
PENNSYLVANIA ARCHAEOLOGICAL COUNCIL

PRESIDENT'S MESSAGE

I want to talk about Act 70 in this column. At the spring PAC meeting in Williamsport, the board and members had a lengthy discussion about Act 70, because the annual report on the Act released by the Bureau for Historic Preservation of the Pennsylvania Historical and Museum Commission provides a detailed assessment of what has happened to archaeological resources since it was passed four years ago. If you haven't seen the report, it is on the PAC webpage:

<http://www.cs.pitt.edu/~bev/act70up.html>

Act 70 is a state law which amended the History Code and gave the PHMC responsibility for conducting archaeological investigations of known sites in state permitted projects (like housing developments and gravel quarries). The program receives about \$300,000 a year which is spent to support an in-house archaeological team, known as the Commonwealth Archaeology Program, directed by Joe Baker, and three consulting groups, Kittatinny Archaeological Research, Inc., KCI Technologies, Inc., and ASC, Inc. The Act does not provide the CAP archaeologists or consultants the opportunity to conduct Phase I surveys to locate new sites, but only to investigate those which are already recorded in the state site files.

The report makes several suggestions for improvements to the Act. These include:

1. A change in the time limit for investigations and modification of the requirement for landowner consent;
2. A disincentive or penalty for permittees who knowingly use the provisions of Act 70 to avoid federal-level compliance;
3. Some provision for the consideration of archaeologically sensitive (high probability) locations;
4. A tax-based incentive for developers and permittees to avoid the locations of important sites.
5. Creation of a state-wide archaeological preservation trust fund to buy easements or purchase exceptionally important sites to protect them from development.
6. Some kind of official recognition or award for permittees or developers who make substantial or exceptional contributions to the preservation of sites on their properties.

While all of these are good recommendations, the board and members instead voted to continue to

support our longstanding position that Act 70 should be repealed. The report makes it clear that significant archaeological sites are being destroyed. Twenty-two sites have been destroyed before any investigations were conducted. Only 23 sites have been investigated and described in completed reports. Investigations have been conducted at another 68 sites; the projects are not completed. While the program is certainly successful in collecting a sample of artifacts through controlled surface collections, each year a major significant site, like a Monongahela village or a deeply stratified floodplain site is destroyed or only subject to limited investigations. Our position is that unless the program can be adequately funded, it should be repealed. We believe that adequate funding would be approximately \$2 million dollars per year to cover the routine investigations and to have enough funds available to investigate a major site. I urge all of you to read the report and to give it to anyone who you think might be concerned about the destruction of sites. PAC will be sending letters to the PHMC and other agencies outlining our concerns about the program. I think it is time to voice our concerns about the program and I hope all of you will join in this effort.

Beverly Chiarulli
Indiana University of Pennsylvania

ARTICLES

The Promise of Section 106: Departments of Transportation and the National Historic Preservation Act

Introduction

In 1966, Congress passed the National Historic Preservation Act (NHPA) in part to establish a program for the preservation of additional historic properties to those already preserved throughout the Nation. For state highway programs using federal-aid funds, Section 106 has been its most pertinent provision.

Thirty-five years later, by what measure should we gauge the success or failure of this Act with reference to archaeological resources? Should it be gauged by the \$5-10 million annually that PennDOT and the Federal Highway Administration spend each year on archaeological studies, a figure that approaches the total annual amount of grants by the Pennsylvania Historical and Museum Commission? Should it be gauged by the number of documents annually generated (around 500) and reports produced (around 150). If measured by the original promise of the Act, to preserve these irreplaceable archaeological sites - to ensure future generations an opportunity to appreciate the heritage of our country - the NHPA must be judged a failure.

Prehistory and Protohistory

Was it inevitable that Section 106 archaeology evolve to this current state, and, must the implementation of 106 continue on its present path? Ten years prior to the passage of the Act, Congress passed the Federal-Aid Highway Act of 1956, which contained provisions for archaeological and paleontological salvage. In the first four years of this legislation, 160 highway salvage projects were conducted in 26 states; however, two-thirds were concentrated in five states,

none further east than Illinois. In 24 states, no highway salvage projects were initiated, despite the availability of federal funds.

