

Ohio Archaeological Council Fall Membership Meeting

Friday October 21, 2016

Cedar Ridge Lodge @ Battelle Darby Creek Metropark, Galloway, Ohio

AGENDA

9:30: Coffee and Donuts

10:00: *Mastodon Finds in Clark, Champaign, and Madison Counties: Using Various Resources to Fill In the Blanks*. John Stroman, Independent Researcher

10:20: *Planning for a Future Archaeology: Integrating New Ideas with Tried and True Standards*. David Snyder, Ph.D., Ohio State Historic Preservation Office

10:40: *The Booth Farmstead Site, Perry Township, Carroll County- Mitigation with Oral Histories*. Kristen Janowski, BL Companies

11:00: *The Emergence of Social Complexity during the Late Prehistoric Period: an example from Western Pennsylvania*. John P. Nass, Jr., California University of Pennsylvania

11:20 Ohio Archaeological Council Business Meeting

12:20 Lunch

1:20: *Archaeology Research Results from the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794)*. Christine Thompson and Kevin Nolan, Ball State University

1:40: *Testing Photogrammetry as a Tool for Making Three-Dimensional Recordings of Petroglyphs*. John Soderberg, Denison University

2:00: *Do They Measure Up: Testing the Accuracy of Photogrammetry Models?* Jamie Davis, Ohio Valley Archaeology, Inc.

2:20: Break

2:30: *The Mississippian Iconography of Serpent Mound*. Bradley T. Lepper, Ohio History Connection; James R. Duncan, St. Louis, Missouri; and Carol Diaz-Granados, Washington University

2:50: *Archaeological Survey in the Jackson-Vinton County, Ohio Area*. Jonathan E. Bowen, Independent Researcher

3:10: *The Archaeological Conservancy: 36 Years of Saving Archaeological Sites in Ohio*. Paul Gardner, The Archaeological Conservancy

PAPER ABSTRACTS

John Stroman, Independent Researcher

Mastodon Finds in Clark, Champaign, and Madison Counties: Using Various Resources to Fill In the Blanks

Historic books and documents often contain valuable information about archaeological sites. For a number of reasons, however, such resources are sometimes inaccurate or confusing in reporting exact locations, dimensions, and other important data. Fortunately, a variety of other resources can be used to supplement or verify those accounts. This presentation will examine 3 mastodon discoveries in Clark, Champaign, and Madison Counties based on their original reports, and show how that information can be supplemented and verified using historic atlases, topographical maps, satellite images, first person accounts, and ground-truthing.

David Snyder, Ph.D., Ohio State Historic Preservation Office

Planning for a Future Archaeology: Integrating New Ideas with Tried and True Standards.

Abstract: This year marks the 50th anniversary of the National Historic Preservation Act and the Centennial Celebration of the National Park Service Organic Act. Although neither Act was narrowly written to focus on archaeology, looking back we see that both Acts have led to revolutionary changes in the science of archaeology. These changes came about substantially from changes in how we have come to think about the management of cultural heritage resources. And yet, throughout a sustained period of change, the shovel has remained as a basic tool of archaeology. It seems likely that when archaeologists look back 50 years from now they will see both astounding and marvelous changes, and they will also see archaeologists working with their shovels. New ideas and new instruments will take hold and continue to reshape archaeological thought. But in many fundamental ways, archaeologists have many of the basic tools that we need to chart our course to the future.

Kristen Janowski, BL Companies Camp Hill, PA

The Booth Farmstead Site, Perry Township, Carroll County- Mitigation with Oral Histories

In 2015, the remains of a historic farmstead were discovered during a Phase I archaeological investigation for a pipeline going through Perry Township, Carroll County. The remains included unmarked cut stones, one large depression of a historic barn, a smaller depression thought to be a dwelling, a historic road trace, and associated artifacts, including a mix of nineteenth and twentieth century ceramics, bottle glass, cut nails, and wagon hardware. The Ohio SHPO requested further excavation and research, and it was learned that this late nineteenth century farm belonged to the James and Emma Booth family for nearly 40 years, until they sold it in 1920. The SHPO determined this site to be eligible under Criterion D, and requested further mitigation of this site. Mitigation included seeking descendants of the Booths for interviews, interviewing current, local farmers, and synthesizing this information into a presentation of the broader agricultural history of Carroll County, Ohio. This presentation is a summary of the site, mitigation work, and how this relates to the changing agricultural practices in Perry Township, Carroll County.

