Profiting From Down Time: Benefits of Starting an In-house Cross-training Program.

By Susan T. Goodfellow

Most firms, particularly those located in areas with harsh winters, experience periodic lulls in field work during the course of the year. Unless the majority of staff consists of seasonal employees, these lulls can represent weeks of few billable work hours and high overhead costs. Unfortunately, unless one is able to conduct year round field work (or can schedule projects such that all lab work and report production takes place during field work lulls), these lulls are something we can’t avoid. Employers are, therefore, forced to find tasks for employees that will benefit the firm in the long run, such as using the time to clear up existing backlogs of overhead tasks or by identifying ways of making the business run more productively and efficiently once the lull is over.

One simple means of accomplishing this goal is to initiate staff training programs. These programs can take the form of sending staff members to outside seminars and short-courses (e.g., Section 106 courses, HAZWOPER training), hiring a consultant to train staff in-house (e.g., personnel issues training), or by sharing expertise completely in-house. Although there is a great deal of benefit to be had from all three of these options, ones involving outside expertise can be costly. This article will therefore focus on developing a cross-training program completely in-house.

There are two primary reasons for a cross-training program: (1) to rectify gaps in staff training and/or to provide refresher courses and (2) to train staff in something completely new. If the program is aimed at filling gaps in training, first poll the staff to determine exactly what those gaps are and who needs what level of training to bring them up to speed. Once these facts have been determined, program content can be tailored and instructors selected to maximize the effectiveness of each training session. If, on the other hand, staff training is in something new (e.g., Internet research) determine which of your staff would get the most benefit from this training. Examples of sessions conducted at Gray & Pape, Inc., include GPS, Total Station training, Internet research, Paradox for Windows, Architectural History Survey methods, basic and advanced issues in Geomorphology, Ceramic Analysis, and weather port assembly. The core audience for all sessions were our field directors; however, most sessions were attended by general staff as well.

The specifics of developing a cross-training program will be dependant on the goals and the audience that one is trying to reach. Regardless of program content, there are a few cautionary notes. First, employers shouldn’t start a cross-training program unless they plan to dedicate some time and money to making it successful. If sessions are done on the spur of the moment, are not focused on a specific topic, or do not involve much hands on participation, the staff will not get much benefit out of them; in fact, it could generate a very negative attitude in the staff. At a minimum, make sure that instructors have sufficient time to prepare their sessions and have adequate resources to effectively conduct their sessions. Secondly, most sessions work better when the number of participants is small and participants share the same level of

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Conference Calendar

March 27-30, 1996 - Society of Ethnobiology will hold its 19th annual conference at the Santa Barbara Museum of Natural History. Contact: Jan Timbrook, Dept. of Anthropology, 2559 Puesta del Sol Road, Santa Barbara, CA 93105; 805-682-4771, ext. 307; FAX 805-569-3170.

March 29-30, 1996 - Historical Archaeology Conference of the Upper Midwest (HACUM) will hold its second annual conference in Red Wing, Minnesota. Contact: John McCarthy, Institute for Minnesota Archaeology, 3300 University Avenue, SE, Suite 202, Minneapolis, MN 55414.

April 3-7, 1996 - Society for California Archaeology will hold its 30th annual conference at the Red Lion Inn, Bakersfield. Contact: Andy Yatsko, 619-545-1131, or Gerrit Fenenga, 805-664-2108.

April 10-14, 1996 - Society for American Archaeology annual meeting will be held in New Orleans, LA. Contact: Paul Fish and Suzanne Fish, program chairs, at 520-621-2556; FAX 520-621-2976; e-mail archaeo@ccit.arizona.edu

April 24-28, 1996, Military History Conference - The Council on America's Military Past will hold their 30th annual meeting in El Paso, TX. Contact CAMP'96 Conference, PO Box 1151, Fort Myers, VA 22211.

