

REVISITING THE GRADUATE CURRICULUM: THE PROFESSIONAL FACE OF ARCHAEOLOGY

# the SAA archaeological record

NOVEMBER 2006 • VOLUME 6 • NUMBER 5

SOCIETY FOR AMERICAN ARCHAEOLOGY



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# the SAA Archaeological record

The Magazine of the Society for American Archaeology

VOLUME 6, No. 5

NOVEMBER 2006

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Mapping Cerro de la Hormiga, a cerro de trincheras near Oquitoa, Sonora. Adrian Lopez is holding the laser target. Cerros de Trincheras and Defense Project, February 2006. Photograph by Randy McGuire.



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## EDITOR'S CORNER



# EDITOR'S CORNER

John Kantner

*John Kantner is Vice President of Academic & Institutional Advancement  
at the School of American Research.*

### In With the Old; In With the New

I am pleased to have resurrected the Point-Counterpoint column for this issue of *The SAA Archaeological Record*. For those who do not remember, this column was established by former Editor Mark Aldenderfer, and it traditionally featured two short editorials on a controversial topic important to archaeologists, with the editorials taking opposing positions on the topic. For this issue's Point-Counterpoint column, Charles R. McGimsey III and Francis McManamon debate the National Park Service's responsibility for developing a national program of archaeology as envisioned in the Archeological and Historic Preservation Act (AHPA, or Moss-Bennett). I will happily entertain any suggestions on future topics—from NAGPRA to the placement of archaeology in the academy—that should be covered in the Point-Counterpoint column.

Also in this issue, I introduce a new column format. The idea for Call-Answer grew out of a short article that Paul Minnis submitted that challenges archaeologists to articulate the practical relevance of the discipline. As opposed to leaving it an open query, Paul and I decided that it would be much more interesting to have a selection of our colleagues attempt to address the challenge in no more than three paragraphs. Paul's "call" and several well-reasoned "answers" that we received inspired me to develop the format into an occasional column. I encourage anyone to submit short articles that challenge your colleagues to

briefly address important topics on archaeological practice. If the "call" seems appropriate and interesting, together we can select respondents to provide their "answers."

Finally, I am also pleased to announce that Student Affairs is back! After a considerable hiatus, this occasional column produced by the SAA Student Affairs Committee has made a return. This issue features a column by Yale University's Lauren Lippiello on finding graduate funding, and additional articles are planned for the future. It is especially appropriate that the resurrection of Student Affairs occurs in the same issue in which appears a series of short articles that assess the future of the graduate curriculum in archaeology.

### My Last Thematic Issue

In March 2007, a thematic issue will feature articles on Indigenous Knowledge in Archaeological Practice. While this issue is almost full, contributions are invited on topics ranging from traditional cultural properties (TCPs), to the Native American Graves Protection and Repatriation Act (NAGPRA), to the conflict between science and tradition and the value of oral histories. Please contact Kurt Dongoske ([kdongoske@cableone.net](mailto:kdongoske@cableone.net)), Associate Editor of the Working Together column, or me directly ([kantner@sarsf.org](mailto:kantner@sarsf.org)) if you would like to contribute to this important issue.

✍ EDITOR'S CORNER, continued on page 10



# AUSTIN 2007!

Tobi A. Brimsek

*Tobi A. Brimsek is executive director for the Society for American Archaeology.*

A busy submissions process for the 72nd Annual Meeting came to a close in September, and this Annual Meeting, April 25–29, 2007 in Austin, Texas, promises to be rich, rewarding, and robust! Don't forget to check out the preliminary program online in late December or in your snail mail in early January to register for the meeting as well as for workshops, roundtable lunches, and the fabulous excursions planned for Austin! Also returning to the Annual meeting in Austin—the President's Forum, the Silent Auction, ArchaeologyLand!, and the CRM Expo. We hope to see you there!

## Austin Hotels

In addition to the headquarters hotel, there is an overflow hotel, as well as some properties exclusively for students. Detailed information follows below.

### Headquarters Hotel

The **Hilton Austin** (approximately 32 steps from the door of the hotel to the door of the Austin Convention Center) is the **headquarters hotel** for the 72nd Annual Meeting.

Hilton Austin Hotel  
500 East 4th St.  
Austin, Texas 78701  
Rates: \$159 single/double; \$20 additional person

### FOR RESERVATIONS:

- By phone: (800) HILTONS or (512) 482-8000
- By fax: (512) 682-2769
- Online: [http://www.hilton.com/en/hi/groups/personalized/auscvhh\\_saa/index.jht](http://www.hilton.com/en/hi/groups/personalized/auscvhh_saa/index.jht)

### Overflow Hotel

The **Radisson Hotel and Suites Austin** (approximately 2 blocks from the Austin Convention Center) will serve as an **overflow hotel** for all attendees and also has a limited number of rooms at a special rate for **students**. Additional hotels exclusively for students are listed below.

Radisson Hotel and Suites Austin  
111 Cesar Chavez at Congress  
Austin, TX 78701  
Rates: \$139 flat rate (single–quad);  
For Students Only, a limited number of rooms: \$119 flat rate (single–quad)

### FOR RESERVATIONS:

- Call (800) 333-3333 and reference the “Society for American Archaeology.” If you need a student rate, please ask for that rate specifically. You must have your valid student ID with you upon check-in.
- You may also make reservations online. For the regular SAA rate, go to <http://www.radisson.com/archaeology>. For the student rate rooms at the Radisson, go to <http://www.radisson.com/arcstudent>

### Student Hotels

In addition to the Radisson Hotel and Suites Austin, there are two additional **student properties**: **La Quinta Inn Capitol Downtown** (8 blocks from the Austin Convention Center) and the **Holiday Inn Austin Town Lake** (approximately a 10–15 minute walk to the Austin Convention Center). While both La Quinta and the Holiday Inn are walking distance to the Austin Convention Center, complimentary shuttling will be provided for those two hotels. **Students must present a current student ID to qualify for these rates. There are a limited number of rooms, and they are available on a first-come, first-served basis. Reserve ASAP!!!**

### Radisson Hotel and Suites Austin

See description, student rate, and reservation information above under “Overflow Hotel.”

### La Quinta Inn Capitol Downtown

300 E. 11th  
Austin, Texas 78701  
Rate: \$109.99 flat rate

IN BRIEF, continued on page 10

72ND ANNUAL MEETING

## GETTING READY FOR AUSTIN!

Elizabeth S. Chilton

*Elizabeth S. Chilton is Program Chair for the 72nd Annual Meeting.*

**A**s I sit here in my office at the University of Massachusetts, Amherst, I look outside and see the beautiful fall colors of New England and students scurrying around in their thick sweaters. Inside my office, I am surrounded by more than 2,000 submissions for the 72nd Annual Meeting of the Society for American Archaeology, and my thoughts turn to springtime in the beautiful capitol city of Austin—the “Live Music Capital of the World!”

As I write, I have only just received the paper abstracts, and the submission data are still being compiled by SAA, so while I can't tell you the exact number of papers, posters, and symposia, I can tell you the numbers are well above average for the annual meeting. As a result, it is likely there will be Thursday evening sessions, as there was this past year. The papers represent a broad range of geographical, methodological, theoretical, and professional issues. I would like to call your attention to just a few of the many offerings at the meeting in Austin.

On Wednesday evening, the Program Committee will sponsor the Opening Session, “Borders, Boundaries, and Bridges in Texas Archaeology.” Given its geographical and historical context, Texas archaeology provides us with an opportunity to explore social boundaries and build bridges among seemingly disparate intellectual, theoretical, and professional categories. Papers in this session will explore current research and practice in Paleo-Indian research, models of hunter-gatherers, collaborations among Native peoples and archaeologists, cultural resource management, and the archaeology of colonization.

There will be two SAA Board-sponsored sessions in 2007: “Central American Archaeology: Current Situation and Future Per-

spectives,” organized by Barbara Arroyo and chaired by Daniel Sandweiss; and “The Discipline of Archaeology,” organized by Vin Steponaitis, Margaret Conkey, and T. Douglas Price. The President's Forum will focus on the peopling of the Americas, and is organized by Ken Ames.

There are several events that are being organized by the Public Education Committee. These include a workshop, “Education Programs Evaluation: Prospects and Planning;” a forum, “Diversifying Archaeology's Impact through New Forms of Public Engagement: Current Happenings in Public Archaeology;” and a symposium, “Taking the Camino Real to School” (which includes teachers from Chihuahua, Mexico). ArchaeologyLand! (featuring hands-on archaeology and cultural history-based activities), which premiered in Salt Lake in 2005, will be back! The CRM Expo, which was on hiatus in San Juan, will also be back, in the Exhibit Hall on the Saturday of the meeting.

The Program Committee and I are still finalizing the topics for the 15 roundtable lunches, but I can tell you that they include topics related to professional development, heritage management, and broad theoretical and methodological issues in archaeology. Stay tuned for more details on the program in the January issue of *The SAA Archaeological Record*.

The real work of the Program Committee is only just beginning. I am honored to be able to serve as the Program Chair for the 72nd Annual meeting, and I look forward to seeing you all in Austin!





# SAA 2007 AUSTIN LOCAL ARRANGEMENTS

**Pam Wheat-Stranahan and Pat Mercado-Allinger**

*Pam Wheat-Stranahan and Pat Mercado-Allinger are co-chairs for the Local Advisory Committee.*

**W**e'll be looking for you in Austin for a first-rate SAA conference. The city offers an eclectic setting to renew old friendships and meet new folks. You will also want to experience for yourself why Austin is known as the *Live Music Capital of the World*!

We have arranged several special excursions that relate to important archaeological research. These excursions will require registration and we expect that they will fill up quickly, so don't miss out—sign up early! If the tours are not fully subscribed through advance registration, on the other hand, they will not be able to run! Check these out in the preliminary program and online in late December.

A Thursday tour group, led by James Bruseth of the Texas Historical Commission, will go to the Texas State History Museum (<http://www.thestoryoftexas.com/>), where some of the premiere artifacts recovered from La Salle's shipwreck, *La Belle*, are on display (<http://www.thc.state.tx.us/lasalle/lasdefault.html>). The group will then travel to College Station, to the Conservation Research Laboratory at Texas A&M University to view *La Belle's* hull undergoing treatment in a holding tank and to learn how over one million artifacts were conserved.

Another Thursday destination will be San Antonio to visit two of the city's eighteenth-century Spanish missions: Mission San

Jose, an active parish, and the Alamo (originally established as Mission San Antonio de Valero), where recently installed exhibits are ready for viewing. Serving as hosts will be the National Park Service, Daughters of the Texas Revolution, and the Center for Archaeological Research at the University of Texas at San Antonio. Archaeologists and historians will present information on recent archaeological investigations along the Mission Trail.

Friday's excursion will begin at the Texas Archeological Research Laboratory—University of Texas at Austin, where you will tour the largest archaeological repository in the state. Michael B. Collins and other research associates will lead you through the evidence and artifacts associated with the Paleoindian-age Gault site ([http://www.utexas.edu/research/tarl/research/gault\\_intro.php](http://www.utexas.edu/research/tarl/research/gault_intro.php)). Next, you will travel to the site itself, about two hours north of Austin.

In town, you will find an array of lunch and dinner diversions and live music venues. Austin sights, sounds, and suppers are short walks or rides from the conference hotel. Public transportation includes the "Dillo," a free trolley that runs from Town Lake to the University of Texas and many points in between. Everyone has their favorite spot; just ask a local—either native or adopted—for suggestions! And of course, we'll be doing a restaurant guide for you.



