistoric and proto-historic human remains from Ill-

inois. An important focus of these studies has been the role of maize in the diets of late prehistoric populations in this region. Past research has shown that although maize consumption was significant for all Illinois Mississippian populations, osteological and isotopic analyses indicate significant chronological, ethnic, regional, and sex-based differences in diet, as well as status-related differences in the quality of the diet, namely in the amount and nature of the protein consumed. ITARP researchers have continued to explore the cultural and biological ramifications of such variation. In addition to stable isotope and AMS data, we have begun to explore the potential application of strontium isotopes and ancient DNA (aDNA) analyses to these questions.

In 2009, we began work on two large research projects that involve the osteological and molecular level analysis of skeletal remains from two Middle Woodland sites—the Dickison South Mound Group and Neteler Mound of the Havana Mound Group—as well as from Guy Smith Farm, Rose Mound, and 18 late prehistoric locations within the boundaries of the Cahokia Mounds site. The Cahokia sites include Fingerhut, Gems, Tract 15B, Powell Mound, Sawmill Mound, and Mounds 18, 19, 20. The Middle Woodland sites include elaborate mound inhumations, as well as central tomb primary and secondary burials, while the Cahokia sites include mound and non-mound burials and represent

individuals of diverse social position in Cahokian society. The majority of sites included in this study are currently on loan from UIUC’s Department of Anthropology. Cahokia Tract 15B was on loan from the Illinois State Museum, Springfield.

ITARP was granted permission from these institutions to collect bone and enamel samples for molecular-level analysis for inclusion in an ongoing study of subsistence, health, and social/biological variability of native populations. The samples collected will be used for stable isotopic analysis of bone collagen and apatite, and enamel apatite, to address questions of dietary variability between individuals and populations, both through time and between presumed distinct social groups; analysis of strontium ratios of enamel to identify possible non-local individuals and evidence of population movement and interaction; and to provide collagen for AMS dating of specific individuals and burial events allowing establishment of tight temporal control used for defining chronological shifts in diet, health, and mortuary practices.

Results of ITARP stable isotope research adds to a growing database of isotope data already available from several late prehistoric sites in the Midwest, specifically those in the American Bottom and Upper Illinois River valley, as well as data available from Late Prehistoric-Early Protohistoric sites in the Midwest and Great Lakes region of the US and Canada.

In addition to diet, we are interested in investigating questions of population movement and interaction. Strontium and ancient DNA (aDNA) may provide information on these issues. This information will also be used in comparisons with isotopic and genetic data derived from other Midwestern regions to address questions about migration into and out of the American Bottom as well as migrations of people from the American Bottom into other late prehistoric regions such as the Central Illinois River valley and Wisconsin.

Strontium isotope ratios in bone and





and other sites currently under study will allow researchers to begin compiling a regional database focusing on the genetic relationships between groups inhabiting different archaeological sites throughout Illinois.

tooth

enamel re-

fect the geology, soils, and water of the region from which resources consumed by a given individual were obtained, and is incorporated into tissues through the foods consumed with little if any fractionation in strontium ratios as the isotope moves up the food chain. Strontium isotopes of enamel have been used increasingly to identify possible non-local individuals in several prehistoric populations, including a few in the Midwest. Recent work by Hedman provides preliminary baseline strontium values for the American Bottom and surrounding regions based on archaeological fauna that suggest measurable and significant differences in strontium isotope ratios are present across the Midwest study region. Strontium isotope ratios may allow the identification of non-local individuals within the Tract 15B population.

ITARP is also collaborating with Dr. Ripan Malhi, UIUC Department of Anthropology, to extract ancient DNA (aDNA) from several late prehistoric sites including Cahokia Tract 15B and the Hoxie site. A number of studies over the past 15 years have resulted in the successful extraction of ancient DNA from North and South American prehistoric human remains and have addressed such issues as: (1) the genetic composition and timing of the original Amerindian migration into the Americas, (2) the relationship between mortuary behavior and kinship as defined through genetic similarities, and (3) the genetic relationships within and between regional populations to address issues such as migration, trade, marriage patterns, and social hierarchy. To date, with the exception of Napier's (2000) study on Mound 72 from the Cahokia Mound Center, very little research has been conducted using ancient DNA to identify the genetic composition of populations inhabiting the late prehistoric American Bottom. If successful, results from Hoxie, Tract 15B,

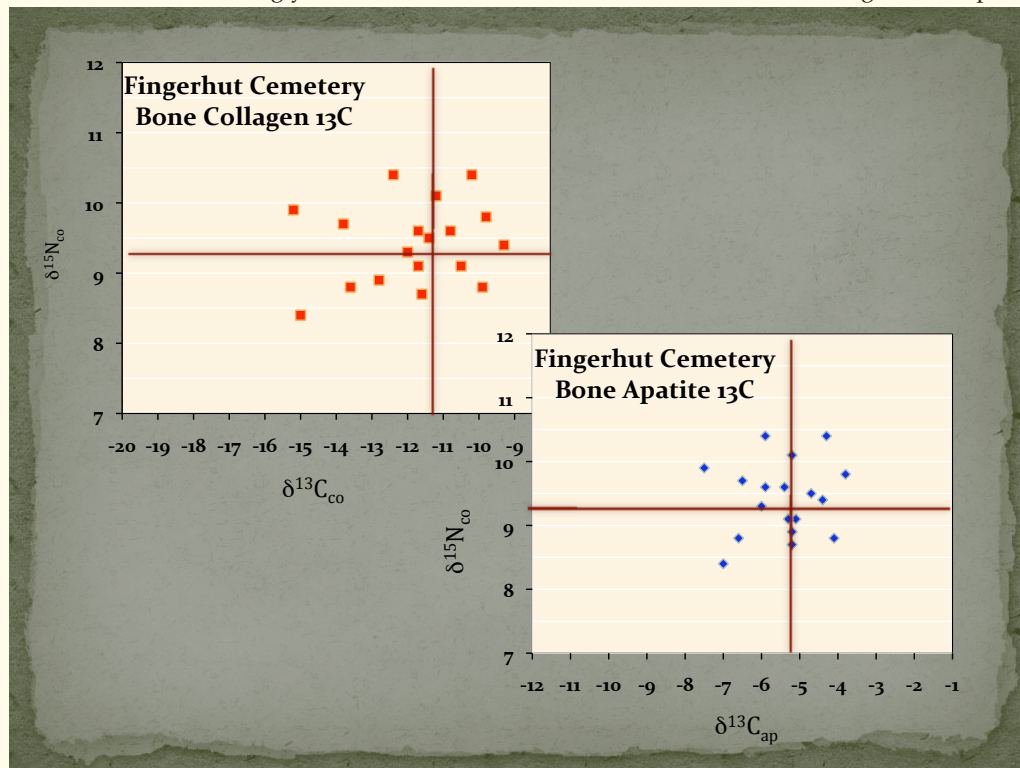


The importance of comprehensive studies such as this is further stressed because these skeletal collections, curated in many cases for over 80 years, have never been fully described or documented. The excavation of large mortuary sites is largely a thing of the past, since current archaeological practices stress preservation over excavation, and increasingly the documentation of

human remains is done without removal from the ground. Thorough analysis of large curated collections will provide the baseline data necessary to better interpret the more limited osteological data obtained from expedient and more limited examinations.

ITARP bioarchaeologists presented results of their research at the *Society for American Archaeology* meetings in April 2009 and at the *Midwest Archaeology Conference* in October 2009. They also authored or co-authored papers for publications in *Radiocarbon*, *the Journal of Archaeology Sciences*, and *Illinois Archaeology*.

Bioarchaeology staff assists students from UIUC's Department of Anthropology through supervising undergraduate and graduate osteological research projects and providing analysis space for visiting researchers. In 2009, we worked with Jenna Mortenson (Grossmann site), Alyson Rhode (aDNA of Hoxie and Tract 15B), Sara Otten (Richland Complex sites), Doreen Dong (Drda site), and Aimee Carbaugh (Fingerhut Cemetery). Several former and current graduate students have been involved in the pedestal excavations and analysis of skeletal remains from Grossman, Haliday, and Pfeffer sites under the direction of Hargrave. Excavations of these Richland Complex sites were conducted as part of archaeological field schools in the American Bottom directed by Dr. Tim Pauketat, UIUC. Dong, in collaboration with Hedman and Hargrave, complet-



Results of bone collagen and bone apatite analyses of Fingerhut samples, Cahokia (above); Mississippian jar fragment, Centreville site, St. Clair County (top).



Knife blade, Duckhouse site (above);  
faience, Gammon site (below left),  
both Eighteenth Century, French  
Cahokia.



ed a manuscript summarizing the results of her recent reanalysis of skeletal material from the Terminal Late Woodland Drda site (11MS32). Drda was excavated in 1977 by Illinois State University archaeologists and the materials were later transferred to ITARP. Dong's reanalysis included a re-assessment of the number and age of individuals represented in an ossuary feature and incorporates recently obtained stable isotope data and an AMS collagen date. Results from the isotope analysis indicate little/no maize consump-

tion; the radiocarbon results place these remains well within the Terminal Late Woodland period (A.D. 900-1050),



just prior to the rise of the Cahokian polity. Carbaugh's analysis of dental remains from the Fingerhut Cemetery, an early Mississippian cemetery within the larger Cahokia site excavated by Charles Bareis in the 1960s, will form the basis for her Senior Honor's thesis. The information on dental health and age gathered by Carbaugh, combined with recent osteological and stable isotope data from Fingerhut, will provide valuable insight into social and temporal relationships at Cahokia. The ITARP Bioarchaeology Lab also provides space to Dana Beehr, a graduate student in Anthropology at UIUC completing her dissertation research.

### Salisbury Research Laboratory

The Salisbury Lab is an ITARP satellite research facility located in Salisbury, Illinois and managed by Robert Mazrim, ITARP outreach coordinator. The Lab has begun producing short video summaries of various projects, old and new. Mazrim happened to be on hand when a remarkable Mississippian figurine was discovered at the East St.

Louis site and produced a short video summary that is currently being expanded by Production personnel at ITARP's Champaign Office. Also of interest is older video footage, shot on now-extinct formats, which is being digitized for future projects.

The Salisbury Lab produced images and content for the new "Progress and Preservation" exhibit at the Chicago Rockford International Airport, which highlighted archaeological investigations undertaken in advance of airport expansion, as well as artifact images from our new nineteenth century comparative collections for the 2009 *Archaeology Awareness Week* poster. Other outreach



Historic glass and ceramic research collections (above);  
French fiole from private collection (center) and French wine bottle fragments (top right), Eighteenth Century.

Several magazine and journal articles on our French studies will appear in the coming months.

Mazrim has completed a new, large-scale publication focusing on the French domestic resources of Illinois. *At Home in the Illinois Country 1730-1800: French Colonial Domestic Site Archaeology in the Midcontinent* presents excavation data from several IDOT sponsored excavations (such as Jarrot Nordique, Old Village Peoria, Ghost Horse, and Trotier sites), as well as the research excavations of the French Colonial Heritage Project (including the Duckhouse and Gammon sites). The study also incorporates the results of Margaret Kimball Brown's recent salvage work at Prairie du Rocher and older, unpublished data from the Laurens site. Finally, the volume presents an exhaustive synthesis of all of these sites, resulting in the first large-scale desk reference for French domestic archaeology in the midcontinent.



## Illinois Department of Transportation Compliance Projects

### IDOT Project Review

ITARP received 277 requests for Phase I archaeological survey from IDOT in 2009. More than 16,000 acres were surveyed in conjunction with projects located in 81 counties throughout the nine IDOT districts. Highway and bridge improvements comprised the preponderance of projects (ca. 70%), while approximately one-quarter were borrows. The remainder of survey requests were for a variety of projects, including airport expansion, bike and multi-use path development, drainage improvements, and wetlands.

projects include lectures on our recent French colonial excavations for audiences at Prairie du Rocher, Cahokia, and at the annual meeting of the *Center for French Colonial Studies in St. Louis*. Mazrim also collaborated with Dr. Michael Wi-ant on a French-themed bus tour for the Illinois State Museum.





Jar fragment, Statewide Survey Office, Champaign.

A total of 236 projects were resolved in 2009. Phase I survey was completed for 226 projects, and final survey reports recommending clearance with no additional work were submitted to IDOT. Other projects were cancelled (six) or superseded by updated projects (three). A feasibility study was also completed.

Approximately 425 archaeological sites that differed in size, complexity, and age were investigated in 2009. Sites ranged from isolated projectile points recovered during pedestrian survey to large habitation sites with intact cultural features, whether the remains of prehistoric wall-trench structures and storage pits or historic house foundations, wells, and privies. Investigative techniques ranged from surface collection and documentation of small nondiagnostic artifact scatters to mitigative excavations of sites potentially eligible for listing on the National Register of Historic Places.

At year's end, some projects remained to be surveyed, some had sites recommended for further examination, and/or some required a final report.

### Ongoing 2009 Investigations— Statewide Survey Divisions

#### Northern Illinois Survey Division

In 2009, Phil Millhouse and Paula Porubcan supervised work at the Northern Illinois Survey Division (NISD) in Rockford, Illinois with the assistance of crew chiefs

Paula Bryant, Pete Geraci, Ed Jakaitis, and Melissa Baltus. Graphic artist, Marcia Martinho, was involved in a series of illustrations, photography, and report preparation for several ITARP offices. Crew members Amanda Douglas, John Hicks, Brittany Jackson, Stephen Jankiewicz, Caleb Kestle, Khristin Landry, Ellen Powell, Ryan Raeder, Jake Rieb, Nicole Roth, Mike Salerno, David Smith, and Eric Vane helped with all aspects of survey, testing, and artifact processing along with ASSR and ATSR preparation. The year's work included a number of surveys and testing projects. A

total of 47 projects that requested survey of 9,283 acres were completed; these included 38 (81%) in District 1, seven (15%) in District 2, and two (4%) in District 3. A total of 99 sites were recorded: 48 prehistoric, 22 mixed component prehistoric/historic, and 29 historic. Phase II testing was conducted at the Kinsley Tenant House (11MH482) and Bottlemey site (11MH495) in McHenry County, the Nativity (11WI3584) site in Will County, and 11RI739 in Rock Island County. During the year 19 sites (12 mound groups, 6 cemeteries, and 1 isolated burial) were revisited to contribute updated information to the Illinois Inventory of Burial Sites (IIBS). All of these sites were within District 1; 14 were destroyed, three were partially intact, and two were intact.

#### District 1

##### Caton Farm-Bruce Road-Oak Street Various Alignments, Will County

This is a road construction project, connecting Bruce Road at US 30 to IL 7 at Cedar Road (ITARP Project Log #06149 and #07016). The project area is primarily located in the uplands east of the Des Plaines River along the drainage divide between Fraction Run and Spring Creek and includes a major crossing of the Des Plaines River. A total of 1,400 acres were included in the survey, 1,200 (86%) of which have been subjected to Phase I survey. The remaining 200 acres, encompassing three previously recorded sites (two prehistoric and one historic), were not accessible at the



Well remnant, Nineteenth Century, Nativity site, Will County.



*Excavation, Bottlety site, McHenry County.*

time of the survey. NISD archaeologists revisited 11 previously recorded sites (six prehistoric and five historic), identified 36 new sites (32 prehistoric and four prehistoric/historic), and recorded 60 isolated finds (57 prehistoric, one prehistoric/historic, and two historic). A total of 21 sites (20 prehistoric and one prehistoric/historic) have been recommended for Phase II testing to determine their eligibility for listing on the NRHP.

### **Elgin-O'Hare Expressway, Cook and DuPage Counties**

Survey was undertaken for construction of a new expressway and associated

extensions and interchanges to improve access to O'Hare International Airport from the west (ITARP Project Log #09105). The project area is situated within the heavily urbanized uplands drained by Salt, Higgins and Willow Creeks. A total of 6,651 acres (99% of the project total) was subjected to Phase I survey. The remaining 11 acres is a secure parcel within airport property that was not accessible. One new historic site, one isolated historic find, and one isolated prehistoric find were located. In addition, 18 previously recorded sites were revisited and three historic cemeteries were evaluated. No sites were recommended for Phase II

testing to determine their eligibility for listing on the NRHP. Avoidance of the three historic cemeteries was also recommended.

### **Interstate 55 at Lorenzo Road and IL 129, Will County**

This project traverses terrace and upland areas adjacent to the Kankakee River, just southeast of where it joins with the Des Plaines River (ITARP Project Log #09197). Construction is planned around an I-55 interchange and an area to the west, comprising approximately 2,000 acres set for future development of the Ridge Port Logistics Center. Phase I survey is currently in progress with 786 (33%) of the project's 2,385 acres investigated to date. Thus far, seven new sites (two historic and five prehistoric) and nine isolated find spots (eight prehistoric and one historic) have been identified. Three previously recorded sites within the survey area have not yet been revisited. Currently, five of the 10 sites will be recommended for Phase II testing in order to determine their eligibility for the NRHP. Phase I survey will continue during the spring of 2010.