June 27-30, 1996 - Association for Gravestone Studies Conference. Contact: Catherine Goodwin, 10 Longview Dr., Chelmsford, MA 01824; 508-256-6240; or Fred Oakley, 19 Hadley Place, Hadley, MA 01035; 413-584-1756.

September 11-14, 1996 - American Association of State and Local History's annual meeting will be held in Nashville, TN. Contact: Jon Vaughn, 615-255-2971.

October 16-20, 1996 - National Trust for Historic Preservation will hold its annual meeting in Chicago, IL. Contacts: 1-800-944-6847.

October 24-27, 1996 - Eastern States Archaeological Federation will hold its 63rd annual meeting at the Radisson Hotel, Huntington, WV.

November 6-9, 1996 - Southeastern Archaeological Conference will hold its annual meeting in Birmingham, Alabama. For further information, contact Jim Knight or Ian Brown, Department of Anthropology, University of Alabama, Tuscaloosa, AL 35487.

State Events

Arizona

May 10-11, 1996 - Arizona Archaeological Council Spring Meeting, at the Smokey Museum in Prescott, Arizona. Contact: Tom Motsinger at (520) 325-9194 tmosinger@aol.com

Arkansas

April 10-12, 1996: Washington, Arkansas - Historic Preservation Symposium and Workshop. This 3-day workshop consists of a number of individual sessions covering diverse aspects of preservation, including historic archaeology, artifact preservation, exhibits in small museums, and the art of graining. Cost of the workshop is $65. Contact: Carey Walker, Superintendent, Old Washington Historic State Park, P.O. Box 98, Washington, Arkansas 71862; (501) 983-2684

Missouri


Missouri Archaeology Week will be April 28-May 5, 1996. For further information, contact Carol Diaz-Granados, Dept. of Anthropology, Washington University, 1 Brookings Drive, St. Louis, MO 63130-4899; 314-935-5252; FAX 314-935-8535.

New Mexico

New Mexico's Heritage Preservation Week is May 11-19, 1996. For further information, contact Lynne Sebastian at 505-827-4044.
Ohio

May 1-3, 1996 - Building Successful Communities: Preservation and Economic Development, Akron Hilton Inn at Quaker Square. Contact: Ohio Historic Preservation Office (614) 297-2470. This is a 2-day statewide conference on the use of historic preservation as a tool for economic growth and development. This conference will bring together community development and preservation interests to hear leading experts on neighborhood revitalization, downtown development, financial incentives for investment in older buildings, and heritage tourism.

May 1, 1996 - Historic Preservation Commissions and Design Review Boards Training Course, Lake Theatre, Barberton, OH. Advance registration and fee required, contact: Ohio Historic Preservation Office, (614) 297-2470. This is the Historic Preservation Commissions and Design Review Board's training course for members of the more than 100 such groups in Ohio, which will be held at the restored Lake Theatre in Barberton. Instructors include attorney Scot E. Dewhirst and historic preservation consultant Judith L. Kitchen. The course will introduce new commission members to the work of preservation commissions and design review boards and equip them for the difficult decisions commissioners sometimes face. It will help experienced commission members improve their effectiveness and make sound, well-informed decisions.

Utah

Utah's 1996 Prehistory and Heritage Week will be May 4-11. The week will kick off Saturday, May 4th with an afternoon celebration at the Division of State History, 300 Rio Grande, Salt Lake City. For more information and a list of activities, contact Reneae Weder 801-533-3529 or Dave Schmitt 801-533-3577.

Cross-training

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knowledge. The higher the instructor:participant ratio, the more opportunity for "hands on" training so that participants are forced to apply what they are learning rather than simply taking notes. Third, training sessions should be focused on a particular issue, approach, or procedure, so that necessary information can be offered and absorbed in the context of the session. If there is a need to cover several issues under the same topic, do it in short bursts (1-2 hour sessions) with breaks in between, otherwise participants will become overloaded and their attention will wander. Finally, training should be treated in the same manner as a client meeting or conference --participants should not be interrupted or called out of sessions (unless absolutely necessary). Not only do interruptions break the flow of the session, but they send the message to both instructors and participants that the session is not important to the firm.

