



NEWSLETTER

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PRESIDENT'S MESSAGE

William S. Dancey

The Council is 26 years old this year, the new millennium is upon us, and Ohio celebrates its bicentennial in three years. All are causes for celebration and reflection. They are also opportunities to promote archaeology and advance the understanding and appreciation of Ohio's past. The conjunction of these historical events surely is a sign for the Council to think about its future.

In the March 1999, issue of the Newsletter, Martha Otto reported on a Board of Directors meeting at which the topic of discussion was the future of the Council. In my term as President I hope to pursue many of the initiatives identified under Martha's direction.

Several are well under way. For example, an internet web site is under construction and should be up and running by the Spring Members meeting. This obviously can be a powerful way of both letting the world know of our existence and educating Ohioans about the archaeology of their state. On another front, the OAC has joined the Dayton Society of Natural History in a joint effort to inaugurate an Archaeology Week to be held June 19-25. You will be hearing more about this from Sandy Yee and Dave Bush.

Another item on Martha's list was preservation advocacy, to "continue and strengthen the Council's efforts to preserve significant cultural resources through public education and direct involvement in the legislative process." If a reason for uniting professionally oriented archaeology groups was required, one need look no further than the impending demise of Ohio's archaeological record. The economic boom of the late twentieth century combined with the revolution in agricultural and construction technology threaten to completely remove or rework Ohio's surface. This means that the archaeological remains of Ohio's early history and prehistory will, very soon, be destroyed forever. Somehow, representatives of the archaeological community, business, industry, development, government, indigenous people, media, and lay people must join together to protect or conserve the legacy of the past without impeding economic growth. I think the Council could play an important role in assessing the seriousness of the problem, educating the citizens of Ohio, and bringing the various constituents together to work toward agreeable solutions.

Membership was an important item on Martha's list. I have asked the Membership Committee to examine the question of whether the current level is reflective of the number of "joiners" in the Ohio archaeological community. Perhaps we are at the peak with around 100 members. On the other hand, perhaps there many potential members in the academic, contract, and avocational worlds who are waiting anxiously to be nominated. If there is an untapped pool of archaeologists who meet our membership criteria, what would it take to get them on board?

One group not represented prominently in the early years of the Council is avocational archaeologists. These are the Ohioans who lack degrees in archaeology but embrace the values of professional archaeology and want to, and often do, conduct professional level field and laboratory investigations under the direction of professional archaeologists. Two well established avocational groups that come to mind are the Central Ohio Valley Archaeological Society (COVAS), and the Toledo Area Aboriginal Research Society (TAARS). Undoubtedly there are others. Some members of these groups already are members of the Council and others are potential members. Setting aside the membership question, however, I think the Council should establish continuing relationships with such avocational groups as COVAS and TAARS for we share similar values and goals.

One item of unfinished business is the conference publication project. As members are acutely aware, we organized six conferences over the last eight years and have published the proceedings of only two of them. Bob Genheimer has nearly completed the Late Prehistoric

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volume and hopes to have it back from the printer by early summer. As a member of the Education Committee in 1991 when the idea for this project was hatched, I feel a sense of personal responsibility to see it through to completion. To that end I have asked the Education Committee to convene a meeting with the editors of published and unpublished volumes to work out procedures, set timetables, and discuss ways of sharing the workload. My goal is to get the remaining volumes completed during my term.

When the Council was founded 25 years ago everyone who was anyone in Ohio archaeology was a member. Why? Because the mandates of federal archaeological legislation had just hit Ohio and the implications were unknown. All archaeologists in the state wanted to know how their work was affected, or what funding opportunities were presented. Policies and regulations were hotly debated at the semi-annual meetings. Membership rose. There was a certification list, and an Archaeological Services Review Committee that reviewed member's contract reports. As processes and procedures solidified, momentum slowed, and membership began to decline. Certification was abandoned along with the Review Committee. Yet while part of the impetus for the Council's existence was federal preservation law, the purposes of the Council as expressed in the Articles of Incorporation were extremely broad. All members should have a copy of the Articles, and I recommend that you dig them out and reflect upon them. They may inspire ideas for future Council projects.

In closing, let me say that the Council has had a vibrant first 25 years and the potential for growth exists within the scope of the organization as initially conceived. I am pleased to be President of the group as we enter the 21st century. I would also like to challenge members to come forward with ideas that will enhance the status of professional archaeology in Ohio, advance knowledge, awareness, and preservation of the state's prehistoric and historic past, and revive the spirit of participation that characterized the Council in its early years.



AD HOC LEGISLATIVE ISSUES COMMITTEE REPORT

Al Tonetti

Committee Chair

State Legislation

Here we go again, perhaps. On January 18, 2000, State Representative James Buchy (R-Greenville) introduced House Bill (HB) 550, a bill to revise the offense of

vandalism. The bill has been referred to the House Committee on Criminal Justice. The revisions are primarily technical in nature. Revisions relevant to archaeological concerns include clarifying that the offense of vandalism pertains to all private property, not just certain types of private property as indicated in the current law, and adds "but is not limited to" the definition of a cemetery. Under the bill the new definition for a cemetery would be "any place of burial and includes, but is not limited to, burial sites that contain American Indian burial objects placed with or containing American Indian human remains." According to Rep. Buchy's office, this bill was drafted and introduced after numerous requests to do so by artifact collectors, sellers, and buyers, many of whom are members of the Archaeological Society of Ohio.

Electronic review of HB550 or any proposed bill or existing legislation in Ohio can be made at www.legislature.state.oh.us.

The privilege clause and existing penalties are retained in the bill. The bill prohibits a person, without the privilege to do so, of knowingly causing physical harm to private property or serious physical harm to government property. The difference between physical harm and serious physical harm is that the latter results in a loss to the value of the property of \$500 or more, while the former has no dollar threshold. Physical harm means any tangible or intangible damage to property that results in a loss to the property's value or interferes with its use or enjoyment, but does not include wear and tear by normal use.

Federal Legislation

On February 15, the National Mining Association filed a federal lawsuit challenging a number of provisions of the revised Section 106 regulations promulgated last year by the Advisory Council on Historic Preservation (ACHP). The regulations remain in effect until otherwise ruled by the court.

Among other things, the lawsuit alleges that the revised regulations unlawfully 1) exceeds the role assigned to the ACHP by Section 106 in that it gives the ACHP substantive regulatory authority over other Federal agencies; 2) extends the reach of Section 106 in defining an undertaking; 3) extends Section 106 to properties not formally determined eligible for the National Register of Historic Places; 4) enlarges the role of Indian tribes beyond that intended by Congress; 5) employs a vague and overbroad definition of what constitutes an adverse effect; 6) violates the Appointments Clause of the Constitution by vesting the ACHP (which includes two members that are not appointed by the President -- i.e., NCSHPO and the National Trust) with authority or functions that may only be carried out by Presidential appointees; and 7) were promulgated without observing certain procedural aspects required by the

Administrative Procedures Act, such as not meaningfully addressing the comments filed by the National Mining Association and publishing the regulations without adequate notice and opportunity to comment.



ERRATA

In the last issue of the Newsletter (Vol. 11, no. 2), the lone citation appearing in Craig Keener's article "Historical Archaeology at the Thomas Worthington Estate" was incorrect. The correct citation is as follows:

Keener, Craig S.