MUSICIANS IN FRONT OF AUSTIN SKYLINE. ACVB PHOTO



## POINT

### THE LIFE AND HARD TIMES OF THE ARCHAEOLOGICAL AND HISTORIC PRESERVATION ACT IN WASHINGTON, DC: AN ASSESSMENT 30 YEARS AFTER

Charles R. McGimsey III

*Charles R. McGimsey III is Director Emeritus, Arkansas Archeological Survey.*

I was deeply disappointed when the National Park Service (NPS) failed to utilize the full potential of the Archeological and Historic Preservation Act (AHPA, or Moss-Bennett) to develop a true national program for archaeology, as Carl Chapman and I had envisioned. As it developed, the timing was unfortunate. At that time, all attention in the NPS was focused on the Historic Preservation Program (HPP), and NPS was unprepared administratively, and unwilling philosophically, to entertain other concepts, however complementary. Perhaps we did not fully appreciate the fragility and complexity of the internal NPS situation regarding implementation of HPP, but I am not sure what we could have done about it if we had. But this failure to undertake the mandates of AHPA is going to make it much more difficult the next time around, for, instead of being a new experience for all and therefore everyone being more open to outside advice, entities from the Department of the Interior (DOI) to the State Historic Preservation Offices (SHPOs) are going to be set in their ways and less willing to make many adjustments. Leadership can be most effective in the very beginning.

We envisioned a national archaeology program separate from but complementary to HPP, one whereby NPS assumed an aggressive policy of coordination throughout the federal government (not simply implementing Section 106 procedures, which was all that was attempted—and considered to be enough). We wanted NPS, right from the very start, to issue firm guidelines and standards and do everything in its power to see that the other agencies would follow the NPS lead, from initial contracting standards to the final report and its distribution. As it developed, absent strong NPS leadership, everyone went their own way to a depressing degree. Agency guidelines were less than uniform, and copies of reports were not forwarded to NPS for public availability, all just the reverse of what we had anticipated. We also envisioned NPS increasing the role of its regional centers and developing a contracting program that filled the cracks not covered by the existing programs. And there are some huge ones: the charge to DOI in the Historic Sites Act of 1935 encompasses the entire country, not just that portion affected by federal programs. In this regard, our efforts proved

to be visionary, and fruitless.

On the other hand, the positive effects that were achieved by AHPA more than warrant the efforts made by so many. It opened wide the fiscal floodgates—already cracked to some extent by NHPA and NEPA—with clear legislative direction that all federal agencies were to follow up the discovery and evaluation of sites authorized by those earlier acts by undertaking appropriate data recovery, analysis, and publication. It set the Secretary of DOI as the coordinator of the federal archaeological program, and charged the Secretary with making available to the public all resulting publications (a charge not yet adequately met) and report progress to the Congress. The process of passage thoroughly alerted the discipline to the need for involvement with the legislative process at all times, and it helped to introduce archaeology to the federal agencies, albeit without the needed regulatory backup that could have been provided only by the NPS. Finally, I believe AHPA's language, directed toward programs as well as projects, opened the door to the development of innovative programmatic planning instead of limiting our research to traditional, scientifically inadequate, project-by-project salvage.

Unfortunately, rather than strengthening its position, more recent decisions by NPS have further reduced AHPA's capability of playing a significant, much less a lead, role in archaeological resource management.

I firmly believe this country needs strong federal leadership in all aspects of cultural resource management. However, the immediate challenge facing archaeology is to make maximum use of the favorable developments that have come to pass, while we work with the federal government to establish a program fully adequate to safeguard our nation's cultural resources.

For an in-depth discussion of the subjects briefly covered here, see Charles R. McGimsey III, 2004, *CRM on CRM: One Person's Perspective on the Birth and Early Development of Cultural Resource Management*, Arkansas Archeological Survey Research Series No. 61, Fayetteville, Arkansas.



# COUNTERPOINT

## NATIONAL LEADERSHIP AND COORDINATION FOR FEDERAL ARCHAEOLOGY

Francis P. McManamon

*Francis P. McManamon is Chief Archeologist for the National Park Service and Departmental Consulting Archeologist for the Department of the Interior.*

### What was Envisioned?

The promise that Bob McGimsey, Carl Chapman, and others may have envisioned in the early and mid-1970s for a national archaeological program controlled by a single national agency was not realized. In his comment, McGimsey criticizes the National Park Service (NPS) cultural resource leaders at the time who could not or would not, and, in any case, did not, seize the opportunity provided by the Archeological and Historic Preservation Act (AHPA) that McGimsey believes was in their grasp.

Of course, a single, controlling national archaeological or cultural resource agency or department might not have had as beneficial an impact as the multiple federal agencies and departments involved in contemporary public archaeology. In fact, in 1974 when the Moss-Bennett bill was enacted, it might already have been too late for a single national archaeological agency in the U.S. Wendorf and Thompson (2002:327) suggest this in their interesting and informative article about the crucial role played by the Committee for the Recovery of Archaeological Remains (CRAR) in the development of American public archaeology between the late 1940s and the 1970s. In their opinion, the “salvage archaeology” public programs of the 1950s–1970s had

created multiple centers of archaeological activity that began to develop on their own, paying little or no attention to the NPS leadership. Each agency, in good bureaucratic tradition, was working for itself.... We believe the great strengths of the American system lie in these many loci of activity. Unlike many countries where all archaeology is centralized in one agency or ministry, and often a weak one, the United States has many agencies and offices striving to do good archaeology. This kind of competitiveness not only serves to improve the federal program overall, but also spreads responsibility, cost, success, and blame throughout the bureaucracy and makes it difficult to eliminate archaeology from the federal system [Wendorf and Thompson 2002:327].

In 1966, even before enactment of the National Historic Preservation Act (NHPA), NPS Director George Hartzog Jr. established a special committee to advise him on the ways that the NPS should carry out its historic preservation responsibilities, both for archaeological and historic properties within units of the National Park system and for assisting or coordinating with other agencies and organizations on meeting broader historic preservation responsibilities. The committee of three—archaeologist J. O. Brew, architectural historian Ernest A. Connally, and NPS historian Ronald F. Lee, who chaired the committee—recommended developing a program with an archaeological component squarely within the overall scope of the program (Lee et al. 1966). The special committee did not recommend a separate program specifically for national archaeological integration, and the NPS went on to develop an overall historic preservation program with archaeological activities integrated within it. In its early years, the program was known administratively as the Office of Archeology and Historic Preservation. Early in 1967, Connally was hired to develop and lead this program, which he did for many years. It is not surprising, therefore, that persuasive as McGimsey undoubtedly was in arguing for a separate national archaeological program, this proposal was not accepted. For readers interested in more details on this topic, I recommend McGimsey's well-documented description of his efforts to create a single national archaeological program in his recent collection of historical commentary, essays, reports, and reflections (McGimsey 2004: 47–66).

The NPS did not develop a single national organization to provide comprehensive public archaeological expertise and services. Instead, NPS leaders used the archaeological, historical, and architectural expertise within the organization to develop general standards and provide guidance for cultural resource identification, evaluation, planning, documentation, preservation, protection, and treatment that could be used by all public agencies. These standards and guidelines eventually were published in 1983 as *The Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* ([http://www.cr.nps.gov/local-law/arch\\_stnds\\_0.htm](http://www.cr.nps.gov/local-law/arch_stnds_0.htm)).

Historical interpretations and judgments about how public archaeology in the U.S. has come to be organized during the last generation, and the roles of the NPS and other organizations, certainly will continue to be debated. McGimsey's primary point about the need for strong, effective leadership and coordination at the present time, however, is right on target. Due to the decentralized activities and responsibilities of many agencies in the U.S. system of public archaeology, such leadership is needed to ensure adequate and consistent effort, integration of activities, and accessibility of results.

### **What Has Happened**

About a dozen federal agencies manage public land in excess of a million acres. In all, about a third of the nation is made up of public lands, and the federal agencies that manage these lands are responsible for the care of millions of archaeological sites on them, both those already known, recorded, and managed, and those not yet discovered. Other federal agencies are responsible to ensure that their actions ("undertakings" is the official procedural term) do not wantonly destroy significant archaeological resources. Hundreds of millions of dollars are devoted to archaeological activities related to these public responsibilities. Such widespread responsibility to take proper account of archaeological resources probably means that more archaeological investigations are done than if a single governmental organization was responsible directly and exclusively for American archaeology.

Of course, this kind of diffuse responsibility and widely spread decision-making runs the risk of wasteful redundancy, inconsistent priorities, and unprofessional work being accepted. There are a number of integrative mechanisms in the American system of public archaeology to counter these risks. A set of federal laws and uniform regulations require the protection or adequate consideration of archaeological resources by federal agencies, as well as the national standards and guidelines cited above. These laws, such as the Antiquities Act, the Archaeological Resources Protection Act (ARPA), NHPA, and the Abandoned Shipwreck Act, set the requirements for all agencies that manage archaeological resources or whose activities affect significant archaeological properties.

Integration also has been provided through leadership and coordination in the promotion of certain activities and by undertaking certain initiatives. The NPS Archeology Program, at the national level and at regional offices and centers across the U.S., has been instrumental since the late 1980s in providing integration within federal archaeology in this way. One of the earliest examples of this was the promotion of public education and outreach activities now taken up by many archaeologists in public agencies, colleges and universities, and the private sector.

The Archeology Program continues to offer a wide range of information on this topic, including reading lists, web links, public interpretation vignettes, and online courses for archaeologists, interpreters, teachers, and the general public on our national website (Archeology Program 2006a). Similarly, the pressing need for more attention to the curation of and access to archaeological collections has been stressed in training programs, publications, and workshops led or sponsored by NPS professionals and offices (e.g., Childs and Corcoran 2000). Working with key officials, government attorneys, archaeologists in other agencies, and law enforcement colleagues, the effective use of archaeological resource protection laws to fight looting and illegal trafficking has been another major thrust of the NPS Archeology Program.

Since 1986, the NPS Archeology Program has coordinated the reporting of yearly data and summaries related to archaeological activities accomplished or funded by up to three dozen federal agencies. In 1990, through coordinated efforts among federal agencies with substantial archaeological programs, the "National Strategy for Federal Archeology" was proposed by the NPS Archeology Program, issued by the Secretary of the Interior, and endorsed by other Cabinet Secretaries as a means of directing federal agencies to undertake or support archaeological activities that emphasized the preservation, protection, stewardship, and wise use of archaeological resources. The National Strategy was most recently updated and reissued through the Director of the NPS (Archeology Program, 2006b). In all of these examples, as well as others not summarized here, one overriding objective has been the integration of archaeological activities among public agencies, colleagues in academic positions, and individual archaeologists and firms in the private sector.

### **What Is Needed**

Continuing efforts in archaeological public education and outreach, archaeological curation, resource protection, and program coordination are necessary. The kind of work needed may have shifted over the years, but the level of activity required has not diminished. At least three other topics bear mentioning. One is the need for easier archaeological data retrieval and integration (e.g., Kintigh 2005; Snow et al. 2006). The National Archeological Database (NADB), a national effort since 1983, coordinated and largely funded by the NPS Archeology Program, has provided information about archaeological projects undertaken in the U.S. (Archeology Program 2006c). The NADB-Reports module presents basic bibliographic information, general geographic location of the project, and a location where a copy of a report can be found. The Reports database now contains information about 350,000 reports, mainly from the "gray literature." This probably is less than half of all the unpublished archaeological reports that exist, and the rate of

records entry is not keeping pace with the rate at which new reports are being created. Another NADB module with summary information about over 3,200 archaeological investigations for which Antiquities Act or ARPA permits were issued between 1907 and 1984 awaits completion and posting on the NADB web page. Resources are needed if NADB is to serve as an important component in a national archaeological cyberinfrastructure and to provide for better data access and integration.