If a cross-training program is done correctly, benefits to the firm are numerous. First, having such a program encourages a feeling of team work, particularly if participants are a mixture of non-supervisory and supervisory staff, and engenders a positive feeling about the firm by the staff (i.e., my company is paying me to improve myself). Second, because training sessions are conducted in an informal atmosphere, the exchange of ideas is emphasized: people can air frustra-

tions; clarify misunderstandings; and, as a group, work out problems with existing procedures. In short, these sessions tend to facilitate communication and gather valuable input from the staff. Third, both participants and instructors come away with a heightened understanding of how other people work and how they can help each other. As one participant in our training sessions commented, "it helped us to see with each other's eyes a little bit better." Not only does this facilitate interactions between individuals in different departments or disciplines with-in the firm, but it also engenders a new level of appreciation for one's peers.

For individual participants, cross-training can increase job confidence and decision making ability, both by filling gaps in training and clearing up misunderstandings about current procedures, as well as by giving them the opportunity to learn completely new things. Employees will generally feel gratified at being allowed to participate in training sessions, and will also feel good about being able to give their input during discussions. For individuals who act as instructors, benefits include increased experience in preparing and making public presentations, as well as an opportunity to exchange ideas and learn new approaches from the participants.

In conclusion, I can think of few more productive means of improving morale and productivity during slow times. Initiating a cross-training program is a fairly simple, inexpensive process that has a large number of benefits for the firm, instructor, and participants.

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Indiana

Division of Historic Preservation and Archaeology Now Issues State Archaeological Site Numbers

As a result of the Indiana Division of Historic Preservation and Archaeology's (DHPA) progress in the computerized archaeological database project, the DHPA is at a point where it can officially begin issuing state archaeological site numbers. Beginning March 4, 1996, requests for state site numbers should be directed to:

Dr. James R. Jones III
State Archaeologist
Division of Historic Preservation and Archaeology
402 West Washington St., Rm W274
Indianapolis, IN 46204
317-232-1646

For each site number issued, a completed, original state archaeological site form, as well as any related reports, are expected to be submitted to the DHPA, thus allowing the division to maintain and update the database. The DHPA will also continue to distribute state archaeological site forms.

New Mexico

New State-wide Preservation Organization

The New Mexico Heritage Preservation Alliance is a new statewide private non-profit organization. It purpose is to promote awareness and respect for all that is culturally significant and distinctive about New Mexico and to keep alive the unique multicultural heritage of New Mexico.

The Alliance's definition of heritage includes prehistoric and historic structures and places, cultural landscapes, agricultural lands, open space, traditional cultures, family heritage, religions, and languages.

For further information, contact Lois Snyderman, Secretary/Treasurer, New Mexico Heritage Preservation Alliance, PO Box 2535, Santa Fe, NM 87504-2535; 505-983-2567.

Texas

Changes to the Rules of the Antiquities Code of Texas

[Taken from Cultural Resource Management News & Views, January 1996.]

With the exception of those who have been out of the state for the last year or more, everyone should be aware that the Sunset Commission and 74th Legislature made some rather substantive changes to the Antiquities Code of Texas in 1995. Those changes have necessitated changes in the rules and regulation that the Texas Historical Commission uses to administer the Antiquities Code. Anyone concerned with historic preservation issues in Texas needs to stay abreast of these changes.

Making and changing rules that govern state agencies follows an open process that requires public input to function properly. The rule changing process for the new Antiquities Code already begun and will continue for at least the next two years. Therefore, everyone will have plenty of opportunity to participate.

Some changes are simply administrative housecleaning measures related to the abolishment of the Texas Antiquities Committee. Other changes include the creation of a new Section 26.6, concerning the creation of the Antiquities Advisory Board. These changes clarified new limitations on the ability of private citizens to nominate sites for official State Archeological Landmarks designations and to set into motion the prior notification procedures for development projects on public lands.