1999 An Archaeological Survey of Portions of the Ohio Historical Society's Adena Site in the City of Chillicothe, Ross County, Ohio. APPLIED Archaeological Services, Inc., Facilities Planning Office. Copy available for review at the Ohio Historical Society.



PLAN NOW TO ATTEND THE 2000 OAC SPRING MEMBERSHIP MEETING AT THE OHS

Plans are underway for the 2000 OAC Spring Membership meeting to be held on Friday, May 19th at the Ohio Historical Center in Columbus. This year's meeting will feature an afternoon ceramic workshop focusing on the Late Prehistoric period (ca. AD 1000 to 1700) archaeology of Ohio region. Participants in this hands-on event will include contributing authors of the soon-to-be-published OAC volume titled "Cultures Before Contact" and edited by Bob Genheimer. The morning session of the Spring meeting will include short papers on Late Prehistoric archaeology as well as the traditional business meeting. All OAC members and associate members are encouraged to attend. Avocational archaeologists and members of the interested public are also welcome. Any OAC member wishing to bring Late Prehistoric material for examination during the workshop should contact meeting organizer Brian Redmond by e-mail: bredmond@cmnh.org or by phone: (216) 231-4600, ext. 301.

ELECTRONIC RECREATION OF THE MONUMENTAL ARCHITECTURE OF THE HOPEWELL: A NEW TOOL FOR PUBLIC EDUCATION

John Hancock
University of Cincinnati
Bradley Lepper,
Ohio Historical Society

Public education efforts concerning Ohio's ancient earthworks have always been hampered both by their immensity and their on-going destruction. Where earthworks do survive, they are hard to visualize; and of course, the large majority have not survived at all.

Engaging the public imagination about this magnificent architecture is beginning to be made easier, because of new efforts in computer visualization technologies being developed at the University of Cincinnati. The "Center for the Electronic Reconstruction of Historical and Archaeological Sites" (CERHAS), with state and national humanities and arts funding, has produced a short video featuring computer reconstructions of the Newark earthworks. This animated video was presented at several regional museums, including the Ohio Historical Center, over the past year.

The video combines historical images, views of modern Newark, and flyovers of the ancient complex as it may have looked to its builders. The model is based on measurements obtained by the Salisbury brothers in 1862, but it also incorporates the results of the most recent archaeological investigations undertaken at Newark. We can't bring back what has been so thoroughly effaced by the plow, shovel and bulldozer, but this electronic recreation allows us to gain a new appreciation of the scale, precision, and complexity of the Hopewell culture's largest ceremonial center.

CERHAS is continuing its work with the Ohio Valley earthworks, developing multi-media learning resources featuring several more of the Adena and Hopewell earthworks. Funding currently is being provided by the National Endowment for the Humanities, and a multi-disciplinary team of advisors and content experts is helping with the project. Current work in progress, including VR files, can be viewed at www.cerhas.uc.edu/earthworks and copies of the Newark video can be ordered by sending an e-mail to john.hancock@uc.edu or a FAX to his attention at 513-556-1230.

OHIO HISTORIC PRESERVATION OFFICE INVITES NOMINATIONS FOR OUTSTANDING ACHIEVEMENT AWARDS

Nominations are being accepted through July 1, 2000 for the Ohio Historic Preservation Office Awards. These awards recognize outstanding achievements in preservation, rehabilitation and adaptive use of historic properties, as well as publications and educational programs that promote the preservation of historic places in Ohio. The awards are presented in two categories: Preservation Merit, and Public Education and Awareness.

Activities eligible for the Preservation Merit Award include longtime care of a historic property; preservation, rehabilitation, restoration, or adaptive use of an important building or site; and leadership, support, or service to historic preservation. The Public Education and Awareness Award is for advocacy educational programs, publications, film and video, special events, and similar efforts which have helped to increase understanding and awareness of historic preservation at the local, regional, or state level.

For a nomination form with full details, contact the Ohio Historic Preservation Office, 567 E. Hudson St., Columbus Ohio 43211-2497, (614) 297-2470, FAX (614) 297-2496.



UPDATE ON THE OHIO PRESERVATION OFFICE DATA-AUTOMATION PROGRAM

Todd Tucky

Ohio Historic Preservation Office

In 1997, the Ohio Historic Preservation Office (OHPO) initiated a comprehensive program to transfer data from over 100,000 paper files into digital format while building a comprehensive Geographic Information System (GIS) program for implementing its use. The data automation program focused extensively on the Ohio Historic Inventory and Ohio Archaeological Inventory (OHI & OAI respectively), as well as development of a customized GIS application known as MAPIT. This effort was supported by grants from the Ohio Department of Transportation.

Approximately 15,000 OHI forms were coded with grant assistance from the Gund Foundation in the mid-1980's. In

1997, the second and much larger phase of the OHI coding project was undertaken to examine, edit and enter data from paper forms into digital format. As a result of this project, a total of 81,078 forms were codified into electronic form. This represents a complete record of OHI received through calendar year 1997. Since March 1999, work has continued on OHI's received from 1998 to present date.

With respect to the OAI, an initial attempt at digital coding occurred in 1985 during which approximately 17,000 records were entered into an electronic database, under a grant from the U.S. Army Corps of Engineers. In November of 1998, the second major effort to transfer the OAI into electronic format began in earnest. The goal of this project was to first check, edit, correct, and enter data from a backlog of over 7,500 forms that had accumulated and then 'clean-up' known issues with existing UTM coordinates and/or other spatial attribute data. 'Clean-up' of the data has taken a variety of forms and largely involves methodology designed to catch errors, typographic problems, inconsistencies, misplottings of sites, updating existing forms, adding continuation sheets, coding new entry forms, correcting the 7.5' topographic maps, transferring locational data from existing 15' quadrangles, and handling any other obvious errors in need of correction.

UTM correction consists of comparing OAI form, map, description, narrative and coordinates against a USGS 7.5' quadrangle. If the information on the OAI is correct, that record is added to the database. If the centroid of the site is not consistent with the plotting and associated information, then a new point is created with the corrected coordinates and entered into the database. As a result of this project, approximately 14,000 of approximately 23,000 forms being examined to date have had their UTM coordinates corrected. Currently, there are 32,881 sites recorded in the electronic OAI database and approximately 1,600 new sites have been added each year.

The MAPIT (Mapping and Preservation Inventory Tool) is a customized version of the popular ArcView GIS program developed by Environmental Systems Research Institute (ESRI). MAPIT was designed by the National Park Service Heritage Preservation Services Cultural Resources GIS Facility (CRGIS). The MAPIT program is designed to bring various cultural resources together into one comprehensive computer desktop environment and is specifically designed for use by the Ohio Historic Preservation Office (OHPO) and by researchers of Ohio's cultural resources, both public and private. By providing the capability to extensively examine all of Ohio's resources in a spatial context, it is hoped that decision-makers will be able to use these data to make informed decisions while planning for a multitude of activities across the State. One of the powerful features of the MAPIT program is the ability to customize the program to address a variety of inventories and research questions, and thus once new data are available, they can be easily

added to the existing application and coverages. The ability to use MAPIT will be available on public terminals at the OHPO central office and, to a more restricted degree, via the Internet.

