

PAC Newsletter

Spring 1999

Vol. 20

PENNSYLVANIA ARCHAEOLOGICAL COUNCIL

PRESIDENT'S MESSAGE

Some Thoughts about Archaeological Contexts and How We Might Get Some
By Beverly Chiarulli, Anthropology Department, Indiana University of Pennsylvania

As my first column as PAC President, I would like to share some thoughts I have been having about archaeological contexts in Pennsylvania. I've done several things recently that have led me to think about context and I'm curious if others of you have had thoughts as well on this topic. In late May, I attended a conference in Washington, DC sponsored by the Transportation Research Board, the Federal Highway Administration, and the National Park Service ambitiously titled "A National Forum on Assessing Historic Significance for Transportation Programs". (I should add that the organizer of the conference was Kate Quinn, formerly a PAC member. I also saw more PAC members at the conference than I usually see at PAC meetings.) The forum brought together 190 people who work in many areas of historic preservation to identify critical issues in determining significance of historic properties for transportation programs. Eight work groups identified key issues, barriers, resources and made recommendations for ways to improve our ability to assess historic significance in areas including the Integration of Section 106 and NEPA; Cultural, Historic, and Rural Landscapes; 20th Century Properties; Archaeological Site Significance; Traditional Cultural Properties; and Historic Structures. The increased use of historic and archaeological contexts for assessments of significance was mentioned in every group as a solution to problems that exist with site significance assessments. The lack of these contexts was seen as a major problem. Much discussion was directed toward finding ways of creating more context statements and using these contexts. It was said more than once "if only there was a context for lithic scatters, for example, we could ...justify investigating more of them or... not investigate any of them."

It struck me as strange that an archaeological context could be viewed as the solution to two opposite problems. So the question becomes, what are archaeological or historic contexts? In my understanding, contexts are frameworks used for National Register Nominations. They are important in multiple property nominations and in single site nominations, because they provide a way of identifying how significant any single resource might be relative to the broader context. I think a good example is the Coal and Coke context written by Carmen DiCiccio and published by the PHMC (1996). Besides the published survey of the bituminous coal industry from the colonial period through World War II, the context project produced a list of coal and coke resources, and property types associated with the industry. A list of potential resources for future nominations was created by developing and using a set of criteria to evaluate identified resources.

I think PAC should begin to work on developing archaeological contexts. I see this as something that could grow out of the Study Group symposiums. I think we could apply for funding from the

PHMC Historic Preservation Grant Program. So if you are interested in working on this project let me know what ideas you have and what areas you think are priorities.

I also want to recommend a book to all of you that I read this summer called "In Search of Ancient North America" by Heather Pringle (1996). Although this is not a technical book and was written by a journalist, I think this book provides wonderful explanations of the research questions some North American archaeologists are investigating, why their investigations are important, and how archaeological research can actually answer some questions about the past. We are often faced with a public asking us to explain what we are doing. I know that this book gave me some new ideas about ways to answer this question. It also made me wonder why much of the archaeology we are doing doesn't produce these kind of answers. I have some thoughts about that as well but I'll save them for later. This book made me feel very optimistic that archaeology can provide us with insights into the past.

This is an exciting time for Pennsylvania archaeology. Some major archaeological discoveries have been made in the past year. I would encourage all of you to become active in PAC and help decide what role the organization and the state's professional archaeologists will have in protecting and explaining the archaeological history of the state. My email address is bevc@grove.iup.edu.

COOPERATION COLUMN

It has been suggested that the PAC Newsletter could provide a medium in which requests for information regarding research questions / problems could be posted. If you have such requests, please forward them to the editor (see below) for inclusion in the next Newsletter.

NO SUBMISSIONS FOR THIS ISSUE.

CURRENT RESEARCH

In an effort to shine some light onto the "gray" literature, the editor requests submissions for the Current Research column. These should be short descriptions of on-going or recently completed work. Reference to the full report should be included, if available. Please forward such items to the editor (see below). Many thanks to those who contributed to this issue.