Generally speaking, participation by DOTs in archaeological salvage and research work did not begin in earnest until well after the passage of the NHPA in 1966. Implementation was hampered by a number of things, not the least of which was the original requirement that a site be listed on the National Register to be considered for protection. By 1974, the climate had changed, due to passage of the Archaeological Data Preservation Act (Moss-Bennett) and the Advisory Council issuing the first version of 36 CFR 800.

In Pennsylvania, although fieldwork related to the NHPA was initiated by PennDOT as early as 1973, consistent application of Section 106 did not occur until the 1980s.

Differences between Maryland and Pennsylvania Highway Programs

The differences between Maryland and Pennsylvania are instructive. In Maryland, fieldwork through the State Archaeologist's office began in the early 1970s, with a highway archaeology program being established in that office by 1974. Maryland established its program early through a neutral party, the State Archaeologist, enabling the Maryland State Highway Administration (SHA) to have a cost-effective program, using state employees, and a neutral and independent professional who would monitor the work. The latter fostered a good working relationship between the Maryland Historic Trust and SHA.

PennDOT relied exclusively on the advice of the SHPO at the beginning, when at all, and used outside consultants for the conduct of the studies. Also, PennDOT management was slow to embrace the National Historic Preservation Act, as well as other environmental legislation. PennDOT recast the role of the SHPO into that of a permitting agency, and created what in psychology could be called a co-dependent relationship. The main feature of co-dependency is turning over the responsibility of one's own actions to others, in this case to the SHPO.

Co-dependency may be dysfunctional, but offers some powerful attractions. First, co-dependency let PennDOT avoid responsibility for its actions, since control could be viewed as being in the hands of the SHPO. Lack of responsibility also implied lack of accountability by PennDOT (i.e., "it was the SHPO's fault"). There was little disincentive for the SHPO to play along. FHWA, as the agency, could not actually delegate ultimate responsibility. Also, in the beginning when agencies did not have in-house cultural resource expertise, the SHPO was often the only source of that expertise.

That there would be conflict was inevitable. SHPO and DOT goals are necessarily different, a point on which Section 106 consultation rests. The SHPO is there to advocate for the preservation of historic resources. This makes the SHPO ill-suited to be the sole advisor to a DOT which has as its mission the maintenance of a transportation system. Furthermore, DOTs must balance all environmental concerns not just historic preservation. Logistically, the SHPO's staff can never fully serve the needs of a DOT because DOT needs are large and SHPO resources are small. The SHPO is outside the DOT and can never be fully integrated into the DOT's business practices, meaning frequent external transactions such as letters, meetings, etc., that are necessarily more cumbersome than internal transactions.

A New Direction

Beginning in 1985, with the hiring of a staff archaeologist, PennDOT began to move away from complete dependence on the SHPO. Four events mark that shift. In 1993, an Engineering District hired its own archaeologist. PennDOT proved that its district-based design operations could be more effective by tapping into District professional expertise. In 1996, Pennsylvania endured severe flooding, which washed out a number of bridges and roads statewide. That emergency resulted in the execution of a flood programmatic agreement to quickly and efficiently handle disaster-aid work. The success of the flood programmatic led PennDOT staff to execute a minor projects programmatic agreement that relied heavily on the proven value of field views and project guidance by qualified professionals. The statewide decentralization of cultural resource expertise was seeded by the 1996 floods, but began in the summer of 1996 and culminated this month.

The premise of this decentralization is that each Engineering District belongs to a region. Each region has a work team - an archaeologist and an architectural historian - who are responsible for scoping, document review, and the qualified professional responsibilities under the minor projects PA. The pilot for team-based 106 used management consultants for staffing. This is being replaced by four state employees from new PennDOT hires and from a 3-year agreement with Indiana University of Pennsylvania (IUP) to provide five more. In two years at the end of the agreement in Year 2002, PennDOT has agreed to have hired the five IUP professionals.

Inserting these 15 - nine new hires plus the six existing positions - into the design process and empowering them will give PennDOT the best opportunity to act responsibly. In addition to the duties described above, the teams will be entering into a dialogue with the engineers early in the process at the scoping field views, with the chance to minimize project impacts by influencing design. Finally, each professional will serve as a District preservation officer, providing training and guidance beyond the individual project. This last role is possibly the most important insofar as the internal advocacy of an historic preservation ethic must be ongoing. The ability to reach those who are responsible for the design decisions and make a case for historic preservation that is neither watered down nor woolly-headed will be the ultimate factor in the success or failure of this program.

