Ohio Archaeological Council Spring Membership Meeting 2015

May 1, 2015
Sharon Woods Metro Park, Spring Hollow Lodge, Westerville, OH

AGENDA

9:30	Coffee and Donuts
10:00- 11	*Update on Ohio's Underground Utility Protection Law: What Archaeologists Need To Know.* George Gillespie, Central Ohio Public Awareness/Services Coordinator, Ohio Utilities Protection Service
11:00	Ohio Archaeological Council Business Meeting
12:00	Lunch
1:30	*Becoming an Archaeologist: Professionalization in a Social Science*. Megan Shaeffer, M.A., Kent State University
1:45	*GIS Simulated Shovel Tests: Are isolated finds and small lithic scatters a product of cultural function or archaeological methods?* Jamie Davis, Ohio Valley Archaeology, Inc.
2:05	*On the Value of Archaeological Prospection in the Ohio Valley: A Summary of Recent Work by the Applied Anthropology Soil Science Laboratory at Ball State University.* Kevin C. Nolan, Applied Anthropology Laboratories, Department of Anthropology, Ball State University
2:25	*Investigating Anthrosols: The Search for Ritual Activity in the Middle Woodland Period.* Joshua Donaldson, Ball State University, and Kevin C. Nolan, Applied Anthropology Laboratories, Department of Anthropology, Ball State University
2:40	**BREAK**
2:55	*Middle Woodland Occupation of the Lower Little Miami River Valley: A GIS Approach.* Jocelyn Connolly, University of Cincinnati, Department of Anthropology
3:10	*Archaeology under the Big Tent: Salvaging the North Bridge Street Mound*. Jarrod Burks, Ohio Valley Archaeology, Inc.
3:25	*The Lichliter Site Project: A Model for Revealing Hidden Archaeological Collections.* Sarah M. Aisenbrey and William E. Kennedy (Dayton Society of Natural History)
3:40	*Almost 35 Years Later, A New Engraved Marine Shell Gorget Found in Newtown.* Bob Genheimer, Cincinnati Museum Center

PAPER ABSTRACTS

Aisenbrey, Sarah M. , and William E. Kennedy (Dayton Society of Natural History)

The Lichliter Site Project: A Model for Revealing Hidden Archaeological Collections

The Dayton Society of Natural History (DSNH), with the help of a generous grant from the Council on Information Resources for 2014-2016, is in the process of cataloging a large collection of archaeological artifacts from the Lichliter site near Dayton, Ohio. The materials are from the Late Woodland, a poorly known time period in Ohio prehistory. DSNH's first Curator of Anthropology, Virginia Gerald, led excavations at this site throughout the 1960s and kept the collection with her as material for a dissertation. Despite wide interest, no other professional had ever seen the artifacts, maps, or notes until the return of the (now highly disorganized) collection to DSNH in 2012. The first part of our project is to decipher and catalog the site collection into a meaningful, cross-referenced database that will also integrate maps and notes. There is no existing solution for this type of problem in American archaeology and most archaeological research collections do not lend themselves well to normal cataloging procedures or available software. To accomplish this, the DSNH staff selected and trained on QLC's ArcheoLINK software. This European program is an all-in-one solution that enables the user to link archaeological artifacts, maps, and notes into a single database. DSNH has cataloged over 6,900 artifacts (90% of the total collection) in ArcheoLINK to date, with over 1,300 staff and intern hours logged. The second stage of our project will be to publish a case study illustrating how ArcheoLINK can be used to untangle a complex and disorganized collection. This project will serve as the first case study in applying ArcheoLINK as a collection management solution for archaeological research collections.