John P. Nass, Jr., California University of Pennsylvania

The Emergence of Social Complexity during the Late Prehistoric Period: an example from Western Pennsylvania

Evidence for emerging socio-political integration can take several forms, such as changes in regional settlement patterns, mortuary treatment, and the emergence of craft specialization/production. Within the Upper Ohio River Valley that includes Southwestern Pennsylvania, excavations at post AD 1400 Late Prehistoric village sites west of the Somerset Plateau belonging to the Monongahela Tradition have revealed changes in mortuary treatment, the addition of a new artifact type the bowl, the identification of a new ceramic horizon marker, and the addition of a new form of architecture, the pedal house. The intent of this presentation is to argue that the occurrence of these three material traits at post AD 1400 village sites signals a fundamental change in the socio-political landscape resulting from an increasing need for group identity and political cohesion.

Christine Thompson and Kevin Nolan, Ball State University

Archaeology Research Results from the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794)

The Applied Anthropology Laboratories, Department of Anthropology, Ball State University has completed six years of archaeological and historical research at the battlefield of the Battle of the Wabash (1791) and the Battle of Fort Recovery (1794), two significant Northwest Indian War battles that took place in present day Fort Recovery, Ohio. Our research has focused on creating a more comprehensive picture of the battles through both determination of extent, and bringing the stories of both combatant parties. Funded by multiple federal, state, and university grants, we have reshaped the understanding of both conflicts. We present a summary of our results and products, specifically the use of GIS data modeling and the KOCOA landscape analysis method to highlight probable Native American battle strategy and movement, U.S. military strategy, and possible placement of the original Fort Recovery built in 1793. We conclude with a framework for using our results to support future archaeological research, plan for site preservation, and community engagement.

John Soderberg, Denison University

Testing Photogrammetry as a Tool for Making Three-Dimensional Recordings of Petroglyphs

Ohio's petroglyphs record the stories and beliefs of Native American peoples. But, wind, acidic rain, lichen, and a host of other agents are breaking down the relatively soft rock surfaces where the petroglyphs are etched. With each passing decade, the carvings become more faint. Now, advances in three-dimensional technology make it possible to create precise models of petroglyphs. This paper presents preliminary results from a proof-of-concept study using photogrammetry to create 3D records of the rock surfaces at Leo Petroglyph State Memorial and Inscription Rock State Memorial. The paper reviews procedures, demonstrates sample results, and considers implications for petroglyph research.

Jamie Davis, Ohio Valley Archaeology, Inc.

Do They Measure Up: Testing the Accuracy of Photogrammetry Models?

Photogrammetry has been proven to be an effective way to document archaeological features and objects. But, the accuracy of the models continues to be a concern. Three studies using three different

data collecting techniques and three different scaling techniques have shown that the accuracy of photogrammetry models depends upon the quality of the model and the scale of the project. The Grave Creek Mound project used survey grade RTX GPS equipment to reference the model and test its accuracy; the Zenas Jackson House model depended solely on the drone's onboard GPS and the photogrammetry software's precision for measurements; and skeletal remains were scaled within the photogrammetry software during post-processing. All three techniques proved to be highly accurate relative to the model.

Bradley T. Lepper, Ohio History Connection; James R. Duncan, St. Louis, Missouri; and Carol Diaz-Granados, Washington University

The Mississippian Iconography of Serpent Mound

Serpent Mound (33AD1), located in northern Adams County, Ohio, is one of the most iconic symbols of ancient America and yet there is no widely agreed upon date for the age of its original construction. The iconography of the earthwork offers one line of evidence for its cultural context. Serpent imagery is abundant in the Fort Ancient culture as well as in the more encompassing Mississippian Ideological Interaction Sphere. Picture Cave in Missouri contains an extensive series of Mississippian pictographs, including a grouping of three figures: a large serpent, a humanoid female, and a vulviform oval. Interpreted in the light of Dhegian Sioux oral traditions, these elements could represent First Woman engaged in sexual intercourse with her consort the Great Serpent. The Picture Cave imagery dates to between A.D. 950 and 1025. Whatever the correct interpretation of these glyphs, we argue that these same three elements are represented in the original configuration of Serpent Mound and therefore situate its design and original construction in the Early Fort Ancient period.

Jonathan E. Bowen, Independent Researcher

Archaeological Survey in the Jackson-Vinton County, Ohio Area

Several dedicated amateur archaeologists have spent the last several decades amassing extremely well-provenienced surface collections of prehistoric lithic artifacts from numerous locations in the Jackson-Vinton County area of southeastern Ohio. The resulting database, which is in the process of being entered into the Ohio Archaeological Inventory, is useful in ongoing studies of settlement and land-use patterns in the area from Paleo-Indian through Fort Ancient times.

A brief overview of this rich database is presented.

Paul Gardner, The Archaeological Conservancy

The Archaeological Conservancy: 36 Years of Saving Archaeological Sites in Ohio

The Archaeological Conservancy has been active in Ohio since its inception 36 years ago, and its first regional office was here. Since that time we have created nearly 30 archaeological research preserves in the state. This talk will briefly discuss the organization, goals and methods of the organization, point to some of our successes, and highlight regions and time periods which remain underrepresented as acquisitions.