### **Thorn Creek Bicycle Trail, Cook County**

This project includes construction of a bike path through the Cook County Forest Preserve District from 183rd Street/Cottage Grove Road to 26th Street/Euclid Avenue (ITARP Project Log #09058). It is situated in terrace and upland areas adjacent to Thorn Creek. The impact area for bike path construction is a 100' wide



*Nineteenth Century structure and well remnants, Nativity site, Will County.*



Screening soil, Nativity site, Will County.

occupation ending during the 1920s; the structure was razed the following decade. The site covered 1,100 m<sup>2</sup> with 150 m<sup>2</sup> (14%) falling within the proposed ROW. As the site lies within an active cow pasture, the owner put up a fence to cordon off the area with subsurface historic features. This left 400 m<sup>2</sup> of the total site area or 60 m<sup>2</sup> of the impacted area available for investigation, of which 40 m<sup>2</sup> (11 m<sup>2</sup> within the area of project impact) was subjected to Phase II testing. Three features were identified, including a dry-laid field-stone foundation, a debris-filled depression, and a cement-lined cistern. Two test units were also excavated in the area containing a domestic refuse scatter surrounding the structure. The residence foundation and cistern were largely filled with post-1920 debris when the structures were razed. Discrete deposits pertaining to the mid-nineteenth century occupation were not discernible during the Phase II testing, and further work is not recommended for the site.

along with two post molds, one possible post mold, and four dense concentrations of FCR, burned bone, charcoal and other refuse that may represent shallow hearths with secondary refuse deposition. Preliminary analysis of the lithics indicate that small Mankar, Gibson, and Steuben points are present along with examples of Madison Triangular points. Grit-tempered ceramic rim sherds from five jars and one bowl were also recovered. These rims include transitional Weaver-like and Madison wares. Testing both within and outside the buried A-horizon uncovered evidence for both emergent and mature Late Woodland occupations.

### Nativity Site, Exchange Avenue, Will County



1900 Indian head penny (top); 1853 half dime (bottom); prehistoric celt (below), Nativity site, Will County.

transect that is 7.5 miles long. The entire 91 acre project area was subjected to Phase I survey. Nine previously recorded sites (five prehistoric, two prehistoric/historic, and two historic) were revisited, seven new sites (five prehistoric and two prehistoric/historic) were identified, and eight isolated find spots (five prehistoric and three prehistoric/historic) were recorded. Seven sites (all prehistoric) will be recommended for Phase II testing in order to determine eligibility for listing on the NRHP.

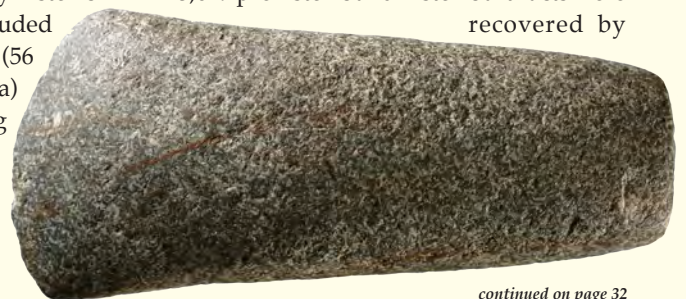
### C. Kingsley Tenant House, Alden Road (State Line Road to Charles Road), McHenry County

The C. Kingsley Tenant House (11MH482) was initially located during Phase I survey along Alden Road (ITARP Project Log #08246) in McHenry County. Historic documents indicate a structure in the area by 1862, although by 1872 the main farming residence was located near the more modern house and outbuildings facing Hebron Road. According to the current landowner, whose family has occupied the property since the mid-nineteenth century, 11MH482 represents a tenant house built around 1859. The tenant house was used and altered through the turn of the century with

### Bottlemeys Site, Alden Road (State Line Road to Charles Road), McHenry County

The Bottlemeys site (11MH495) was investigated in conjunction with drainage improvements along Alden Road in McHenry County (ITARP Project Log #08246). The site covers 1,200 m<sup>2</sup> of a low terrace adjacent to Nippersink Creek. A 225 m<sup>2</sup> portion of the site contains a 10 cm thick, well preserved A-horizon that has been sealed by historic alluvium. Phase II testing included the excavation of 30 hand units (56 m<sup>2</sup> or 4.7% of the total site area) to uncover the buried living surfaces and more accurately determine site boundaries. This testing uncovered the generalized living surface

The Nativity site (11WI3584) was discovered during Phase I survey for the re-routing of Exchange Avenue east of Crete (ITARP Project Log #07151). This multi-component habitation site encompasses 25,800 m<sup>2</sup> of upland between Deer and Plum Creeks that GLO records indicate was within the prairie-forest border. Approximately 3,100 m<sup>2</sup> (12.5%) of the site lies within the proposed ROW. A surface collection was done during the initial Phase I survey and a second controlled surface collection (CSC) was conducted in preparation for Phase II testing. The CSC comprised 264 10x10m units both within and outside of the proposed ROW; clusters of both prehistoric and historic debris were noted. A total of 5,679 prehistoric and historic artifacts were recovered by



continued on page 32



**Public C**

Raising public awareness of Illinois' and a component of ITARP's mission. Opportunities throughout Illinois. Staff armed with Power the trade make presentations to students to avocational archaeologists, budding M





**Outreach**  
Archaeological resources is an important  
... toward this end are found in communities  
... verpoint programs, artifacts, and tools of  
... s, from preschool to college, and lecture  
... Master Naturalists, and lifelong learners.



# Illinois Department of Transportation Career Day

In October, ITARP participated in the Illinois Department of Transportation's "Career Day 2009: Promoting Transportation Careers to America" housed at the Illinois State Fairgrounds Exposition Building in Springfield, Illinois. The event, sponsored by IDOT industry partners responsible for building and maintaining the Illinois transportation system, introduced students from around central Illinois to careers in the transportation industry. Approximately 600 middle and high school students from 20 schools learned about career opportunities in:

- civil engineering,
- engineering technology,
- safety engineering,
- survey work, and
- the various construction trades.

The ITARP exhibit, organized by Linda Alexander and Eve Hargrave, included displays of a variety of archaeological artifacts from the ITARP teaching collection, a Powerpoint slide show presentation including photos of ITARP personnel in various activities including field survey and excavation, artifact analysis, cartography, curation, outreach, and report production, as well as photos of ITARP artifacts. Corinne Carlson and Linda Alexander, both from ITARP Production, combined forces to produce a composite poster entitled 'We are ITARP' which included images of outreach, excavation, fieldwork, analysis, curation. This poster combined with the slide show will be used for future outreach activities.



# The Illinois Steward



During 2009, we continued a multi-year collaborative effort with Dr. Robert Reber (UIUC Extension). Dr. Reber, in addition to being a lifelong collector of aboriginal artifacts from the farm fields surrounding his home in Ford County, is also one of the editors of the 20 year old and very popular journal, *The Illinois Steward*. This widely distributed journal focuses on ecology in Illinois. Articles are intended to make professionals and the greater public aware of the rich natural and cultural heritage of the state and the importance of stewardship in this age of rapid development.

Beginning in 2008 with the publication of an article on the Paleoindian period (11,000–9,000

B.C.), authored by Brad Koldehoff, ITARP has embarked on a multi-year publication effort. The

intended audience is the greater Illinois public, and our aim is to summarize in an accessible format, what is known about the several major periods of Illinois history prior to European contact. Eventually the various articles will be collected into one special issue of the journal. To this end, an article summarizing the Early Archaic cultures in Illinois (9,000–1,000 B.C.), authored by Dale McElrath and Mary Simon, was published in the fall 2009 issue of *The Illinois Steward*. Additionally, the same authors, at the request of Dr. Reber, produced a short article on the 10,000 year record of human interaction with the prairie ecosystem of our "Prairie State"; this article was published in the spring 2009 issue of *The Illinois Steward*.



# Illinois Master Naturalist

In 2009, a major commitment to the UIUC College of Agricultural, Consumer and Environmental Sciences was completed with the publication of "People and the Early Illinois Landscape: the History Beneath Our Feet" (by Dale McElrath, Mary Simon, Alice Berkson, Mark Branstner, Brad Koldehoff, Steve Kuehn, Eve Hargrave, Kris Hedman, and Brenda Beck). This was produced at the request of Dr. Robert Reber (UIUC Extension), to serve as the chapter on archaeology for the *Illinois Master Naturalist Program Handbook*. The Master Naturalist Program is designed to heighten awareness, for interested Illinoisans, of the many branches and subdisciplines that study natural ecology and the impact of human activities on the environment. We eagerly accepted this responsibility because it highlights the many talents, specialties, and strengths of our program. Featured in the article were bioarchaeology, faunal analysis, ethnobotany, and historic archaeology, as well as a summary of the Pre-Contact culture history of the state.

# The Brooklyn Public Engagement Project



Brooklyn, Illinois is a small town with a nationally significant past. Despite repressive laws meant to discourage Black settlement in Illinois, Brooklyn was founded in 1829 by free African Americans and fugitive slaves as an attempt at Black self-determination. On July 30, 1873 it became the first majority-Black town in the United States to incorporate. Brooklyn is also one of only a handful of nineteenth-century Black towns that have survived until the present day. Now home to 700 inhabitants, Brooklyn is situated alongside the Mississippi River one mile north of East St. Louis. Because of its close proximity to East St. Louis, Brooklyn once benefited from the meatpacking and manufacturing jobs that the city offered, but it was also economically devastated by the collapse of those industries after WWII. Almost half of Brooklyn's population now lives below the poverty line, and a vice district anchored by adult entertainment is the town's main source of revenue.

Despite these discouraging realities, there is a grass-roots effort underway to revitalize this community, and archaeology, history, and historic preservation lie at the center of this effort. A multifaceted archaeological and historical public engagement project has developed over the last three years as an outgrowth of ITARP's 2002–07 work at the adjacent Janey B. Goode site (11S1232). This project is a partnership between ITARP and the people of Brooklyn, represented by the office of Mayor Nathaniel O'Bannon III (pictured right), and the Historical Society of Brooklyn, Illinois (HSOBI). The goals for this project, as defined by HSOBI, include: (1) historic preservation, such as cemetery restoration and saving historic documents and structures; (2) increased recognition and appreciation of the town's history by both residents and outsiders, including eventual nomination of the town to the National Register of Historic Places and the generation of positive press coverage; and (3) heritage-based community development, such as building an African-American heritage museum and cultural center. ITARP's involvement with the first two goals enhances the public service mission of UIUC, and promotes greater public understanding of Illinois history.

ITARP's involvement in previous years included organizing a cemetery restoration workshop, educating village officials about

the cultural resources compliance process to enhance enforcement of the village's historic preservation ordinance, and documenting previously unknown city ledgers from the early years (1891–1905) of Black control of city affairs. They also included survey and testing of "Upper Brooklyn" to document the distribution and integrity of nineteenth-century archaeological deposits



and to try to relocate the town's founding settlement.

Project activities during 2009 focused on public dissemination of project information, recordation of cemetery headstone inscriptions, compiling historical documents pertaining to the town's founding, and continued coordination with the historical society and village officials.

Dissemination of project information was achieved through a variety of different media. For example, ITARP arranged a loan of archaeological materials from the 2008 investigations, which were placed on display as part of the 2009 exhibit, *From Humble Beginnings: Lincoln's Illinois 1830–1861*. Joseph Galloy gave public presentations at the Illinois State Museum, Archaeological Institute of America (Urbana), Southern Illinois University, Edwardsville, and Saint Charles Community College (Missouri). Miranda Yancey presented a paper at the annual *Illinois Archaeological Survey* meeting. An article on the project, authored by Galloy and Yancey, was published in the September 2009 special issue of *Illinois Antiquity*.

Assisted by Judy Jennings of the St. Clair County Genealogical Society and accompanied by Mayor O'Bannon and a few other Brooklyn residents, ITARP employees Mera Hertel and Miranda Yancey performed volunteer work at the Brooks Cemetery (11S1233). This work consisted of documenting visible markers and probing for buried stones. The ultimate goal of this work is to record all of the cemetery's gravestones as a first step towards their restoration and that of the cemetery as a whole.

Volunteer documentary research performed by Yancey and Hertel succeeded in locating records that will help fill in some details about the town's founding. Among many others, these documents include an 1837 newspaper advertisement announcing the offering of lots for sale in Brooklyn by Thomas Osborn. This advertisement trumpets the new

town's future amenities, such as mills and the planned construction of a canal to Cahokia Creek. It also indicates that Osborn, one of the town's five white platters, had been residing with his family at the site of Brooklyn for 20 years, pushing the initial occupation of the town's location to ca. 1817.



# Preservation Working Group

ITARP curator Laura Kozuch continues as a member of the UIUC Preservation Working Group (PWG), a campus-wide committee whose mission is to promote cultural heritage on campus. The PWG at the University of Illinois (UIUC) exists to assure the long-term access to the physical, electronic, and intellectual contents of the campus' cultural collections. These collections support teaching, research, and public engagement activities across campus as well as document the University's history and development. The PWG provides information and expertise in physical collections management, records management, preventative preservation, conservation, exhibit preparation, digitization, and care of digital objects, as well as in other areas.

## Preservation Working Group, University of Illinois at Urbana-Champaign

<b>Don McManus, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>Corinne Carlson, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>Kevin Jones, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>Thomas Davis, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>Laura Kozuch, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>James G. Smith, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>James G. Smith, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign	<b>Paula Roberts, Ph.D.</b> Director of the University of Illinois at Urbana-Champaign
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**Overview**

The Preservation Working Group (PWG) began as an offshoot of the University Cultural Engagement Council (CEC) in the fall of 2003 with a meeting of various cultural collection managers and others interested in collaborating on collections preservation, conservation, and digitization. Over time, it grew into an informal group until 2005, when it was made a subcommittee of the CEC. The PWG includes professionals from several colleges and units, including the College of Media, Film and Digital Arts, Library and Information Science, the Natural History Survey, Library and Information Science, and University Administration. Many of its active participants are national and international preservation associations, as well as publish and present workshops on preservation and collections care, both nationally and internationally.

**Our Mission**

The PWG exists to ensure the long-term access to the physical, electronic, and intellectual contents of the UIUC Campus' cultural assets. These assets serve to support teaching, research, and public engagement activities across campus, as well as document the University's history and development. We support these goals across campus by providing information and expertise in physical collections management, records management, preventative preservation, conservation, exhibit preparation, digitization and care of digital objects, as well as other areas as needed. The PWG additionally develops and maintains institutional guidelines for preservation, and acts as a first resource to ensure that items of enduring value receive appropriate care while they are retained to the University of Illinois.

**AVSAP Grant Project**

The AVSAP (Archival Video Storage and Access Program) is a three-year grant project funded by the Institute for Museum and Library Services. It will assist cultural heritage institutions and collections who have audiovisual materials in their collections but little or no training in audiovisual preservation. The AVSAP will consist of a self-guided series of questions designed to help collection managers assess the condition of their audiovisual materials in their collections, create a prioritized preservation plan, and develop strategies to use their current resources to meet the best of their collections. It will be available via a web-based interface as well as a download. AVSAP will cover the following types of materials: film, videotape (analog and digital), audio (analog and digital), audio recordings (analog and digital), and digital media (analog and digital). The AVSAP does not address issues related to still photography or print.

**Home Movie Day**

Since 2006, the PWG has locally participated in the international "Home Movie Day." Home Movie Day offers the public a "free film clinic" for assessing the condition of older films, providing information on how to care for family films and videos, and host of all, continuous screenings of home movies brought to by the public. Activities show examples of home films from their collections; as preservation specialists explain why transferring films to video or digital media DOESN'T mean they're lost.

**Urbana Free Library Exhibit**

The PWG recently presented a "Home Movie Day" exhibit which demonstrated examples of preservation, such as before and after treatments of old leather, ceramics, fine art, reel-to-reel film, and historic documents. Examples included conservation mistakes that can accelerate digital damage, proper preservation practices, and damage mitigation accomplished by professional conservators and preservation professionals. The exhibit had wide exposure to the general public, including many children, at the Urbana Free Library.

**Urbana Call-Radio Show Hosted on WILL-AM**

PWG members were featured on two broadcasts, first call-in radio shows on WILL-AM's "Call-Radio" program. The first was in February 2007, and the second in February 2009. The shows were popular, and our experts answered many questions about how people may best preserve and share their family treasures.