Over the next two years, many new rules will be drafted, which affect the Antiquities Advisory Board, Shipwreck Rules, Texas Historical Commission, and much more that cannot be adequately summarized in this article. For detailed information on the new rules of the Antiquities Code of Texas, we suggest you contact The Texas Historical Commission, PO Box 12276, Austin, TX 78711-2276.

Idaho

Changes in State Historic Preservation Officer Selection Process

[Reprinted from "Editor's Corner" by Will Reed, The Heritage Times, March 5, 1996.]

Here in Idaho we have a legislation that would change the SHPO with a resolution intended to make the SHPO serve "at the pleasure of the Governor." For the past 20 years, the Idaho SHPO has been the Director of the Idaho State Historical Society and has always been appointed as the SHPO after being selected as the Director. Now some ranchers have decided to shake up things by changing the State code to require that the SHPO be named by the Governor without regard for the Directorship. Got the picture?

Public frustration with the NHPA process leads to a misguided attack on preservation people and infrastructure. The resolution has passed the House and is on its way to the Senate with a "do pass" recommendation. Testimony in opposition to the bill was offered by several State employees but the Committee seemed deaf to suggestions that "it ain't broke!" If it is passed by the Senate, then we may see the end of a long standing, successful operation - an end brought about by a public disturbed by the apparent Federal intervention in private land management.

I think this sort of episode just highlights the need for Heritage workers to pay as much attention to the public as to the endless reams of paperwork. In the end, all the paperwork will do little to offset the ire of one rancher.
Pennsylvania Historical and Museum Commission
Lacks Funding to Keep Promise; Sites Will Be Lost

Harrisburg, March 1 -- Under question from Rep. Phyllis Mundy, D-Luzerne, the Pennsylvania Historical and Museum Commission (PHMC) revealed Thursday that it is unable to keep its commitment to protect historic archaeological resources.

In the past, developers seeking state permits were required to redesign development to avoid significant archaeological sites or pay the cost of archaeological surveys and recovery.

Act 70 of 1995 removed the incentive for developers to avoid sites and shifted survey costs to the PHMC. Under the law, developers only are required to give the commission 90 days to complete archaeological work. That is assuming the commission has the funds to do the work.

In response to Mundy's direct question, PHMC Executive Director Dr. Brent Glass informed the House Appropriations Committee that there are no new funds to carry out the commission's new duties. He said that 80 permit applications have been filed since the new law took effect at the end of January and that six of those sites have been found to contain significant archaeological resources. Glass further admitted that "some sites will be lost."

"I and many of my colleagues voted for the bill because we were assured by the commission and the governor's office that the funds would be made available to protect the information these sites hold," said Mundy. "I withdrew an amendment to the bill based on those commitments."

"As it worked out," Mundy added, "Pennsylvania loses some of its precious historical heritage and we are doing this at the same time that we are trying to promote heritage tourism as an important economic development strategy."

PLOWZONES: WHAT ARE THEY GOOD FOR?

By Matthew E. Becher, Associate Archaeologist, Gray & Pape, Inc.

Archaeologists continually face the problem of managing resources which exist solely in the contexts of plowed fields. Unfortunately, active investigation into the archaeological viability of plowzone deposits has only been undertaken in the past two decades. A number of excellent literature reviews have been published including those by Talmage and Chesler (1977), Lewarch and O'Brien (1981b), and Weed and Parish (1990). Ironically, few studies have been conducted since the late 1970s, despite the fact that development of prime agricultural land is occurring at a steadily increasing pace. An examination of the current state of thinking on the subject re-veals that there has yet to be consensus on the most basic question asked of all plowzone resources: does this site retain integrity of anything other than setting?