Route 11/15 Data Recovery

Five prehistoric sites eligible for the National Register of Historic Places have been identified within the required right-of-way for the widening of Routes 11/15 in Perry and Juniata counties. The project is funded by the Pennsylvania Department of Transportation and the Federal Highway Administration. Data recovery is being performed by KCI Technologies, Inc. in consultation with the Department and the Pennsylvania Historical and Museum Commission. Fieldwork has been completed at three of the five sites -- 36Ju93, 36Ju95, and 36Pe60. Field investigations will continue through July at Site 36Pe16, located on the Susquehanna River terrace in Liverpool. Following roadway construction, additional work will be performed at 36Pe61 in areas outside the expanded fill slope.

The work in progress at 36Pe16 will bring the total excavated area to 10% of the site within the

required right-of-way. The primary components represented at 36Pe16 date to the Paleoindian, Early Archaic, and Transitional periods. The Paleoindian component is confined to sandy deposits and the underlying cobbles found in the central portion of the site where the basal channel lag is deeper. Artifacts have been found within the 10 cm thick cobble layer, which directly overlies bedrock. To date, the component has produced over 3000 artifacts, including projectile point fragments, keeled endscrapers, a burin, and a limace. To date, no features have been identified in the Paleoindian component.

The Early Archaic component is within a vertical package of deposits up to one meter in thickness. Although debitage is distributed vertically throughout this package, it is possible that several distinct episodes of occupation will be identifiable following detailed data analysis. Diagnostic hafted bifaces include Kirk stemmed and corner-notched, St. Albans, Stanly, and Kanawha, as well as St. Charles corner-notched, a type primarily found in the Ohio River Valley. A new projectile point type, tentatively named Susquehanna Serrated, is also associated with this component, as well as with the Early Archaic component at 36Pe60. The type, described by Stanley Lantz and Marilyn Cartwright Kern, has straight to convex margins with medium to fine serrations, narrow corner notches, and a slightly concave to convex base with basal grinding. The points are characterized by excellent craftsmanship and fashioned of high-quality chert or jasper. A variety of scrapers, graters, and other tools has also been found. Fourteen features have been identified in the Early Archaic component, including rock clusters, diffuse organic stains, and two pit features, one of which contained nutshell.

The Transitional period component extends from 50 to 110 cm downward from the surface and is characterized by very high artifact densities. Steatite, broadspears, and Orient Fishtails are diagnostic of this component. Fire-cracked rock clusters are the most common Transitional Period feature type. However, pit features and postmolds were also found. Several of the pit features contained substantial amounts of nutshell.

Site 36Pe16 is located at the intersection of Route 17 and Routes 11/15 in Liverpool. Visitors are welcome. Group tours can be arranged by calling Dave Bibler at KCI (717-691-1340).

Gettysburg National Military Park

The National Park Service (NPS) and Gettysburg Municipal Authority (GMA) are undertaking a program to replace failing water systems at Eisenhower National Historic Site (EISE) and Gettysburg National Military Park (GNMP), Adams County, Pennsylvania. Phase I archeological testing of the proposed 16-inch waterline was conducted in the Fall of 1998 by GAI Consultants, Inc. Ben Resnick (GAI) and Kristen Stevens (NPS) served as Co-Principal Investigators; Karen Orrence (GAI) served as Field Director.

The goal of Phase I testing was to provide basic information concerning cultural resources in areas that would be subject to ground disturbance from the planned waterline construction. The NPS Scope of Services identified four cultural resources anticipated to occur within the project right-of-way: the Pitzer YCC Camp (ca. 1930s), an 1863 earthwork in the vicinity of Berdan Avenue and West Confederate Avenue, World War I-period Camp Colt (1917-1919), and World War II-period Camp Sharpe (1944-1945).

It is worth noting that the project ROW crossed several large fields between West Confederate Avenue and Long Lane. These fields coincide with the location of a pivotal engagement on the

third day's battle (3 July 1863), known as "Pickett's Charge." Here, under the command of General James Longstreet, approximately 12,000 Confederate troops traveled nearly a mile across open fields when attacking the Union center along Cemetery Ridge. The Cemetery Ridge assault was a disaster for Lee's army and a turning point in the Battle of Gettysburg. After the attack, Lee retreated to Maryland and on July 4, 1863, to Virginia, never again to wage an attack on Union soil. Although the Civil War continued for two more years, "Pickett's Charge" and the Battle of Gettysburg marked a turning point, one that resulted in a diminished Confederate army.