New Regulations, Reviving the Promise

Due to recent changes in 36 CFR 800, we as archaeologists, in PennDOT, in Pennsylvania, and in the Nation, are at a crossroads where we will choose which direction historic preservation will take. The old no adverse effect finding meant that a site could be destroyed twice - once by data recovery excavation and once by the project - yet from a regulatory standpoint, the project did not have an adverse effect upon the resource. This brought a certain pragmatic efficiency. No memorandum of agreement (MOA) was needed and most of the brokering of the data recovery could be done between two parties: the DOT and the SHPO. The research exception became a Faustian bargain, carrying a clear message that archaeological sites are not as important as other historic resources. The other message, more subtle but equally damaging, was that data recovery excavation could be the only appropriate way of mitigating impacts to archaeological resources. Destruction of an archaeological site is now an adverse effect. With this change in the regulation, the way mitigation of that adverse effect will be decided will be more open and multiparty. Not only will the SHPO and the DOT be at the table, but there is a higher likelihood that other consulting parties will participate, including local governments with jurisdiction over the affected site, and other groups that have a demonstrated interest in the site. The views of the public will also need to be solicited.

Federally recognized tribes that attach religious and cultural significance to historic properties that may be affected also can be consulting parties, and must be afforded the opportunity to participate and consult. Under the new regulations, these sites need not be on tribal lands. This augurs well for cultural and other non-research values being included in the larger discussion over what should be done.

Making the resolution of adverse effects a multi-party and public activity is a good thing. Archaeological excavation is labor intensive and expensive. With the lower end of archaeological data recoveries around \$100,000 and the upper end now around \$8 million, public accountability becomes very important. The following questions must be recited mantra-like, until there is an answer everyone can be comfortable with: "Is this mitigation the best expenditure of public funds, and if not, what is?" In the last 3 years, FHWA and PennDOT have spent or will have spent \$8 million each on two projects for archaeological data recovery - Meyersdale in Somerset County and Route 15 at Liverpool in Perry County. Did we do the right thing? Probably, but consultation for both projects for data recovery was done under the old regulations. The public and other groups that might have been consulting parties were not substantially involved, so we may never truly know.

In his post-mortem to the 1956 Federal-Aid Highway Act archaeological salvage provisions, Charles McGimsey stated:

All they (FHWA) ask in return, and they have a right to ask it, is the submission of reliable, readable reports which adequately communicate the results of the work to the layman as well as to the scientist, reports which will further the program itself by demonstrating that such research is important.

Those words were penned 30 years ago, and ring true today. For results to be communicated, they must be written more clearly and must reach the wider public. For the research to be valued, it must be set into a context that states what we know and what we want to know next. Changes at PennDOT are now beginning to close the deficiencies in context development and dissemination of information. Public dissemination is requested of each data recovery work plan. Each of the new regional professionals are preparing summary statements of the history and prehistory of their regions, for use as a training tool and as a management tool. Using the IUP agreement, PennDOT will be establishing a cultural resource web site, which will be managed by the 9th position recently hired. In addition, IUP held the first "Byways to the Past Conference" this past March.

Creative Mitigation

Does Section 106 require that adverse effects to archaeological sites be mitigated through data recovery excavation? In a word, no. Creative mitigation is a term that is increasingly coming into use by 106 practitioners. An operative definition is any mitigation that does not follow the dig, document, and destroy path. Creative mitigation in being defined by what it isn't, is necessarily unbounded. The opportunity for creative mitigation has always been available for archaeological sites. The acceptance of creative mitigation in lieu of traditional on-site excavation represents an evolution from Mosaic law - an eye for an eye - to a Code of William S. Gilbert, where the Mikado argues for letting the punishment fit the crime.

Examples of creative mitigation could include excavating a site other than the one being affected because the non-affected site has better research value; the acquisition of an easement or outright

purchase of a site to be preserved; a fuller synthesis of a region using existing collections and data. A cash buy-out, an attractive option for both the DOT and the SHPO, should be an option of last resort. The potential for conflict of interest exists if the funds are under the direct control of either agency. Use of creative mitigation carries with it one additional responsibility for the DOT. Once the genie is out of the bottle, and there are as many options as can be imagined, program-wide planning is needed.

Conclusion

For 35 years, our "compliance" with Section 106 has resulted in skyrocketing costs and decreasing returns to a public that has not awakened to this policy failure. Let us pray that it is not too late for radical change. That modest promise of historic preservation still awaits redemption. What the above proposes is a package of increased internal professionalization within PennDOT, more delegation to PennDOT qualified professionals, more public involvement in archaeological decisions, and more flexibility in mitigating archaeological impacts. The alternative is more of the same.