The professional archaeological workforce in public agencies is aging. Retirements among the cohort hired at the beginning of the growth of public sector archaeology in America have begun and will accelerate during the next decade. Replacements for these experts have not been hired at a rate that ensures an easy transition from one generation to the next. The network of professional archaeologists in public agencies—federal, state, tribal, and local—has been an essential part of ensuring that significant archaeological resources have been treated appropriately. If holes in this network are not filled, America's archaeological record will suffer neglect and loss.

Finally, public support for archaeological investigations, the protection of archaeological resources, and public interpretation of archaeological sites and collections is essential. There is tremendous public interest in archaeology and archaeological sites and objects, as shown by the results of the Harris Interactive national opinion survey (Ramos and Duganne 2000). However, the actual knowledge most individuals have about archaeology and sites is very shallow. So, the opportunity exists to take advantage of positive public attitudes, but quite a bit needs to be done on improving public perceptions and understanding of American archaeology. In addition, such potential support must be translated into political interest and action through the representatives of the American people.

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## FOURTH ANNUAL SAA ETHICS BOWL

The Society for American Archaeology's Committee on Ethics is pleased to announce the Fourth Annual Ethics Bowl. Graduate and undergraduate students are invited to organize a team of 3–5 participants with a faculty advisor to take part at the SAA 72nd Annual Meeting in Austin, Texas on April 26, 2007. Rules and procedures for the Ethics Bowl and the 2004–2006 case studies can be downloaded from: <http://www.saa.org/aboutSAA/committees/ethics/ebowl.html>. To sign up for 2007, contact one of the organizers: Julie Hollowell (email: [jjh@indiana.edu](mailto:jjh@indiana.edu)), Chip Colwell-Chanthaphonh (email: [chipcc@gmail.com](mailto:chipcc@gmail.com)), or Dru McGill (email: [dremcgil@indiana.edu](mailto:dremcgil@indiana.edu)).





# REBUTTAL

Charles R. McGimsey III

I agree with Wendorf and Thompson that we are better off with a multiple agency program rather than one conducted primarily by the NPS, although I admit we did not start out with that idea. But we were rapidly disabused of a NPS monopoly as we worked with the agencies.

We never intended for the NPS to develop a national archaeological program such as those in, for example, India or Egypt. We wanted the NPS to do three things: (1) promptly develop guidelines for all aspects of federal archaeology and to do everything

in its power, as the clearly designated lead agency, to see that all agencies adhered to them (a nine-year delay in issuing Regulations does not cut it); (2) serve as a public repository for all resultant publications and make them accessible to the public (too little too late); and (3) based on its 1935 Historic Sites Act mandate, develop the NPS Intergency Archeological Services (IAS) to fund contracts for investigation of sites identified by basic regional programmatic or other scientifically based management programs, thus freeing archaeology from a total past and present dependence on salvage archeology (never even considered).

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EDITOR'S CORNER, from page 2 ↩

March will be the last thematic issue of my six years as Editor of *The SAA Archaeological Record*, and my yet-to-be-named successor might continue the tradition, or she or he might not. Any feedback on the policy of dedicating issues of the magazine to

specific topics would be very valuable as we make the transition to a new Editor!

Remember that not all issues are dedicated to specific themes. If you have ideas for interesting contributions, do not hesitate to email or call!

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IN BRIEF, from page 3 ↩

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# THE EMERGENCE OF GEOARCHAEOLOGY IN RESEARCH AND CULTURAL RESOURCE MANAGEMENT: PART I

Joseph Schuldenrein

*Joseph Schuldenrein is Principal Archeologist and President of Geoarcheology Research Associates.*

Since the early 1970s, the trajectories of geoarchaeology and cultural resource management (CRM) have followed contemporaneous if somewhat independent courses. As a widely applied strategy, geoarchaeology emerged in the wake of the “New Archaeology.” It was a logical vehicle for incorporating scientific methods to a theoretical orientation that emphasized human ecology. Perhaps the signature work that placed the discipline on the academic “archaeological map” was Karl Butzer’s second edition of *Environment and Archaeology: An Ecological Approach to Prehistory* (1971). At about the same time, the expansive reach of the National Historic Preservation Act (1966) mandated archaeological investigations across landscapes, environments, and contexts heretofore unanticipated across the U.S.

In hindsight, geoarchaeology’s landscape perspective and the preservation ethic would appear to be natural allies for implementing compliance projects, but the convergence of the two was slow to develop. The catalyst for integration was the growth of large-scale planning projects—reservoir expansions for major drainages of the Southeast and Forest Service inventories in the West, for example—that formally designated natural landscapes as planning units. By the mid-1980s, it became apparent that an understanding of the systematics of landscape evolution would account for site/settlement distributions and the processes of site burial and preservation, items of paramount concern to cultural resource planners. The results of CRM research began to be reported in the professional literature (Waters 1992), and geoarchaeology was eventually integrated into planning strategies.

While it is safe to say that geoarchaeology has demonstrated its worth in CRM, the science behind it remains mysterious to planners and general archaeologists alike. As in other archaeological specialties, the methods, techniques, and interpretive potential of the field have evolved over decades. Ideally, practitioners are extensively trained in both the natural and social sciences and have gained considerable experience by studying archaeological sites in their natural contexts. The purpose of these articles is to acquaint the archaeological public with the key concepts and applications of geoarchaeology, and specifically that aspect of geoarchaeology bearing on ancient landscapes. More importantly, the mission is to enable planners, principal investigators, technicians, and students to identify those settings in which geoarchaeology is beneficial and to pose the right questions for professionals working at their sites. In Part I, the general concepts and principles of geoarchaeology are discussed, and field work and sampling are introduced. In Part II, which will appear in the next issue of *The SAA Archaeological Record*, a detailed assessment of geoarchaeology’s utility for compliance work in CRM will be provided.

## Concepts and Principles

As the term implies, *geoarchaeology* addresses the interface between the earth sciences and archaeology. Archaeological problems form the basis of the inquiry. The term *archaeological geology* is also used, but it more accurately refers to a thematic bias in which geology is the primary focus and archaeology is simply an investigative technique.

A fundamental postulate is that cultural finds are always tied to a *landscape*—either on an exposed surface or buried underneath it. Irrespective of the aims of an archaeological project, the association between cultural materials and the ground is critical to assessing significance from the compliance perspective. Systematic associations between cultural features (e.g., artifacts, storage pits, processing stations, settlements, structures), their periods of occupation, and patterned distributions with particular terrain elements enables CRM professionals to structure observations in a way that is meaningful for clients and regulators.

A second postulate is that over the course of the 15,000 years of human occupation across North America, the landscape has been dynamic. Thus the history of landscape dynamics provides an independent context for explaining the variability in archaeological distributions across time and space. Landscape histories are initially reconstructed by examining the individual *landforms* that define an environmental setting. An alluvial landscape, probably the most prominent setting for stratified sites, includes such landforms as terraces, flood basins, marshes, and meander scrolls. However, because of landscape dynamism, the configuration of landforms comprising the contemporary alluvial terrain may not correspond to that of the past. Surface artifacts of recent origin can be separated from prehistoric settings by depths of deposit within the same landform or by distance from former landforms that are no longer exposed. Systematic study of landscape change is key to understanding patterned contexts of cultural features through time and determines if, for example, remains of a given prehistoric period will survive on the surface, erode away, or be buried. The study of landscape change—effectively, the change in landform configurations—is *geomorphology*.

Assembling landscape histories and assessing site integrity are the most critical objectives for the geoarchaeologist. Landform histories are grounded in absolute dating techniques, which, in North America, still center on the radiocarbon technique for carbonized cultural remains, but are now increasingly dependent on AMS and bulk sediment dating of organic deposits that may house archaeological materials. Archaeomagnetism and thermoluminescence have gained increasing prominence for archaeological dating, while dendrochronology and obsidian hydration are routine across the western U.S. The most exciting recent development in absolute dating is optically stimulated luminescence (OSL), which expands the dating scale to 100 KYA and facilitates determinations in Aeolian environments.

To develop assessments of site integrity, geoarchaeologists draw on techniques from a variety of disciplines, including geology, sedimentology, pedology, hydrology, geomorphology, stratigraphy, chemistry, geophysics, photogrammetry, and engineering, as well as archaeology. Parenthetically, geoarchaeological approaches are colored by the training of the practitioner vis-à-vis these disciplines; the approach of a pedologist, for example, differs considerably from that of a geomorphologist, since the former emphasizes soil sequences and stable environments, while the latter is keyed to dynamic landscapes and processes of change. Geoarchaeological approaches are widely applied to prehistoric settings but are increasingly drawn upon to reconstruct site formation processes at historic sites.

The initial strategy for modeling landform histories is an understanding of the subsurface materials that account for their formation. Subsurface materials can be divided into three basic categories: *geological deposits*, *soils*, and *anthropogenic sediments*. *Geological deposits* or *sediments* are laid down by gravity, water, or wind and represent the accretionary forces of the natural environment. The ideal preservation context for ancient occupations in formerly active landscapes—coastal plains, stream margins, dune fields, rock shelters, and caves—is burial by low-energy deposition. More commonly, however, artifacts are mobilized after site abandonment. It is the geoarchaeologist's job to determine how, why, and when such displacements occurred.

*Soils* are weathered (mechanically or chemically “broken down”) sediments that represent stable periods of a landscape's history when prehistoric evidence is likely to be preserved *in situ* (thus retaining integrity and factoring into significance determinations). A broad rule of thumb is that buried soils are proxies for ancient surfaces. Many archaeologists are familiar with the “A-B-C” horizonation of soils, although these designations are widely misused, and the terms “soils” and “sediments” are bandied about with abandon in field settings. While soil taxonomies are intricate and complicated, another sim-