Burks, Jarrod (Ohio Valley Archaeology, Inc)

Archaeology under the Big Tent: Salvaging the North Bridge Street Mound

This winter the Heartland Earthworks Conservancy, with volunteers from the Cincinnati Museum Center, the Ohio History Connection, and the Mound City Chapter of the ASO conducted a salvage archaeological dig of the North Bridge Street Mound in Chillicothe. For centuries this ancient burial mound sat there on a low rise next to what today is North Bridge Street. In 2008 it was bulldozed flat by the landowners and several years later the land was sold to developers, who were unaware that the mound had once been on the property. As the heavy equipment started in on the development in December, the Heartland Earthworks Conservancy negotiated for access to conduct an exploratory excavation to determine if any of the mound had survived the 2008 bulldozing. The short answer is a definite yes! In this presentation I explore the results of the excavation in the chilly winter temps of January 2015. While very little human bone was found, lots of architectural remains were uncovered, including a paired-post circle surrounding what remains of the mound floor. Many of the posts contained pottery fragments and two large thermal basins were lined with charred logs. Together with the new radiocarbon dates run on charcoal from the charred logs, the pottery and other artifacts from the project show that the North Bridge Street Mound fits squarely into the gap between these things we now call Adena and Hopewell.

Connolly, Jocelyn (University of Cincinnati, Department of Anthropology)

Middle Woodland Occupation of the Lower Little Miami River Valley: A GIS Approach

The Lower Little Miami Valley, most famous for its Turner earthworks, is an area of great density of prehistoric sites. The area's mounds and earthworks were a subject of great interest to the early antiquarians, but they seemingly did not wonder about the economic lives of their original makers. As a result, despite the presence of 81 mounds in the area at the time of historic contact, fewer than 10 definitively woodland habitation sites are recorded in the Ohio Archaeological Inventory. Using elevation, environmental/subsistence information, and prior knowledge of known Woodland habitation sites elsewhere in the Ohio Valley, I used ArcMap to compose a site prediction model equation to ascertain areas of potential prehistoric occupation. This summer, I will ground-truth a non-random sampling of these locations with a Dual-flux Gradiometer and a hand operated solid-sediment drilling core rig. In order to confirm the temporal period of cultural features, I will conduct 13 radiocarbon assays, which will greatly improve temporal resolution in the area.

Davis, Jamie (Ohio Valley Archaeology, Inc)

GIS Simulated Shovel Tests: Are isolated finds and small lithic scatters a product of cultural function or archaeological methods?

GIS simulated shovel tests demonstrate that a phase I 15 meter shovel testing grid only locates prehistoric sites that have low to medium artifact density and does little to evaluate the site or define the site boundaries. The simulated shovel tests also demonstrate that highly structured prehistoric sites are nearly invisible at the phase I level, resulting in archaeologist defined sites that appear to be small, insignificant lithic scatters. The simulations along with actual field data show that by reducing the amount of shovel tests required to locate prehistoric sites and focusing the majority of the shovel testing effort within the sites, a phase I survey can locate and evaluate most prehistoric sites.

Donaldson, Joshua (Ball State University) and **Kevin C. Nolan** (Applied Anthropology Laboratories, Department of Anthropology, Ball State University)

Investigating Anthrosols: The Search for Ritual Activity in the Middle Woodland Period

The author of this study investigates the use of geochemical and geophysical methods to determine ritual activity in a Middle Woodland Period context. The objectives were to locate areas of activity (ritual and domestic) that are not detectable by traditional methods such as excavation. The soil analysis consisted of Phosphate extraction using dilute Mehlich-2 solution measured colorimetrically and the analysis of magnetic susceptibility with a Bartington MS2B with MS3 laboratory meter. Soil was examined from the Moorehead Circle, a Hopewell culture ceremonial site located within Fort Ancient State Memorial (33WA2). The results of this thesis will have the potential to reveal new information on ritual and domestic activity areas and processes of earthwork construction that will make an important contribution to the elusive social practices of the Woodland Period.

Genheimer, Bob (Cincinnati Museum Center)

Almost 35 Years Later, A New Engraved Marine Shell Gorget Found in Newtown

It has been nearly 35 years since a pair of engraved marine shell gorgets was recovered from the Newtown Firehouse Site near Cincinnati. In mid-February of this year a third gorget was found by construction workers excavating for a fiber optics junction box within an existing road tight-of-way. This new gorget was located near the cranium of an adult burial. The engraving depicts a composite animal with the head, wings, primary feathers, and tail feathers of a bird, but the foot and tail are decidedly mammalian in character, perhaps representing a cat. The gorget has been scanned for replication, and is currently undergoing stabilization and conservation to prevent its degradation.