**Annual Preservation Emporium at the Spurlock Museum**

Since 2007, an annual Preservation Emporium has been held at the Spurlock Museum. Hundreds of people have attended and brought personal treasures, such as Christmas cards, photographic prints and other paper-based objects to the PWG preservation specialists and asked questions about how to best handle, store, and preserve these items. Specialties include: musical instruments, natural history objects, audio-visual materials, archaeological artifacts, ethnographic collections, art objects, and paper-based collections were on hand. PWG experts not only received valuable preservation advice, but were also able to take home free information from leading archival suppliers and local vendors. During the emporium, supporting events such as a raffle and keynote speakers were also quite popular.

Kozuch collaborated with ITARP Production staff Linda Alexander and Corinne Carlson in the creation of a poster for the PWG. The poster was presented in March at the "Cultural Engagement Symposium," an event sponsored by the Vice Chancellor for Public Engagement to showcase UIUC's public outreach, and also in November at a "Know Your University" talk. An annual Preservation Emporium is hosted by the PWG at the Spurlock Museum in late winter. This event introduces the public to specialists in the identification and preservation of a variety of personal treasures from heirloom baptismal garb to butterfly and arrowhead collections.



# Jo Daviess Conservation Foundation



Activities for the Jo Daviess Conservation Foundation (JDCF) included a joint interview for a group of high school students who were creating a video about local archaeological sites. The video won the *State Superior Award for the Illinois History Fair Project* sponsored by IHPA. Work was also done in collaboration with Marge Schroeder (ISM) to complete an NRHP nomination for the John Chapman site (11JD12). This important Mississippian site is now part of the Wapello Nature Preserve. The NRHP application was ultimately successful, and the site is now listed on the National Register. A grand opening was held at the preserve; Phil Millhouse (ITARP) and Ferrel Anderson conducted site tours for the attendees. The annual JDCF luncheon was held in Galena; the program dealt with the correlation between preserving cultural and natural sites and an area's sense of community and connection to the land. Millhouse has also compiled site data for the Foundation. (Thanks to a cooperative agreement between the JDCF, ITARP and IHPA concerning data in the Illinois site files, the JDCF can request information regarding known cultural resources on land being acquired for conservation easements or property purchase.)

# Collins Site

The Collins Site Complex is located north of the Middle Fork of the Vermilion River and is situated along the Middle Fork of the Vermilion River. The site consists of the Collins site (11V15)—a large platform mound situated on expansive Middle Fork River bluffs. A number of mound sites (11V82, 11V394, and 11V395) are located on the bluff edge overlooking the Collins site. The site is dated to the Late Woodland period (Albee Phase) and is estimated to range from A.D. 1000–1200. What differentiates this group from others situated within the valley is the fact that this site exhibits evidence of interaction with the Middle Mississippian population. The presence of platform mounds, burial mounds, and Mississippian ceramics. In the 1970s a proposed road through the site complex, prompting researchers from UIUC to conduct mound investigations. The plans for the research portion of the project property, including the Vermilion County Conservation District and the Vermillion County Conservation District. In 2009, visits were made to the site complex and the East Central Illinois Archaeological Society conducted a survey of the village site and mounds. Other than the vegetation, it appears that little has changed over the years. Excavations were completed. During visits to the complex, several mounds were observed and an IAS site design was completed. GPS locations were established for these mounds, previously known mounds in the site complex. A survey of the site by volunteers will continue in 2010. Preliminary maps, and material collections has been undertaken and will continue in the future. Because this important site is so well preserved, we are hoping to establish a long-term working relationship with the Vermilion County Conservation District to preserve the sites, maintain them, and help educate the public about this site and the





# Complex

hwest of the city of Danville, Illinois  
 Vermillion River. This complex of sites  
 village and associated low platform  
 River terrace deposits—and a small  
 d two additional mounds) located on  
 the complex of sites is affiliated with  
 d has an occupation span estimated  
 entiates this Late Woodland mound  
 ous river drainages of east central  
 idence of some degree of contact/  
 ulations at the Cahokia site, based  
 eremonialism, and small amounts of  
 sed dam and reservoir threatened the  
 JC to conduct a series of village and  
 rvoir were ultimately cancelled and a  
 Collins Complex, was transferred to  
 and became Kennekuk County Park.  
 Complex as part of a joint effort by ITARP  
 ociety (ECIAS) to evaluate the present  
 n the Collins site being overgrown with  
 the sites since the 1970s excavations  
 two previously unreported bluff edge  
 mation will soon be obtained for them.  
 ew mounds as well as for all of the  
 Additional survey of likely mound areas  
 y evaluation of site excavation notes,  
 taken, and additional work will be done  
 close to our base in Champaign, we  
 relationship with the Vermillion County  
 ntain trails, set up interpretative signs,  
 e prehistory of the local area in general.



# Warsaw Forts Project

Over the course of two separate weeks in June and September, a small group of ITARP personnel spent their vacations digging a series of hand units at 11HA957, the location of Fort Johnson (1814) and Cantonment Davis (1815–16), two related War of 1812-era military installations. Joining them for some or all of this time were Joe Bartholomew of the Warsaw Historical Society, Steve Tieken of the NAAI, who donated the original site collections to ITARP earlier in the year, Cindy Peterson and Bill Whittaker of the Iowa Office of the State Archaeologist, and Mike Kolb and Andy Jalbert of Stratamorph GeoArchaeology, Inc. The Warsaw Forts project garnered both local media and public interest, including a site tour by a Warsaw high school class, pieces in the *Quincy Herald Whig* newspaper, and a half-hour spot on *Illinois Stories*, a regional PBS program. The results were also presented in a professional paper delivered at the *Midwest Archaeological Conference* in Iowa City. It is also the subject of a book chapter included in *Frontier Forts of Iowa*, published this year by the University of Iowa Press (see Bibliography).

Fifteen screened 1 x 2 m units were excavated at 11HA957 in 2009, alone or in combination to form linear exploratory trenches. These units were placed to illuminate the extent and function of cultural features and other artifact bearing-deposits discovered during earlier survey and probative work at the site. All but one of these tests produced evidence for War of 1812-era features, including the remains of several broad shallow subterranean basins that presumably underlay log buildings, a heavily oxidized fireplace foundation comprised of laid limestone slabs, two unidentified pits, and a series of trenches and/or fortification ditches. The other hand unit penetrated through either a poorly defined feature or a sheet midden deposit relating to the fort or cantonment.

Our excavation work produced a surprisingly rich and varied artifact assemblage that is wholly consistent with a military occupation dating between 1814 and 1816; no substantive quantities of later historic debris or more recent features have been noted. The artifacts include numerous military buttons, gunflints, and musket balls, as well as a small but surprising amount of domestic debris, such as animal bone, utensils, broken dishes, and parts of small glass containers. A few objects suggestive of interaction with historic tribes or their use of the site area were also found, such as an iron arrowhead, a tinkling cone, and several glass trade beads.

In short, the ITARP work at 11HA957 demonstrates that it has remarkable integrity and information potential. Relatively few military sites like it are available in the Midwest. As such, we consider it to represent a very significant resource for the people of Illinois, especially with the bicentennial of the War of 1812 fast approaching.



Artifacts: knife (top); fork (bottom), Hancock County



the NISD crew. The prehistoric assemblage included large amounts of chert debitage, flake tools, celts, hammerstones, several



endscrapers, and triangular points along with 10 grit-tempered, undecorated ceramic sherds. The historic scatter was dense enough that only a sample of material was taken; historic artifacts indicate an occupation from 1850–1900.

The plowzone was mechanically removed from a 1,150 m<sup>2</sup> area (4.5% of the site or 36% of the impacted site area), revealing 27 historic features that include 1 fieldstone house foundation, 1 earthen-walled well, 1 brick-lined cistern, 2 drainage trenches, 17 post molds, and 5 unspecified pit features. A sample of these features was excavated, yielding domestic debris, which indicates an occupational time frame similar to that revealed by the CSC. Unfortunately mid-nineteenth through early twentieth century artifacts were mixed with earlier material allowing for little interpretation of the pre-Civil War homestead. Although the historic component was recommended as ineligible for the NRHP, the prehistoric component should be subjected to further testing if threatened by future construction.

### District 2

#### 11RI739, Quad City International Airport, Rock Island County

Site 11RI739 was revisited in conjunction with improvements to the Quad City International Airport (ITARP Project Log #09157). As a result of the survey, which included 88 acres of discontinuous parcels

around the airport, previously recorded Archaic site 11RI739 was relocated and the boundaries expanded to 22,500 m<sup>2</sup>. The site occupies a well-drained sand and gravel terrace ridge within the floodplain of the Rock River. A surface collection yielded 282 pieces of lithic debitage and flake tools, including the base of a Middle Archaic side notched point. Unfortunately deep stripping for construction activities had destroyed 14,500 m<sup>2</sup> (64%) of the site area, leaving only 8,000 m<sup>2</sup> (36%) of the site intact.

NISD used a backhoe to mechanically remove ten test trenches, covering 800 m<sup>2</sup> (10%) of the intact site area, to look for subsurface features. No cultural features were located; the site was recommended as ineligible for the NRHP without the need for further work.

#### Central Illinois Survey Division

The Central Illinois Survey Division (CISD), directed by Dale McElrath, is based at the University of Illinois at Urbana-Champaign campus. CISD is responsible for cultural resource compliance work in Districts 3, 5, and 7, occasionally taking on additional projects in Districts 1 and 8, as necessary. Permanent field staff includes Ian Fricker (assistant district archaeologist), Mi-

chael Barnes, and Matthew Cross (assistant crew supervisors). Additional field personnel are incorporated on a seasonal basis.

In 2009, CISD submitted 35 Phase I survey reports and undertook data recovery excavations at 11ML627. CISD also continued Phase I survey of FA 322/US 51 (US 51 South), in collaboration with the American Bottom Survey Division. The US 51 South survey and 11ML627 excavation are both detailed in this report. In addition, Fricker delivered a presentation on cultural resource survey to the *East Central Illinois Archaeological Society* (ECIAS) in February. The presentation outlined the function and importance of Phase I survey, as well as different survey techniques used. Certain large-scale surveys conducted by CISD, such as Prairie Parkway and US 51 South, were also summarized.

### District 5

#### Brumhead Site, TR 135/2125 N (SN 057-4926 over Crooked Creek to CH 21 [2600 E]), Roadway Widening, McLean County

Data recovery excavations were undertaken in the fall of 2009 at the Brumhead Site, 11ML627, located south of Lexington, Illinois. 11ML627 is a multi-component site, containing a historic period Euro-American component and an unspecified prehistoric component. The site was discovered by ITARP in the spring, during Phase I survey for the widening of Township Road 2125 North (ITARP Project Log #09075). 11ML627 is situated in upland south of Crooked Creek, at the intersection of three agricultural fields and a small pasture. Like



Machine excavations, Nineteenth Century, Brumhead site, McLean County (above); sleightbells, Nineteenth Century, Nativity site, Will County (top left).

many farmsteads of this age, it was established near the interface between open prairie and the wooded area surrounding a creek or other drainage. This interface area allowed prehistoric inhabitants and early settlers access to a diverse spectrum of natural resources from both woodland and prairie ecosystems. The presence of both prehistoric and historic components at 11ML627 demonstrates the attractiveness of the site's location.

Historic material found during survey included blue rococo edged whiteware, early polychrome handpainted whiteware, flown blue transfer printed ironstone, lead-glazed redware, and salt-glazed stoneware (ca. 1830–50). Prehistoric material was limited to a small amount of chert debitage and a single core. The documentary evidence was largely consistent with the historic material observed. According to General Land Office records, the associated property was initially purchased by Joseph Brumhead in 1835. The deed was not granted until 1837, but was subject to pre-emption right. This presumes that Mr. Brumhead was a resident on the property prior to 1835. None of the available historic mapping sources indicate a residence at this location. The earliest structurally annotated map of the project area was published in 1874 by Warner and Beers. This map indicates that the original parcel had been subdivided, and that the site area was owned either by A. B. or H. B. Downey.

According to this and other historic mapping sources, the road itself appears to have been significantly rerouted during the late nineteenth century. Also, the surface material scatter was present on either side of the existing road. This led to some concern that expansion of the existing ROW, however limited, might potentially impact sensitive features at 11ML627. Given



the site's research potential as a short-term, early nineteenth-century farmstead, mitigation of the site was recommended.

Prior to excavation, Ken Farnsworth conducted a metal detector survey across the site area. Several iron and steel artifacts were found, including an axe head, awl, kettle rim, two knife blades, a fork, and a hoe fragment. Other notable findings include two brass buckles, a brass curry comb, and a lead-filled copper button featuring a deer design. A disturbed plowzone was present across the entire site area, even in the pasture, which was formerly planted in row crops. A backhoe outfitted with a ditch-shaping bucket was employed to remove the plowzone in order to expose any intact features beneath. Nine cultural features were identified, including a keyhole cellar, four pit features, three historic postmolds, and what appears to be a shallow, rectangular privy pit. Nearly all of these were found on the south side of the road, with the exception of one pit feature, F6. The latter appears to be prehistoric in age, given the presence of lithic debitage and a chert hammerstone, as well as the absence of historic period material.

The remaining eight features are all historic in age. The keyhole cellar contained the largest sample of building material, including soft-paste brick, square/cut nails, and flat window glass. The cellar also contained a large amount of domestic debris, including a paneled, flown blue transfer print bowl and a metal cooking bowl, approximately 28 cm in diameter. Also of note, an 1834 large cent was recovered



U.S. large cent, ca. 1834 (right); flown blue bowl interior base and exterior base fragments (above) 1845–1860, Brumhead site, McLean County.

from the machine-scraped surface but was not associated with any particular feature.

Based on the recovered data, 11ML627 indeed appears to represent the residence of Mr. Joseph Brumhead, one of the earliest settlers in this part of McLean County. Mr. Brumhead was laid to rest not far from his pre-Civil War era homestead, on land still owned by one of his descendents.

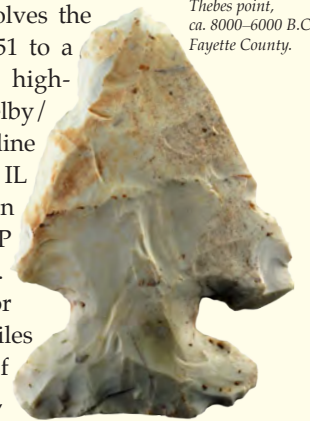
## Districts 7 and 8

### US 51 Expansion, Shelby, Fayette, Marion, Clinton and Washington Counties

The project involves the expansion of US 51 to a four-lane divided highway, from the Shelby/Christian County line in the north to the IL 177 interchange in the south (ITARP Project Log #08048). The survey corridor stretches over 60 miles across portions of Shelby, Fayette, Marion, Clinton, and Washington Counties and varies in width from approximately 985 feet at its narrowest point, to over four miles wide in the vicinity of Vandalia, Illinois. The proposed expansion will incorporate much of the existing US 51 right-of-way, although the final design will likely include bypass alignments around certain municipalities. These include, most notably, Centralia, Ramsey, and Vandalia. The entire corridor covers 47,512 acres, including over 10,000 acres of municipal area.

ITARP 2008–09 survey efforts concentrated on examining readily accessible cultivated lands to maximize their coverage. Surveys to date have examined 5,617 acres and identified 268 archaeological sites and 317 find spots. Of this total, 3,310 acres were surveyed, 147 sites were identified or revisited, and 158 find spots were located in 2009.

Prehistoric sites have been identified across the varied landscapes traversed by the US 51 corridor. In general, prehistoric occupation of the upland portion does not appear to have produced especially dense or complex habitation sites. Based on the results of this survey thus far, it appears that occupation of the ridged drift in the Vandalia area seems to have been significantly more intensive than that seen on the till plains of Shelby and northern Marion Counties. All of the upland sites recommended for further



Thebes point, ca. 8000–6000 B.C., Fayette County.



evaluation produced fire-cracked rock (FCR) in surface assemblages. However, no prehistoric ceramics have been recovered from any of these sites to date. By contrast, surveyors have observed evidence of intensive, multi-component habitation on the Kaskaskia River floodplain and western bluffcrest, as well as the Crooked Creek bluffcrest north of Central City. Further survey will focus primarily on these areas, as they demonstrate the highest potential for intact habitation sites. In addition to standard survey techniques, geomorphological testing will be employed to examine floodplain and bluffbase deposits for buried cultural materials in the Kaskaskia River valley.

Recovered historic assemblages range from a few non-diagnostic pieces of ceramics and glass, suggestive of short-term occupation sites, to large collections of ceramics, glass, and historic debris indicative of much more permanent occupations, with diagnostic artifacts dating from ca. 1830 through at least the early decades of the twentieth century. Evaluation of historic sites and site components is underway, and recommendations will follow.