Field Layer	Depth (cm)	Unit	Soil Horizon	Munsell Color	Texture	Structure	Consistence	Carbonates	Boundary	RC Dates	Comments
I	0-20	1	Occupation	10 YR 4/3	SL	1 f gr	fri	ste	c,s		ash, abundant charcoal, colluvial
II	20-37	1	Occupation	10 YR 6/3,5/3	SL	1 f gr	fri	ste	s,a	3980±40 B.P.	contains discrete charcoal horizons
III	37-60	1	Occupation	10 YR 5/4,6/4	SCL	1 f gr	sl hard, fri	ste	c,s		ash lenses, abundant pottery
IV	60-75	1	Occupation	10 YR 5/4,6/4	LSI	1 f gr	fri	ste	c,s		abundant decomposed bone, ash
V	75-130	1	Occupation	10 YR 5/3,6/3	LSI	mass strat	hard fri	ve	a,s	3960±40 B.P.	local alluvium, few artifacts, ash
VI (A,B)	130-260	1	Occupation	10 YR 5/3,5/4	LSI	1 f gr	fri	sls	c,s	3780±70 B.P.	slump, heterogeneous, burnt features
VII	260-305	1	Occupation	10 YR 5/4	LSI	mass strat	hard fri	ste	c,s		"mud brick horizon", burnt clays
VIII	305-315	2	Ab	10 YR 5/3	FSL	1 w sbk	soft fri	ste	g,s		"Upper Paleosol" (Middle Holocene)
VIII	315-340	2	Bw	7.5 YR 5/3	SCL	2 f sbk	hard firm	sls/Stage I	d,s		root casts, diffuse kankars, organic clay films
VIII	340-365	2	Bek	7.5 YR 5/4	SCL	2 m sbk	hard firm	ste/Stage I+	d,s		kankars increase in size and frequency
VIII	365-385	2	BG	7.5 YR 5/4	SL	1 w sbk	soft fri	sls	g,s		parent alluvium
IX	385-405	3	2AB	10 YR 5/4	FSL	1 w sbk	soft fri	ste	c,s	6900±40 B.P.	"Lower Paleosol" (Early Holocene)
IX	405-420	3	2Bk1	10 YR 5/4	SCL	2 f sbk	hard firm	ste/Stage I+	d,s		small kankars (3-4mm), clay films
IX	420-440	3	2Bk2	10 YR 5/4	CLSI	3 s sbk	v hard	ve/Stage II	d,s		25% kankars (to 40 mm), prominent clay skins
IX	440-460	3	2Bk3	7.5 YR 5/3	SCL	2 m pr	v hard	ste/Stage I+	c,s		continuous clay skins
IX	460-475	3	2Bk	10YR 5/4	FSL	mass strat	hard fri	ste/Stage I+	c,s		parent alluvium
NA	475-515	4	2AB	10YR 5/3	SCL	2 w sbk	sl hard, fri	ste/Stage I	g,c	13,050±60 B.P.	"Terminal Pleistocene Entisol"; mottled organics
NA	515-540	4	3C1	10 YR 6/4, 6/3	SCL	mass strat	sl hard, fri	ve	c,s		fining upward alluvium
NA	540-685	4	9C2	2.5 Y 5/3	FSL	mass strat	fri	w	c,s		sandy micaceous alluvium, fining upward
NA	685-710	5	4AC	2.5 Y 5/3	CS	1 w sbk	soft fri	sls	c,s		"Pleistocene Entisol" laminar beds, dense organics
NA	>710	5	4C	2.5 Y 6/3	FS	mass strat	locus	sls	NA		coarsest parent alluvium

Texture: SL = silt; L = loam; C = clay; S = sand; F = fine; G = gravel

Structure: 1 = weak; 2 = moderate; 3 = strong; f = fine; m = medium; c = coarse

f = fine; gr = granular; mass = massive; strat = stratified; sbk = subangular blocky; sb = angular blocky; pr = prismatic

Consistence: fri = friable; sl = slightly; v = very; l = loose; f = firm; st = sticky; ss = strongly sticky

Carbonates: ve = violently effervescent; ste = strongly effervescent; sls = slightly effervescent; we = weakly effervescent

Boundary Distinctness: a = abrupt; c = clear; d = diffuse; g = gradual; s = sharp

Boundary Topography: s = smooth; a = abrupt

Figure 1: The integration of stratigraphic data at a complex archaeological site, a Harappan Mound in northeastern Pakistan. Field levels are recorded by field archaeologists. "Units" are lithostratigraphic divisions, while formal soil horizons underlie occupation horizons (or archaeo-strata) (After Schuldenrein et al. 2004).

ple rule for field archaeologists is that the "A" horizon is organic and typically black, "B" horizons are zones of mineral enrichment, often red or brown, and "C" horizons are the unmodified parent material or the sediment above which active soil formation occurs.

Finally, *anthropogenic sediments* are of unequivocal cultural origin and represent the human imprint on the earth; features such as roasting pits, storage facilities, house floors, and planting fields are examples. Typically, anthropogenic deposits and soils are found together and represent the most sensitive archaeological contexts.

All three contexts are expressed in the range of natural environments, from deserts to temperate woodlands, and from coastal plains to uplands and alluvial valleys. *Stratigraphy* is the term used to order and sort the vertical and lateral sequences of deposits, soils, or anthropogenic sediments preserved within a landform. Here again, investigator bias often determines the stratigraphic framework applied to a given succession. *Litho-stratigraphy* is probably the most widely used approach; it refers to the grouping of sediments on the basis of lithological differences such as sediment composition or rock type. It is widely used in active depositional settings. *Pedo-stratigraphy* is the method favored by soil scientists ordering periods of soil formation and intervals of landscape stability. *Archaeo-stratigraphies* are less frequently used but can be useful at complex sites, such as mounds or tells, where the preponderant deposition agent is of cultural origin. In reality, many archaeological landscapes will preserve elements of dynamic deposition, soil formation, and cultural sedimentation. The task of integrating lithological, pedological, and sedimentary observations at an archaeological site is never easy, but it is somewhat simplified by differentiating soil and sediment properties as carefully as possible and linking them temporally by radiocarbon dates and diagnostic cultural remains (Figure 1).

Finally, on a larger scale, archaeological landscapes may extend across more than one landform. To accommodate this type of situation, an *allostratigraphic* framework has been given increasing prominence. The allostratigraphic unit is separable by bounding discontinuities that are not as stringently constrained as either of the other categories. Thus soils, sediments, and cultural deposits can be accommodated by this framework, as can deposits that cut across several landforms. Where temporal correla-

tion is critical—such as linking a Mississippian terrace occupation with its inhabitants' exploitation of an adjacent, lower-lying marsh for shellfish procurement—the allostratigraphic perspective is of considerable utility. An excellent discussion of the various stratigraphic approaches for archaeologists is available in Holliday (2004).

### Geoarchaeology in Action: Field Work and Sampling

The classic archaeological traditions eschewed the use of heavy equipment for subsurface testing under the assumption that site integrity would be irrevocably compromised. The advent of CRM demanded more cost-efficient strategies that, over time, have demonstrated that a window on site stratigraphy previews site structure and provides guidelines for appropriate testing and mitigation practices. Invasive techniques are almost always necessary for landform reconstruction. In general, backhoe-based techniques are preferred in the eastern U.S., where surface archaeology may have a questionable relationship to subsurface stratigraphy. In the Plains to arid and semi-arid West, associations of artifact clusters with incised *arroyo* and *cien-aga* profiles often furnish hints on site-landform associations and provide direction for testing.

Practitioners use a variety of testing strategies. These include coring devices (from a portable 2-in. Oakfield corer, to a truck-mounted, hydraulically activated Giddings rig), while tractor-mounted backhoes allow large exposures. The objective is to obtain as much stratigraphic exposure as possible across the site or project landform. Ideally, the backhoe is placed at critical breaks in the landform or where archaeological sensitivity is high; if there is concern that critical site contexts will be compromised, backhoe location can be locally repositioned. In the past decade, the geo-probe has emerged as a favored coring device because of its maneuverability, speed, and efficiency; minimal set-up is required, and the machine can penetrate all but the hardest bedrock and lithified materials (Figure 2). Recovery of subsurface columns is typically intact, and compression is minimal. The geo-probe represents the future for rapid subsurface soundings and is equally suited for the open landscapes of the West and the often constrained and disturbed settings of the urban Northeast.

Integrated probing techniques are applied as scopes and circumstances dictate. Cores help to bridge subsurface sequences between the broader backhoe sections. In general, stratigraphic, sediment, and radiocarbon samples are secured from backhoe sections, but wider cores can also provide sufficient sediment. Soil and sediment analysis is dictated by stratigraphy and purpose. Geochemistry is valuable for assessing soil development and anthropogenic inputs. Grain size and mineralogy are more critical for evaluating natural stratigraphy. Sediments are analyzed in-house or by outside labs. Radiocarbon dates are always performed at special labs. Regulatory agencies and State Historic Preservation Offices are increasingly reliant on subsurface testing to determine archaeological potential and to structure planning strategies. The recent protocol established by the Minnesota Department of Transportation offers a baseline for deep testing in a variety of contexts (<http://www.mnmodel.dot.state.mn.us/pages/DeepTestProtocol.html>).

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Figure 2: Geo-probe equipment in action for a Phase II, CRM-based study along a first terrace location of the Delaware River, eastern Pennsylvania.

# ENVISIONING AN ARCHAEOLOGICAL CYBERINFRASTRUCTURE

Dean R. Snow, Kenneth G. Hirth, and George R. Milner

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Archaeologists plumb the depths of Maya temples to uncover their secrets, dig hundreds of post molds to tease out house patterns, study the locations of sites to understand settlement trends, and analyze languages to map their evolution and what they tell us about the people who spoke them. Museums become filled with artifacts, government agency offices overflow with documents, and databases blossom everywhere. More than 100 years of archaeological information collected by a variety of people and institutions for a myriad of purposes exist in the U.S. in various forms, from highly specialized databases to handwritten notes on three-by-five cards. Large collections and databases cover the gamut from potsherds, stone tools, plant and animal remains to survey information and excavation notes and reports.

We recognize that archaeological sites represent a fragile resource. Events such as floods, erosion, earthquakes, excavation, and modern land use often prevent reexamination of archaeological remains, making old collections, field notes, and reports exceptionally valuable and at times the only insight into no longer existing resources. But, even though this information exists, locating it and accessing it are difficult. Not surprisingly, six federal agencies alone account for 40,000 linear feet of documentation and about 64,000 million cubic feet of collections storage.

Much of the written information exists only as gray literature. Reports filed at government agencies, universities, and cultural resource management companies exist, but they were never widely disseminated, and they are generally not indexed. In these days of Internet connectivity, word of mouth is sometimes the only means of identifying gray literature of interest for a project. Actually acquiring the information is often a long process of nailing down exact titles, authors, and owners.

Even when databases exist in electronic form, combining them can become a nightmare. Once the researchers overcome the

electronic difficulties of differing software, they must reconcile chunks of data of different sizes, containing different variables and using differing terminology. Data collected from one cultural area may look very different from another cultural area, not only because the cultures differ, but because the archaeologists who collected the data used different approaches or had different training. Even if data were collected in the same area, differences in when the project occurred can make them incompatible; time changes even archaeological practice.

Not to be forgotten are the photographs, maps, drawings, and other images that stand alone or exist in published works. Without them, archaeological research is often impossible, but tracking, cataloging, and accessing them is difficult.

## The Solution: Cyberinfrastructure

To make the best use of the information we already have, we need cybertools that will allow us to access old data and reuse it for new purposes. Without some type of cyberinfrastructure, using information for large comparisons across cultures and regions becomes arduous, whether it is comparing animal bones, potsherds, or site information. The obstacles are many, but they are not insurmountable.

An archaeological cyberinfrastructure must accommodate gray literature, incompatible databases, and visual images and present a workable interface for the user. However, archaeologists do not have to begin from scratch. They can use new developments in computer and information science for the tools, protocols, and standards for an integrated infrastructure. Existing examples include the National Science Foundation's cyberinfrastructures in the human-environment interaction, called "HERO" (Human-Environment Regional Observatory Network), and in geosciences, called "GEON" (Geosciences Network). The U.S. government's approach to spatial data includes the National Map, the National Spatial Data Infrastructure, and



the Geospatial OneStop. For handling images, SIMPLicity (Semantics-sensitive Integrated Matching for Picture Libraries) manages large-scale databases for art and culture, remote sensing, biomedical, and web applications. Other search engines, data mining programs, and data management software exist.

However, any approach to creating a cyberinfrastructure in archaeology must consider sustainability. It does not make sense to create a monolithic cyber-entity containing the wealth of knowledge accumulated by archaeologists—better to allow owners to manage and maintain their own information. This approach will control costs and interfere least with individual and institutional autonomy. Because all data sources are not equal, digital libraries and other services need to be available so that researchers and organizations can store and mirror data. A distributed system is much more manageable than a centralized one and allows for the inevitable growth of information. Government, academia, and commercial enterprise need to make a long-term commitment to this approach.

With a distributed system, middleware becomes the essential, operative component. New tools, operating between an easy user interface and the underlying stored information, must be able to use many different perspectives and approaches and access and search many different database structures simultaneously. Researchers should be able to ask for a search in terms that they understand, and the middleware should be able to convert that request into language mapable onto the various and different databases queried. The results should be delivered in the original frame of reference.