The proposed waterline ROW measures approximately 10,150 feet in length (north-south) by 20 feet in width (east-west), incorporating approximately 4.6 acres. These investigations included a surface survey of more than 1,000 linear feet of recently-plowed fields, systematic excavation of 171 shovel test pits (STPs), and a metal-detecting survey, the latter resulting in the identification of 570 magnetic "anomalies or targets."

Based on a preliminary field analysis, approximately 225 of the 570 magnetic "targets" (39 percent) consisted of Civil War-related military artifacts, such as artillery shell fragments, iron and lead artillery case balls, artillery fuses, sabot fragments, lead fragments, metal rivets and fasteners, and impacted (fired), and dropped/discarded (unfired) small arms ammunition (e.g., Minie balls, round shot, Sharpe's bullets). Except for a small number of disturbed areas, Civil War-period military artifacts were collected along virtually the entire length of the ("Pickett's Charge") survey area, including Camps Colt and Sharpe. A railroad fill deposit containing large amounts of iron fragments, coal, cinders, slag, railroad spikes, and a railroad chair rail was collected, and appears to be associated with the Round Top Siding of the Gettysburg and Harrisburg Railroad (1884-1917). An historic sketch map of Camp Sharpe (Thomas 1944) depicts the railroad at the southern terminus of the camp. Preliminary comparisons to plans of Camp Colt (HABS 1989) indicate that the above location may be in the vicinity of the 59th Regiment, U.S. Infantry. Artifacts dating to this period in this area include cartridge shell casings, an unfired (dropped/discarded) bullet, ammunition clips, military buttons (2), and coins (1905 "V" nickel and 1913 penny).

Notwithstanding years of artifact collecting and post-Civil War disturbances, identification of Civil War-period ordnance between West Confederate Avenue and Long Lane (open fields) demonstrates the survival of archeological remains affiliated with the Battle of Gettysburg's climactic engagement (i.e., "Pickett's Charge"). It is expected that analysis of artifact patterning across this area, in light of available historical data, may add to our knowledge of this important Civil War encounter. A technical report will be submitted to the National Park Service later this year.

PUBLIC EDUCATION

[In order to encourage the very important task of developing public support of and involvement in archaeology, members are asked to submit short items describing how they, and their firms, institutions, and organizations are interacting with the general public.]

NO SUBMISSIONS FOR THIS ISSUE

COMMITTEE REPORTS

Survey Priorities Committee

At the end of April, PAC submitted a revised Historic Preservation Grant proposal addressing comments from the 1998 proposal that was not funded. The project would study the existing site data within three of the nineteen watersheds identified in The Development of Prehistoric Settlement Pattern Research Priorities in Pennsylvania (PHMC 1996) as having a low priority for future survey. The goal of the study is to identify information needs and to precisely define environmental settings with a high probability for containing sites that would address these needs. The three low-priority watersheds will include one each from the eastern, central, and western parts of the state. A Principal Investigator, each of which is a PAC member, will lead the study in each region, assisted by one or more Research Assistants. The end product will be a report for each watershed describing the results of the study relevant to the project goals. The team for each region will include at least two peer reviewers who will be consulted during the course of the study and who will provide comments on the final report. The reports will be submitted to the PHMC with recommendations regarding survey priorities for upland terrain that could be generalized to adjacent watersheds. All of the participants in last year's proposal agreed to be included in this year's submission.

The primary reason for rejection of last year's proposal was that all of the project participants were members of the Pennsylvania Archaeological Council. The review committee believed an independent review of results by someone from outside PAC and, preferably, from outside Pennsylvania would increase the validity of the study. To address this comment, Dr. Dean Snow, Chairman of the Pennsylvania State University's Department of Anthropology, has been added to the project as an outside reviewer. Dr. Snow has over thirty years experience in archaeology, all but the last four of which were outside Pennsylvania. He has never done compliance work in Pennsylvania and has never been a member of PAC. Dr. Snow will take part in the development of the study methods and will review interim and final work products.