### Western Illinois Survey Division

The Western Illinois Survey Division (WISD) has offices in Jacksonville and

Macomb that are directed by Robert N. Hickson and David J. Nolan, respectively. In addition to the aforementioned, Richard Fishel (project archaeologist) is responsible for many of the larger testing and excavation projects conducted in IDOT Districts 4 and 6. Susan Nolan in Macomb and Rose Smith at the Jacksonville facility currently function as lab supervisors and office managers. The WISD staff consists of both full-time employees and a small but fluctuating number of seasonal or part-time help. The former consist of Trudi Butler (analytical assistant), Jennifer Edwards-Ring, Bob Monroe, Jim Pisell, and Dan Smith (statewide surveyors/crew chiefs). Field and lab personnel include Chad Boehlke, Shannon Kirby, and Mike Welty. Macomb is also the location for one of ITARP's two flotation-processing facilities in the state.

In 2009, the WISD offices undertook test excavations at ten different archaeological sites throughout the western part of the state and submitted six reports detailing the results of such Phase II work. In ad-



*Pedestrian survey, Macomb Bypass, McDonough County (above); Late Woodland projectile points (left, top and middle); Archaic projectile point (left, bottom), US 51 Expansion, Fayette County.*

dition, 70 Phase I Archaeological Survey Short Reports were submitted to the IDOT during the year. Some of the more interesting highlights of these investigations are briefly summarized below, along with several notable research projects. A number of WISD staff also gave presentations about archaeology to various schools and community groups and participated in a variety of other public and professional outreach activities.

Fishel and Butler assisted the Western Illinois Museum in Macomb by setting up a display of regionally recovered prehistoric ceramics as part of the exhibit entitled "Clay Works: Industry and Art." They also gave a series of presentations to school groups and local audiences about different facets of the subject. While the Macomb area is well known for its nineteenth and twentieth century potteries, such as the Haeger Pottery, the use of abundant local clay sources to form vessels extends back at least two millennia. The display included pottery specimens ranging from Marion Thick, the first aboriginal ceramics in the area, to



*Parker Heights Rock Shelter, Adams County.*

# Protecting and Preserving Mounded Sites



Archaeological sites in Illinois continue to be destroyed or impacted as suburban expansion and industrial developments expand into less developed regions. This expansion requires the construction of new transportation networks. IDOT's transportation archaeology staff often encounters early mound and burial sites as well as pioneer cemeteries while conducting surveys for these projects. Such sites are also very important to the former native inhabitants of Illinois. To better manage these

sensitive resources, IDOT, in cooperation with the Illinois Historic Preservation Program, has had ITARP undertake a systematic reinventory of all burial sites within areas effected by transportation projects. Many of these sites have not been revisited since their initial cataloging in the 1930s. The reassessment of burial sites is housed in *the Illinois Inventory of Burial Sites*, a database maintained by ITARP.

With our new awareness of the rapid destruction of burial sites, ITARP district staff have engaged

in numerous volunteer partnerships with groups such as the Quincy Park District, the Illinois Department of Natural Resources, and the Jo Daviess Conservation Foundation to preserve mound groups in northwestern and western Illinois. These activities involved volunteering professional expertise, providing field assistance, and helping in promotion and acquisition activities. These volunteer partnerships have helped to bring several privately owned mounded sites into public ownership.

late prehistoric Oneota vessels, many of which were recovered during IDOT-sponsored projects in the Macomb area.

Several Western Illinois Survey Division staff members were also involved in another interesting weekend outreach project conducted in partnership with the North American Archaeological Institute (NAAI), a locally based not-for-profit research group, and the Quincy Park District. This work involved mapping and non-invasive reassessment of aboriginal burial mounds and related possible earthworks in the Parker Heights (11A1) and Indian Mounds Park (11A2) groups. The fieldwork was followed by a standing room only public bus tour of these and other mounds in the Woodland Cemetery group that was lead by Steve Tieken (NAAI) and Dave Nolan in May; there was a waiting list of over one hundred interested individuals. One of the highlights of the tour was the participation of several tribal representatives from the Gabrieleno/Tongva, Nueta (Mandan), and Potawatomi (Prairie Band) nations.

## District 4

### FAP 315/IL 336, Peoria to Macomb Survey (I-474 to Macomb Bypass), Peoria, Fulton, and McDonough Counties

This proposed highway corridor will link Peoria to Macomb with a four-lane limited access freeway/expressway (ITARP Project Log #05084). This multi-year corridor study resulted in the identification of 311 archaeological sites and 356 nondiagnostic find spots, with Early Archaic and Historic age components the most common. Of the 311 sites, 34 within the final project limits are recommended for additional archaeological investigations. The final survey report, Compliance Report No. 130, was submitted to the ITARP Production Office in 2009.

### FAP 665/IL 116 Improvements (Media to IL 94 Intersection) Addendum, Henderson County

Phase I survey and Phase II testing was undertaken in conjunction with this modest-

scale road widening and improvements project (ITARP Project Log #08001). The addendum limits consist of the western half of a previous IDOT survey (ITARP Project Log #01021) undertaken by WISD personnel that also included the area east of Media to a point located .7 miles west of the US 67 intersection near Roseville, in rural Warren County. Three new sites were documented as a result of the addendum survey (11HE571-573), along with revisits to two previously identified sites (11HE443 and 451). The latter were subsequently subjected to subsurface evaluation to determine whether significant archaeological deposits were present within the narrow (5-7 m) strip of right-of-way (ROW) that would be taken as part of the planned road improvements. This consisted of the excavation of a series of gridded auger tests and 1 x 2 m hand units, followed by machine-aided plowzone removal at each site.

At 11HE443, which generally dates to the Archaic period, relatively dense amounts of flint knapping debris were encountered on the plowed surface and in the plowzone, but



at either site and cultural resources clearance was recommended for the project in a summary memo submitted to the IDOT in April. Archaeological Testing Short Reports are currently pending for 11HE443 and 11HE551.

**FAU 6775 Grange Road/  
Summit Drive (IL 8 to US 24),  
Tazewell County**

The proposed project consists of the reconstruction of the existing alignment and the construction of 3,100 feet of a new alignment to connect Grange Road and Summit Drive, near the northern edge of East Peoria, Illinois (ITARP Project Log #06064). ITARP personnel surveyed the proposed project during the spring of 2006 and identified three upland sites (11T511, 11T512, and 11T513). 11T512 and 11T513 were small Archaic period scatters that were not subjected to further work because they were located outside the proposed alignment or lacked obvious significance, respectively. The Danz site (11T511) consists of the remains of a historic occupation that also produced a few pieces of flaking debris that are suggestive of an apparently minor unidentified

prehistoric component. The historic artifacts and documentary sources indicate the site assemblage dates to the period ca. 1845–75. Given its relatively short occupation span and the fact that it did not appear to have been complicated by more recent occupations, Phase II evaluation of the narrow ROW portion of 11T511 was recommended.

only two vestigial concentrations of flaking debris were encountered in the subsoil deposits within the 175 m<sup>2</sup> area that was mechanically exposed to look for features. Middle to Late Woodland use of 11HE551 was suggested by projectile point fragments found on the surface during survey, although scattered Archaic remains were encountered during the hand and machine excavations. Only a single small pit feature was discovered within the 215 m<sup>2</sup> area opened with machine blocks. Unfortunately, no temporally or functionally diagnostic artifacts were associated with this feature or the other sparse subsurface remains found at either site. Given this, no further work appears to be warranted in the proposed ROW



The project-specific parts of the Danz site were then subjected to comprehensive surface collection, a metal detector survey, and incremental machine-aided plowzone



*Machine excavation, Golden Bluff site, Fulton County (above); grooved axe, 6000–3000 B.C., Henderson County (top left); reconnaissance of US 34 alignment, Henderson County (top right).*

removal in March 2009. Twelve excavation blocks exposed a total of 963 m<sup>2</sup>; four historic pit features, and 41 square post molds were identified. The sampled features yielded few associated artifacts or evidence for their original function. Since the tested portions of the Danz site failed to produce significant information and the primary habitation focus is probably located west of the current project limits, no further archaeological investigations appear to be warranted within the proposed ROW. Cultural resources clearance was subsequently recommended in a summary memo sent to the IDOT. An ATSR is currently in progress that details the results of this work.

### District 6

#### FAP 685, IL 96 Culvert Replacement over Unnamed Ditch, Hancock County

This proposed project (ITARP Project Log #09032) involves the replacement of a culvert on IL 96 and improvements to the approaches. Three archaeological sites were recorded during this project: 11HA821, 11HA955, and 11HA956. Two of these, 11HA821 and 11HA956, lie outside the currently defined project limits. The Hutson View site (11HA955), however, is a large (ca. .7 ha) prehistoric and historic occupation bisected by IL 96; approximately 75 percent of the defined site limits lie within the project boundaries. Phase II testing was conducted at 11HA955 that involved the excavation of seven 1 x 2 m units. This excavation revealed quantities of primarily late nineteenth century historic materials, prehistoric lithics, shell- and grit-tempered ceramics, as well as one prehistoric pit and one historic feature. Because of its long-term occupation and mixed provenience, no further testing is recommended for the historic component at

11HA955. However, the aboriginal components, which consist of both later Late Woodland and late prehistoric occupations, are recommended for further archaeological investigations. Evaluation of 11HA955 indicates that the prehistoric component is significant and mitigation is recommended for the prehistoric component of the site.

#### Wetland Mitigation Bank, Brown County

Limited Phase II testing was undertaken at the Thompson site (11BR18) in anticipation of a proposed parking area that is depicted on design plans for future development of an IDOT-owned Wetland Mitigation Bank (ITARP Project Log #01056). This property consists of 1,650 acres of bottomland and adjacent bluff slope that are situated just below the mouth of the LaMoine River in the northeastern corner of Brown County. ITARP personnel have evaluated a series of prehistoric and historic sites on this property for the IDOT over the last several years. John McGregor (UIUC) originally recorded the Thompson site, a well-known Middle Woodland (Hopewell) habitation, in 1952. The recovered ceramics subsequently were used by William E. Taylor, Jr. as part of a Masters thesis that attempted to seriate 18 Illinois Val-



ley sites based upon observed differences in their respective ceramic assemblages.

ITARP personnel excavated seven 1 x 2 m hand units in the 11BR18 site area during the second week of August 2009. These units documented that much of the proposed project area has been seriously disturbed as a result of the occupation and destruction of a farmstead and related outbuildings that date from the late nineteenth to mid-twentieth century. However, Middle Woodland lithic and ceramic remains are interspersed with these historic materials across most of the project area. At least one possibly intact aboriginal midden area and a single basin-shaped feature remnant were discovered during testing. This 15 cm deep pit exhibited two distinctive fill zones, the uppermost of which produced an undecorated, reconstructable Middle Woodland vessel section. Based upon these findings, additional machine stripping of the project-specific portion of the site is recommended prior to construction. An ATSR is currently pending.



Total station mapping, US 67 project, Morgan County (above); remote sensing, Golden Bluff site, Fulton County (top right).

## District 8

### FAP 310/US 67 Godfrey to Madison/ Jersey County Line, (Structure Demolitions), Madison County

The project consists of a series of standing structure demolitions associated with the construction of a new four-lane highway connecting Alton and Jacksonville, Illinois (ITARP Project Log #09053). The DeBaun site (11MS2258) was recorded as an early 1830s hand-hewn timber frame cabin and mid-nineteenth century house with associated standing smoke house located along the eastern edge of an upland ridge overlooking an unnamed tributary of Little Piasa Creek in rural Madison County. The entire site was scheduled for impact by the proposed highway improvements so it was subjected to comprehensive machine scraping, which exposed ca. 1,600 m<sup>2</sup> in 12 separate excavation blocks. As a result, 23 pit or structural features and 15 post molds were identified and excavated by WISD personnel during a three-week period in June and July. Notable archaeological features include a large cellar (4.2 m x 3.9 m x 82 cm deep), a sizeable cistern (3.65 m deep), and a double-sided limestone fireplace. ABSD personnel subsequently made a detailed architectural evaluation and recordation of the standing structures; the smoke house was demolished at this same time and excavations were undertaken below the superstructure after it was removed. A large assemblage of decorated early nineteenth century refined ceramics and other domestic materials were recovered as a result of these excavations. Based upon the archaeological data and associated records, a significant 1820s component is present at DeBaun. Given its early dating and excellent state of preservation, the site was determined eligible for listing on the NRHP; the negative affects of construction were mitigated through the excavations briefly outlined here. A report of investigations is currently in progress.

### American Bottom Survey Division

The ABSD coordinator, Brad Koldehoff, and, assistant division coordinator, Dr. Joseph Galloy, direct a team of archaeologists and support staff, responsible for project survey and site investigations in the southern third of Illinois and, most importantly, the American Bottom, a region of abundant and complex archaeological resources. In August, Brad Koldehoff became cultural resources coordinator for ITARP, and Joseph



Early Eighteenth Century DeBaun site, Madison County: shell-edged plate fragment (top); excavations (center); double fireplace (bottom).

Galloy took over as ABSD coordinator. Charles Witty handles Statewide Survey Division projects, Jeffrey Kruchten is the site director for the MRB project, and Patrick Durst conducts FAP 310 project investigations. Jim Burns and Mat Terry are archaeological technicians, Julie Bukowski is the skeletal analyst, and Miranda Yancy is the GIS specialist. The Belleville and Wood River Labs are supervised by Tricia Wright and Kelly Arnold, respectively; Amanda Gifford oversees the Godfrey Flotation Lab. Mera Hertel is the ABSD graphic designer, illustrator, and photographer.

In addition to handling the nearly 100 new survey requests received from IDOT

in 2009, ABSD has been involved in two multi-year projects: the extension of I-255 (FAP 310) from the Mississippi River bluff line in Madison County into the uplands of Jersey County, and the Mississippi River Bridge Project, which includes a new bridge across the Mississippi River at St. Louis, and more importantly, the realignment of I-70 northward through East St. Louis. The I-70 realignment and associated roadwork passes through the East St. Louis Mound Center (11S706), a large Mississippian period mound and town site second only in size and complexity to nearby Cahokia. Investigations here have produced hundreds of well preserved Mississippian features





Lindley bridge remains, mid-Nineteenth Century, Little Piasa Creek, Madison County.

### District 8

#### FAP 310

The 2009 field season for the FAP 310 project included testing and mitigation of sites in northern Madison and southern Jersey Counties. Investigations were completed within areas to be impacted by the construction of a four-lane expressway linking Godfrey and Jerseyville. This work resulted in the testing of 14 previously recorded sites and the delineation and/or testing of six new sites.

Of the six new sites investigated, all but one were subjected to Phase II testing. Three of them (11MS2334, 11MS2338, and Field Site #98024-87) consisted of nondiagnostic prehistoric lithic concentrations within a plowzone context. These sites could represent evidence of ephemeral landform use during the Archaic period. A fourth lithic concentration (Field Site #98024-88) also yielded mid- to late-nineteenth century materials but no subsurface features were present.

The Lindley Bridge site (11MS2339) contains the ruins of a mid-nineteenth century bridge situated on the north and south sides of Little Piasa Creek. Lindley Bridge is located immediately adjacent to the project

limits and as a result should not be impacted by construction. The abutments were constructed of rough-cut limestone masonry and represent a crossing associated with the "Old Road" between Alton and Jacksonville. This bridge is illustrated in the 1873 Madison County atlas, and it was photo-documented by ITARP this spring.

The WWTDD site (11MS2366) was discovered by shovel testing a fallow field covering a large ridge near Godfrey. Numerous prehistoric lithics were recovered along with mid-nineteenth century historic artifacts. Subsequent Phase II testing revealed a potential Late Archaic pit feature as well as four mid-nineteenth century historic features (three pits, one post cluster), all of which were completely excavated. One of the pits may represent a shallow subfloor cellar or possibly a privy vault. A Merom/Trimble-type projectile point was recovered from the site during machine stripping.

All of the revisited sites were subjected to Phase II testing. Eight of them (11MS813, 11MS1027, 11MS1265, 11MS1266, 11MS1612, 11MS1613, 11MS1623, and 11MS1635) produced only non-diagnostic prehistoric lithic concentrations from plowzone contexts. The GM&O site (11MS806) yielded a Middle Woodland Snyders-type projectile point, but no subsurface features were present. The Meeks Farm site (11MS1614) produced a possible Early Archaic lithic scatter within an intact E-horizon. Recovered artifacts include a biface, an axe fragment, and a Dalton-like end scraper. A survey

of the Meeks Farm site also recorded an I-House dwelling that exhibited vernacular Greek Revival architectural elements suggesting construction ca. 1840–60. The structure was photographed and documented to record characteristics of the original framework, hardware, clapboard siding, and architectural details. No subsurface features were located, likely due in part to disturbance from modern development of the residential lot.