Along with middleware come standards. Many existing spatial systems contain well-defined metadata requirements, such as the National Spatial Data Infrastructure. An archaeological cyberinfrastructure will also need metadata for descriptions of the range of items in archaeological studies, including, but certainly not limited to, various artifact types, images, maps, and sites.

Any archaeological cyberinfrastructure must be easy to use. A web interface would allow access to a variety of tools, including those for visualization, mapping, and searching, as well as various maintenance tools. In essence, this portal would be the

front-end entrance to the middleware, which would operate invisibly. On the far end would be the information, stored in its various homes, distributed everywhere but accessible. Past the portal, on the Internet, would reside the normal tools for web maintenance—registration, login, and system monitoring. Once past login, one would find access to the actual middleware, allowing analysis, searching, visualization, and exploration of the stored, distributed data.

Key to this vision of archaeological cyberinfrastructure is the Open Archives Initiative (OAI) Protocol for Metadata Harvesting, which, according to the OAI mission statement, creates

interoperability standards that aim to facilitate the efficient dissemination of content. The Open Archives Initiative has its roots in an effort to enhance access to e-print archives as a means of increasing the availability of scholarly communication....The fundamental technological framework and standards that are developing to support this work are, however, independent of the both the type of content offered and the economic mechanisms surrounding that content, and promise to have much broader relevance in opening up access to a range of digital materials.

In essence, those owning data make structured information (metadata) about their data resources available using well-defined protocols. This lets others harvest the information and use it in a variety of ways that add value. The OAI Protocol provides a framework for the cyberinfrastructure upon which can be hung existing software.

While a metadata framework, middleware, and other cybertools exist, establishment of an archaeological cyberinfrastructure will require cooperation and commitment among information owners. The rewards, however, will be well worth the effort. Eventually, archaeologists will have at their fingertips catalogs of stored and preserved archaeological knowledge, tools for manipulating that knowledge, and shared virtual space for collaboration.

(Adapted from *Cybertools and Archaeology*, Policy Forum, *Science* 311[17], February 2006. )



# ANSWERING THE SKEPTIC'S QUESTION

Paul E. Minnis

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**S**o," the Skeptic asks, "you expect me to pay taxes so you can play in the dirt digging up old stuff instead of me saving more for my kid's education or for producing more vaccines against childhood illnesses in the Third World?" I ask some variation of this question each time I teach our graduate core course in archaeology. The usual response is one of a number of variations of "we might find something from the past that might have value for the future." Silence usually meets the obvious rejoinder, "Of the hundreds of millions of dollars already spent on archaeology in North America, give me an example of 'something' of value." Answers that simply point out that we spend as much on archaeology as we spend on chewing gum or other seemingly trivial goods; that some athletes, actors, and CEOs make obscene salaries; or that recent tax cuts disproportionately favoring the rich are far more than what is spent on archaeology are not the affirmative answers we need. I am not criticizing graduate students, mine or others; there seems to be precious little discussion among archaeologists in general about *why* archaeology has value outside our discipline, except for complex relationships between archaeology and indigenous peoples.

As the vast majority of archaeological funding comes from public funds and as budgets become increasingly tight, we can, and frankly should, expect pressure to explain not only what we do and what we have discovered, but, most importantly, the benefits of what we have learned. There are, of course, many different answers at varying levels to this question, and I do not expect everyone to share the same answer. Robert Kelly (1998), as an example, argues that archaeology's primary value is counteracting racism. Others will find archaeology's worth in documenting the experiences and accomplishments of those communities long ignored by other disciplines. Still others will point out that the long time depth inherent in archaeology is a needed antidote to the typical short-term perspective of many North Americans and others. These and similar points are surely all important lessons from anthropological archaeology; they may well be the most critical benefits of our work. But are they enough?

Perhaps not. Archaeologists should also articulate the more tan-

gible benefits of archaeology, the types of value most easily understood in the political arena. The risk of not doing so is to leave ourselves strategically vulnerable in increasing competitive budgetary environments.

As someone whose professional life includes both archaeology and ethnobotany, it should not be surprising that my answer emphasizes prehistoric human ecology. Specifically, I have emphasized the importance of several "relevancies" for studying prehistoric human ecology: understanding ecological dynamics for environmental conservation, especially anthropogenic factors; documenting novel uses of plant resources that could have economic value; understanding strategies for farming marginal lands with the increased use of such locations throughout the world; and expanding our increasingly impoverished inventory of crops to decrease risk of food shortages (Minnis 2001, 2004). These topics are non-trivial and are easily explained to non-archaeologists. While I am most passionate about these topics, I appreciate that fellow archaeologists will have very different priorities. Differing conceptions of benefits should be encouraged; valuing archaeology is not a zero-sum equation. Whatever issues motivate our work, archaeology as a discipline should be more vocal among ourselves and with others about the benefits of our work.

Do we deserve public funding if we cannot satisfactorily answer the Skeptic's Question to ourselves or others? There are many people across the globe ill, malnourished, and inadequately educated who could use the money spent on archaeology. Fortunately, archaeology is important, having both intellectual and practical worth. Therefore, we can enumerate archaeology's value. A good beginning would be a series of short letters or articles in the *SAA Archaeological Record* outlining various benefits of archaeology. Several of my colleagues begin this conversation below.

## Barbara J. Little

The Skeptic asks why archaeology is valuable. I agree that we are beset by poverty, inadequate education, looming global pandemics, racism, misogyny, warfare, genocide, economic

upheavals, environmental degradation, and threats of terrorism. Such challenges are cultural, political, and deeply historical. Has the Skeptic ever noticed how the past is used as a weapon, how people use selective histories against each other to fuel passions that erupt in violence? Even a cursory look at the Middle East is convincing of that. How we learn about and use history matter. Our history is an anchor, a vantage point, and a library. Archaeology is the tool for expanding that history. Archaeologists expand history across time, so that we can understand something of the vast majority of the human past. We also expand history across society, so we can understand the struggles and triumphs of the many people who do not appear in documentary records or whose lives are distorted there.

As a historical archaeologist who focuses on time periods for which there is written documentation, I often field the question of whether such work contributes anything new. There is a gap between what people actually do and what they say they do. I'm convinced that gap affects how we might approach the misuse of history. The documentary record is incomplete and biased toward certain categories of information. Records are also biased because they reflect the prejudices and stereotypes of their age. Detailed knowledge of the past drawn from archaeology can challenge myths, misconceptions, and stereotypes. I do not believe it is an overstatement to say that archaeology can counter racism. A growing number of historical archaeologists are explicit about how their work contributes to anti-racism efforts. In the U.S., for example, archaeology has become an important tool for discovering and teaching African-American history and for initiating dialog about the continuing effects of racism.

Our problems are deeply rooted. One lesson from the deep past is that there are no quick solutions. I share the frustration underlying the Skeptic's question. Like me, he or she would prefer solutions to be immediate. The Skeptic may be surprised that I find the question hopeful. Impatience in the face of seemingly intractable problems is preferable to despair. It is far too easy to give up. Archaeologists also want something of broad value from archaeological research; we need skeptics to prompt us make our work and our perspectives useful.

*Barbara J. Little is the author of Historical Archaeology: Why the Past Matters (Left Coast, 2007) and editor of Public Benefits of Archaeology (Florida, 2002).*

### Robert Kelly

I'd still argue that since the real or perceived wrongs of "the past" often lie at the heart of racism, ethnocentrism, etc., archaeology can play a role in the dialogue that must occur for people to overcome their pasts and learn to "all get along." But Minnis asks that we provide the Skeptic with even more concrete bene-

fits. He outlines some, but he wants to know what value archaeology could have in the minds of legislators who think in terms of today's cash flow. What's the payoff to a financial investment in archaeology?

The obvious answer is tourism. But here we would have to show that the development of an archaeological property (which will probably require some archival and field research) will actually bring more people into a state or region and hence pay for itself—and more. This is not easy, for few archaeological sites (Mesa Verde and Cahokia are examples) are "destination" spots. But we could certainly play this angle; a first step would be to collect data on visitation rates to the many publicly accessible archaeological properties in a state and to generate vehicles for promoting those properties as tourism resources.

An investment in archaeology can also help promote energy and mineral industries by making the Section 106 process more efficient. We've had to deal with this issue in Wyoming, created by a remarkable increase in mining and energy extraction. We are encouraging the legislature to fund historic context development to assist Section 106 compliance, and thereby make mining more efficient and hence profitable for the state.

*Robert Kelly is Professor of Anthropology at the University of Wyoming and a former SAA president.*

### Scott E. Ingram

The public benefits of archaeological research are both tangible and intangible. We can argue for the tangible benefits of tax revenues raised through archaeology-related tourism, but ultimately there are better reasons for investing in archaeological research. The primary reason public money should be spent on archaeological research is that it contributes to the development of a long-term perspective. A long-term perspective is worth investing in because it changes public dialogue when the benefits and costs of policy decisions are considered over time periods exceeding a single human generation. The growing consideration of sustainable development is an example of the effects a long-term perspective can have on public dialogue and policy development.

Archaeological resources and research contribute to a long-term perspective by educating and informing people of the long-term history of our species and the common and divergent struggles we have faced. As archaeologists, we document the periods of stability and transformation that are inevitable within each society. Our research is a tangible reminder of the positive and negative effects of our decisions. As politicians know, the needs of the present often out-compete the needs of the future. If people expect the long-term effect of policy decisions to be regularly accommodated, better political/policy decisions will likely be

made. Archaeological research will not discover a cure for cancer, but it can instill a long-term perspective to better inform policy and perspectives on the present.

*Scott E. Ingram is a graduate student in anthropology at Arizona State University.*

### Dean Snow

From time to time I have been pointedly asked why archaeology should receive public support, on one occasion by a renowned physicist, on another by a ski bum. My sample could hardly be smaller or more diverse, but the implied premise that archaeology is not worthy of such support seems to me to be a small (if vocal) minority view. Of course, a few questioners have already made up their minds that archaeology is unworthy or even threatening for some reason, and in these cases the question is rhetorical and precludes any answer. However, I have found that questioners that are truly seeking a response are not hard to convince. Archaeology enjoys wide popular support, as evidenced by book sales, television ratings, and visitations at publicly supported sites and museums.

A more specific problem is that some people perceive value in classical archaeology but question the value of the seemingly less glamorous pursuits of most American archaeologists. In this case, an appropriate response can have several parts. The archaeology of the American Indians from their first arrival to the first voyage of Columbus is important to their living descendants because it is their heritage. Historical archaeology is inherently important to the rest of us for similar heritage reasons. American archaeology of all kinds is or should be important to all modern Americans simply because it is embedded in the landscape that we all share. But in my view, the most compelling argument is a scientific one. American archaeology is important to science because in 1491 the societies of the Americas, from the simplest to the most complex, were remarkably like those in the “Old World,” despite the virtually complete mutual isolation of the two hemispheres since well before the end of the Pleistocene. Were it not for the American Indians, we could never be quite sure that things like urbanism, state religion, literacy, and empire were all elements of universal but latent human potential back when nobody had so much as dreamed of any of them. Without American archaeology, we would lack independent confirmation of the potential for complex society that is latent in all the members of our species. A separate point is that the trajectories of the past partially determine our future, and we cannot adequately predict the latter without understanding the former. Thus, archaeology is vital for our understanding of not just the origin and development of complex societies in general, but also the persistence of the many threads of cultural diversity found in the skein of human culture.