While we are working to provide expedient and widespread access to the data as soon as possible, responsible stewardship of the data and technologies for protecting sensitive information are being developed specifically for this automation program. When the data are available, instructions for access will be provided at the OHPO website. Therefore, we strongly recommend going to the OHPO website (www.ohiohistory.org/resource/histpres/) which will provide all information about what data are available and in what format. Also, from the website, access will be available for the on-line versions of the National Register, OAI and OHI databases. The National Register database is scheduled to be on-line by March 2000; the OAI and OHI databases will go online thereafter. Again, any information about the availability of the on-line databases will be provided at the website.

Finally, while OHPO is at the end of its second major electronic coding project, in reality we are at the beginning of using this new tool to spatially examine the cultural record of the state. Future efforts will include continued improvement of the databases, issuance of electronic forms for entry and initial quality control, additional on-line features and query capabilities, new coverages, additional database integration, multi-media enhancements, and greater accessibility. For questions about this program, please contact me at: tucky@ohiohistory.org.



A FORGOTTEN INDUSTRY: INVESTIGATING A NINETEENTH CENTURY RURAL DISTILLERY

Matthew E. Becher
Gray & Pape, Inc.

Rural landscape is being consumed at an alarming rate by modern development. While agrarian industries such as grist- and saw-milling have been studied at length and there is even an organization dedicated to the conservation of mills (Society for the Preservation of Old Mills), others have received scant attention. During the nineteenth century, thousands of small distilleries operated throughout

rural America almost exclusively in tandem with gristmills. However, precious few distilleries have been documented by trained researchers, and there are few contemporary interpretations of the economic viability and technical operation of the industry.

The above observations were made following the archival and archaeological investigations of a rural distillery located in Greene County, Ohio. During the summer of 1996, Gray & Pape, Inc., of Cincinnati, Ohio, conducted Phase III investigations at the Harbine Distillery and Millrace (Sites 33Gr914 and 33Gr916). Data recovery of the sites was completed in advance of proposed improvements to the Greene County Wastewater Treatment Plant. The work was performed under Section 106 of the National Historic Preservation Act of 1966 for Black & Veatch, Inc., of Cincinnati for the Greene County Board of Commissioners under a permit issued by the U.S. Army Corps of Engineers - Louisville District. What follows is intended as a reference for others who are faced with the management of similar resources.

In order to effectively mitigate the adverse effects of the wastewater treatment plant expansion on the Harbine Distillery and Millrace, a combined program of archival and archaeological investigations was implemented. The investigations resulted in a summation of the mechanics and methods of nineteenth century distilling as well as a review of the economic and social systems under which the industry grew and collapsed. The final products of the investigation included a technical report delivered to the client, the Ohio Historic Preservation Office, and the U.S. Army Corps of Engineers - Louisville District, as well as a separate public document. The public document, *The Distiller's Tale*, was a synopsis of the investigations designed for distribution to local libraries and school districts and received a Public Awareness Award from the OHPO in 1997.

The field investigations at the Harbine Distillery included mechanical removal of the overburden from half of the site area to reveal extant features. Unfortunately, the distillery was consumed in an 1888 fire, and the site's integrity was further compromised during the 1970's when all remaining surface structures were bulldozed. Nonetheless, a number of buried features were encountered and excavated, including the remains of a brick stillhouse and three wood frame structures. In addition, a large trench was excavated through the millrace to expose its profile and facilitate documentation of its construction.

The fieldwork permitted a reconstruction of how the distillery may have operated, though most of the production details and feature functions could not have been surmised without an extensive review of nineteenth century distilling methods and technology. This part of the investigation proved to be the most exciting, as surprisingly little research into this industry has been published. The most valuable

sources consulted were three practical manuals written by distillers between 1804 and 1819 (Krafft 1804; Hall 1813, 1818; Boucherie 1819). Primary information from several other contemporaneous distilleries in southwestern Ohio was also helpful for estimating the layout, capacity, and production of the Harbine Distillery, since such records from the Harbine facility could not be located.

An extant photograph of the nearby Staley Distillery depicts how small operations such as the Harbine's may have functioned (Figure 1). Today, the Staley Farm and Distillery is listed in the National Register of Historic Places and is among the most well-preserved rural milling and distilling complex in the country (Simmons 1990).

The archival work included a summary of the development of distilling in America to about 1900. It is important to note that most of the early nineteenth century distilleries were anything but backwoods stills producing illicit moonshine in an effort to avoid taxation. Rather, these concerns were essential to farmers, as they permitted the reduction of bulky grain crops into whiskey, which was easier to transport and quick to sell. The distilling profession was respected as something between an art form and a science until sometime in the middle of the nineteenth century when temperance movements began to color the public's view of both the product and its producers. Widespread illegal distilling did not become common until taxes soared during and after the Civil War. In fact, the rise and fall of rural distilling was inexorably tied to temperance and taxation, although transportation also played a role. Indeed, the railroads robbed rural distillers of a part of their local raw material base by making it easier for farmers to transport bulk goods to market.

As noted above, distilleries were often operated in tandem with a gristmill, simply because the first step in distillation involved reducing the grain to a course meal. Indeed, one authority recommended building a small mill next to the distillery solely for the purpose of grinding grain on site (Krafft 1804:45). The grain (usually barley, rye, corn, or a blend) was infused with warm water into a mixture called *wort*, to which yeast was added. This concoction was fermented in large wooden vats or open barrels for several days before being directed to the stillhouse as *beer* or *wash*. The spent grain was itself considered a valuable commodity, since it could be sold off as fertilizer or feed or used to maintain a herd of livestock on site. In fact, the Harbines not only raised swine, but also operated their own pork packing house. The grist mill-distillery-hog farm combination was very cost effective, as the output of one step in the system formed the raw material of the next step.

The still was the most important and valuable part of the industrial process. Most of the technological advances made during the nineteenth century in this business were concerned with the development of new stills and related apparatus. The earliest type to be used in America

exclusively in the production of spirits was the simple pot still, which was first used by gin makers in the early 1700s.

A shift in preference toward whiskey making was made by 1800, and changes in technology followed on its heels. Pot stills were soon supplanted by patent stills, which were more efficient and easier to clean. At the same time, the concept of steam heat was introduced, which spurred the development of a unlimited array of steam stills. By the middle of the nineteenth century, massive column stills were widely in use at the commercial level of production. Column still technology, which employed steam, was vastly superior to the earlier patent and steam stills in terms of production, though the flavor and character of the end product suffered somewhat. For the most part, the expense of large column stills precluded their use outside of big city distilleries like those clustered in and around Cincinnati.

Once distilling was complete, the product was typically decanted into wooden casks for shipping or aging. Many small distillers in Ohio opted to sell their whiskey to large producers in Cincinnati, Ohio, or Maysville or Louisville, Kentucky, where it was refined, aged, and distributed as a finished product. Bottling at the rural level was virtually unheard of, though some rural distillers barreled and aged some of their whiskey on site in bondhouses. This portion of the whiskey "run" was then sold or traded locally, assuming the position of an acceptable cash substitute.