Ira Beckerman

Note: I would like to thank Wayne Kober, Kate Quinn, Jay Smith, and Linda Ries for assistance on this paper. The views and statements presented in this paper represents my opinion and do not necessarily represent the views of the Pennsylvania Department of Transportation or the Maryland State Highway Administration.

COOPERATION COLUMN

There were no submissions for this edition.

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).

Coverts Crossing Site (36Lr75) Update, Lawrence County, Pennsylvania

Archaeological excavations at two sites in Lawrence County provide insight into the prehistoric occupation of the Mahoning River Valley in northwestern Pennsylvania. In 1999, GAI Consultants, Inc. of Monroeville, Pennsylvania, under contract with Frank B. Taylor Engineering, conducted Phase III data recovery excavations at the Coverts Crossing Site (36Lr75) for PennDOT District 11-0 in advance of a bridge replacement project. Excavations yielded thousands of lithic artifacts, including triangular points, tools, and debitage, produced mostly from locally-available Mahoning Chert, as well as Onondaga and Gull River cherts. Small amounts of Upper Mercer, Flint Ridge, and Uniontown cherts indicate a southern-oriented settlement pattern. Ceramics from the site were exclusively grit-tempered Mahoning Ware, consistent with other early Late Woodland sites in the

area. Ethnobotanical remains included wild berries and fruits, but few nuts, suggesting occupation during the late summer. A small number of maize fragments were also recovered from two features. We await the results of radiocarbon dating on several hearths that were identified during archaeological excavations. The low number of domesticates, as well as the lack of storage features or post molds, suggest that the Coverts Crossing Site may have been used seasonally as a short-term camp, rather than as a village.

GAI has also completed Phase I excavations at another site, 36Lr228, located on the opposite (south) side of the Mahoning River. Upcoming Phase II fieldwork will define site boundaries, test for intact features, refine the site's culture history, and determine its information potential. Deep testing at both 36Lr75 and 36Lr228 will attempt to identify deeply-buried archaeological remains at the sites. The final reports for both projects are scheduled to be completed by the end of the year. GAI requests information regarding current research at other Late Woodland sites in northwestern Pennsylvania. Please contact Doug MacDonald at: d.macdonald@gaiconsultants.com or Ben Resnick at: b.resnick@gaiconsultants.com if you have information or questions regarding GAI's work at either site.

*Douglas H. MacDonald, Ph.D., RPA, Co-Principal Investigator, GAI Consultants, Inc.
Monroeville, PA.*

PUBLIC EDUCATION

(See Committee Reports)

COMMITTEE REPORTS

Survey Priorities Committee -

At the end of April, 1999, PAC submitted a revised Historic Preservation Grant proposal addressing comments from the 1998 proposal that was not funded. The funds requested in the revised proposal have been awarded and work began early this year. To provide additional support for the study, we submitted a proposal to the Pennsylvania Department of Transportation to be funded under the Transportation Enhancements Act (TEA-21). Notice that this funding has also been approved was recently received.

The funded project will study the existing site data within three of the 19 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. A Principal Investigator, each of which is a PAC member, will lead the study of each of the three watersheds, assisted by one or more Research Assistants. 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. In addition, Dr. Dean Snow, Chairman of the Pennsylvania State University's Department of Anthropology, will serve as an outside reviewer. The end product will be a report for each watershed describing the results of the study relevant to the project goals. The reports will be submitted to the PHMC with

recommendations regarding survey priorities for upland terrain that could be generalized to adjacent watersheds.

Pat Miller

Site Stewardship Committee -

State Archaeological Council Presents First Stewardship Award to Allegheny Valley Trails Association and Venango Museum of Art, Science, and Industry

The first Pennsylvania Archaeological Council (PAC) Archaeological Site Stewardship Award was presented to Jim Holden, President of the Allegheny Valley Trails Association (AVTA) and Barbara Perlstein, Executive Director of the Venango Museum of Art, Science, and Industry in Oil City for their outstanding efforts in the preservation and interpretation of the Indian God Rock Petroglyph Site in Venango County, Pennsylvania. Beverly Chiarulli, PAC President presented Mr. Holden with his award at the Annual Meeting of the AVTA in Franklin on May 3, 2000 at the Franklin Club. Both recipients were also recognized at the Awards Banquet during the Annual Society for Pennsylvania Archaeology Meeting on Saturday May 6, 2000, which was held in Williamsport.