The Mechanics of Plowzone Deposits

Presently, thinking on the subject can be roughly segregated into two camps. Both camps agree that tilling will rapidly, effectively, and permanently destroy the vertical integrity of materials deposited in the plowzone. However, there is some disagreement about the effect tilling has on horizontal patterning. One camp acknowledges that tillage results in dispersal of artifacts to varying degrees (Robertson 1976; Roper 1976; Trubowitz 1978; Lewarch and O'Brien 1981a; Dunnell and Simek 1995). However, they contend that the distances materials are moved do not completely compromise horizontal integrity. The other camp (Odell and Cowan 1987; Weed and Parish 1990; Becher 1996) argues that in most cases all traces of horizontal patterning are compromised by tilling and that very few plowed sites retain integrity of anything other than setting.

A limited number of controlled experiments and field case studies have been interpreted by both camps and used as bases for arguments. The most commonly cited studies include Robertson (1976), Roper (1976), Trubowitz (1978), Lewarch and O'Brien (1981a), and Odell and Cowan (1987). These studies vary greatly in terms of methods as well as in their viability and applicability, though all are concerned with measuring the effect that plowing has on artifact scatters. More recent studies have addressed the practicality of interpreting sites through analysis of materials recovered through controlled surface collections (Dunnell and Simek 1995; Shott 1995). It is more constructive to summarize what has been learned to date by these studies taken as a body of work, rather than recount the details of each individually.

There is continuing debate concerning the role artifact size plays in movement rates. Experimental studies consistently reveal that plowing may disperse artifacts horizontally anywhere from 30 inches to 50 feet (Robertson 1976; Roper 1976; Trubowitz 1978). However, depending on which study is consulted, artifact size and displacement distance either correlate positively or negatively, though the most well controlled study indicates that the latter is true (Roper 1976; Trubowitz 1978; Lewarch and O'Brien 1981a, 1981b; Odell and Cowan 1987). Some contend that artifacts are not dispersed to such an extent that interpretations of site size and function are jeopardized, though Odell and Cowan (1987) demonstrated that the size of experimental "sites" can more than double following extensive plowing. Furthermore, the creation of "spurious aggregations" (i.e., false clusters of artifacts) has been observed on such sites (Odell and Cowan 1987).

The most reliable studies show that plowing results in larger artifacts being differentially represented on the ground surface relative to smaller ones (Lewarch and O'Brien 1981a; Odell and Cowan 1987). It has also been demonstrated that there is a positive correlation between the direction of plowing and the direction in which artifacts are dispersed (Roper 1976; Lewarch and O'Brien 1981a; Odell and Cowan 1987).

Several points which weigh...continued on page 6
directly on how sites are presently investigated have also been illuminated by these studies. It is fairly clear that a single episode of surface collection will probably only recover a 5% sample of the total population present in a given area (Trubowitz 1978; Lewarch 1979; Lewarch and O'Brien 1981a; Odell and Cowan 1987). In fact, varying interpretations of site function have been made on a Paleo-Indian site based on analysis of separate episodes of surface collection (Shott 1995). Consequently, there is some utility in conducting multiple surface collections, at all phases of investigation. There is also some evidence to suggest that surface collection recovery rates vary by season, with rates peaking in spring and fall and dipping during summer, when solar glare is problematic (Odell and Cowan 1987).

A theme common to most previous works is that there are numerous and cumbersome sources of variation acting upon archaeological remains in tilled contexts. The most problematic is tilling itself. It is virtually impossible to control for such variables as equipment type, direction and frequency of plowing, and number of years since an area was first tilled. Sources of variation other than plowing which affect assemblages and/or the way in which they are recovered include soil type, topography, initial field preparation technique, the impact of collectors, personnel experience and skill level, weather, lighting, and sampling strategy.