The Quarry Road site (11JY397) is located in southern Jersey County overlooking Little Piasa Creek. Phase II testing delineated 55 pit features, all of which were fully excavated. While most features appear to date to the Late Woodland Patrick and/or Sponeemann phases (A.D. 650–900) a few lacked ceramic artifacts and may represent Archaic-period deposits. Numerous Archaic diagnostic artifacts were recovered from plowzone context during machine stripping. These include Helton-type projectile points, Dalton-like end scrapers, an axe fragment, and a Thebes/St. Charles-type perform.

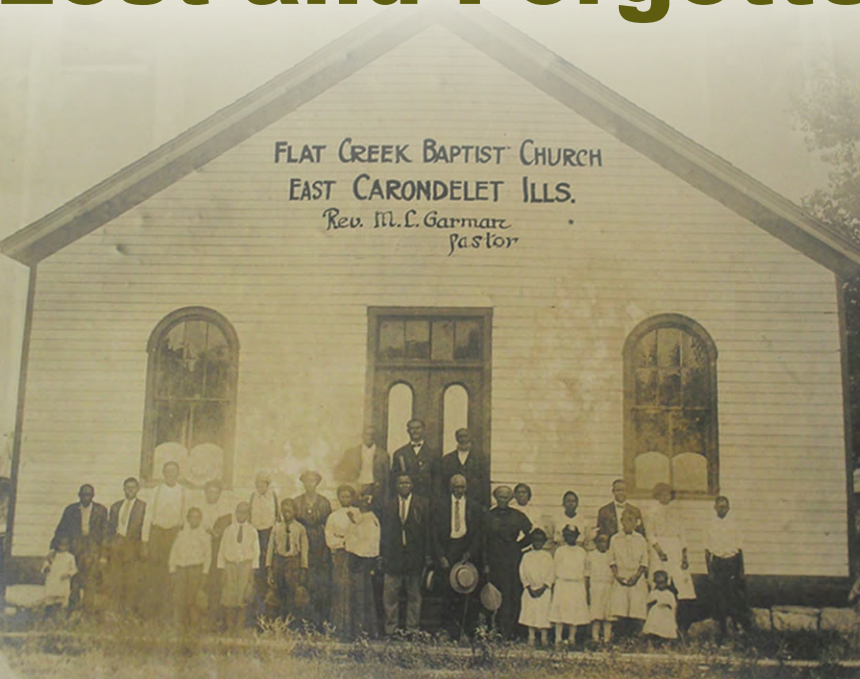
The Elbert Watt site (11MS1843) is located on a long narrow ridge overlooking a large tributary of the West Fork of Wood River Creek. The previously reported site limits were expanded in the spring as a result of additional shovel testing on the eastern portion of the ridge. Phase II testing conducted during late fall revealed a cluster of 11 shallow pit features that were completely excavated. Although little material was recovered from these features, a Middle Woodland affiliation for all is supported by the recovery of diagnostic ceramics from a few of the pits. Snyders- and Gibson-type projectile points were recovered during machine stripping from the vicinity of the area with features. Also, several possible Late Archaic lithic scatters were identified within



Late Woodland pit, A.D. 650–900, Quarry Road site, Jersey County.

continued on page 42

# Lost and Forgotten Cemeteries



lages of Cahokia, Prairie Du Pont, and Carondelet, Missouri. The first house of worship was a log church, and in 1873 the congregation built a large wood-framed building.

Of note, the Flat Creek Cemetery contains the grave of Jack Jackson, a member of the Flat Creek Church who belonged to the 6<sup>th</sup> U.S. Colored Heavy Artillery during the Civil War. Jackson served on

Rural Illinois is dotted with small cemeteries dating to the nineteenth and early twentieth centuries. With the passage of time, many of these cemeteries have fallen into disrepair and are no longer marked on maps or listed in state records. Some are family plots, while others are vestiges of defunct communities and congregations. Across all ITARP divisions, when such cemeteries are encountered in project areas, they are recorded. In 2009, Mera Hertel, with other American Bottom Survey Division staff members, continued working closely with local historical and genealogical societies to locate and document lost and forgotten cemeteries across the American Bottom region. This effort continues to clock numerous volunteer hours spent investigating out in the field, interviewing descendants, researching archives,

and helping organize clean-ups. A main focus of this research has been the identification and documentation of cemeteries associated with early African American communities and congregations. Some of these cemeteries hold secrets about much of Illinois' unwritten history.

Hertel's recent research of the Flat Creek Cemetery in East Carondelet, revealed that the Flat Creek Missionary Baptist Church is the oldest Black church known to date in Illinois, established in 1809. This was the year Elder James Lemen brought about the split within the Baptist Church, dividing it forever on the issue of slavery. Lemen named his new fellowship The Friends of Humanity Baptist Church, which accepted only non-slaveholders as members. Lemen originally came to Illinois in 1786 from Virginia after making a secret compact with Thomas Jefferson to begin a movement against slavery in the Northwest Territory, initially through the churches and ultimately through the establishment of the new Illinois state government. His efforts succeeded—the Flat Creek Church sprang up just four miles southwest of Cahokia in a brush harbor on the shore of the Mississippi River, in the vicinity of Lemen's first established churches and along one of his main preaching circuits. Original members of the church were likely descendants of French slaves of African and Native American descent from the vil-

the front lines in numerous skirmishes and famous battles, such as the Fort Pillow Massacre and the battle at Milliken's Bend during the Siege of



Vicksburg, where he survived a bullet to the head. "Big Jack" Jackson played a key role in recruiting much-needed Black troops for the Union when dispirited white officers had trouble enlisting these men and allaying their fear of racist white authority.

A major clean-up effort at the Flat Creek Cemetery is slated for spring 2010. Members of the Flat Creek Missionary Baptist Church, the Prairie Du Pont Levee District, the Buffalo Soldiers Motorcycle Club of Southern Illinois, and the International Order of Oddfellows have worked together with Hertel and Judy Jennings, St. Clair County Genealogical Society Cemetery Division, to make this event possible.

Hertel and Jennings first collaborated in 2005, having a mutual interest in preserving cemeteries and pioneer history. They began traveling around the local area, collecting information and searching for new sites to record. In 2000, Jennings began documenting the Booker T. Washington Cemetery, a massive Black cemetery in St.

Clair County with more than 12,000 graves. Combining their talents and with help from local and county authorities and other outreach organizations, they continue their efforts to document and clean up this significant site.

## Before Clean-up



Hertel recorded the Freeman African School and Cemetery site in 2007 after ITARP statewide archaeologist, Charlie Witty, identified the site during a survey near Freeburg. At the 2009 African American Discover Your Roots Conference in St. Louis, Hertel became acquainted with a descendent of the Freeman family, Sarah (Freeman) Cato, whose great-great-grandmother was born July 4, 1800. In 1816, she walked to Illinois from Maryland during the "Year Without a Summer," a meteorological phenomenon generated by the major eruption of Indonesia's Mount Tambora in 1815. Despite

servitude, and on New Year's Day in 1819, purchased his first tract of an eventual 315 acres of land, a feat that was almost unheard of at that time. The couple married

December 23, 1819, after which according to family legend, Mary was kidnapped and taken back to the East Coast by what came to be known as the Reverse Underground Railroad, where freed slaves were sold back into servitude. Unwilling to relinquish his new bride, Richmond managed somehow to make his way to Baltimore, arriving with only twelve cents in his pocket and retrieved Mary. Once back safely in Illinois, they built a farmstead, dairy and school, and raised fourteen children. Cato's family's written records confirm the existence of an underground railroad running from the Freeman property to O'Fallon, Illinois, where slaves would try to make their way on to Canada; the family was said to have run the railroad from their home until slavery ended.

In the uplands of St. Clair County, near Swansea, Hertel and Jennings recorded and photographed the Badgley family cemetery, one of the oldest in St. Clair County. David Badgley, pioneer minister and well-known historical figure in Illinois, is buried with his family on his original 1814 homestead. They conducted a cemetery tour this summer for Badgley family descendents from Virginia.

In the summer of 2009, Hertel, Jennings, and Miranda Yancey recorded the headstones at the early twentieth century Brook Cemetery in Brooklyn, Illinois—a Black community founded in 1829 as a freedom village. Serving as a river, railroad, and religious hub, it is not surprising that Brooklyn also served as a main stop on the Underground Railroad. Yancey, ABSD GIS specialist, has spent numerous hours

pated by the Belt family in 1818. That same year Richmond Freeman completed his indentured

referencing historic plats to modern maps, plotting the original town of Brooklyn and the homes and businesses of its residents. She is currently compiling a statistical analysis of historical data studying incomes and occupations of the town's occupants during the industrial era. Working with citizens and members of the Historical Society of Brooklyn, a much older African American cemetery was located within the town and is now currently under investigation.

## After Clean-up



Obtaining information on and organizing restoration of these sites is predominately credited to the willingness and

concern of community residents, church and city officials, and numerous interested clubs and organizations. They volunteer information, time, and manual labor. ITARP volunteers appreciate the opportunity to play a part in these achievements, lending their expertise in research, cartography, and site documentation. These kinds of projects give us all the chance to learn and work together, strengthening not only our cultural heritage, but also our cultural comradery.

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the fact that no crops grew that year and Illinois recorded an inch of ice that August, Mary Graham [Freeman] survived the trek and was emanci-





Total station mapping, Quarry Road site, Jersey County.

an E-horizon context. These produced at least two Osceola-type projectile points.

The DeBaun site (11MS2258) was previously investigated by ITARP in 2007. At the time, the site contained a ca. 1830s hand-hewn timber framed cabin that was recorded but has since been demolished. The property was purchased and settled by George DeBaun and his family in 1829. The DeBaun family occupied the land until ca. 1865 when Irish immigrant Patrick Waters purchased it; his family owned the farmstead well into the twentieth century. The site was revisited in 2009 following IDOT acquisition of the remainder of the site area, which contained the remnants of three extant nineteenth century structures. One of these was a ca. 1840–60 I-house dwelling with vernacular Greek Revival architectural elements. This dwelling was constructed in three major stages using divergent framing techniques, including timber framing. The other two buildings included a brick smokehouse and a converted garage that was originally a timber-framed barn. All three structures were depicted in a ca. 1873 illustration of the Waters farmstead. ITARP documented the

structures in photographs and line drawings. Mitigation of the site's subsurface deposits included the complete excavation of twenty historic-period features: 11 pits, 3 basins, 2 cisterns/wells, 1 cellar, 2 limestone foundations, and deposits within the smokehouse interior. Most of these contexts contained ca. 1825–40 domestic material culture, and all features were completely excavated.

### Mississippi River Bridge (MRB)

#### The East St. Louis Site

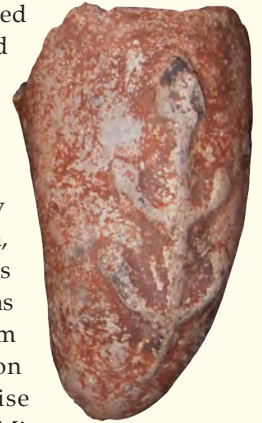
After more than a decade of planning, the new Mississippi River Bridge (MRB) project is now coming to fruition. This project is considered vital to the St. Louis region's continued economic growth. It includes a new bridge across the Mississippi River that will alleviate congestion on the Poplar Street Bridge (PSB), which now carries Interstates 55, 70 and 64. I-70 will be routed onto the new crossing to the north of the PSB; then, the I-70 Connector will run to the southeast, through the former St. Louis National Stockyards to connect with a rebuilt Tri-Level Interchange.

ITARP began conducting preliminary surveys of MRB impact areas during the mid-1990s. Since then, two large prehistoric sites have been identified, tested, and partially mitigated. These are the East St. Louis Mound Center (11S706) and the nearby Janey B. Goode (11S1232) site. The latter was

tested and mitigated from 2002–07, and testing of the East St. Louis site was conducted in 2008.

Second in size only to its mighty neighbor, Cahokia, the East St. Louis Mound Center was situated downstream Cahokia Creek on a topographic rise overlooking the Mississippi River. As the city of East St. Louis grew and industrialized during the nineteenth century, the mound center's visible presence on the landscape was blotted out. Although its mounds were leveled for borrow, filling and leveling to reduce the risk of flooding protected much of the site's remaining prehistoric deposits. Over the last few decades, archaeological work for transportation projects exposed portions of the site's civic-ceremonial precinct, but the location of the associated residential areas remained unknown until ITARP's 2008 testing revealed several early Mississippian dwellings in the stockyards.

ITARP began Phase III excavations at the East St. Louis site during the spring of 2009, focusing on the proposed impact areas for the I-70 Connector (ITARP Project Log #07128) and the MRB-associated Exchange Avenue Extension (ITARP Project Log #08080). This work was conducted entirely within the former St. Louis National Stock-



Burned posts (above); ceramic lizard/salamander (top right); copper atlatl (center), Mississippian, East St. Louis site, St. Clair County.



Woman holding shell cup, East St. Louis site, St. Clair County.

and wall-trench structures, many of which were rebuilt at least once. Also, several large, monumental posts (post pits) that had been emplaced early in the occupational sequence were subsequently pulled, and structures were erected over them. Often these structures were constructed later in the Lohmann phase, although some clearly derive from the Stirling phase (A.D. 1100–1200). The Stirling-phase component is widespread but smaller than the previous component, and also appears to exhibit both early and late occupations. A very late Stirling-phase occupation appears to be restricted to one small area of the site. No late Mississippian occupations are present, suggesting that East St. Louis met its demise earlier than did Cahokia.

yards, which is located immediately north of the East St. Louis city limits in Fairmount City, Illinois. Most our efforts there fell within the defined limits of the site's Stockyard Tract (11S706/5) with the remainder in the National City Tract (11S706/4).

A total of 567 Mississippian features were excavated in 2009. Work in the I-70 Connector resulted in the completion of 336 features, including 64 structures, 193 pits, 10 post pits, 68 nonstructural posts, and 1 hearth. Investigations in the Exchange Avenue Extension right-of-way and in an adjacent 40'-wide utility easement resulted in the excavation of another 231 features, including 47 structures, 104 pits, 3 post pits, 74 posts, and 3 hearths. Despite widespread disturbance caused by historic period activities within the stockyards, the features are typically well preserved, and many were found intact beneath concrete pavement and building foundations.

The distribution of features throughout both project areas revealed a intensively occupied residential zone similar to those that have been observed at the Cahokia site. One significant aspect of our excavations this year was the further delineation of a substantial Lohmann phase (A.D. 1050–1100) component that was only hinted at during Phase II testing in 2008. It is likely that more than half of the excavated structures date from this first Mississippian phase. It also might be possible to identify early and late facets within the Lohmann phase. The early Lohmann facet is represented by small, rectangular single-post structures, whereas the late facet exhibits a mix of single-post

One highlight of the 2009 season was the excavation of Feature 181, a burned Stirling-phase structure. The shallow basin and floor yielded 21 arrowpoints; 2 chert hoes; a flintknapping toolkit consisting of 4 abraders, 3 chert cores, and associated debitage concentrations; several vessel fragments, including Ramey Incised jars; botanical remains including corn, acorn, grass, cane and preserved woven matting; and last, a 6 cm-tall red flintclay figurine depicting a kneeling female holding a shell cup or dipper.