Notification of awards is expected at the beginning of November.

Submitted by Pat Miller

FORUM

[Members are invited to submit comments on issues of current concern. With luck, varying points of view will be presented.]

NO SUBMISSIONS FOR THIS ISSUE

COMPUTER USER'S COLUMN

by Mark A. McConaughy

The time is approaching when we will all find out if our computers are really Y2K compliant. The year 2000 bug may or may not hit you on 1 January 2000, but you should be checking your systems and software to see if you will have any problems when the year 2000 rolls around. I

presume that PAC members working for corporations have teams already checking for the Y2K problem. Those who do not work for large corporations or have home computers will have to check their own computers and software for Y2K compliance. Fortunately, there are web sites devoted to this problem and they will be able to help you determine if your system and some common programs are Y2K compatible.

The Y2K problem involves how your computer and software reads, stores, and uses dates. If the system or software only reads the last two digits of the year and reads 00 as 1900, then you will have a problem. If it is a hardware problem (i.e., how the BIOS reads dates), then you will experience a system crash when you try to boot the computer on 1 January 2000. If so, you will not be able to use that computer and you have to upgrade your BIOS or buy a Y2K compatible system. However, if it is only a specific piece of software that reads dates in that fashion, then your system will boot but crash when trying use that application. You might have to upgrade to a Y2K compliant version of that software to correct the problem (there is an exception to this listed below). If the system and software reads the year 00 as 2000, then you will not experience any problems and you are Y2K compliant.

A good place to start checking on Y2K problems on the web is the following site:

<http://www.zdnet.com/enterprise/zdy2k/compliance/>

It discusses the Y2K problem and has links to most of the other web sites listed in the rest of this report. I suggest reading the background materials provided about Y2K problems before checking the other sites.

The next thing to do is check to see if your computer system is listed as Y2K compliant, presuming it was purchased from one of the major manufacturers of computer equipment. Links to Acer, Apple, Compaq, Dell, Gateway, Hewlett-Packard, IBM, Micron and Packard-Bell web sites detailing whether or not systems are compliant can be found at:

<http://www.zdnet.com/zdy2k/1998/09/4591.html>

If you own a system built by one of these manufacturers and it is not listed, then it is not Y2K compliant. This web site will not help you if you own an off-brand, a locally built system or if you made major changes and upgrades to the system after you purchased it. Fortunately, there are other ways of determining if the computer is Y2K compliant.

If you cannot find out if your system is Y2K compliant from the manufacturer, then it is time to physically check your computer system to see if it is Y2K compliant. A small downloadable test program that can be run on your computer to check if it is Y2K compliant is located at:

<http://www.zdnet.com/vlabs/y2k/testy2k.html>

This program only tests hardware settings to see if the system is Y2K compliant. They do request that you provide information about how the test performed on your system. I ran the test program on two machines I use, and both systems were Y2K compliant. I did not have any problem running the test or problems after running the test. However, I did not have a system that failed the test to see what happened in those cases. Presumably, the test does not crash systems that are not Y2K compatible.

Results from running the Y2K test are posted at the above web site, and I did check some of the current data for this report. The tests revealed that if you bought your system prior to 1995 and/or have a system running an Intel 80486 or older CPU, then it is probable that you are not Y2K compatible. Systems built in 1995 were about 60% Y2K compliant. Systems built in 1994 were less than 50% compliant and it drops off rapidly before 1994. Most Pentium-based systems built since 1997 were Y2K compliant, but there were exceptions. Thus, you should still check your system, even if it is relatively new.

If you do find that your system is not Y2K compliant after making these checks, then you will have to decide what to do about it before 1 January 2000. Certain machines can be upgraded with new CPU chips or new BIOS systems that correct the Y2K bug. However, it may not be worth it considering the relatively low cost of many new systems. It may be as cost effective to buy one of them instead of upgrading the old computer. If the system cannot be upgraded, then the purchase of a new Y2K compliant computer is the only solution.