Petroglyphs are rock carvings created by Native American peoples. They are often found on large stone cliffs or boulders and may have been used to mark territorial boundaries or trails. Although there are more than 17,000 recorded archaeological sites in the state, there are fewer than 100 petroglyph sites. Many of those that once existed have been destroyed by construction or mining or vandalism in which the carvings have been obscured by graffiti or destroyed. The Indian God Rock Petroglyph is a large stone slab on the edge of the Allegheny River in Venango County. When first discovered in the 19th Century, it was seen to be covered with dozens of animal, human and geometric figures. Through time, this artwork was defaced with paint and graffiti until few of the figures could be seen. As part of the designation of the Allegheny River as a scenic waterway, local organizations and the National Forest Service and other local agencies began efforts to preserve and interpret important features along the River. The AVTA and the Venango Museum worked to preserve and interpret the Indian God Rock site and obtained funding to stabilize the site and create interpretative signage explaining the importance of the site.

According to Rick Kandare of the Allegheny National Forest and Chair of the Council's Award Committee, since this effort, little vandalism has occurred at the site. The only exception is that one of the interpretative signs was stolen, but has since been recovered.

This award fits with PAC's goal to actively encourage the preservation of archaeological and historic sites in the Commonwealth and to increase public awareness and understanding of the state's 14,000 year history through the dissemination of information about archaeological sites. It also has a web page called Discovering Pennsylvania's Hidden Memories, that provides brief descriptions of archaeological sites throughout the state. The site can be accessed through: <http://www.cs.pitt.edu/~bev/memories.html>.

The site stewardship award can be presented each year, depending on nominations. If you would like to nominate someone, contact Rick Kandare for details on the nomination process.

For more information about the AVTA, contact Jim Holden, CIS Department, Clarion University

Clarion, PA 16214, Holden@clarion.edu. For information about the Venango Museum, contact, Barbara Perlstein, Executive Director, Venango Museum of Art, Science and Industry, 270 Seneca Street, Oil City, PA 16301. For more information on the award or the Allegheny River project, contact Richard P. Kandare, Heritage Resources Program Leader, Allegheny National Forest (814) 723-5150 Ext. 178.

Beverly Chiarulli

Education Committee -

The PAC Education Committee Traveling Trunk and Project Archaeology display were represented at the PA Science Teachers Conference in Hershey on 2 December 1999. The teachers were pleased to learn how to integrate archaeology into the science curriculum without "digging".

Valerie B. Perazio

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

PAC COMPUTER USER'S COLUMN

by Mark A. McConaughy

Recent virus attacks over the Internet have been the most important user-related news that may affect PAC members. Denial of Service attacks on large networks earlier in 2000 and the more recent "I Love You" virus that hit both networks and individual users around the world are worth noting. They may not have impacted you directly, but they could have. Additional virus attacks are almost certain to occur in the future. Thus, it is worth looking at programs designed to limit such impacts to you and your computer(s).

First, it seems Apple/MAC users believe they are immune from viruses, etc. True, the latest attacks were confined to IBM compatible computers running Microsoft (MS) operating systems. However, the belief that Apple/MACs cannot be attacked because their operating systems are too well designed is a fallacy. It is due to the fact that malicious people, usually called hackers, who write viruses, etc., want to create the most havoc they can. Apple/MACs are a distinct minority among computer users. IBM systems using MS operating systems are the largest user group in the world. Hackers attack MS systems because they can cause the most damage by doing so, not because they are wary of the Apple/MACs operating systems.

Apple/MAC users should not be lulled into some false sense of security. If Apple/MACs run partitions that interface with IBM compatible systems, those sections may be infected by the same viruses that attack MS systems. Also, viruses specifically designed to attack Apple/MACs are out there. The last major one to spread occurred in 1998 and was known as the Hong Kong Virus (a.k.a., Autostart 9805 virus and it technically is a "worm"). An article about this virus may be found at: <http://www.zdnet.com/zdhelp/stories/main/0,5594,916656,00.html>

The Hong Kong virus can overwrite data on your hard drive causing corrupted files, unexplained crashes and other nasty things to happen on Apple/MAC systems. The Hong Kong virus can be introduced from just about any medium. Information on other Apple/MAC viruses is at: <http://www.zdnet.com/zdnn/stories/news/0,4586,2564833,00.html>

Thus, Apple/MAC users cannot assume they will never be attacked by viruses. Viruses, worms and Trojan horses are problems all computer users, regardless of operating system, should take seriously.