The information gleaned from archival sources, coupled with archaeological investigations, allowed for a reconstruction of what the Harbine Distillery may have looked like during its heyday between 1832 and ca. 1870. Material remains encountered at the site included a variety of architectural debris, but aside from a few burned copper fittings, no intact traces of the equipment used to run the distillery were recovered. By far the most common artifacts recovered from the site were nails and bricks and, based on the condition and distribution of these items, it was clear that most of the structures at the distillery were destroyed beyond repair by the 1888 fire.

The most significant feature at the Harbine Distillery was the stillhouse, which minimally consisted of a series of brick footers, a limestone pavement, and a massive brick hearth and chimney (Figure 2). The Harbine stillhouse probably did not include a superstructure; a simple shed or suspended gable roof designed to keep rain off the distilling equipment was employed instead. The heat generated by the furnace and still(s) would have made a well-built wooden structure impractical.

The compact footprint of the stillhouse probably would have accommodated only a patent or steam still, though it is difficult to say exactly what type of equipment was used. The floor plan is comparable to plans for an 1816 distillery patent known as Gillespie's Improved Steam Still (Figure 3). Gillespie's plan consisted of a large square brick furnace,

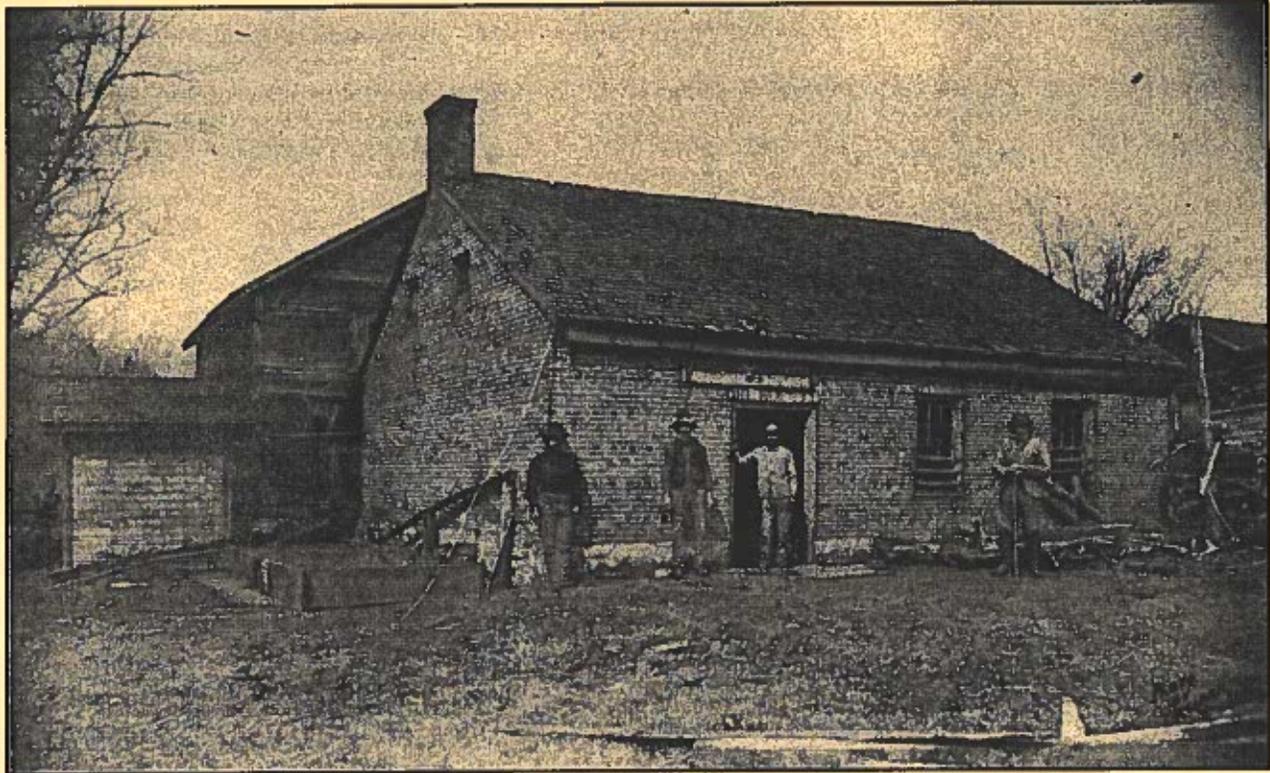


Figure 1: Late 19th century photograph of the Staley Distillery in nearby Miami County, Ohio. (Courtesy Ohio Historical Society).

upon which a copper boiler was set. The wooden still was located adjacent to the boiler, though the Harbines could have easily used a copper still to greater effect.

A second, somewhat larger building (Structure B) was situated immediately north of the stillhouse. The function of this building is unknown, though it could have been used as a malthouse or to barrel finished whiskey. The largest building on the site was of frame construction set upon limestone footers (Structure C). Over half of the interior flooring of Structure C was designed to support a great deal of weight, as evidenced by a series of heavy piers which braced the floor. If the Harbines aged their whiskey on site, this would have been the bondhouse. However, the structure could have also been used as a mashing and fermenting room, processes which would also have required a sturdy floor.

A dense scatter of wrought nails and one limestone footer suggest that a fourth building (Structure D) once stood along the western edge of the site. It is impossible to say how large this structure was or what purpose it may have served. The only other feature which may have existed at the site during its occupation was a drainage ditch consisting of a channel lined with gravel and cobbles. Such a feature would have been useful for carrying waste water from the stillhouse or other buildings to the nearby millrace. While it is likely that the millrace was used as a water source by the distillery, no evidence for the method of conveyance was found.

The Harbine Distillery was initially constructed during a time when distilling was an accepted and honored profession. Grist and saw-milling, hog raising, and pork packing were ancillary industrial concerns that made efficient use of the infrastructure and byproducts of the distilling process. Temperance and the development of a widespread and functional railroad system precipitated the decline of this industrial system by the mid-1800s. The crushing blows to rural distilling occurred during the Civil War, when federal excise taxes soared from nothing to \$2.00 per proof gallon on whiskey and other distilled spirits. By 1868, when the excise taxes were finally reduced, most of the rural whiskey making ventures had either suspended production or simply ceased. The advent, operation, and demise of the Harbine Distillery parallels the once widespread rural practice of whiskey distilling, an extinct and largely forgotten feature of the American landscape.