*Dean Snow is Professor of Anthropology at Pennsylvania State University and president-elect of SAA.*

### Lynne Sebastian

The National Historic Preservation Act says “the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.” Although there are certainly practical scientific and economic benefits to be gained from preserving, studying, and interpreting our heritage, Congress recognized that there are “cultural, educational, esthetic, [and] inspirational” benefits as well.

On one level or another, most people (but not all) are fascinated by the past and want to know—to really know and understand—what life was like in a world very different from our own. Archaeology, because it deals with the actual physical remains of the past, provides an immediate, tactile sense of connection with people from another time. It is a rare individual who remains unmoved when allowed to compare his or her hand with a thousand-year-old handprint left in the plaster of a pit-house wall.

Archaeology reminds us that even though there were cultural differences from place to place and huge changes in technology and communications through time, the whole history of the human race involved groups of people striving to solve a basic set of problems: providing themselves with food and shelter, finding mates, raising children, organizing themselves for defense and companionship and cooperative enterprises, pursuing spiritual goals, and transmitting information to future generations. Archaeology teaches us that there really isn't anything new under the sun and that, however terrible our problems may seem, others have struggled with them before us and overcome the challenges of life in this world.

Archaeology is a source of wonder and inspiration and even of comfort. It provides the American people with a sense of orientation, of who we are as human beings and where we came from.

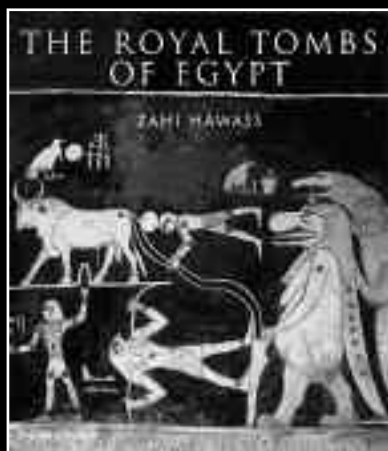
*Lynne Sebastian is Director of Historic Preservation Programs with the SRI Foundation and a former SAA president.*

### Katherine A. Spielmann

I agree that the larger applicability of archaeology is in its relevance for understanding contemporary ecosystems and the possibility of identifying sustainable subsistence agricultural practices. Interdisciplinary research that unites ecologists and archaeologists provides greater depth of understanding concerning coupled human-natural systems. In ecology, such an understanding is critical because many landscapes that provide



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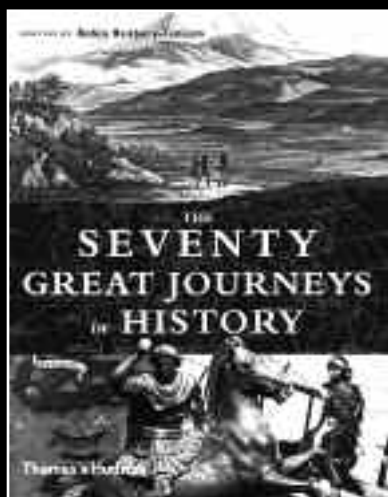


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## CALL-ANSWER

baseline ecological data for evaluating environmental change were partly structured by prehistoric occupations and agricultural practices. Although ecologists know that ecosystem structure and function may take decades or centuries to fully respond to disturbance, most ecological studies examine ecosystem dynamics over a few days to a few years. Rare centennial-scale studies have suggested that some human impacts are enduring, but few integrative ecological studies of human land use cover time scales longer than 200 years. Deciphering the relationship between human land use and ecosystem structure and function requires the time depth accessible through the archaeological record.

Collaborative research between archaeology and colleagues in ecology at Arizona State University is currently focused upon the long-term legacies of prehistoric human land use, particularly agricultural production, on the ecology of semi-desert grasslands in the southwestern U.S. Our goal is to identify the conditions under which enduring land-use legacies arise, so that we can build theory about what past human actions have directly caused ecosystem change or initiated processes that later changed ecosystems; gain insights into the ways that contemporary ecosystems can be interpreted in light of past human impacts; and develop strategies for sustainable agricultural production in semi-desert grasslands. We are only at the beginning of a very long process of data accumulation and analysis, and the step from understanding ecological transformations to enhancing contemporary subsistence agricultural production is a long one. However, I find it heartening that our colleagues in ecology are as enthusiastic about the goals of the project as we are. There is a strong sense that such collaborations will bear real fruit.

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## STUDENT AFFAIRS

### ACCESSING AND ACQUIRING FUNDING RESOURCES IN THE SOCIAL SCIENCES

Lauren Lippiello

*Lauren Lippiello is a graduate student in the Department of Near Eastern Languages and Civilizations at Yale University.*

In 1974, my father received his Ph.D. in Physiology. Thirty years later, when I was applying to graduate school, he provided me with his accumulated knowledge on applying to and being accepted into a desirable program. This invaluable advice consisted of three major points. First, visit programs and interview with appropriate faculty members. Second, a graduate degree is a union card; it is not where you go, but with whom you work. Third (and most important), if a program is considering you seriously, you will receive some level of financial support.

Unfortunately, the reality for most graduate students in social science programs differs from my father's experience. As more and more anthropology/archaeology departments are subject to ever-shrinking budgets, graduate students, and in particular M.A. students, must find their own resources to pay for school-related expenses, including tuition, books, and housing. Many graduate students choose to avail themselves of subsidized or unsubsidized loans that are difficult to pay off even with deferred payment. Aside from loans, where does a student begin to look for monetary resources? And once found, how does one acquire a fellowship or grant?

#### Finding Resources

There are several different avenues one may pursue to achieve the status of financially solvent (or, at the very least, stable) graduate student. In general, funding is associated with either academic institutions or non-academic organizations, including both public and private foundations.

When researching academic funding, one should consider the resources of the department as well as the individual faculty members. Some programs provide tuition waivers and partial financial support for M.A. students, and almost all programs provide a similar or more generous level of support for Ph.D. candidates. There are two types of academic funding offers. Assistantships require graduate students to perform certain duties within the department, often as a teaching or research

assistant. Fellowships do not require any such commitment. It is important to realize the positive and negative aspects of both offers. Assistantships provide a graduate student with valuable teaching experience and the opportunity to work with faculty outside his/her immediate interests. Unfortunately, assistantships require a time commitment anywhere between 10–25 hours per week and should be considered a “real” job. Personal aspirations in a chosen field should inform the search for potential funding resources.

In addition to fellowship or assistantship offers, smaller grants are available through the department or organizations associated with it (e.g., student clubs) and can be acquired with minimal effort on behalf of the student. If an academic department cannot provide the level of support necessary, a student may contact faculty directly. Individual faculty members may receive public and private grants that include funding for graduate students. This separate potential funding source makes school visits an important part of the application process, allowing the student to connect with an advisor that is both well funded and actively pursuing research pertinent to the student's own interests.

Finally, prospective students can place their email address on a departmental listserv in order to receive emails concerning fellowships, grants, postdoctoral positions, and job announcements submitted by faculty members, graduate students, and affiliated organizations.

Apart from academic funding, graduate students may find financial support through professional organizations. For students applying to anthropology/archaeology programs, the most prominent organizations include but are not limited to the Society for American Archaeology, the Archaeological Institute of America, and the American Anthropological Association. The following websites provide links to anthropological organizations as well as more specialized organizations within anthropology: <http://vlib.anthrotech.com/Organizations/>; [http://dmoz.org/Science/Social\\_Sciences/Anthropology/Organizations/](http://dmoz.org/Science/Social_Sciences/Anthropology/Organizations/); and <http://www.oneonta.edu/academics/anthro/org.html>.

The National Science Foundation (NSF) and affiliated recruitment programs also serve as funding resources. Previously, NSF seldom awarded monies to B.A. or M.A. students; however, relatively new programs now award generous sums to focused research pertaining to anthropological archaeology. The Graduate Research Fellowship Program is designed to support beginning M.A. or Ph.D. students, for up to three years. Likewise, Research Experiences for Undergraduates support students, in conjunction with their advisor, for expenses outside that of a typical undergraduate education. More information may be found at [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=6201&org=SBE](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6201&org=SBE) and [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5517&from=fund](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund). By using an interdisciplinary approach, additional funding may become available; the Integrative Graduate Education and Research Traineeship National Recruitment Program provides fellowships that include a stipend, tuition support, and research materials. See their webpage at <http://www.igert.org/index.asp>.

Appropriate funding resources within private foundations can be difficult to locate. Fortunately, most libraries publish catalogs of organizations offering fellowships and grants to students, meeting specific requirements in a particular specialization. Typically, catalogs provide information on the history of the foundation, its location, the amount of financial resources available, and how to apply. A student may also avail themselves of Internet resources by typing “graduate funding archaeology” into a web browser.

In addition, museums offer financial assistance to graduate students, such as the Smithsonian (<http://www.si.edu/ofg/fell.htm>), Field Museum ([http://www.fieldmuseum.org/research\\_Collections/scholarships/default.htm](http://www.fieldmuseum.org/research_Collections/scholarships/default.htm)), and the Metropolitan Museum of Art ([http://www.metmuseum.org/education/conservation\\_application.html](http://www.metmuseum.org/education/conservation_application.html)). Typically, museums have a link on their websites for prospective applicants. One can also type “fellowship” into the search engine for the specific foundation.

Remember that competition exists for any grant. It is not only a useful strategy, but both academic institutions and non-academic organizations expect that students will apply to more than one funding source, particularly if an institution has limitations on the amount of financial support they are willing or able to provide.

### Applying for Funding

Even though finding an appropriate fellowship or grant may feel like 90 percent of the work, the funds must still be awarded. The following are helpful tips when approaching proposal writing, whether for funding graduate study or for supporting specific

research. For additional information, consult your university. Academic institutions usually offer helpful grant writing seminars.

First and foremost, institutions provide guidelines, requirements, and time-sensitive deadlines for the manner in which proposals should be written and submitted. Pay attention to them! Be aware that deadlines change from year to year and should always be double-checked.

All submitted proposals should have a well-organized statement consisting of an abstract, a description of the proposed project, and its contribution to the pertinent discipline. Project methods outlined in this section must be suitable for the proposed objectives; the methods must be able to answer the hypothesis within the temporal limitations of the grant. A selective bibliography may help reviewers place the proposal in the appropriate analytical context. One may also include career objectives and how the research will assist them in the future. Proposals should include information on the collaborative process, if any, and the qualifications of affiliated project members. As more grants are awarded to interdisciplinary research, collaboration is a good way to incorporate different skill sets and perspectives into research. It is not uncommon to have three or more researchers listed as collaborators.

A tentative work schedule also is important. Not only do reviewers look for concise objectives that may be answerable in the time limit your potential funding provides, but also what facilities are needed to complete the research.

Most funding applications require a budget, including travel and research expenses. Salary replacement may or may not be available based on the guidelines of the particular grant. The amount of money must be appropriate for the project, not exceeding the limitations imposed by the funding agency or foundation. Do not exaggerate the amount of money needed. Very often, organizations will ask you to describe other sources of support for your project. Again, it is important to apply for multiple funding opportunities.

Above all, be concise. Proposals have word limits, and reviewers appreciate brevity. When writing a grant, be cognizant of the audience, especially if you are applying to organizations with an interdisciplinary flavor. After completing the proposal, ask for evaluations from colleagues, academics, and professionals that have successfully received funding in various disciplines.