Before continuing, it probably is best to define the differences between Trojan horse, worm, and true virus since these terms often show up in articles about programs generically called viruses. A Trojan horse usually is disguised as a program that does something useful. It might be a screen saver you received from someone or any number of other useful computer programs. However, once the Trojan horse program has been installed on the computer, much like the mythical one, it opens up and attacks your computer from the inside. The only "good" thing about Trojan horses is that they usually only infect the computer on which they are installed. They do not send unsolicited copies out to other computer users. However, the other two categories are much more dangerous because they are self-propagating. Worms are programs that reproduce themselves without altering other computer programs. They usually are found on computer networks where they reside in active memory, duplicating themselves by using parts of the operating system that usually are invisible to users. They become known when they reproduced fast enough to use up all the network's resources, causing the network to crash. A true computer virus is a program that attaches itself to another computer program, usually some type of executable program (although, due to macros used in newer software, data files may now also act as hosts or become infected). A computer virus works much in the same manner as a real virus that takes over a host cell and uses it to produce more viruses which then spread the infection. A computer virus makes duplicate copies of itself and attaches them to other programs on that computer. If the user sends or places one of these infected files to or on another computer, the virus can then infect the new computer. The virus continues to spread as long as it is moved from computer to computer.

How does one protect their computer from these types of infections? Since Trojan horses are part of a program that is seemingly useful, never accept a free program from an unknown or unscanned source. Various types of virus protection programs are available to computer users to protect computers from infections, and I highly recommend that computer users have some type of virus protection software on their systems. Virus protection programs generally check executable programs and files to see if they have been altered in order to detect true computer viruses. Virus protection programs check the file against a database of known viruses and their signatures in order to detect the viruses. These databases must be periodically updated as new viruses are continuously written by hackers and spread. New virus protection programs also can check to see if something is functioning in the operating system that should not be there in order to detect worms. Firewalls are another type of program used to prevent worms from entering and using the operating system by denying access to the network by unauthorized programs and users. From this point on in the discussion, unless specifically stated, I will use the term "virus" in its more generic sense that encompasses Trojan horses, worms, and true viruses.

Unfortunately, no virus protection program can ever insure that your computer will never be infected by some type of virus. Hackers develop new viruses on almost a daily basis and they find new delivery systems to spread them. A new type of virus with a previously unrecognized method

of propagation may easily spread through systems with virus protection programs. Hackers always have some advantage over people developing antivirus software because they are looking for ways to circumvent those protection programs. The best defense a user has is to be wary of unsolicited Email and programs. Delete files and any Email with attachments from unknown senders, especially ones with executable file extensions in the names of the attachments, without opening them. That will insure any viruses attached to them will not be executed on your computer. Finally, since you are not going to delete everything coming into your computer, purchase a good antivirus program and periodically update the virus data files. These programs may not catch a really new virus, but many old ones are still making the rounds and will be caught by antivirus programs.

Several good antivirus programs are available. McAfee and Symantec produce probably the two most popular programs, but there are many other companies who sell antivirus programs. McAfee and Symantec sell stand alone antivirus programs, bundled programs that include antivirus programs, system "cleaning" utilities, update utilities, etc. McAfee Virus Scan 5.0 Delux costs \$39.95 retail (and often can be found discounted) and is equivalent to Symantec's Norton Antivirus Enterprise Solution at \$39.95 (again, retail -- look for discounted prices). These programs come on CD Rom and you will have to install the programs.

McAfee also has an online version of their Virus Scan program that can be downloaded directly from their web site. It is part of a suite of programs called McAfee Clinic. Subscriptions to McAfee Clinic were \$19.95 when I subscribed. However, I do not know if that price still is in effect. It includes the online web version of Virus Scan, a version of Virus Scan (what used to be called McAfee Virus Shield) that is installed on your computer to detect incoming viruses, a systems clean utility that can remove unused web files and free up space, a program that goes out and checks to see if updates are available for all (i.e., not just McAfee's programs) of the user's programs, and a systems resource utilization program. Users can also set things so McAfee automatically notifies them when there are updates for the virus data files. Users then can go to the web site and download the updates (usually an under 5 minute download with a 56K modem). McAfee Clinic does have a yearly subscription fee, and users have to pay for the ability to use McAfee Clinic each year (i.e., \$19.95/year right now). Users must have web access to get and use McAfee Clinic. A similar program available on CD Rom from Symantec is Norton System's Works 2000, but I was not able to find out how much it cost.