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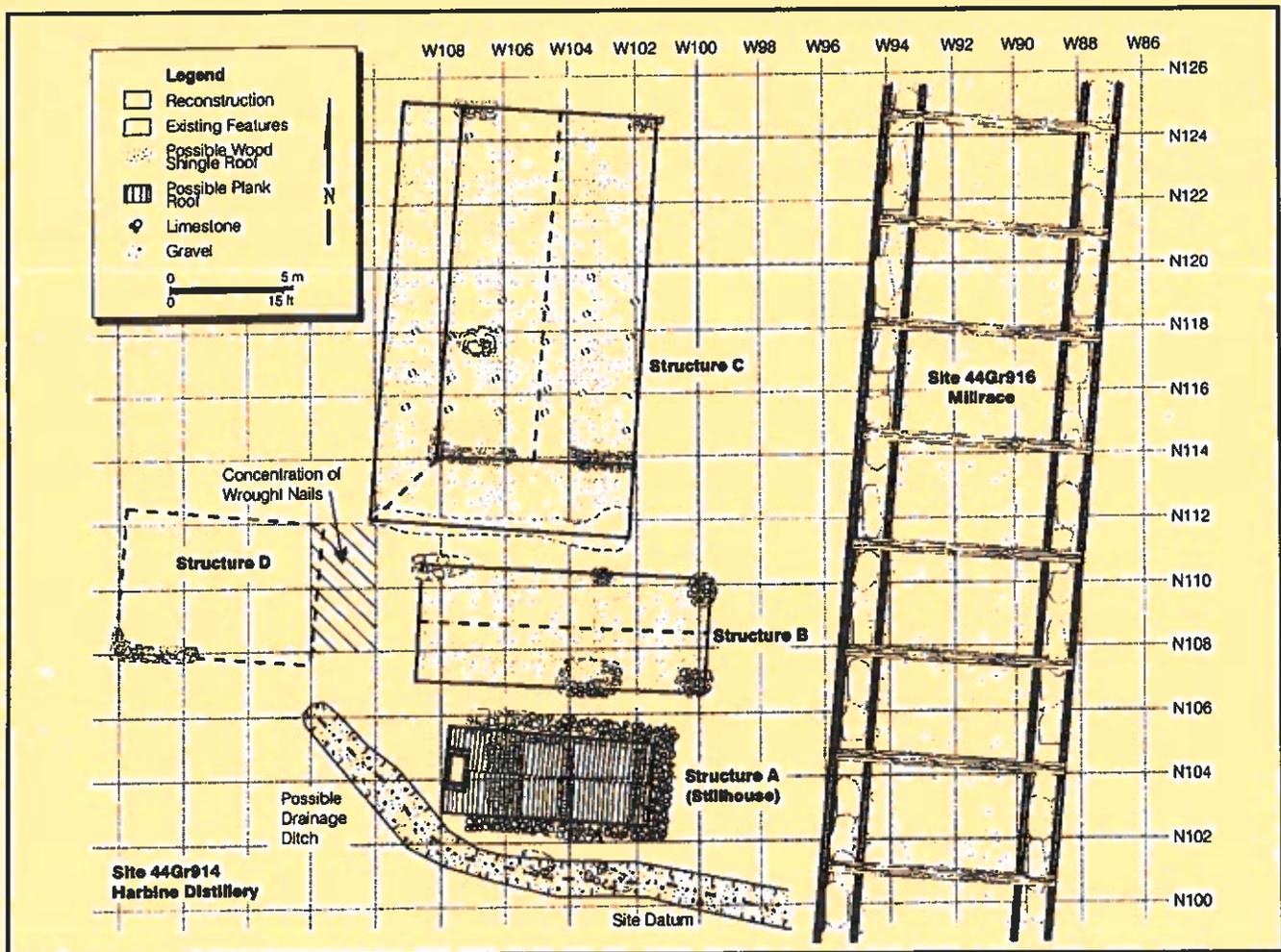


Figure 2: Artist's reconstruction of the Harbine Distillery, based on excavations and archival research conducted by Gray & Paper, Inc.

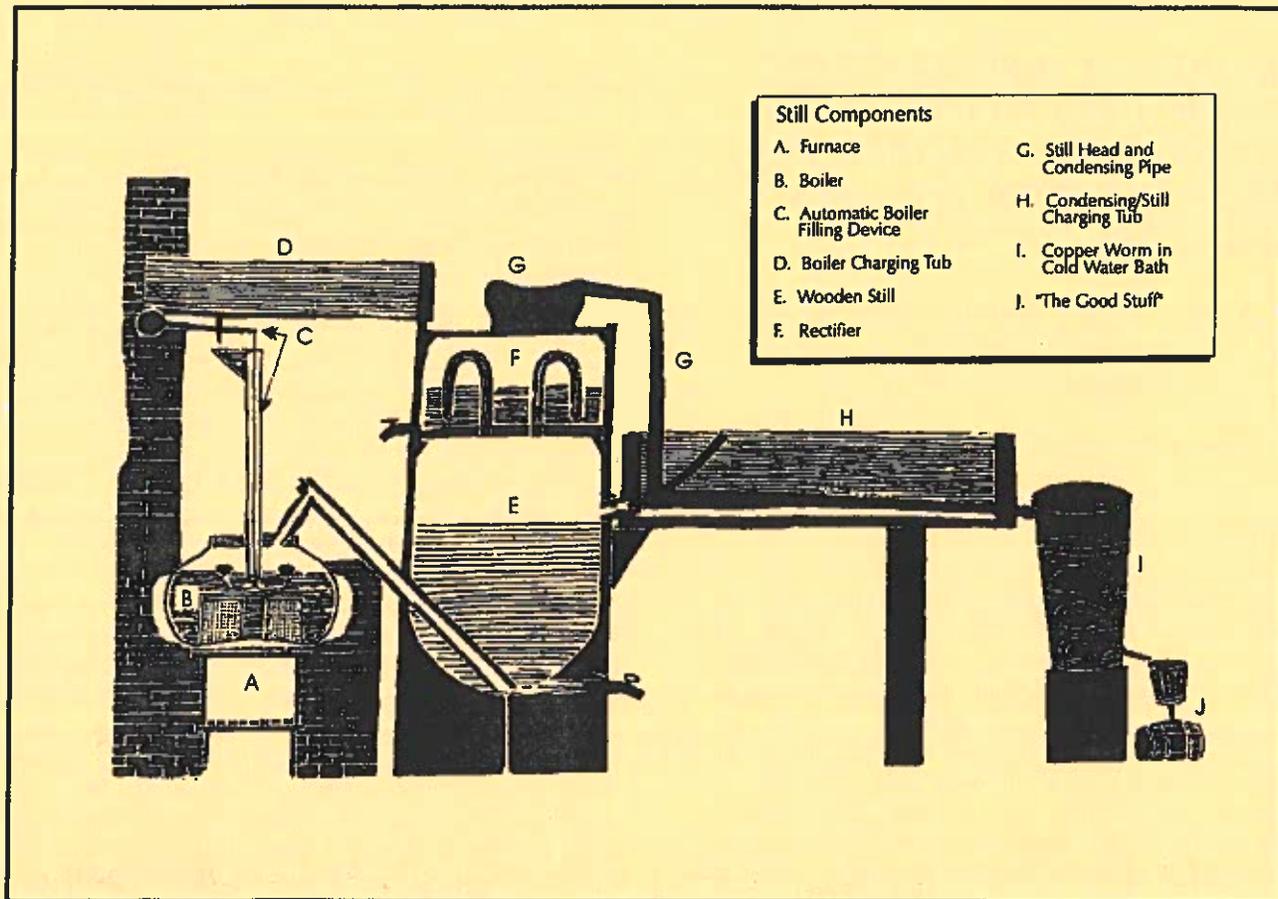


Figure 3: Plans for Gillespie's Improved Steam Still, a design patented in 1816.

ASC GROUP, INC. LOOKING FOR ARCHAEOLOGISTS

ASC Group, Inc. has immediate openings for an Archaeological Principal Investigator and Field Supervisors at our Columbus and Cleveland offices.

Principal Investigator: Responsibilities include supervision of fieldwork, analysis, research methodology, and report preparation. Candidate will have a minimum of a M.S./M.A. in anthropology/archaeology, plus at least two years of full time experience supervising archaeological fieldwork.