#### **Old Eighth Street Site, Exchange Avenue Bridge, St. Clair County**

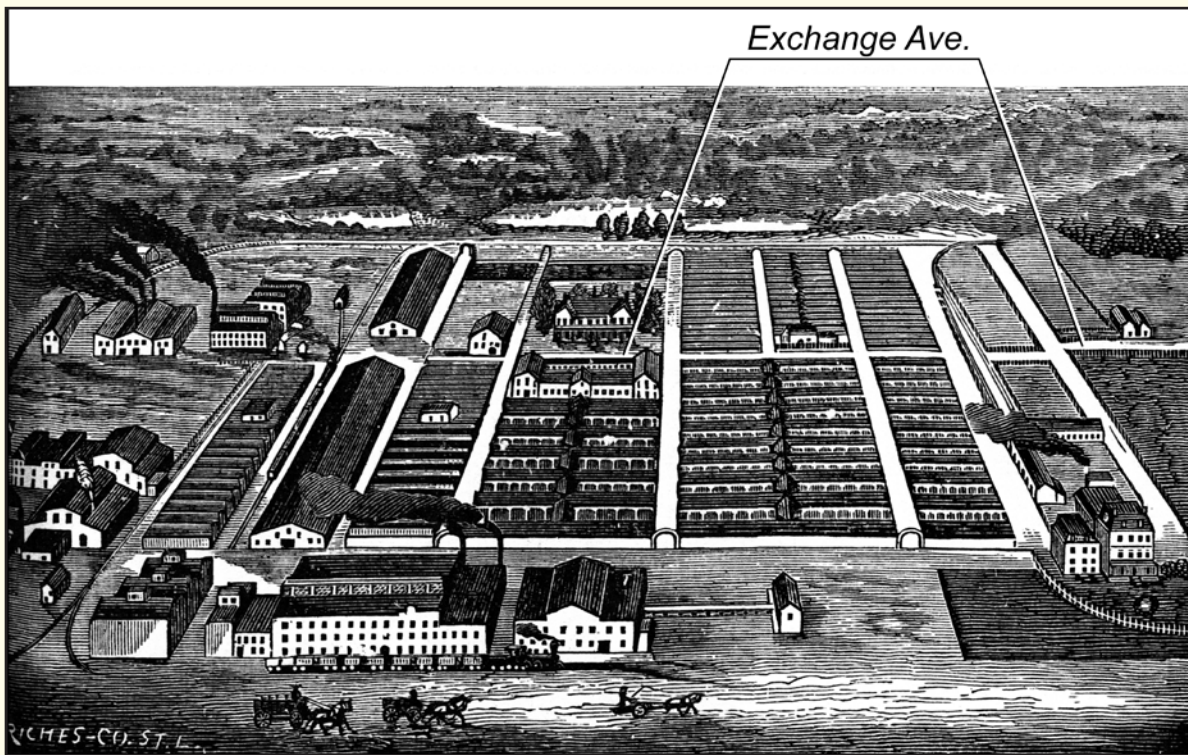
The Old Eighth Street site (11S1790) consists of two former residential blocks in East

St. Louis between 7th and 8th Streets and bordering Exchange Avenue. This area was investigated as part of the Exchange Avenue Bridge over Interstate-55/70 project (ITARP Project Log #08020), a component of the MRB project. Due to the presence of a thick layer of historically deposited cindery fill, the area was investigated using a trackhoe. Eighteen excavation blocks were opened, and no prehistoric deposits were located. Because the western portion of this area had been previously included as part of the East St. Louis site (11S706/6), the absence of prehistoric materials here redefined the site's boundaries.

Eighty features were revealed that are associated with the nineteenth and early twentieth century occupation of this part of East St. Louis. These features include 72 pits (most of them privy vaults), 6 cisterns, 1 cellar/crawlspace, and 1 fence line. The 1905 and 1950 Sanborn fire insurance maps, 1900 East St. Louis city directory, and 1900 federal census, reveal a socially diverse working-class neighborhood. The population included both black and white native-born Americans as well as white European immigrants. Many residents likely participated in the well-known migration of workers from rural regions to industrial centers in the late nineteenth century. Most appear to have been employed as non-skilled and skilled laborers, the former being most common. It is likely that most workers were employed at one of the nearby manufactories or at the National Stockyards. All of the features delineated were completely mapped and excavated by hand and/or machinery. The vast majority of the 72 pits were wood-lined, rectangular



Ceramics and glass, Nineteenth to early Twentieth Century, Old Eighth Street site, St. Clair County.



Lithograph, 1889 Exchange Avenue Stockyards, East St. Louis.

privy vaults between 3 and 7 feet deep. Although most features contained a wide variety of ca. 1900–30 material culture, some produced ca. 1860–1900 artifacts such as historical flasks and blob-top soda bottles. In general, the materials represent a wide variety of domestic refuse such as ceramics, bottles, spittoons, metal cookware, shoe leather, faunal remains, and toys. One feature even contained numerous and varied items from a chemistry set.

The detailed socioeconomic data for this period, along with materials from contexts of

varying ages, will provide an unprecedented opportunity to explore change in a turn-of-the-century working class neighborhood in one of America’s great industrial cities. Similar contexts have seldom been explored.

***Ninth and Exchange Site,  
Exchange Avenue Bridge,  
St. Clair County***

The Ninth and Exchange site (11S1791) is located at the intersections of 9th Street and Exchange Avenue in East St. Louis and was also investigated in conjunction with work on the Exchange Avenue Bridge (ITARP Project Log #08020). The affected area generally consisted of narrow wedges along each street corner that minimally expanded the intersection right-of-way. A backhoe was used to open four excavation blocks, revealing that most of the area was severely damaged by development, although one privy vault containing ca. 1860–70s material was identified and excavated.

***Belleville Street, US 50 to  
Stanton Road, St. Clair County***

This project (ITARP Project Log #09064) involved improvements to Belleville Street from Stanton Road to US 50, in Lebanon, Illinois. In the spring of 2009, ITARP conducted Phase II and III work on those portions of the Low-Tee (11S1735)

and William Pfeffer (11S204) sites within the county right-of-way on the south side of Belleville Street. ITARP also helped county engineers modify the improvements to avoid known mounds belonging to the Pfeffer site on the north side of the street.

At the Low-Tee site, 18 pit features were exposed and excavated. Three of these yielded Marion Thick potsherds and thus date from the Early Woodland period. Eight other pits derive from a Late Woodland occupation, while the remaining seven are culturally indeterminate.

Features excavated at the Pfeffer site include 22 Late Woodland pits, one Mississippian pit, and a Mississippian wall-trench structure that had been partially destroyed by the existing roadcut.



“Pike’s Peak” flask, Old Eighth Street site, St. Clair County.



**Current Research**

***The Archaeology of  
East Central Illinois Project***

Several years ago, in partnership with the East Central Illinois Archaeological Society (ECIAS), personnel at ITARP began a long-term project to identify and record the archaeological resources, both prehistoric and historic, situated within the east central portion of the state. We define this area as a nine county segment ranging from Ford and Iroquois in the north to Coles and Edgar in the south, to Piatt and Moultrie in the west and extending east to the Illinois-Indiana border. Significant river drainages that lie within this area



directed at assembling information about an enigmatic feature type in the American Bottom known as “truss trenches.” This term was created by the late Dr. Warren Wittry for linear trenches

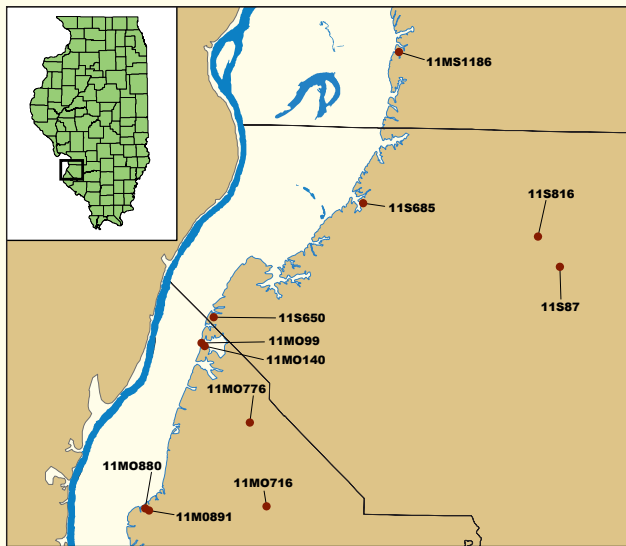
that he had discovered at the Holdener site in 1980. Two sets of trenches, one consisting of five trenches and another of nine trenches were identified. Each trench in the set was ca. 3 m long and from 50–75 cm in width; depths ranged from 1.00–1.45 m. The narrow, linear trenches consisted of two parallel lines that were slightly offset. He believed that posts marked the ends of the trenches and therefore interpreted these trenches as supports for burial platforms, hence the term “truss trench.” He believed that the trenches dated to the Late Woodland period, although there was little archaeological support for this conclusion.

include the Embarras, Iroquois, Kaskaskia, Sangamon, along with several larger tributaries of the Wabash. Additional aquatic natural resource areas that were attractive to prehistoric populations were the vast upland marsh/glacial kettle areas present in this part of Illinois. There are many aspects to this ambitious project. One primary objective is to revisit and evaluate the current status of the many mounds and mound groups that have been reported. We are also attempting to identify and contact individuals with artifact collections in order to document, record, and photograph their collections, and thus preserve this aspect of the archaeological record. Thus far, we have been fortunate to work with nine individuals/families whose collections represent Champaign, Coles, Douglas, Ford, Piatt, and Vermillion counties. Several of these collections are substantial, and detailed locational data were recorded by some of the individuals, adding to the archaeological value of the collections. Archaic components dominate these collections but Woodland components have also been identified. In time we will be making collection data available to the general public through publications, Internet sources, and public presentations as part of our public outreach activities.

### Slot Trenches in the American Bottom

Special projects coordinator, Andrew Fortier, initiated a research project in 2009

Since 1980 a total of 55 trenches, including those from Holdener, from 11 sites have been identified in the American Bottom. Trenches occur in pairs, small groups, lines or as isolated units. The age and function of these trenches are elusive. Cultural materials from the trenches are typically absent, except in the final fill zones that clearly post-date the actual use of these trenches. Two dates, one from Holdener and one from the Greenhouse site, date



to the Mississippian period. However, the dated material came from the upper-

most fill zones of the trenches, after the trench had filled in. The absence of posts in all 55 trenches, including those from Holdener, has raised serious doubts about their function as burial platforms. Moreover, it is clear that these trenches stood open for some time after their use, since silt laminae and niter-like mottles typify the lower zones of these trenches.

A more neutral term, slot trench, is proposed for this feature type. Two new dates from the Earl Kolmer site are from the Early Woodland and early Late Archaic periods but are probably unreliable since they were run on organic lenses. In both cases, however, Middle Woodland cultural materials were found in zones above where the dateable materials were derived. In at least half of the trenches from this region, Early Woodland Carr Creek phase materials have been found in or near



Slot trench plan view, Holdener site, St. Clair County (above); celt and grooved axe, private collection, Champaign County (top left); slot trench distribution in the American Bottom (top right).

the trenches. It is probable, therefore, that at least some of the trenches may actually date to the Early Woodland period.

The function of these trenches is still enigmatic. The fact that the trenches were not filled by their makers and are missing posts indicates that they are definitely not platform supports. Had posts been placed in these units they surely would have filled the trenches to stabilize the posts. The absence of burning in the fills argues against their use as specialized food processing or cooking facilities. It is possible that they functioned as some kind of storage facility, perhaps as short-term holding units for excess nut harvests. All of the trenches occur in the uplands in savanna/woodland edge environments where nut groves would have flourished. Perhaps local nut foragers used these units as temporary over-winter facilities that were revisited in the following spring before other wild plants, such as starchy seeds, were available. Once the nuts were removed, the trenches were simply abandoned and filled in naturally. The niter mottles probably are derived from



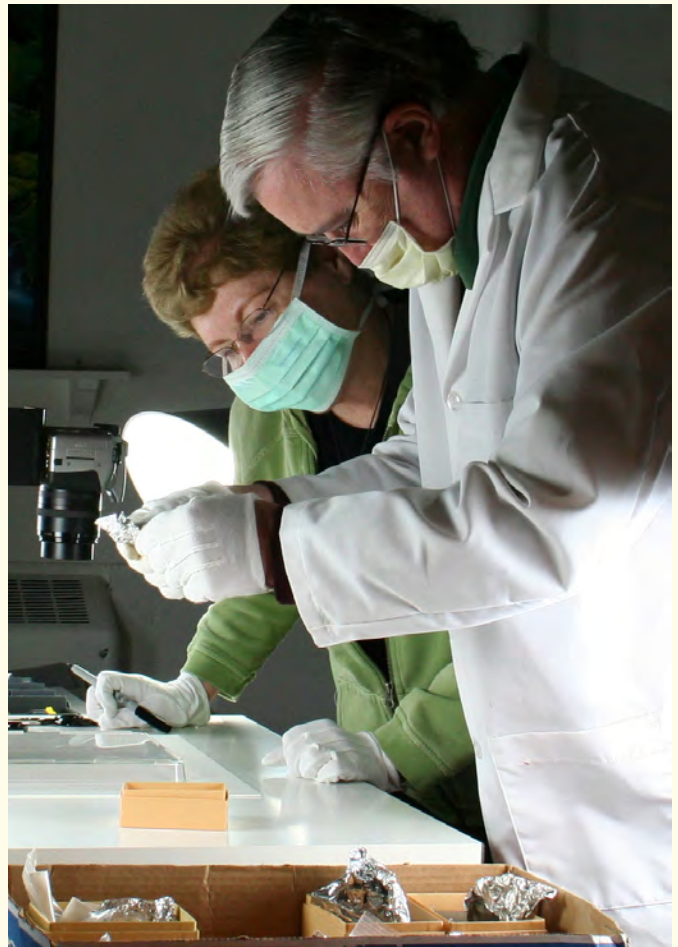
Slot trench, Holdner site, St. Clair County.

leaf litter. As the trenches stood open for longer periods, natural erosion through collapsing walls and rainfall erosion would have occurred. Cultural material in the final zones probably was due to either erosion of surficial middens from later occupants or from dumping episodes by these occupants in the remnant shallow depressions of the final trench.

Most interesting is that slot trenches seem to be a uniquely American Bottom phenomenon and occur only in upland contexts. The only exceptions are two possible slot trenches from the Tree Row site near Havana in the Central Illinois River Valley. At least one of these trenches is thought to be associated with the local Early Woodland Black Sand component at the site. Until we find trenches with dateable materials or functionally unambiguous contexts, slot trenches will remain one of the great archaeological enigmas of the American Bottom. The author of this research is presently preparing a paper for publication that will give more details about the locations and attributes of all known trenches in this region.

### Coprolite Analysis

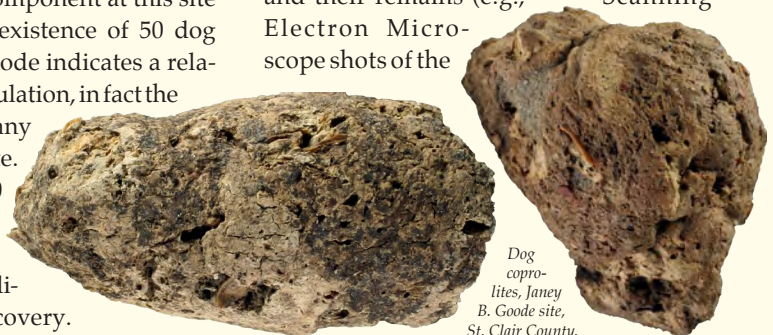
This research is part of a long-term project involving over 100 individual pieces of desiccated dog feces recovered from the Janey B. Goode site in St. Clair County, Illinois. The dogs and associated scat are probably associated with the early Terminal Late Woodland component at this site (A.D. 900–950). The existence of 50 dog burials at Janey B. Goode indicates a relatively sizable dog population, in fact the largest identified at any Midwestern site to date. The recovery of 100 feces samples from an open-air site in the Midwest is an extraordinary and unique discovery.



Photographing coprolites from the Janey B. Goode site.

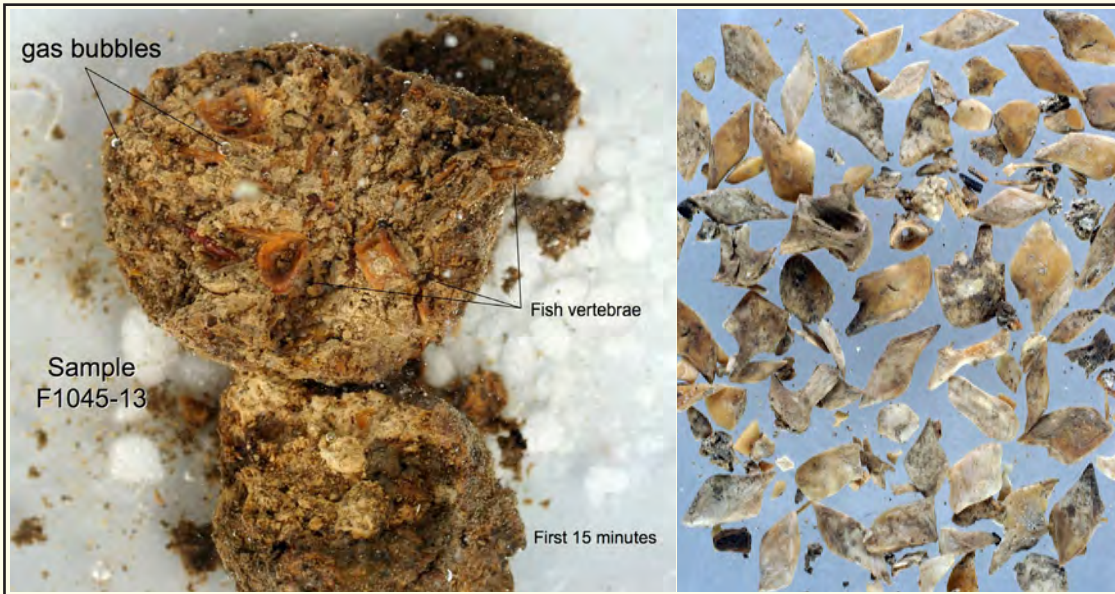
The process of breaking down the feces and the kinds of information that can be retrieved from such analysis are described in previous ITARP annual reports. Thus far, only seven samples have been processed, and each has yielded various macro-fauna remains, including fish, bird, mammal, rodent, and amphibian. Four strands of hair, presumably dog, and sinew have also been identified. One sample produced possible carbonized plant remains, but these remains have not been verified at this time.