Even if your computer is Y2K compliant, some of the software you use may not be compliant. Also, some types of software are listed as compliant, but with minor Y2K problems. Fortunately, you will not have to replace the computer if it is only the software that is not Y2K compliant.

Microsoft has provided information about software it makes that is Y2K compliant or compliant with minor issues at:

http://www.microsoft.com/technet/year2k/product/user_compliant.htm

This site lists all the programs by name and provides hotlinks to software specific descriptions. For those that are listed as compliant with minor issues, it is worth checking the software specific site to see what minor issues exist that might be a problem.

Microsoft also has a site that lists information about software it makes that is not Y2K compliant at:

http://www.microsoft.com/technet/year2k/product/user_noncompliant.htm

This site also lists the programs by name with hotlinks to software specific descriptions of why they are not Y2K compliant. Some of the programs listed that might be used by PAC members are Access 2.0 for Windows, Front Page 1.1 for Windows, Internet Explorer 3.X for MacIntosh, MS Office Professional 4.xx for Windows, Site Server 2.0 for Windows NT, Site Server Express 2.0 for Windows NT, Visual Basic Standard versions 1.0 through 4.0 for Windows, MS Word 4.0 for DOS and MS Works 3.0 for Windows. These are all English language versions of the software (foreign language versions are also listed). It is worth checking the hotlinks for comments about why the programs are not Y2K compliant to see if you really need to upgrade these programs. For example, the reason Access 2.0, an early version of Microsoft's relational database, is not compliant is because it reads two digit year dates with 00 as the year 1900. However, you can still use the program after 1 January 2000 if you convert all dates in your databases into four digit years (e.g., 1/1/1999, 1/1/2000, etc.). If you would want to continue to code only two digit year dates or use data with two digit year dates, then you must upgrade to a Y2K compliant version of Access. This is a fairly common problem in early versions of many database and spreadsheet programs. It is not confined to early versions of Access.

Novell also has a site that lists software it makes or made (e.g., it used to make Word Perfect and office suites using Word Perfect; these were later sold to Corel) at:

<http://www.novell.com/year2000/product.html>

Novell is most famous for its networking programs. If you are part of a network that uses Novell software, it is worth checking this site to see if it is Y2K compliant. Also, the site indicates anyone that purchased Novell versions of Word Perfect or Word Perfect Office should upgrade to Corel Word Perfect Suite. The Novell (and presumably earlier versions that were made by Word Perfect as a separate company) versions are not Y2K compliant.

Other pieces of software may not be Y2K compliant and should be tested. Even if a program is listed as Y2K compliant, there could be potential problems. For example, MS Excel 97 is supposedly Y2K compliant. It usually reads two digit 00 year codes as 2000. However, there is a bug in Excel 97 that does not read 00 as 2000 in the Date() function. It still reads a date in the following year first format (00,01,01) as 1900, and any spreadsheet calculations using this function and format will be incorrect.

McAfee also has a program, McAfee Toolbox 2000, that tests to see if your programs and hardware are Y2K compliant. The software can be downloaded for a test run at:

<http://hotfiles.zdnet.com/cgi-bin/taxis/swlib/hotfiles/info.html?b=pcm&fcode=000WLW>

This is shareware and they request a fee of \$29.95 if you decide to keep and use the product. I did download the program and found it useful. The compressed or zipped program is about 6M in size, so it will take some time to download it even using a 56K modem connection. The actual download time will depend on the speed of your modem and the quality of your connection. It took me nearly 50 minutes to download the program using a 56K modem connection and MSn as my Internet Service Provider (ISP). However, the Pittsburgh hub for MSn is very busy and slow at times. I suspect it could be downloaded faster than my time on a less crowded ISP. The program has to be unzipped and installed before it is usable. Once it is run, McAfee 2000 Toolbox checks all your programs and hardware for Y2K compliance. It then lists potential problems it finds. It will also correct some of the problems if you tell it to do so. McAfee 2000 Toolbox has the capability of converting most common database and spreadsheet two digit year dates to four digit years. This is very useful if you have large databases that need to be converted (however, I do recommend you back up the old files before converting them in case something goes wrong). It beats having to do it yourself either using the program's search and replace function or by going through the database and converting each date "by hand."