Field Supervisors: Responsibilities include the everyday supervision of field activities, including assignment of crews, review of work in progress; assisting with analysis and interpretation of materials collected; report preparation. Candidate will have a Master's or Bachelor's degree in Anthropology or closely related field, plus one year of full time professional experience in archaeology or CRM; at

least six months of archaeological field experience in an assistant supervisory role. Transit/laser transit and data collector experience a must.

Eastern Woodlands archaeology familiarity helpful. Excellent field, analytical, communication, and report writing skills are mandatory.

We offer competitive salary, including health and dental insurance and 401 (k) benefits. For consideration, forward resume/salary requirements to: HR, ASC Group, Inc., 4620 Indianola Ave., Columbus, OH 43214, or e-mail to, shuy@ascgroup.net, or fax to, (614) 268-7881. EOE



**SITE 33Wy674: A PRELIMINARY
VIEW OF A MULTICOMPONENT,
TRANSITIONAL LATE ARCHAIC/
WOODLAND EXTRACTIVE SITE IN
WYANDOT COUNTY, OHIO**

*William E. Rutter
Andrew M. Schneider
Jason M. Koralewski*

Midwest Environmental Consultants, Inc.

Introduction

Midwest Environmental Consultants, Inc., a member of the Mannik & Smith Group, recently initiated Phase III excavations at two prehistoric sites, 33Wy674 and 33Wy783, in Wyandot County, Ohio. While investigation of 33Wy783 continues, excavations and lab analyses for 33Wy674 are complete. Identification and investigation of the sites was undertaken as a result of the U.S. Route 30 Relocation Project proposed by the Ohio Department of Transportation (ODOT). Phase I and II investigations of the sites concluded they were potentially eligible for the National Register of Historic Places (NRHP), and as a result, Phase III mitigation efforts were recommended. This article presents a preliminary report of investigations and interpretations regarding 33Wy674.

Site 33Wy674 is located in a cultivated field approximately 11 kilometers (7 miles) southeast of the city of Upper Sandusky, in Antrim Township, Wyandot County, Ohio. The site is situated on a broad glacial rise 350 meters northeast of Broken Sword Creek, although a tributary of this drainage is located within 200 meters of the site. The area, classified within the Central Lowland Physiographic province, is situated in the Glacial Lake Plain characterized by relatively low relief. This zone is broken by only beach ridges and limited high ground adjacent to the drainages. Native forests in the region would have been characterized by Beech, Elm-Ash Swamp, and Oak-Sugar Maple (Gordon 1966), having changed from the Spruce conifer-forests common in earlier post-glacial times (Shane 1994).

Previous Investigation

Site 33Wy674 was identified as a lithic scatter during the Phase I survey conducted by ASC Group. Twelve artifacts were recovered including debitage, a Late Archaic Brewerton Side-Notched projectile point, another projectile point fragment, and a modified lithic fragment (Whitman et al. 1996:83-84). The lithic artifacts were collected from an area recorded as 35 (N-S) by 420 (E-W) meters. Despite the paucity of artifacts, the site was recommended for further

work due to its position near a former glacial lake (Whitman et al. 1996:84).

Phase II investigations of Site 33Wy674 took place in early 1995 (Whitman et al. 1995) again by ASC Group. Phase II investigations began with an intensive surface survey effort, operationalized within a five-meter grid system across the entire site. Out of 1,350 such collection units, 99 artifacts were recovered from a total of 75 units. The distribution of the artifacts suggested that the western sub-rise was most intensively occupied, producing 85% (n=84) of the artifact assemblage. The central and eastern sub-rises were determined to represent separate components and assigned new OAI numbers, 33Wy1141 and 33Wy1142 respectively. The western sub-rise, maintained as Site 33Wy674, was targeted for further sub-surface investigation.

A total of 400 square meters (4.6% of the site) was stripped in the form of six units/trenches. While few artifacts were recovered, the excavations disclosed two cultural features below the plow zone. Feature 1 was concluded to be an historic postmold, probably associated with a fencerow along the lane located at the southern boundary of the site. While Feature 2 represented a natural tree/root stain, Feature 3 represented a prehistoric pit feature measuring 116 cm N-S by 132 cm E-W, and a depth of 21 cm from interface. The feature was cross-sectioned and profiled, but the northern portion of the feature remained unexcavated. While the feature did not produce any diagnostic artifacts, specimens of fire-cracked rock, charcoal, and nutshell were recovered. A charcoal sample from the feature produced an uncalibrated date of 3110±150 B.P. (Whitman et al. 1995:69) and was interpreted as a Late Archaic pit feature.

Following Phase II testing, at least two separate components were suggested for the site, an Early Archaic component based on the Lake Erie Bifurcated Base projectile point and a Late Archaic component represented by the Brewerton Side-Notched and Brewerton Ear-Notched projectile points. The Late Archaic component is further evidenced by three unidentified stemmed projectile point fragments and the radiocarbon determination from the pit feature. An autumn occupation was suggested based on wood charcoal and the presence of nutshell.

Phase III Excavations

With the size and dimensions of Site 33Wy674 accurately defined by an intensive surface survey during the Phase II investigations, Phase III efforts focused on data recovery. From October to December 1999, Midwest Environmental Consultants, Inc. stripped 2,033 square meters at the site (Figure 1). Based on the dimensions previously recorded (Whitman et al. 1995), this represents approximately 24% of the site area. Excavation methodology combined the use of mechanical stripping to open large areas with hand excavated units to control for artifacts in the plow zone.

Figure 1: Excavation Plan of Site 33Wy674.