The special projects coordinator completed text boxes for a poster to be presented in April at the 2010 SAA meetings in St. Louis. This poster will describe various aspects of the coprolite analysis and will include photos of the coprolites and their remains (e.g., Scanning Electron Microscope shots of the



Dog coprolites, Janey B. Goode site, St. Clair County.





hair). Identifications of faunal remains, primarily fish bones and scales, were completed by Steven Kuehn of ITARP.

We expect to acquire even more information from the larger samples that have not yet been processed. Thus far, it appears that dogs were scavenging mostly fish such as gar and bowfin. While these fish are certainly edible, they were probably not preferred by the human inhabitants at this site. None of the animal remains in the feces show any signs of burning, hence they were probably not processed as food by humans. Dogs, therefore, were a useful garbage clean-up component at this site and were probably tolerated for this reason.

**Hoxie Farm Site,  
Kingery Expressway,  
Cook County**

The Hoxie Farm site (11CK4) is located in south suburban Cook County near the Village of Thornton. ITARP personnel conducted major excavations at this site earlier this decade for a interstate expansion project (ITARP Project Log #95156) revealing extensive evidence for late prehistoric, Upper Mississippian occupations (late Fisher and Huber phases). Notable among the evidence uncovered was the presence of a large



late Fisher phase village surrounded by defensive works, termed the Fortified Village. This intensive but short term village was spatially segregated from another investigated area of the site, termed the Main Occupation Area, where both late Fisher and Huber phase occupations spanning a much longer period of time were encountered.

A working draft of the report for the Fortified Village portion of the site was previously completed, and in 2009, work consisting of map production, draft reviews, and preparation for editing were accomplished. For the Main Occupation Area, introductory chapters for the report were finished and work on other chapter drafts and analyses continued.

A focus of the analyses conducted in 2009 involved the Main Occupation Area burial features. ITARP excavated a total of 26 burials in this part of the site, and when appropriate, evidence from previously excavated site burials has also been incorporated into our investigations, bringing the total number of burials being evaluated to 53. Most of the ITARP-excavated burials

occurred within two spatially restricted areas, although burial density is not high. Based on a small number of associated vessels, most examples from the larger of the burial groups have been affiliated with the late Fisher phase and for the other area most burials were classified as only Upper Mississippian, although a Huber phase affiliation is suspected. About 60 percent of the individuals were interred with identifiable, nonperishable artifacts. Ceramic vessels, copper artifacts, bone artifacts, and red ochre were the most commonly recovered objects. The human remains were examined for the presence of skeletal and dental pathologies, and stable isotope analysis of bone collagen and apatite results indicated that the site population



*Catlinite disk pipe (left); Fifield Trilled pot (far left) ca. Fourteenth Century A.D., Fortified Village area, Hoxie Farm site, Cook County; Janey B. Goode coprolites hydrating sample (top left) and macrofauna from processed sample (top right).*

had a diet that differed (less maize and animals that consume maize/grass) from Langford phase or American Bottom Mississippian populations. Limited evidence for violence (cut marks characteristic of scalping) was encountered on a few cranial elements, and one cranial fragment exhibited a complex decorative pattern of incised lines. The burial population from the Hoxie Farm Main Occupation Area represents one of a very limited number available from late prehistoric contexts from the Chicago area and represents an important data set.

## Robert Reber Collection

Unparalleled insights into the prehistory of Illinois can be gained by recording well-documented artifact collections gathered by dedicated avocational archaeologists. Dr. Robert Reber, a managing editor of *The Illinois Steward* magazine and a University of Illinois Extension nutrition specialist and associate professor of nutrition, has for decades been systematically recording and surface collecting archaeological sites in the headwaters area of the Middle Fork of the Vermilion River. His site collections are continuing to be recorded by a team of ITARP researchers led by Brad Koldehoff and Madeleine Evans, who have logged many volunteer hours inventorying and photographing stone points and tools.

Reber's efforts are especially important because little is known about the prehistory of east central Illinois. Primarily, results show that while the upland marshlands of the Middle Fork headwaters were little used by native groups at the close of the last Ice age, the marshlands were routinely utilized by subsequent groups, particularly during the Early Archaic (10,000–7,000 B.C.) and Late Archaic through Early Woodland (3,000–500 B.C.) periods. During the spring and fall, the marshes and nearby oak groves would have been flush with plant and animal resources, especially waterfowl. However, stone suitable for making spear points, knives, and other large tools was in short supply because only small glacial cobbles were locally

available. Thus, groups regularly visited bedrock sources to the west along the Illinois River and to the east along the Wabash River. Through time, different sources were used more intensively than others, which provides insights into changing patterns of group mobility and land use.

## Illinois Fluted-Point Survey

Dating to the close of the last Ice Age, Clovis, Folsom, and other types of fluted points are the most diagnostic artifacts of the earliest known inhabitants of Illinois. These stone spear points and associated toolkits hold important clues to settlement and subsistence strategies. Brad Koldehoff and Dr. Thomas Loebel (University of Illinois, Chicago) are coordinating a systematic effort to record fluted-point discoveries across Illinois. This effort relies, in large part, on public outreach activities to locate and record fluted-point discoveries. The ultimate goal of the project is to develop a database for modeling land-use patterns.

## Illinois Early Holocene Point Survey

Similar to the fluted-point survey, Brad Koldehoff continues recording regional samples of early Holocene (Early Archaic) point types (e.g., Dalton, Thebes, and Kirk) throughout Illinois. The ultimate goal of the project is to develop a database for modeling land-use patterns. As with the fluted-point survey, this effort entails public outreach activities to locate and record well-documented collections.

## Archaeological Testing Short Reports Submitted to IDOT in 2009

### Bottlemy Site, FAS 0026/Alden Road Drainage Ditch Reconstruction, McHenry County

The prehistoric Bottlemy Site (11MH495) is located on an undisturbed terrace 35 m west of Nippersink Creek. A 56 m<sup>2</sup> area (4.7% of the total site) was hand excavated within the 1,200 m<sup>2</sup> site area. This testing indicates that Bottlemy represents an intact Woodland Period site probably containing two horizontally discrete occupational components—a transitional Middle Woodland-Late Woodland component confined to the lower portions of an undisturbed A-horizon (located in the northern 1/3 of the site) and an early to mature Late Woodland component (most closely resembling Horicon Phase) confined within a 10 cm-thick buried A-Horizon (located in the central site core). A range of ceramic and lithic artifacts, FCR, faunal material, and charcoal were recovered. Geomorphological analyses suggest that cultural deposits present within the buried A-horizon are in primary context; that is, while formal feature boundaries are difficult to detect, artifact concentrations are intact and can provide confident associations between lithic and ceramic morphologies, faunal and floral subsistence data, and potential radiometric dating results.

Little is known regarding subsistence and settlement patterns of Late Woodland peoples in northeastern Illinois. Regional variations in lithic and ceramic types in this area are poorly defined. A handful of, in particular Horicon Phase, Late Woodland sites have undergone subsurface testing in the area; however, few have contained many intact features to speak of and none have contained an intact buried living surface as is present on the Bottlemy Site. The Bottlemy Site is a unique site with the po-





Fieldwork, Bottlemey site, McHenry County.

tential to yield a wide variety of information important to our understanding the terminal Middle Woodland and early to mature Late Woodland periods in northeastern Illinois and southeastern Wisconsin. Phase III mitigation of 11MH495 is recommended prior to any ground disturbing activities in the area. An ATSR was submitted in September 2009.

**11L730, County Highway 20 (Peterson Road)/Illinois Route 60 Intersection Relocation, Lake County**

Site 11L730, a historic homestead/farmstead, was identified during survey for an intersection improvement project (ITARP Project Log #02016) in Lake County. The 946 m<sup>2</sup> site area, all of which falls within the proposed project limits, is situated in uplands east of Squaw Creek. Surface collections produced pre-1840 whitewares and pearlwares, post-1850 whitewares and glass, and other historic materials. A metal detector survey located a small assemblage (N=30) of iron and refined metal artifacts, including machine-cut nails, fragments of a cast-iron cooking vessel and a pewter spoon, brass buttons, and a hand-forged iron bolt.

A total of 503 m<sup>2</sup> within the project-specific portion of the site and an additional

90 m<sup>2</sup> were subjected to machine scraping. Excavations revealed the remnants of a residential cellar, a crop storage facility, a well/cistern, and a drainage feature that extends from the location of the former residence. Initial survey and later subsurface investigations recovered domestic debris from the last half of the 1830s through the mid-1860s, which consisted of building materials (rock, brick, glass, nails, etc.), refined and unrefined ceramics, vessel and container glass, and fragments of metal implements and vessels. A variety of other household items were found, including a milkglass button and collar pin, lamp chimney fragments, an iron needle, and portions of a cast-iron

kettle, a brass teakettle, safety pins, a pewter button, a leather shoe heel, and a writing slate. Based on the document search, a number of property owners are associated with the occupation of 11L730 from the 1830s through the 1860s.

While discrete features associated with the farmstead's occupation were identified, all of the deposits within these features were mixed and likely due to post-occupation in-filling activities. Testing at the mid-nineteenth century site indicates that it is not NRHP-eligible, and no further work is recommended.

**C. Kinglsey Tenant House, FAS 0026/Alden Road Drainage Ditch Reconstruction, McHenry County**

The C. Kingsley Tenant House (11MH482) was revisited in conjunction with the Alden Road Drainage Ditch Reconstruction project (ITARP Project Log #08246). The site occupies a 1,100 m<sup>2</sup> area on an upland ridge east of Nippersink Creek. Based on

the original survey, the site included an in-filled fieldstone foundation with bulkhead entrance and a scatter of household and architectural debris. Archival and artifactual information suggested a mid-nineteenth century initial occupation date for the site, which persisted into at least the early decades of the twentieth century. Actual impacts from the original project were very limited, with no direct effects in relation to the structural feature(s); however, given the mid-nineteenth century onset date of the site, Phase II evaluation of the site was recommended in the event that expanded impacts to the site were contemplated.

As a result of the 2009 site revisit, the fieldstone foundation was relocated, the presence of yard middens deposits was confirmed, and two additional circular feature depressions (possible well and cistern) were identified. Site boundaries were increased slightly; temporal affiliations originally identified were confirmed. Current construction plans have expanded the proposed impacts; 150 m<sup>2</sup> of the total site area will be affected. This expansion will result in direct impacts to the fieldstone cellar foundation, the westernmost circular feature, and the westernmost 3-4 meters of yard midden deposits. In keeping with previous recommendations, this resource appeared to retain research data that might prove eligible for listing on the NRHP. Phase II testing



Shovel testing in the snow, Cook County.



Machine excavations, Jersey County (above); Oneota vessel, Fourteenth Century A.D., Shorten site, Henderson County (bottom).

Test excavations in four excavation blocks identified 27 cultural features, including storage and processing pits, a possible hearth, and a historic draft horse burial. Diagnostic ceramics recovered from some of the prehistoric features are attributable to Oneota (ca. A.D. 1300–1400) and Late Woodland (ca. A.D. 650–1100) occupations. The site produced a Late Woodland or Oneota Hixton Silicified Sandstone triangular arrowpoint and two Early Archaic (8,500–7,900 B.C) chert projectile points. Five possible Early Archaic point preforms, scrapers, hammerstones, bifaces, utilized flakes, and fire-cracked rock and other lithic implements

of the expanded impact corridor in relation to 11MH482 was recommended prior to any further project-related impacts.

Phase II testing of a 40 m<sup>2</sup> area (11 m<sup>2</sup> of which will be impacted) indicates that the residence (basement and superstructure) and nearby subterranean cistern were constructed in the late-1850s. Significant repairs to the residence continued through the early-1900s. The site was likely occupied into the 1920s, but abandoned and razed by the mid-1930s. As part of site abandonment and land reclamation, both feature cavities were in-filled primarily with post-1920s vehicle parts and out-building hardware, and boulders—that is, primarily items unrelated to the nineteenth century residential use of the site. A moderately dense yard midden deposit containing mid-nineteenth century household and architectural debris was identified. These items do not represent an intact

or formal trash disposal area nor do they mark the location of another structure on the property. Construction methods and materials were documented; however, no additional information significant to our understanding of nineteenth century local or regional history can be gleaned from further investigation of the identified features or yard midden on this site. The site does not appear eligible for listing on the NRHP. Therefore, no further work is recommended for the area containing site 11MH482.

### Shorten Site, Township Road 195A Bridge Replacement over Dugout Creek, Henderson County

The Shorten site, 11HE551, was located in conjunction with survey for a bridge replacement project (ITARP Project Log #05094) over channelized Dugout Creek, less than one mile east of the Mississippi River.

The site area covers a 6,664 m<sup>2</sup> area, 1,561 m<sup>2</sup> of which falls within the project limits. A total of 1,066 m<sup>2</sup> (68%) of the project-specific portion of the site was subjected to sub-surface investigations.



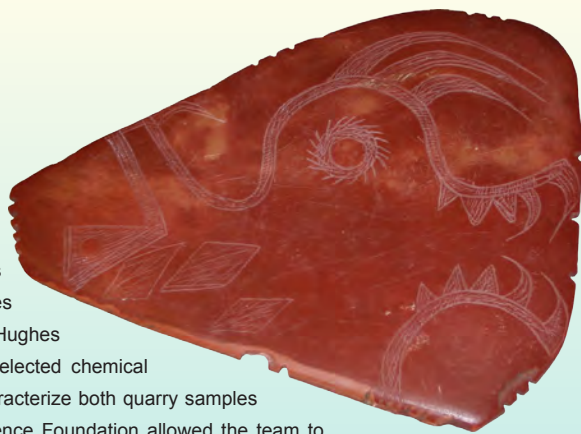
Survey south of Quincy, Adams County.



and materials were also recovered from the site's surface or excavation blocks.

The multicomponent Shorten site is recommended as eligible for placement on the NRHP; however, all intact cultural deposits encountered within the proposed right of way were excavated, thus mitigating project impact to the site; further work is not recommended.

# Sourcing Midwestern Pipestones with a Portable Spectrometer



Since the mid-1990s, a team of archaeologists and geologists from ITARP, UIUC Department of Anthropology, ATAM, and the Illinois State Geological Survey (ISGS) has conducted analyses to determine the sources of raw material used in Hopewellian pipes and Mississippian figurines. Initial analyses were performed by ISGS geologists Randall Hughes and Dewey Moore using mineralogical techniques such as X-ray Diffraction (XRD) and selected chemical techniques (e.g., sequential acid dissolution-inductively coupled plasma, or SDA-ICP) to characterize both quarry samples and archaeological specimens. In early 2000, the first of two grants from the National Science Foundation allowed the team to purchase a PIMA (Portable Infrared Mineral Analyzer) from Integrated Spectronics, Australia, for non-destructive testing of museum artifacts.



The PIMA, a shoebox-sized, portable infrared spectrometer, provides qualitative identification of the minerals that complements and supplements what can be learned from XRD. PIMA spectroscopy uses the short wavelength infrared (SWIR) part of the electromagnetic spectrum (from 1,300–2,500 nanometers) and measures the reflected radiation from the surface of a sample. This measurement reveals the interatomic bond energies characteristic of specific minerals and works especially well on materials containing hydroxyls, OH groups, such as clay minerals (in pipestones and low-fired ceramics), and carbonates (archaeological bone). Invented by Australian geologists for gold mining and mineral exploration, the PIMA is an ideal instrument for testing artifacts in museum settings. Measurements can be taken from artifact surfaces non-destructively in about thirty seconds, allowing the rapid collection of a large number of analyses.