Recommendations should be solicited several weeks in advance of the deadline. Recommenders should be professors or profes-

*STUDENT AFFAIRS, continued on page 40*

# SOME THOUGHTS ABOUT THE GRADUATE CURRICULUM

Paul A. Shackel and Lena Mortensen

*Paul A. Shackel is Professor and Director of the Center for Heritage Resource Studies at the University of Maryland. Lena Mortensen is Assistant Professor at the University of Toronto at Scarborough.*

In the late 1990s, the SAA Committee on Curriculum recognized that the skills needed to practice archaeology were changing dramatically. At the same time, they observed that academic programs were not training students for applied jobs, which make up the majority of employment opportunities for archaeology graduates (Bender and Smith 1998; Zeder 1997). Something needed to be done to better prepare the next generation of archaeologists to meet the needs and challenges of a changing discipline in the 21st century. (A detailed history of the significant events that helped to move the SAA toward the development of curriculum change is found at <http://www.saa.org/aboutSAA/committees/curriculum/issues.html/>.)

The SAA's 1998 Wakulla Springs workshop identified seven working principles—Stewardship, Diverse Pasts, Social Relevance, Ethics and Values, Written and Oral Communication, and Basic Archaeological Skills—as important issues that needed to be addressed in curriculum reform. These issues are also highlighted in the SAA publication *Teaching Archaeology in the 21st Century*, and they are the foundation for the MATRIX project, a plan to revise the national undergraduate archaeology curriculum (Bender 2000:43–47; SAA n.d.1). Sponsored by the National Science Foundation, the MATRIX website contains syllabi of courses that work to incorporate these seven working principles (SAA n.d.2). These initiatives maintain that academic institutions must become more aware of the need for broader training to better prepare students for applied jobs.

The MATRIX project provides a new direction for undergraduate education. However, this direction has not been (concurrently) reinforced for the graduate curriculum. In the attempt to reinvigorate the conversation about curriculum reform at the graduate level, we convened a panel at the 71st SAA Annual Meetings entitled “The New Graduate Curriculum: Heritage, Public Policy and the Professional Face of Archaeology.” This panel brought together a range of graduate students, new graduates, and established professionals working in both academia and applied settings to discuss their experiences and vision for graduate curriculum in the 21st century.

## Training for a Changing Profession

Most of us in the profession probably agree that many students are not receiving the education and training needed to compete for and successfully perform the majority of jobs currently available to archaeologists entering the profession, on both the M.A. and the Ph.D. levels. The results of the SAA's student survey, taken through the Student Affairs Committee in the late 1990s, indicate that almost two-thirds of the students responding were preparing for jobs as university professors, while one-third were working toward employment in the government or private sectors (Smith and Krass 2000). In reality there are far fewer academic jobs than applied jobs, and many new graduates are simply not prepared for employment in applied work. Instead, our graduates are learning their profession on the job.

Recently, Shackel informally reviewed some of the new dissertation titles in archaeology as published in the *AAA Guide*. He noticed that many of the top-ranked schools in the U.S. had a large proportion of students writing dissertations on topics that were very common 20–30 years ago. Many of the dissertations seemed to lack any acknowledgment of the key intellectual components of the seven working principles—like Diverse Pasts, Social Relevance, Ethics and Values—as well as any examination of disenfranchised groups, individuals, and agents of change. Acknowledging a multivocal past and present is necessary if newly trained graduate students are to work effectively with the many stakeholders involved in creating interpretations of the past, a key challenge for the discipline in the twenty-first century.

About 10 years ago, the SAA surveyed all departments listed in the *AAA Guide*. There was a general interest in integrating applied archaeology into the curricula. However, when asked to identify obstacles to teaching applied archaeology, the most common response, at both the graduate and undergraduate levels, was “other courses take priority,” followed by “lack of faculty interest,” followed by “lack of faculty training,” “lack of student interest,” and “inappropriate in their academic setting” (Smith and Krass 2000). So while it is important to talk about



how to change the graduate curriculum, it is equally important to work on how to change the minds and attitudes of those who control the curriculum.

### Visions for the New Graduate Curriculum

The Committee on Curriculum is charged with “implementing the principles outlined in *Teaching Archaeology in the Twenty-First Century* by making recommendations as to how identified needs might be included in undergraduate and graduate curricula in archaeology.” The goal of our recent SAA panel was to take this mandate another step. To jumpstart the conversation, we asked panel participants to reflect on and prepare answers to a series of questions:

1. What is the most useful and/or valuable part of your graduate training? What works(ed)?
- 2a. (For those in applied settings) How can you be better served by graduate training? Or what was missing in your graduate training?
- 2b. (For those in academic settings) What can you do to better serve graduate training?
3. Many people face obstacles when trying to change the culture of a department. Discuss how we can get around these obstacles—or how can we change the culture of departments or the profession.
4. What is your vision for graduate curriculum in the 21st century?

The range and depth of experience of the participants, combined with engaged audience participation, made for a productive and challenging forum. While space restricts us from reproducing the full discussion, we would like to summarize a few of the many important points that were raised. One of the key issues that all agreed upon was to not “over-prescribe” a curriculum. In other words, there need not be a “single” curriculum across graduate education, but instead many models. It was noted that it is perhaps most productive to develop components that can be integrated into existing programs.

The forum also focused on the student perspective, noting that reform often follows student demand. However, many students do not know what is expected on the job, and they need direction in deciding what to ask from their graduate training. As a forum, we agreed that the curriculum committee could take the lead in drawing up such a list of skill sets (Yu et al. 2006), observing that Register of Professional Archaeology (RPA) requirements already provide a good starting point. While many in the forum agreed that one of the most important functions of academic training—for education, research, or industry—is teaching students to think critically and write

coherently, there is clearly a need for structured conversation between industry and the academy. Several also recommended structured mentorships or internships beyond the academy with descendant groups, schools, or cultural resource management firms as a means towards meeting these needs. Several of the graduate students on the panel had taken steps to look for necessary training outside of their departments, making the important point that programs should also think beyond the four fields and develop creative alliances with other relevant fields such as education or law.

Many energetic people before us have created the foundation for this discussion, and we want to acknowledge all the important work that has already taken place. The following articles offer in-depth thoughts from members of this panel group in their own words. It is our hope that these articles will help keep the need for curriculum reform at the forefront of the discipline’s priorities and lead us toward more constructive steps to realizing real and necessary changes.

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# A DIVERSITY OF CURRICULA FOR ARCHAEOLOGY GRADUATE PROGRAMS

**Barbara Mills**

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Over the past few years, the SAA Committee on Curriculum has been concerned with the slow pace of change in graduate curriculum for students who will become applied archaeologists. (We are all applied in some way, but I will use that term here for those who work in archaeological positions other than university teaching.) There are many stumbling blocks to active incorporation of new training for students that many of us have heard: lack of faculty expertise, lack of departmental resources and faculty support for new classes, and the resistance of students to taking classes that they really need, but are unaware that they need until they are looking for a job. Each of these can be creatively overcome, and I would like to pose some potential solutions.

Before discussing these solutions, I want to point out a dilemma that I have seen in the reformulation of archaeology graduate curricula. On the one hand, training at the graduate level, especially at the Ph.D. level, is a specialized endeavor. It involves close mentorship of students with their faculty and continues for several years. On the other hand, it is clear that the field of cultural resource management (CRM) has diversified at the same time it has professionalized. This means that there are more jobs and that individuals who have greater expertise are filling those jobs. Although there are some skills that all applied archaeologists are expected to know and some that all archaeologists are expected to learn—as Sebastian's piece in this issue points out—others are more specific to the varied jobs that now generally fall into the broad area of applied archaeology. Some of the diversification of jobs has to do with the increasing size of CRM companies, with specialized jobs for analyses that carry over from project to project, such as ceramics, chipped stone, Geographic Information Systems, and other skills (Figure 1). Still others are related to the specific job descriptions that go along with being based, for example, in a private company, a nonprofit preservation organization, a museum, or a government agency, each requiring very different skills.

With this diversification, it is clear that a one-size-fits-all curriculum in applied archaeology is not the solution. It is also clear that departments need to think strategically about how to best train their students for the many different jobs that archaeologists now hold or aspire to hold. One solution mentioned by several individuals at the SAA Forum on the New Graduate Curriculum was that many different kinds of graduate programs should be encouraged. One way to diversify is through the encouragement of highly focused, M.A.-only degrees in applied archaeology. Several universities have begun to do this with great success, filling a niche for well-trained students prepared to take jobs in CRM and related applied fields. These programs may promote a set of classes and skills for a particular work setting or they may be broad. M.A.-only programs in applied archaeology are important for enhancing archaeology's workforce.

But we also need specialized training of archaeologists at the Ph.D. level that prepares students for applied positions at the most advanced levels. Ph.D.-level applied archaeologists are more and more in demand, especially those with the skills to write proposals and construct budgets, plan and direct large-scale field projects, direct teams of analysts, conduct one or more specific kinds of analyses at an

advanced level, and place the results of the project within a broader archaeological framework (see Yu et al. 2006 for more discussion of the skills needed at each level).

Resistance to curricular changes at the Ph.D. level is present in some university settings for the very reasons mentioned at the beginning of this piece: lack of student, faculty, departmental, and university support and resources. But there are ways of training students to become applied archaeologists that build on a different model than the separate or stand-alone curriculum—especially at the Ph.D. level. They will need to overcome obstacles, one of which is attitude—the idea that Ph.D. programs are only for training students to take on academic positions. This attitude is changing at administrative levels, however, and placement in applied programs in other fields is seen as beneficial by deans and upper-level administrators and will and should change among anthropology and archaeology faculty.

So what makes up an effective Ph.D. curriculum that trains students for the diversity of specialized positions available in the applied community? There are several overarching principles that I can suggest:

- play on program strengths, such as offerings across the four fields;
- find interdisciplinary collaborations within the university;
- bring the applied community into instruction;
- be flexible; and
- listen to students about what they want to learn.

Students at the Ph.D. level should be encouraged to take anthropology courses outside of archaeology. As many of the contributors to Gillespie and Nichols (2003) point out, there is no other time in the history of archaeology when there has been such a need for knowing how sociocultural, biological, linguistic, and archaeological lines of evidence interrelate. Cultural affiliation studies conducted as part of NAGPRA and the importance of Traditional Cultural Properties in the Section 106 compliance process are two important examples.

Five-field departments—those with large applied programs—have an additional edge. They have classes that students can use to understand the ways in which all anthropologists are employed in positions other than academia. At the University of Arizona, for example, research faculty in the Bureau of Applied Research in Anthropology (BARA) teach classes that many archaeologists take. We are seeing an increasing number of applicants and current students taking applied courses, ranging from the history and intellectual foundations of applied anthropology to environmental anthropology to qualitative and mixed methods.

Courses in other departments are equally important for the training of students in applied archaeology. For example, a relatively new program at the University of Arizona is the Rogers Program in Law and Society. Anthropology and several other departments in the College of Social and Behavioral Sciences have teamed up with the Rogers College of Law to offer classes that bridge the disciplines. Each year, our department offers a seminar, and last year the topic was “American Indians, Anthropology, and the Law.” It gave students an interdisciplinary perspective on the ways in which anthropologists work with and for American Indian communities. It also introduced many of



*Figure 1: A member of the Wailau Archaeological Research Project in Hawai'i uses a Global Positioning System instrument. Most CRM positions require applicants to know how to use this and related mapping technologies.*

➤ MILLS, continued on page 31

# THE NEW CURRICULUM IS MORE THAN COURSES

Brent R. Weisman

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Successful archaeology programs of the future will be those that attract and produce students who are willing to do the work of archaeology. What is the work of archaeology? Finding out real things about the past; communicating the value of the archaeological record as a source for gaining deep insights into the human experience; striving to create a world in which everyone has equal access to information about their past and which provides the social and economic contexts that give knowledge about the past a positive value. Training new students in the work of archaeology will be a major challenge to academic departments given the confluence of increasing pressures to keep in front of emerging technologies (Figure 1), to evaluate and respond to sociologically complex preservation environments, and to meet student demands and expectations in a world that continues to test archaeology's professional viability and question its relevance for addressing contemporary human problems. Challenging, yes; insurmountable, no. In this essay, I direct comments to both students and graduate programs who hope to become part of the new archaeology of the twenty-first century.