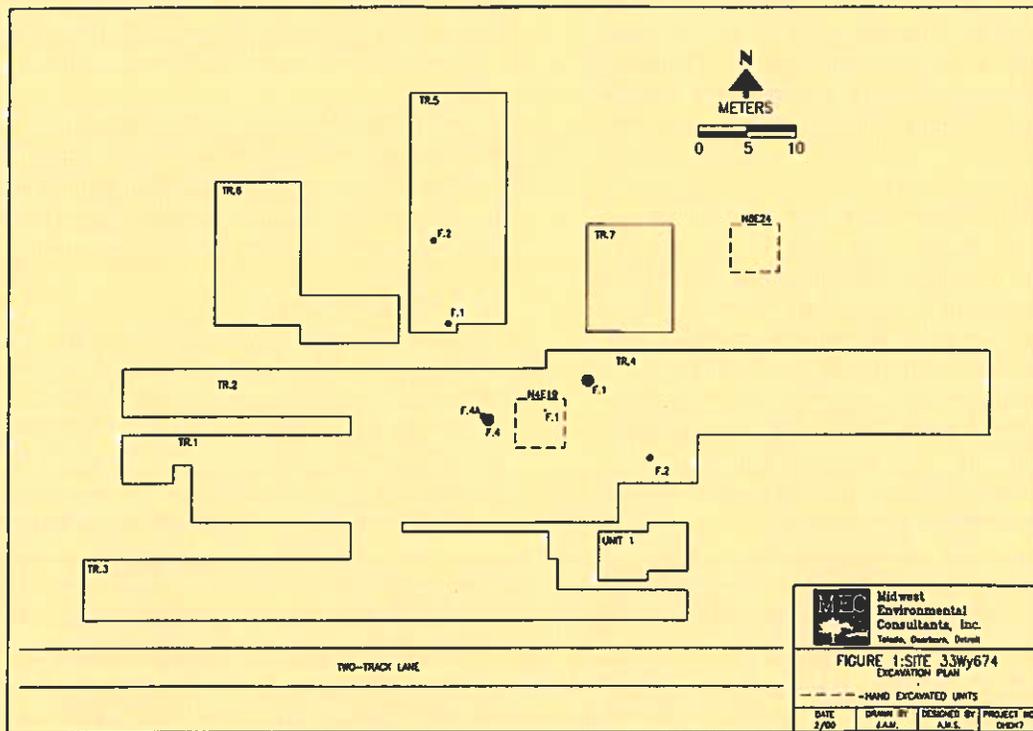
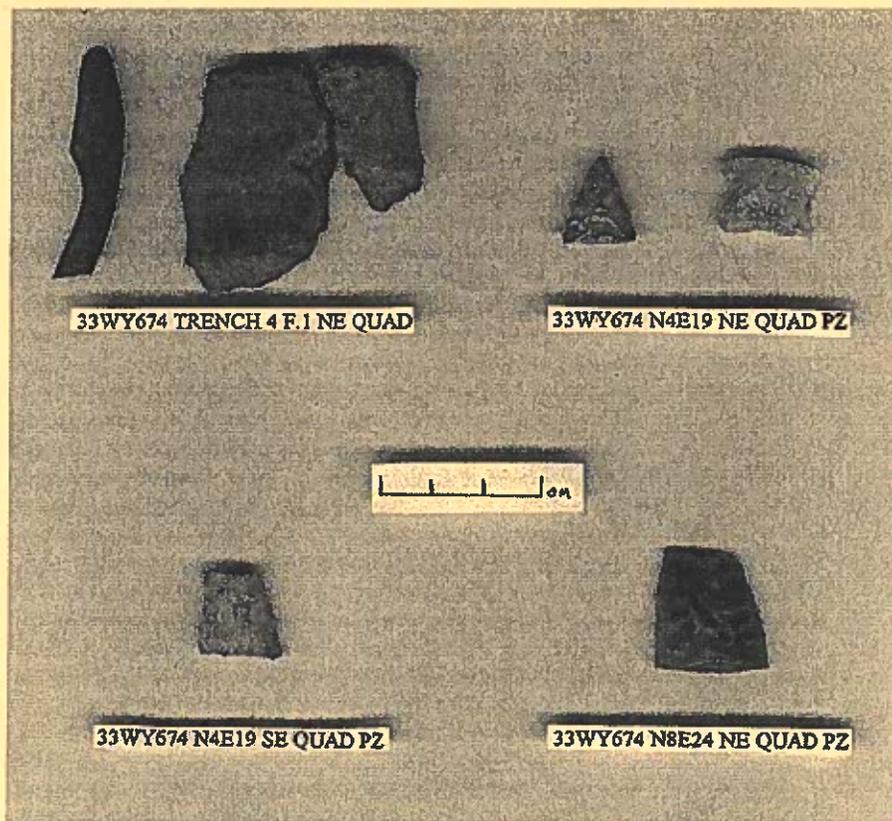


Figure 2: Diagnostic artifacts from Phase III excavations at 33Wy674.



Mechanical excavation removed the plowzone to within approximately 3-5 cm of interface, after which the units were shovel-scraped to reveal potential features. The hand-excavated units, totaling 50 square meters, were shovel-excavated in quarter sections and the plow zone was screened.

A total of 14 cultural features were identified during the Phase III investigation. While seven were representative of historic post molds paralleling the two-track lane, the remaining features represent prehistoric pit features and one post mold. Although most of these features did not contain temporally/culturally diagnostic artifacts, most produced lithic debitage, fire-cracked rock, charcoal, and/or botanical remains (Table 1). One feature (Trench 4/F.1) did however produce ceramic material. An intrusive feature (Trench 1/F.4a) was also identified within the pit feature profiled during Phase II excavations by ASC Group.

**Table 1:
Feature
Summary
for 33Wy674**

FEATURE	SIZE (cm)	CONTENTS	RADIOCARBON DATE*
Trench 1/F.2	28 x 28 x 20	lithic debitage, FCR, charcoal, botanical	
Trench 1/F.4	116 x 132 x 20	lithic debitage, FCR, charcoal, botanical	3110+/-150 B.P.(ASC Date) 2790+/-60 B.P.(GX-26430)
Trench 1/F.4a	59 x 47 x 18	lithic debitage, FCR, charcoal	2580+/-40 B.P. (Beta-139240)
Trench 4/F.1	124 x 120 x 20	lithic debitage, charcoal, botanical, ceramic	2060+/-70 B.P. (GX-26431) 2010+/-60 B.P. (Beta-139241)
Trench 5/F.1	34 x 40 x 15	lithic debitage, FCR, charcoal, botanical	
Trench 5/F.2	34 x 37 x 10	lithic debitage, charcoal, botanical	
N4E19/F.2	25 x 22 x 34	lithic debitage, FCR, charcoal, botanical	

* Uncalibrated radiocarbon date.

Lithic Assemblage

Phase III investigation of Site 33Wy674 yielded a lithic assemblage composed of 197 specimens, not including fire-cracked rock. Chert types represented within the assemblage include Delaware, Cedarville-Guelph, Upper Mercer, Flint Ridge, Dundee, Onondaga, and Pipe Creek. In addition, specimens of slate, quartz, and granite were present within the assemblage. Approximately 12% (n=25) of the lithic assemblage is represented by those cherts which are not locally available, such as Upper Mercer, Flint Ridge and Onondaga. As most of the lithic assemblage was recovered from plowzone contexts, further discussion of chert type distribution is not warranted due to the multicomponent nature of the site. However, one observation can be made with respect to lithic debitage recovered from feature contexts. Trench 1/Feature 2 is the only feature which contains exclusively non-local cherts, Flint Ridge and Upper Mercer. All other pit features at the site contain chert from locally available sources, Delaware and Cedarville-Guelph.

Lithic tools recovered include a projectile point mid-shaft of Flint Ridge (Figure 2:lower right), a fragmented projectile point base of Cedarville-Guelph, a beveled projectile point mid-shaft fragment of Onondaga (Figure 2:lower left), an unidentified basal fragment of Delaware chert, a biface tip of Cedarville-Guelph (Figure 2:upper right), and a corner notched base of Flint Ridge chalcedony (Figure 2:upper right). None of the projectile point fragments were complete enough to clearly identify point type. In addition,

the chipped stone assemblage included re-touched primary flakes, two re-touched secondary flakes, one re-touched shatter specimen, and a bifacial end-scraper.

A total of 46 specimens of fire-cracked rock were recovered from feature contexts, totaling 14.2 kilograms. The fire-cracked rock assemblage contained granitic and sedimentary rock fragments. Of note, Trench 4/Feature 1 contained three large specimens of fire-cracked rock totaling 6.8 kg.