Clearly, the theoretical implications of these sorts of experimental and field case studies are applicable to management issues encountered by cultural resources consultants. This is particularly true wherever a large percentage of sites located on level ground have been adversely impacted by agricultural practices. Unfortunately, such studies are so under represented in the literature that it is difficult to consistently apply these data in evaluating plowzone resources. Recommendations concerning the research potential of a site could vary depending on which school of thought is consulted.

**What to Do With Plowzone Sites**

In many instances, the patterns of artifact densities identified by surface collection are replicated by excavation data. However, this does not imply that the data recovered from either context represents the patterns which existed at the time of deposition. While this appears problematic, there are a couple of simple approaches that may test whether significant patterning is present in an assemblage recovered from a plowzone. Note that such tests require that data (survey and/or testing) be collected systematically (e.g., controlled surface collection or shovel testing).

One method which may be employed is to compare what is recovered from the site from controlled investigations with data recovered from similar (preferably single component) non-plowzone sites. Questions may be addressed: including, (1) are the same types of assemblages present and (2) is space utilized in similar ways. A more easily implemented approach is to analyze intersite patterning, based on the data collected so far. Namely, are artifacts and other materials associated with each other in ways that would be expected, given the type of site and type of artifact? For example, can patterns of distribution be discerned in the lithic assemblage by raw material type or reduction stage? Do fire-damaged materials (FCR, charcoal, burned bone) cluster? Are characteristics seen in sub-plowzone features replicated in the surface assemblage?

Problems with both of these approaches include the blurring caused by multi-component sites, the likelihood that the samples gathered by Phase I or Phase II investigations will be too small to permit such comparisons, and the fact that there is a whole universe of uncontrollable sources of variation acting upon the assemblage. However, the bottom line is very simple: if patterns can be teased out of data recovered from survey and/or testing, it may be possible to argue for integrity of something other than setting. If such patterns cannot be discerned and it is thought that sample size is not a factor, then it is likely that the site retains neither vertical nor horizontal integrity.

There is yet to be consensus on some of the issues which pertain to the integrity and validity of plowzone deposits, though there has been active pursuit of the subject for some time. This state of affairs is largely due to a paucity of experimental studies, though it is likely that more such studies are lurking in the gray literature housed at CRM firms and SHPOs offices. Implications which bear on the methods employed in archaeological investigations on (and data collected from) plowed sites can still be drawn from these collected works. Prehistoric sites identified in plowzone contexts represent a significant and valuable portion of a finite body of resources, and it is imperative that they be recorded. However, evaluating these sorts of resources on anything greater than an individual basis is probably unrealistic, given that the sources of variation which affect site interpretation are so difficult to control. Until such time that there is more agreement on how tilled sites should be managed, it is probably wise to view their integrity with a healthy amount of skepticism.

**References Cited**

Becher, Matthew E.

Dunnell, Robert C., and Jan F. Sinek

Lewarch, Dennis E.

Lewarch, Dennis E. and Michael J. O'Brien

1981b The Expanding Role of Surface Assemblages in Archaeological...
Workshops/Courses

Lithic Technology
Washington State University

J. Jeffrey Flenniken will offer two courses of instruction in lithic technology and analysis. A five-day lecture course will cover all aspects of lithic analysis and the identification of reduction technologies. This course runs March 18-22, 1996 and costs $895 (meals and lodging included). Dr. Flenniken will hold a 14-day Lithic Technology Field-school from June 17-30, 1996. The field-school is an extension of the lecture course and concentrates on replication as an analytical technique. Cost is $1,795 (meals and lodging included). Call 1-800-942-4978 or 509-335-3530 or FAX 509-335-0945 e-mail wsuconf@wsu.edu.

Lithic Analysis
University of Nevada

The University of Nevada, Reno, is offering a thorough introduction to current directions in analysis of flaked stone artifacts. Basic knowledge of lithic analysis is essential. The course will be held May 20-24, 1996, in Reno, Nevada. Cost is $625. For more information contact:

Leanne Stone
University of Nevada, Reno
Div. of Continuing Education
Reno, Nevada 89557
(702) 784-4046

Vernacular Lanscapes

Vernacular Lanscapes III:
Workshop will be held May 22-25, 1996, Nantucket, Massachusetts.
The registration cost for this 4-day conference is $125. For further information contact: Professor Herrick N. Smith, FASLA, College of Architecture, University of Florida Gainesville, Florida 32611;
(904) 392-4836.