Online reviews of the two companies' CD-versions of antivirus programs usually favors the Symantec software, but not because it is significantly better at detecting and eliminating viruses. Comments indicate Symantec CD-based software programs generally are easier for a user to install and use on a system than those from McAfee. However, I have not seen a review of McAfee's online Clinic program, and it installs very easily. Subscribers download the program and it sets itself up. McAfee Clinic's Virus Scan automatically updates itself when new virus data files are downloaded (although you might have to reboot the system to have the updates fully installed, it depends on what was downloaded with that update). Outside of clicking on the download buttons or buttons to use the online programs, users don't really have much to do. I currently subscribe to McAfee Clinic and use it on my home computer. Thus, I may be a little prejudiced in favor of that program. However, both companies produce excellent antivirus programs.

The other type of protection users should consider obtaining is a personal firewall program. Firewalls usually keep hackers from sneaking into an online computer without the user's knowledge, and prevents them from installing some type of virus on the computer. This may not be

necessary for stand alone, modem (dial up) connections, that are not online all the time. Conversely, it is often recommended for users who connect to work networks from remote locations (check with your network administrator to see if they recommend getting a personal firewall for use with that system). Nevertheless, a firewall program should be obtained by anyone who has an Internet connection that is always available or online.

DSL (Digital Subscriber Lines) lines are now available in many areas. DSL connections use an existing telephone line connected to a special modem and software. They permit normal voice operation of your phone while providing an Internet connection that is on all the time. DSL connections speed access to the web, the amount of increase over a 56K modem connection depends on the speed you agree to pay for with the service. However, even the "slowest" DSL connection is usually about 11 times faster than a 56K modem and usually costs around \$50/month for private users.

Unfortunately, a connection that is never closed is the type of port hackers try to exploit when sending viruses. Personal firewall programs (most networks have network firewalls that do essentially the same thing) act as gatekeepers that check incoming and outgoing files on that computer. Someone trying to gain access from outside usually has to be given direct permission to access the computer by the user. Users, depending on the software, can set which sites they wish to access without a check when they consider them "safe." This may be your Internet service provider's (ISP) site or a network you access and trust. Firewall checks may slow down Internet connections and that is the reason trusted sites usually can be set so they are not checked. Nevertheless, if you do permit access to an ISP or network without it going through the firewall check, those ports may act as conduits for hackers to exploit if those sites do not have their own firewall programs.

McAfee and Symantec also sell personal firewall software. McAfee has a personal firewall program that can be added to the Clinic program for a yearly subscription of \$19.95 (\$39.95 if the user is not a Clinic subscriber). Symantec has Norton Internet Security 2000 1.0 available at \$39.95 for Norton Antivirus users and \$59.95 without it. Symantec's program offers some extras not found with the McAfee program. Norton Internet Security acts as a firewall and also has the ability for users to restrict access to certain web sites (e.g., lock out "adult" sites so kids can't access them, etc.). There also are other firewall software on the market. A couple of web sites that provide information about firewalls and links to companies that sell firewall programs are:

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

<http://metalab.unc.edu/mdw/HOWTO/Firewall-HOWTO.html>

Symantec and McAfee have web sites where their software is described and can be purchased directly from the companies. Their sites are:

Symantec - <http://www.symantec.com/>

McAfee - <http://www.mcafee.com/>

I recommend obtaining and updating some type of antivirus program for your computers. They may not catch every virus out there, but they can keep the common ones from infecting your system. Personal firewalls are not as critical, but may be of increasing use as more users regularly

connect to the Internet and other networks. Minimally, the recent rash of viruses that have spread around the Internet should encourage users to regularly backup critical data on removable media (whether floppies, read-write CDS, tape, etc.). The backups should be stored and maintained away from the computer. Then if the computer is ever infected with a virus, those files can be reinstalled from a clean source. It pays to be safe!