I do suggest people consider converting all dates to four digit years and habitually use four digit year dates in the future because, in about 25 years, many programs that are now Y2K compliant will again have to be modified. Manufacturers of Y2K compliant software solved the problem by simply having them read two digit dates for the first 25 years of the next century as 20XX and not 19XX. The belief is people will be upgrading to newer versions of their programs before then and the new software will take care of later dates. However, I hope and expect our data to be preserved long past our life spans, and eventually the year 2100 problem will strike. Thus, to keep the appropriate dates with the data, I suggest everyone simply get used to using four digit year dates. The need for computers to store two digit dates to save space no longer is valid. It is only our habitual use of two digit dates in writing shorthand (i.e., mm/dd/yy format) that makes this

conversion awkward. I have personally started using four digit year dates for everything I do that requires a date.

Finally, there are a couple of web sites devoted to the general Y2K problem that may be of use or interest. The first is PC Magazines Y2K web site that discusses many of the problems, has links to other sites, etc. It is at:

<http://www.zdnet.com/pcmag/special/y2k/index.html>

The other general Y2K site is called the Year 2000 Information Center and is located at:

<http://www.year2000.com/>

The Y2K problem is real. However, the impact of the Y2K problem is also greatly over-hyped by the media. Nevertheless, it is worth checking your systems for any incompatibility with two digit 00 date formats. It is not worth taking a chance on losing valuable data or work to this bug. I do recommend checking your systems for this bug, and stomping it out if it exists. If it does not exist on your system, you will at least have peace of mind knowing it will not directly affect you.

submitted by Mark A. McConaughy

ANNOUNCEMENTS

NO SUBMISSIONS FOR THIS ISSUE

MEETING AND EVENTS CALENDAR

Eastern States Archaeological Federation

Date: 17-21 November 1999

Place: Kings Island Resort and Conference Center, Kings Island, Ohio (northeast of Cincinnati)

Pennsylvania Archaeological Council

Date: Friday, 1 October 1999

Place: Harrisburg, PA

Program: Beside a business meeting in the morning, we will look at public education issues in the afternoon, including a visit to the City Island excavations sponsored by the BHP. On Saturday, for those of you who would like to stay, PAC will hold the essay contest award ceremony at City Island in conjunction with the BHP and it will be PAC day on City Island. Ira Beckerman and Bev Chiarulli have volunteered to be there that day.

** Please send notices of upcoming events to the editor.

PLEASE NOTE

PAC encourages its members to join the Society for Pennsylvania Archaeology. It is important to

foster communication between professional and avocational archaeologists. Moreover, membership in SPA supports Pennsylvania Archaeologist in which PAC members often publish.

SPA annual dues are \$14.00 for individuals and \$16.00 for families, which should be sent to: Archaeological Services, P.O. Box 386, Bethlehem, CT 06751-0386.

The expanded PAC web site is up and running. The URL is <http://www.cs.pitt.edu/-bev/pac.htm>
Many thanks to Pat Miller for her efforts to bring this about.

EDITOR'S NOTE

Materials for the PAC Newsletter should be sent to: Philip A. Perazio, KAR, Inc.,
P.O. Box 1117, Stroudsburg, PA 18360
Phone: 717-620-2591; FAX: 717-620-0186
EMAIL: kittarch@sunlink.net

Please send contributions on disk (Wordperfect 6.1 preferred), accompanied by a hard copy. You may also attempt to send submissions as email attachments. However, not all systems are compatible, so this does not always work. Short items, 1 page or less, may be submitted in hard copy or by FAX.

**Deadline for next issue:
15 October 1999.**

NOTE: Please make sure PAC has your current FAX and/or Email addresses so that we may distribute urgent information as quickly as possible. Send updates to Mark McConaughy.