Publications

Grave Matters

Grave Matters is a newsletter about southern cemeteries. Edited by Sharon Thomason, this publication offers something for all types of "cemetery nuts." Some individuals are interested in genealogy, others in famous persons, and some in the historical significance of cemeteries.

According to Ms. Thomason, "Southern culture is so vast. Nowhere is that more apparent than in burial traditions. The Civil War plays a role, but also native American, African American, Jewish, and even Chinese customs."

Subscriptions are $15 a year. Send check or money order to: Grave Matters, Route 7 Box 1620, Dahlonega, GA 30533.

Request for Information

Comparative Kiln Data

I am engaged in thesis research on a charcoal kiln site on the Beaverhead NF and would like to gather information on other kilns to use for comparative analysis. I'm looking for information on the design, construction, and use of beehive charcoal kilns. Photos, drawings and any form of historical documentation would be very useful. Send information to:

Dan Gard
318 LeVasseur
Missoula, MT 59082
e-mail: wanky@selway.umt.edu
Position Available
Principal Investigator
Historical Archaeology

Gray & Pape, Inc., has a position open for a Principal Investigator in their Cincinnati, Ohio, office specializing in historical archaeology of the midwest and the application of Geographic Information System (GIS) technology to cultural resources management (CRM). An M.A in Anthropology, History or related field required (Ph.D. preferred) and previous experience in CRM supervision at the Principal Investigator level is required. In addition to expertise in historical archaeology and GIS, this person must have sufficient knowledge of prehistoric archaeology to be able to evaluate prehistoric resources at the Phase 1 level of investigation. The ability to write clear, concise, and thorough CRM technical reports without extensive editing is essential, as is the ability to manage multiple projects simultaneously.

This person will also be asked to assist in the preparation of proposals and in marketing. Communication skills and an ability to effectively supervise people is a must. In addition to expertise in GIS, knowledge of WordPerfect is essential; familiarity with database, spreadsheet, and statistical programs is preferred. Other skills that will be given serious consideration include preservation planning, historic artifact analysis, statistical/spatial analysis, and floral analysis.

Gray & Pape, Inc., offers a competitive pay and benefits package, including paid holidays, paid vacation and sick leave, and health, life, and disability insurance. After one year of employment, regular employees are eligible for a profit-sharing retirement plan. Send a current resume, three references from persons in the CRM field, and an example of recent CRM technical writing (not to be returned) to Gray & Pape, Inc., 1318 Main Street, Cincinnati, OH 45210. For further information please contact W. Kevin Pape, President, at 513-287-7700. An Equal Opportunity Employer.

Archaeological Positions

Archaeological and Historical Consultants, Inc. (AHC), is accepting applications for two archaeological positions for CRM projects.

**Principal Investigator**

Responsibilities include client/agency coordination, supervision of fieldwork, analysis, and report/proposal preparation. Requirements include a graduate degree with an archaeological focus, at least one year of supervisory experience, and a demonstrated ability to produce quality reports in a timely fashion.

**Project Archaeologist**

Responsibilities include assistance with supervision of fieldwork, analysis, and report preparation. Requirements include a bachelor’s degree with an archaeological focus and three years of experience in CRM.

For both positions competitive salary and benefits packets is offered, including health insurance and retirement plan. AHC is located in central Pennsylvania near Penn State University. AHC engages in projects at all phases throughout the eastern United States, and has a full-time staff of over 35 personnel. Submit vitae, letter of application, and references to:

Dr. David Rue
Program Manager
Archaeological and Historical Consultants, Inc.
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