Mark A. McConaughy

ANNOUNCEMENTS

Archaeology Month 2000 Excavations on City Island, Harrisburg

In September and October 2000, PAC will once again assist the PHMC with their Archaeology Month activities on City Island. As most of you are aware, the PHMC, in association with the City of Harrisburg, has held public excavations at this stratified prehistoric site every October since 1994. In addition to the excavations, other activities performed on City Island during this event have included demonstrations about prehistoric gardening, and the methods used to make dug-out canoes, dwellings, lithic tools, and baskets. Each year the event has been attended by thousands of families and numerous school children there on organized field trips. Because it was such a success last year, the award ceremony for the winners of the PAC student essay contest will again be held in conjunction with the 2000 City Island excavations.

The PHMC has indicated that they could use volunteers during preparation, operation, and shut down stages of the project. During set up (9/11 to 9/21) and shut down (10/7-13), they will require manual laborers to erect and tear down shelters and other equipment. When the demonstrations are in full swing (from Friday, 9/22, to Friday, 10/6) they could use 3-4 experience volunteers (Principal Investigator, Field Director, or Crew Chief-level) each day. These volunteers would be asked to talk to groups of school children about the excavations, and to engage in impromptu discussions with visitors about Pennsylvania archaeology. These PAC volunteers would also assist the PHMC staff in instructing visitors and inexperienced volunteers (students, scouts, etc.) in basic excavation skills. As they did last year, the PHMC is planning to set up a temporary laboratory next to the excavations. PAC volunteers may be asked to help out in the lab and/or talk to visitors about laboratory procedures. As in the past, free lodging will once again be available at one of the local State Parks on a first come, first serve basis. During the promotion of this event the PHMC will mention PAC, and the names of organizations that pledge to participate, in one or more press releases. Out-of-pocket expenses involved with volunteering (e.g., mileage, lodging) may be tax-deductible.

If you or your company/institution are interested in volunteering your efforts toward this valuable educational program, please contact Gary Coppock (email: coppock@uplink.net; phone/FAX: 814-349-5321). By volunteering 3 or 4 people, an organization (company or institution) can host one or more specific days. In your correspondence please indicate the specific dates that you (or your organization) would like to volunteer, and the number of people from your organization that will be participating. Also indicate if you are interested in utilizing the free State Park lodging.

Finally, PAC and the PHMC would like to thank those companies/institutions that generously donated time and labor to the 1999 Archaeology Month excavations at City Island. In alphabetical

order, they include: Christine Davis Consultants, GAI Consultants, Heberling Associates, Indiana University of Pennsylvania, KCI Technologies, Kittatinny Archaeological Research, and the Pennsylvania Department of Transportation (I apologize to any individuals or organizations that may have been inadvertently left out of this list). We would also like to thank any PAC members who may have volunteered their own time to this project.

Gary Coppock

Legion Ville

Efforts are still underway to preserve the 1792-1793 training camp of Major General Anthony Wayne at Legion Ville, Pennsylvania. Senator Rick Santorum, R - Pennsylvania, has offered his assistance with the preservation efforts. The Legion Ville Historical Society has been busy rallying support from local and state government. A display of artifacts and the scale model of the Legion Ville site can be seen at the Sewickley Public Library in Sewickley, Pennsylvania in early July. The re-enactment unit is featured in a Scottish documentary about the Scots and their role in American history. <http://tristate.pgh.net/~bsilver/legion.htm>

submitted by ASC Group

Delaware Archaeological Forum

Archaeologists in Delaware have recently formed a council similar to PAC called the Delaware Archaeological Forum. One of its features is an online discussion link by which any of the members can bring up subjects on line for discussion or to be trashed by others. It has been active and works well for those signed up.

Ron Thomas

MEETING AND EVENTS CALENDAR

Eastern States Archaeological Federation

Date 2-5 November 2000

Place: Solomons, Maryland

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

PAC MEMBERSHIP

Inquiries regarding membership in PAC should be made to: Daniel G Roberts John Milner Associates, Inc. 535 North Church Street West Chester, PA 19380 Work Phone: 610-436-9000 Work FAX: 610-436-8468 EMail: drobotts@johnmilnerassociates.com

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 \$20.00 for individuals and \$25.00 for families, which should be sent to: Archaeological Services, P.O. Box 386, Bethlehem, CT 06751-0386.

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:
1 November 2000.**

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.

In order to control costs, instead of being printed in the Spring Newsletter as has been done in previous years, the PAC membership list will be distributed to members via email, fax, or mail, as available.

The Editor