Gillespie, George (Central Ohio Public Awareness/Services Coordinator, Ohio Utilities Protection Service)

Update on Ohio's Underground Utility Protection Law: What Archaeologists Need To Know

Ohio Revised Code (ORC) section 3781.25 – 3781.38 requires excavators, including archaeologists, to call the Ohio Utility Protection Service before they dig. An excavator is anyone who moves soil, rock, or other material in order to penetrate the earth ("excavate") to any depth, for any reason, with any hand or mechanical tool. On December 19, 2014, Governor Kasich signed into law Amended Substitute Senate Bill 378, an act that for the first time enforces Ohio's underground utility damage prevention law. Beginning January 1, 2016, all excavators are subject to the law's enforcement provisions (ORC 4913). This presentation will discuss why you need to call before you dig, the call before you dig notification and response process, and the new enforcement provisions, rules for which are currently being drafted by the Public Utilities Commission of Ohio (PUCO). Under the new enforcement provisions, excavators will have to register with the PUCO and pay an annual registration fee. The law contains significant fines for not registering and other acts of non–compliance. The PUCO will enforce Ohio's underground utility damage prevention law, assisted by a 17–member Underground Technical Committee (UTC) whose members are appointed by the Governor and the General Assembly. The majority of UTC members will be excavators or representatives of underground utility industries. A complaint against an excavator can be made by any person who has been aggrieved by an alleged compliance failure. The PUCO must conduct an inquiry

regarding the aggrieved person's complaint. The PUCO will make a report of their inquiry to the UTC. Fines for the first compliance failure may be up to $2,500. Fines for subsequent compliance failures may be up to $5,000. The UTC may designate a person as a “persistent noncomplier.” The fine imposed on a persistent noncomplier may be up to $10,000. Harsher fines and penalties are allowed. An excavator must comply with the law even if they have an excavation permit from the state or a local government agency.

Nolan, Kevin C. (Senior Archaeologist, Applied Anthropology Laboratories, Department of Anthropology, Ball State University)

On the Value of Archaeological Prospection in the Ohio Valley: A Summary of Recent Work by the Applied Anthropology Soil Science Laboratory at Ball State University

Archaeological prospecting techniques are seeing increased use in Ohio and surrounding regions. Much of this progress is thanks to Jarrod Burks and his exploration of the magnetic signatures of the past. The Applied Anthropology Soil Science Laboratory (AASS) in the Department of Anthropology at Ball State University is trying to build on this recent progress and explore a wider array of prospecting techniques for a variety of new and old research problems. I review recent and on-going research into the uses of geochemical and geophysical prospecting techniques for identifying and exploring cultural resources. Highlighted projects include investigation of Late Prehistoric sites in Dearborn County, Indiana, possible prehistoric gardens in Hamilton County, Indiana, multi-component habitation sites in the Lake Erie basin of Ohio, and the Great Circle at the Hopewell Group. The AASS performs soil phosphate, magnetic susceptibility, and multi-element analyses with a variety of equipment including colorimeter, handheld XRF analyzer, and ICP-OES. The results presented illustrate the promise of a variety of archaeological prospecting techniques to reveal many hidden treasures of the Ohio Valley archaeological record.

Shaeffer, Megan (Kent State University)

Becoming an Archaeologist: Professionalization in a Social Science

This paper explores how archaeologists are prepared for the realities of their profession. I examine the social and political forces that affect the practice of archaeology at the professional level, ethical concerns that face archaeologists today, and the future archaeological research. My study is qualitative in nature, using both participant/observation and interviews. During the summer of 2014 I took part in an archaeological field school, which allowed me to interact with students of archaeology and observe the professionalization process as it occurred. I am currently interviewing students, academic archaeologists, and cultural resource management archaeologists to learn about how and when professionalization occurs as well as the acquisition of the technical and normative knowledge necessary to the profession.