Ceramic Assemblage

Ceramic material was recovered from one feature, Feature 1 in Trench 4. The feature contained two rimsherds, seven bodysherds, and one unanalyzable sherdlet. All the ceramic sherds are grit tempered. The bodysherds are all plain smoothed, with a maximum thickness of 10mm, a minimum thickness of 8 mm, and a mean thickness of 8.75 mm. The two rimsherds (Figure 2:upper left) represent a single vessel,

and are also smoothed on the vessel exterior, lip, and interior (Figure 2). No decoration is exhibited on the vessel. The vessel is

however, represented by a collar measuring 24.2 mm in height and 8mm in thickness.

Botanical Remains

During the excavation of Site 33Wy674, a three-liter soil sample was collected from each feature. The samples were floated in MEC laboratory facilities and sent to Paleobot at the University of Toronto for identification and analysis. Table 2 illustrates the qualitative and quantitative paleobotanical data.

Every prehistoric cultural feature identified contained a small amount of botanical remains. Of note, five of the features contained various amounts of black walnut (*Juglans nigra*), and one contained a single pin cherry seed (*Prunus Pennsylvanicus*). No cultigens were identified in the botanical sample (Ounjian 2000b). Both black walnut and pin cherry are available in the late summer and fall months, although both may be dried and stored for long periods. The carbonized bark and wood charcoal recovered from features, as well as the grass stem and tree bud, were too fragmented to identify to species.

Radiocarbon Dates

One radiocarbon date was obtained from the Phase II investigations of 33Wy674. As mentioned, a pit feature was dated to 3110+/-150 B.P. (Whitman et al. 1995). During the Phase III investigations, the remaining half of the same feature was excavated and a second sample submitted for radiocarbon dating. An uncalibrated date of 2790 +/-60 B.P. (GX-26430) was received. At the two sigma limits, the

Table 2: Floral Remains Recovered From Feature Contexts (grams).

FEATURE	WOOD CHARCOAL	CARBONIZED BARK	TREE BUD	BLACK WALNUT	PIN CHERRY SEED	GRASS STEM	UNIDENTIFIED PLANT REMAINS
Tr. 1/F.2	0.41	0.06		0.01	<0.01	<0.01	
Tr. 1/F.4				0.01			
Tr. 4/F.1	0.04	0.03	0.04	0.01			0.01
Tr. 5/F.1	0.45	0.21		35.6			0.11
Tr.5/F.2	0.04	<0.01		0.25			
N4E19/F.2		<0.01					0.01

two dates overlap, placing them during the transitional Late Archaic/Early Woodland period.

A carbon sample was also recovered from the intrusive feature (Feature 4a) within Trench 1/Feature 4 and submitted. An uncalibrated AMS dated of 2580 \pm 40 B.P. (Beta-139240) with a calibrated intercept of 794 B.C.

Two samples were also submitted from the feature (Trench 4/Feature 1) containing ceramics, one sample to Geochron and one sample to Beta Analytic. The Geochron sample dates to 2060 \pm 70 B.P. (GX-26431), with a calibrated intercept of 50 B.C. The Beta sample dates to 2010 \pm 60 B.P. (Beta-139241) with a calibrated intercept between 36 B.C. and A.D. 1.

Table 3: Radiocarbon Dates From 33Wy674

* Calibrated using Calib 4.1.2 and Stuiver and Reimer (1993)

Feature	Lab Code	BP Age	AD/BC Age	Calibrated* Intercept B.C.	Calibrated AD/BC Range (1 Sigma)
Tr.1/F.4	(unk. ASC)	3110 \pm 150	1160 \pm -150	1401	1131-1521 B.C.
Tr.1/F.4	GX-26430	2790 \pm -60	840 \pm -60	966/964/921	837-1003 BC
Tr.1/F.4a	Beta-139240	2580 \pm -40	630 \pm -40	794	765-801 BC
Tr.4/F.1	GX-26431	2060 \pm -70	110 \pm -70	50	3-165 BC
Tr.4/F.1	Beta-139241	2010 \pm -60	60 \pm -60	36/18/1	61BC - AD68

Conclusions

Site 33Wy674 produced evidence of at least four occupations, an Early Archaic, a Late Archaic, a transitional Late Archaic/Early Woodland, and Late Woodland components. While the Early and Late Archaic components are represented by diagnostic projectile points from plowzone contexts, the major component is argued to represent a transitional Late Archaic/Early Woodland extractive campsite. The radiocarbon assemblage would indicate the site was repetitively utilized during the transitional Late Archaic/Early Woodland time period. The intrusive feature is further evidence of site re-occupation. The presence of burned nutshell in five pit features may suggest utilization of the site primarily during the fall.

The ceramic vessel from Trench 1/Feature 1 is suggested to represent plain ware from a local Late Woodland manifestation, based on the presence of a vessel collar. The ceramic vessel rimsherds are analogous to contemporaneous wares, such as Vase Plain of the Western Basin Tradition of

northwest and northcentral Ohio (Stothers 1995; Stothers et al. 1994), Peters Plain of the Peters Phase of south central Ohio (Prufer and McKenzie 1966; Prufer 1967), and Cole Plain of the 'Cole Tradition' (Baby and Potter 1965) of central Ohio. At least three scenarios may explain the fact that the Late Woodland ceramics were recovered from a feature represented by two Early Woodland dates. Either, the Late Woodland ceramics represent secondary deposit into a feature of Early Woodland origin, wood from Early Woodland times was used by Late Woodland people at the site, or the dates are incorrect and the feature is Late Woodland in origin. While the latter two scenarios seem unlikely, it is suggested that the ceramics are most likely to be intrusive.

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- March 17-18 The 18th Symposium on Ohio Valley Urban and Historical Archaeology, Shakertown at Pleasant Hill Kentucky. Contact: Kit W. Wesler, Wickliffe Mounds Research Center, P.O. Box 155, Wickliffe, KY 42087, Phone: (270) 335-3681; E-mail: Kit.wesler@murraystate.edu.
- April 5-9 The 65th Annual meeting of the Society for American Archaeology, Philadelphia Marriott Hotel, Philadelphia. Contact: SAA Headquarters, 900 Second St. NE #12, Washington, DC 20002, Phone: (202) 789-8200; E-mail: meetings@saa.org.
- May 5-12 Annual Meeting of the Society for Pennsylvania Archaeology, Radisson Inn, Williamsport, PA. Contact: Ricki Maietta, 123 Clearview Ln., Cogan Station, PA 17728, Phone: (570) 494-1622; E-mail: rmaietta@csrlink.net.
- November 2-5 The 67th Annual Meeting of the Eastern States Archeological Federation, Holiday Inn Select, Solomons, Maryland. Contact: Dennis Curry, Program Chair, Maryland Historical Trust, 100 Community Place, Crownsville, MD 21032; Phone: (410) 514-7664; E-mail: curry@dhcd.state.md.us.
- November 8-11 The 57th Annual Meeting of the Southeastern Archaeological Conference, Crowne Plaza Hotel, Macon, Georgia. Contact: Adam King, Program Chair, E-mail: aking@sc.edu.
- 2001
- January 10-13 2001 Society for Historical Archaeology/Advisory Council on Underwater Archaeology Conference on Historical and Underwater Archaeology, Long Beach, California. Contact: Sheli O. Smith, Conference Chair; 2001 SHA Conference, P.O. Box 2667, Long Beach, CA 90801; Phone: (562) 424-0201; E-mail: sosmith@95net.com.

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