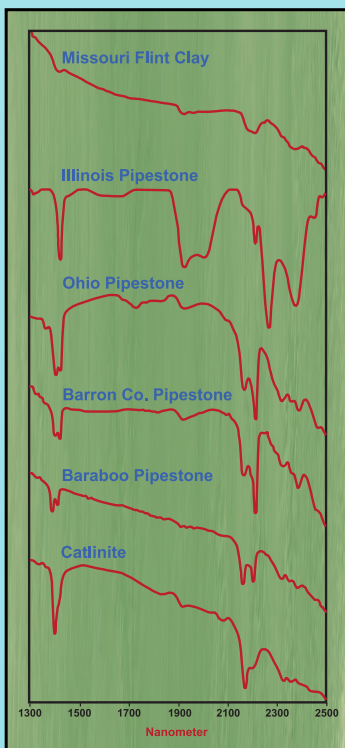
The first phase of our project was to characterize raw materials from known quarry sites (e.g., Pipestone National Monument in Minnesota and the flint clay quarries in Scioto County, Ohio) and collect new samples from suspected sources (e.g., northern Illinois and west of St. Louis) and to compare them with artifact collections. Early results yielded some surprises: many Hopewellian pipes thought to be made from Ohio pipestone turned out to be catlinite from Minnesota and pipestone from near Sterling/Rock Falls, Illinois. This finding led to a major revision in our understanding of Middle Woodland production and distribution patterns. Similarly, the red stone used to make prestige items like the Mississippian red-goddess figurines and effigy pipes at Cahokia and related sites is not Minnesota catlinite or Arkansas bauxite, but a unique cookeite-boehmite flint clay that can be traced to a quarry near St. Louis.

As our work expanded to include less well-known source materials, we have identified two varieties of Minnesota catlinite (A and B, with varying amounts of the minerals muscovite and pyrophyllite), two types of Wisconsin pipestone (Baraboo and Barron county varieties), glacial deposits in northern Iowa and in Kansas, and possible sources in southern Illinois. Although major collections at the Ohio Historical Society in Columbus, the Hopewell Culture National Historical Park in Chillicothe,

Ohio, the National Park Service Midwest Archaeological Center in Lincoln, Nebraska, and the Milwaukee Public Museum have been analyzed, we continue discover small pockets of pipes, earspools, and figurines in private collections and museums throughout the eastern U.S. to add to our database.

Over the years, many individuals have contributed to this project, most notably Dr. Thomas Emerson (ITARP/UIUC Department of Anthropology); Randall Hughes, Dewey Moore, and Philip DeMaris (ISGS); Mary Hynes, Thomas Berres, and Karin Berkhoudt (UIUC Department of Anthropology); Kenneth Farnsworth (ITARP); and Sarah Wisseman (ATAM and ITARP).

A list of publications and presentations from the PIMA project can be found on the web at: <http://www.itarp.uiuc.edu/atam/research/pima/index.html>



# Historic Bridges and Buildings

The Cultural Resources Unit (CRU) at IDOT, under the management of Dr. John Walthall, with the assistance of Brad Koldehoff and Laura Fry, is concerned with historic standing structures as well as the archaeology of Illinois. These structures not only include historic buildings impacted by the creation and alteration of roads, but also the bridges that utilize these roads. While old covered bridges, bascules, and stone arches are all obviously historic bridges, structures on the forefront of the engineering technology of their day are also important.

Starting in the 1970s there have been orders and acts concerning historic bridges, resulting in the creation of a historic bridge list which has ultimately led to the current policy on Illinois historic bridge preservation. In 1990, IDOT, IHPA, and the Federal



Highway Administration established a Historic Bridge Survey in an effort to preserve significant historic bridges. The Historic Bridge Survey (HBS) is comprised of approximately 380 bridges, which are categorized by structure type and separated into primary or secondary importance. The significance of a bridge is determined by following the National Register of Historic Places criteria. These criteria concern the age of the structure (at least fifty years old), historical significance, and structural integrity.

When a bridge is removed from the list, it must be replaced by an analogous bridge, as yet unlisted. The bridge to be demolished must be recorded in accordance with the Historic American Engineering Record standards unless three bridges of that structure-type have been previously recorded. These changes are approved by the CRU in consultation with the IHPA. The CRU maintains records of historic bridges and continually updates the HBS.

To disseminate the Historic Bridge Survey, a new Historic Bridge website has been created in collaboration with Mike Lewis (ITARP). Upon completion, the site will be easily accessible to the public via the IDOT website. Bridge information, including photos and location maps, will be posted on the site. The website is designed

for use both by technical specialists involved in the management of these bridges and the general public.

The historic buildings aspect of work done by the CRU includes review of photo logs of historic structures to determine if a significant building will be impacted by a road construction project. To help standardize the photo-logs received, as well as to provide some examples of buildings that may be significant, a booklet has been written. *Photographing Historic Structures: Guidelines and Photo Logs* briefly explains the state and federal laws concerning treatment of historic properties, an example of an acceptable photo log, tips on taking clear pictures of architecture, several historic building styles found in Illinois with photographic examples and a pictorial glossary of architectural terms. The booklet was written with consultation from IHPA. It will be posted on the IDOT website and printed for distribution in early 2010.



# Bibliography

## **Branstner, Mark C.**

2009 The Buckmaster Site: An Early Settlement Period Homestead in Southwestern Illinois. In *Lincoln's Land—The Archaeology of Early Illinois*, edited by Alice Berkson. *Illinois Antiquity* 44(3–4):16–19.

## **Branstner, Mark C., Christine Hand, and Robert Mazrim**

2008 Archaeological Investigations at Site 11L730, Lake County, Illinois. Archaeological Testing Short Report No. 218. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Branstner, Mark C., David J. Nolan, and Robert N. Hickson**

2009 Archaeological Investigations at Site 11BR429 (Excelsior Site) for the Brown County Wetland Mitigation Bank Project, Brown County, Illinois. Archaeological Testing Short Report No. 277. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 Archaeological Investigations at Site 11MG268 (Frozen Ground Site) for the US 67 Jacksonville Bypass North to Arenzville Road Project, Morgan County, Illinois. Archaeological Testing Short Report 275. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Branstner, Mark C. and Robert N. Hickson**

2009 Archaeological Investigations at Site 11GE675 (Rimfire Site) for the FAP 310-US 67 House Demolitions Project-Parcel #8414003 (Contract No. 76A70-No. 2), Greene County, Illinois. Archaeological Testing Short Report No. 272. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Bukowski, Julie A.**

2009 Late Woodland Frontier Mortuary Practices at the Brennan Hynd Site (11S1492), St. Clair County, Illinois. Skeleton Report No. 2009-21. Illinois Transportation Archaeological Research Program, University of Illinois Urbana-Champaign.

## **Bukowski, Julie A. and Eve A. Hargrave**

2009 Late Mississippian Mortuary Practices at the Russell Site (11MS672), Madison County, Illinois. Skeleton Report No. 2009-20. Illinois Transportation Archaeological Research Program, University of Illinois Urbana-Champaign.

## **Emerson, Thomas E.**

2009 Examining the Silent Rise and Fall of Cahokia: North America's Earliest City. In *World History: Ancient and Medieval Eras* online database. Published by ABC-CLIO Analyze, Santa Barbara.

## **Emerson, Thomas E. and Dale L. McElrath**

2009 The Eastern Woodlands Archaic and the Tyranny of Theory. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath, and A. Fortier, pp. 23–38. State University of New York Press, Albany (In Press).

## **Emerson, Thomas E., Dale McElrath, and Andrew C. Fortier (editors)**

2009 *Archaic Societies: Diversity and Complexity Across the Midcontinent*. State University of New York Press, Albany.

## **Fishel, Richard L.**

2009 Archaeological Investigations at Site 11F2990 (Golden Bluff site) for the FA315/US 136 Road Improvement Project, Fulton County, Illinois. Archaeological Testing Short Report No. 281. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Fishel, Richard L. (editor)**

2009 Phase I Archaeological Investigations of the Proposed FAP 315 (IL 336) Corridor from Interstate 474, Peoria County, to the Proposed Macomb Bypass, McDonough County, Illinois. Contract Completion Report No. 130. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 Archaeological Investigations at the Caterpillar IL 29/Engine Drive Project, Peoria County, Illinois. Research Reports No. 126. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Fishel, Richard L. and David J. Nolan**

2008 Archaeological Investigations at Site 11HE551 (Shorten Site) for the TR 195A Bridge Replacement over Dugout Creek Project. Archaeological Testing Short Report No. 263. Illinois Transportation Archaeological Research Program at the University of Illinois at Urbana-Champaign.

## **Fishel, Richard L. and Jason M. Titcomb**

2009 Sourcing Red Pipestone Artifacts from Northwest Iowa. Iowa Archaeological Society Newsletter 59(1):6–7.

## **Hedman, Krisitin, B. Brandon Curry, Thomas M. Johnson, Paul Fullager, and Thomas E. Emerson**

2009 Variation in Strontium Isotope Ratios of Archaeological Fauna in the Midwestern United States: A Preliminary Study. *Journal of Archaeological Science* 36:64–73.

## **Hickson, Robert N. and David J. Nolan**

2009 Archaeological Investigations at Site 11BR428 (Waynette Mason site) for the County Wetland Mitigation Bank Project, Brown County, Illinois. Archaeological Testing Short Report No. 278. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 Half-Cocked: An Archaeological Perspective of Frontier-Era Flintlock Firearms in Rural West Central Illinois. *Illinois Antiquity* 44 (3&4):33–38.

## **Jackson, Brittany and Mark Rose**

2009 Archaeology's Hoaxes, Fakes, and Strange Sites. Electronic document <http://www.archaeology.org/online/features/hoaxes> accessed December 16, 2009.

## **Koldehoff, Brad and Steven R. Ahler**

2009 Dated Projectile Point Sequences from Modoc Rock Shelter and Applications of Assemblage-Based Analysis. In *Archaic Societies: Diversity and Complex in Across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew C. Fortier, pp. 199–228. State University of New York Press, Albany.

## **Koldehoff, Brad and Jeffrey D. Kruchten**

2009 Phase II Testing at the Stockyard Tract (11S706/5) for the Proposed Extension of Exchange Avenue. Compliance Report No. 127. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

## **Koldehoff, Brad and Thomas J. Loebel**

2009 Clovis and Dalton: Unbounded and Bounded Systems in the Midcontinent of North America. In *Lithic Materials and Paleolithic Societies*, edited by Brian Adams and Brooke S. Blades, pp. 270–287. Wiley-Blackwell, London.

## **Koldehoff, Brad and Juliet E. Morrow**

2009 Gainey-Phase Occupation at the Steinman Site, Madison County, Illinois. *Current Research in the Pleistocene* 26:93–95.

## **Koldehoff, Brad and John A. Walthall**

2009 The Cobden Connection: Early-Paleoindian Lithic Procurement and Settlement Mobility in the American Midwest (with John A. Walthall). *Current Research in the Pleistocene* 26:75–78.

2009 Dalton and the Early Holocene Midcontinent: Setting the Stage (with John A. Walthall). In *Archaic Societies: Diversity and Complex in Across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew C. Fortier, pp. 137–151. State University of New York Press, Albany.

## **Kuehn, Steven**

2009 Analysis of Faunal Remains from the Raven Bluff Site (DEL402), Northwestern Alaska. Report submitted to William Hedman, Bureau of Land Management, Fairbanks, Alaska.

2009 Domestic Dining at French Colonial Sites in the American Bottom: Evidence from the Trotier (11S861) and Jarrot Nordique (11S1741) Sites in French Cahokia. Article submitted to *Illinois Archaeology*.

2009 Faunal Analysis. In *Recent Investigations at the Trotier Site in French Cahokia, St. Clair County, Illinois*, edited by Patrick R. Durst, pp. 77–92. Research Reports No. 122. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 Mussel Shell Analysis. In *Late Mississippian Mortuary Practices at the Russell Site (11MS672)*, Madison County, Illinois by Julie A. Bukowski and Eve A. Hargrave, pp. 59–60. Skeleton Report No. 2009-20. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 A Preliminary Report on a Bison *bison occidentalis* Cranium from Sauk County, Wisconsin. *Current Research in the Pleistocene* 26:157–159.

## **Kuehn, Steven and James A. Clark, Jr.**

2009 Analysis of Faunal Remains from Three Late Paleoindian (Lake Poygan Phase) Sites in East-Central Wisconsin. Article submitted to *Illinois Archaeology*.

## **McElrath, Dale L. and Thomas E. Emerson**

2009 Concluding Thoughts on the Archaic Occupation of the Eastern Woodlands. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath and Andrew C. Fortier, pp. 841–855. State University of New York, Albany.

## **McElrath, Dale L., Andrew C. Fortier, and Thomas E. Emerson**

2009 An Introduction to the Archaic Societies of the Midcontinent. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath and Andrew C. Fortier, pp. 3–21. State University of New York Press, Albany.

2009 The American Bottom Archaic: A Cultural Crossroads. In *Archaic Societies of the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath and Andrew C. Fortier, pp. 317–375. State University of New York, Albany.

## **McElrath, Dale L. and Mary L. Simon**

2009 Life in Illinois After the Glaciers: Early Archaic Cultures. *Illinois Steward*, Vol 18, No. 3, pp 23–28

2009 Ten Thousand Years of Life on the Illinois Prairie. *Illinois Steward*, Vol. 18, No 1, pp 6–11

## **McElrath, Dale L., Mary L. Simon, Alice Berkson, Mark C. Branstner, Brad Koldehoff, Steve Kuehn, Eve A. Hargrave and Kristin M. Hedman**

2009 Archaeology—People and the Early Illinois Landscape: The History Beneath Our Feet, (Chapter 16) Illinois Master Naturalist Curriculum Guide. University of Illinois at Champaign-Urbana.

## **Nolan, David J.**

2009 Prehistoric Landscape Utilization in the Uplands of West Central Illinois. Research Reports No. 98. Illinois Transportation Archaeological Research Program at the University of Illinois at Urbana-Champaign.

2009 Military Sites in Warsaw, Illinois: Fort Johnson, Cantonment Davis, and Fort Edwards, 1816–1824. In *Frontier Forts in Iowa: Indians, Traders, and Soldiers, 1682–1862*, pp. 85–94, edited by William E. Whittaker, University of Iowa Press, Iowa City.

## **Nolan, David J. and Richard L. Fishel**

2009 Archaic Cultural Variation and Lifeways in West Central Illinois. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, pp. 401–490, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew Fortier. State University of New York Press, Albany.

## **Nolan, David J., Robert N. Hickson, and Mark C. Branstner**

2009 Recent Investigations at War of 1812-era Military Sites in Warsaw, Illinois. Paper presented in the Symposium entitled Frontier Forts of the Midwest. Midwest Archaeological Conference, Iowa City, Iowa.

## **Porubcan, Paula J.**

2009 Archaeological Investigations at Site 11MH482 (C. Kingsley Tenant House) for the FAS 0026/ Alden Road Drainage Ditch Reconstruction Project. Archaeological Testing Short Report No. 279. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.

2009 Archaeological Investigations at Site 11MH495 (Bottlemy Site) for the FAS 0026/ Alden Road Drainage Ditch Reconstruction Project. Archaeological Testing Short Report No. 280. Illinois Transportation Archaeological Research Program, University of Illinois at Urbana-Champaign.



Mound Preservation



Digital Cartographic Production



Public Outreach



Research



Survey

### ITARP Mission Statement

*The mission of the Illinois Transportation Archaeological Research Program, a joint program of the University of Illinois and the Illinois Department of Transportation, is to assist the Department in the preservation and protection of Illinois' historic and archaeological resources, to carryout research activities that enhance the educational and public service mission of the University of Illinois, and to promote and ensure the professional and public dissemination of information about Illinois' prehistory and history.*



Photography



Education



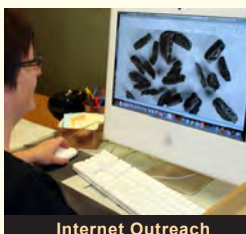
Zooarchaeological Analysis



Bioarchaeological Analysis



Archaeological Fieldwork



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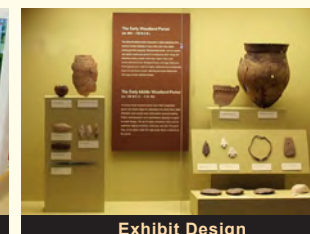
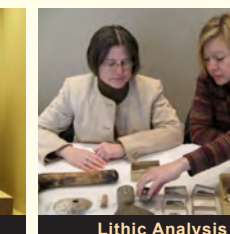
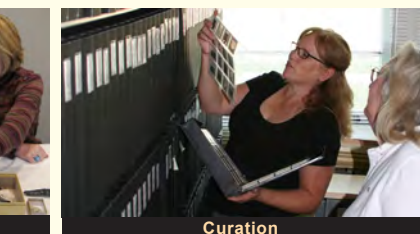


Exhibit Design



Lithic Analysis



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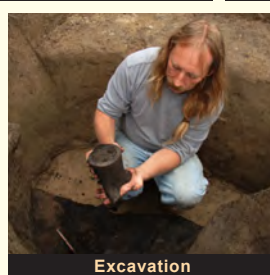
Ceramic Analysis



Historic Research



Volunteerism



Excavation



Paleoethnobotanical Analysis