What can graduate programs do to help prepare the next generation of archaeologists? There are two broad answers, each representing a distinct trajectory of experience and curriculum, but together forming an integrated and unified foundation for responsible professional conduct. The first answer is that academic programs must live up to their prime institutional obligation: foster open-mindedness while requiring intellectual rigor. Despite the needs for technical training, especially at the M.A. level, programs still need to force students through an experience of critical self-reflection. Why do you want to be an archaeologist? What are you willing to sacrifice to become one? Do you know the real nature of the workplace? Are your goals realistic? What good is archaeology anyway? Academic programs should challenge students to question their assumptions and should place ethical and moral checkpoints in as many curricular niches as possible. Public archaeology in particular has been around long enough to be subject to its own version of critical theory; faculty mentors should not allow it to

be a safe haven for students who lack the rigor and courage to question their own motivations.

The second thing that programs can do is to provide opportunities early and often for real-world experiences in professional archaeology and develop a range of for-credit activities that span the curriculum and get students out of the classroom. Required internships are an excellent means for students to get exposure in the pragmatics of the workplace. I stress that internships should be required and form an integral part of the degree, and not be voluntary or informal. Effective internships are those in which students are placed with an external agency or sponsor where they have real accountability for results. Internship requirements typically are features of applied programs across a wide range of disciplines, and archaeology (as applied anthropology) should be no different. Real-world classroom experiences include such things as preparing National Register nominations, writing resource guides and curricula for local public school teachers, or assisting public agencies to develop archaeological resource management plans. Method, theory, and application must all come together in a curriculum.

Graduate programs too should engage in some soul-searching and not be afraid to clean house to make way for the new. The overall goal should be to prepare students for the future, not the present or the past. Programs should clearly define and recognize the distinct missions of M.A. versus Ph.D. programs. Students must be encouraged to think about their educational experience as a social contract, not an entitlement, and should be inculcated with the expectation that they will give back to the profession and to their communities even before they hit the workforce. Faculty can show students by their own example that archaeology is relevant to something larger than itself. Archaeology programs can start by demonstrating their value as a curricular bridge across the varied interests of an anthropology department and beyond. Washing potsherds is fine and probably necessary, but if the image stops there, archaeology will stay trivialized. Archaeology's greatest challenge is to lead its results to broadly useful



insights. Two of cultural resource management's foundational questions—who gets to own, control, and speak for the past; and who wins the struggle between centralized and autonomous models of resource management—are ready-made theoretical ground for displaying archaeology's greater relevance to some of the toughest issues in the social sciences.

For students, I will offer two simple messages. First, jettison “specialness.” Do not waste valuable energy in creating and reinforcing distinctions between you as an archaeologist and other (non-archaeological) students. Do not expect special treatment by the rest of the (non-archaeological) world simply because you are an archaeologist, and do not judge others if their values and attitudes toward archaeology and the archaeological record are less enlightened than yours. Better to find a problem that you can work on and show with results why archaeology is important. Second, read good writing. Good writing abounds on both fiction and nonfiction aisles in any library. Do not denigrate books for being popular; sometimes, like David Hackett Fisher's Pulitzer Prize-winning *Washington's Crossing*, they are popular *because* they are well written. Reading good writing leads to good writing. Archaeology needs more of that.

If archaeology truly is an important thing to be doing in this world, if it is to be other than a trivial pursuit, then it must measure up to what others expect of it. Graduate programs must be engaged in the constant process of discovering what it is the world wants from archaeology. That is their work. Will archaeology meet the many challenges it faces? That depends on how adeptly programs frame its future and how attractive it seems to young people who are not now archaeologists.



Figure 1: Keeping on top of new technologies, such as the geophysics equipment in use here, is one of many challenges to education in archaeological practice.

### DON'T RUN AND HIDE, MEET THE PRESS HEAD ON

Nervous about media interviews? Had “unhappy” experiences with the media? Learn how to get your message across the way you want it presented!

A two-hour, hands-on workshop dealing with the press including print, radio, and television will be sponsored by the SAA Media Relations Committee at the 2007 Annual Meeting. The workshop will include interview techniques, the sound bite, dealing with popular and trade press, how to use your public information officer, or, if you don't have one, learn how to get along without.

Sign up for the workshop when you register for the 2007 Annual Meeting. Looking forward to seeing you in Austin.

# BUILDING A GRADUATE CURRICULUM FOR CRM ARCHAEOLOGY

Lynne Sebastian

*Lynne Sebastian is Director of Historic Preservation Programs with the SRI Foundation.*

I would like to focus on three categories of knowledge and skills needed for a career in cultural resource management (CRM) archaeology. The first are those skills needed by all archaeologists, regardless of the career path they choose: an understanding of the principles of anthropology and the diversity of cultural solutions to universal human problems, training in field and analytical skills and multidisciplinary approaches to understanding the past, and the ability to think logically and analytically and write clearly and comprehensibly. Training students to be researchers, thinkers, and writers *should be* the strength of graduate education programs. Whatever else we in the CRM world may find ourselves having to teach new Ph.D.s and M.A.s, it should not be these things; this is where the academy excels.

The second category comprises skills and knowledge that are,



*Figure 1: Ron Hobgood, an applied archaeologist at Brockington & Associates, works on a cemetery delineation in Coweta County, Georgia, in advance of development.*

in general, shared by all archaeologists, whether academic or applied, but that manifest somewhat differently in the two professional worlds. Designing a research project, for example, is a critical ability for any archaeologist. But in academia the questions come first and finding the appropriate sites to answer those questions comes later. In CRM, the sites are chosen by the development that will destroy them, and it is the archaeologists' job to design the appropriate research questions for those sites (Figure 1). These are very different ways of thinking about the archaeological record; graduate students should be taught how to do both. As another example, training in ethical issues is critical for all archaeologists, but there are differences as well as similarities in the ethical dilemmas faced by applied and academic practitioners. Because of the differences between the applied and academic fields, it is critical that academic programs work with CRM practitioners to identify these differences in shared skills and knowledge when designing graduate curricula and then address both perspectives.

The third category of knowledge and skills that should be part of graduate training for CRM archaeologists are those things that generally are not an important part of the skill set for academicians. CRM archaeology takes place in the realm of public policy and legal compliance. CRM archaeologists need to understand the legally mandated process in which they play a variety of critical roles. They need to understand the public policy issues of fiscal responsibility, public benefit, and the appropriate balance of competing interests in development and preservation and science and descendant community rights. CRM archaeologists need business skills, skills in mediation and negotiation, public outreach skills, and enough knowledge to be good consumers of consultant and expert services in multidisciplinary fields as disparate as palynology, architectural history, and civil engineering.

In general, these are skills and knowledge that are not part of the repertoire of most academic archaeologists. There is

➤ SEBASTIAN, *continued on page 35*

# SKILLS, KNOWLEDGE, AND ABILITIES

## ARCHAEOLOGY IN THE 21ST CENTURY

**George S. Smith**

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**P**roposals dealing with curriculum concerns to educate and train archaeologists to work in the professional field of archaeology in all its diverse applications have included many approaches over the years. We have seen “crash courses” on things students were not getting in university programs (Jennings 1974); postgraduate institutions in archaeological management (McGimsey 1974); graduate-level programs in cultural resource management, public archaeology, and/or archaeological resource management (e.g., contributions in Bender and Smith 2000); and the incorporation of core principles into a variety of archaeology and anthropology courses (Pyburn 2003).

Restructuring the profession and how our students are educated and trained is nothing new. So, why, after three decades of self examination, is it still necessary to have this discussion? I think it may have to do with the notion that we are somehow training archaeologists to be managers. If we were in fact training managers, then certainly students would be encouraged to take management and business courses as part of their graduate programs. If there are programs that require this, they are certainly few and far between. In reality, very few archaeologists actually manage sites. In general, most archaeologists either conduct research that can be used by managers, or they deal with compliance issues, ensuring that research is undertaken and reviewed, and collections and supporting documentation properly curated, to professional standards. If this is the case, where does that leave us? It leaves us right back where we started, educating and training students to investigate and interpret the past.

There is little doubt that helping to manage heritage resources does in fact require, in addition to research skills, some new and/or modified skills, knowledge, and abilities. In addition to fundamental archaeological skills and legal requirements imposed by laws, regulations, policies, and guidelines at the federal, state, and local levels, students must understand several key conditions: heritage resources are nonrenewable and finite and must have complete and substantial documentation; archaeologists do not have an exclusive right to the interpreta-

tion of the past; and there are others outside the profession who also have a vested interest. Given the public interest and support for archaeology, students must also be able to demonstrate its relevance in contemporary society within the context of professional ethics and values and competing national and international agendas. Students must be able to effectively communicate not only within the profession but with the public through written and oral communication and be able to apply archaeological method and theory to issues and problems, some of which might be influenced by factors outside the heritage arena (Bender and Smith 2000; Smith 2006). Getting this information into the curriculum can be done through courses or programs specifically designed for this purpose or, as demonstrated by the MATRIX project, incorporated into existing courses (Pyburn 2003). Individual institutions can decide if they want or need to develop specific tracks for those aspiring to work in the public sector. Regardless of the approach taken, it must be done in a way that does not create real or perceived second-class degrees or archaeologists.

Although we must prepare students to participate in archaeology in all its diverse applications, we must also be concerned with preparing archaeologists to become imaginative individuals and not just cogs in a machine (Willey and Sabloff 1974). That is the challenge before us. How can this be done? First and foremost, students must be aware of what they need to be a practicing professional. The skills paper prepared by the SAA Curriculum Committee should be required reading for all archaeology students (Yu et al. 2006). Given that there are only some 25–35 academic positions in archaeology open in any given year, it is clear that the vast majority of graduates will not find employment in academia but rather in the governmental and private sectors. Even for those that do find employment as academics, they have the professional responsibility to prepare their students for archaeology in the twenty-first century. Regardless of the position, in today's environment, students and professors must know the full range of skills, knowledge, and abilities required to practice archaeology, which involves more than ever the need to manage our collective patrimony on a global scale.

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our archaeology students to faculty and students in other departments, opening the door for them to take additional classes in American Indian Studies and Law. Although the Rogers Program may be unique, classes that discuss issues of policy and practice in historic preservation can be found outside of anthropology on many campuses, such as in architecture and/or planning departments.

The above examples illustrate the many ways that the new graduate curriculum is evolving to include specializations that we might not have envisioned a decade ago. This curriculum is not just about course offerings, but about faculty attitude as well—the willingness to suggest these other courses, to talk about alternative job prospects, and to make sure that students have the skills that they need. Balancing the training needs of all students is especially a challenge in large public universities that are now “public assisted” rather than “public supported.” But it can be done through creative advising and course offerings, especially those that take best advantage of the strong community of practicing archaeologists outside of the academy and courses that cross subdisciplinary and disciplinary boundaries. Most important is the flexibility, interest, and commitment of both faculty and students to come up with creative solutions to training the next generation of applied archaeologists.

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# CAN PUBLIC SCHOLARSHIP SAVE GRADUATE EDUCATION?

Michael Ashley

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In the Point of View column of the June 9 edition of *The Chronicle of Higher Education*, Cantor and Lavine make a compelling case for “Public Scholarship” and for seriously reevaluating the tenure-track rewards system that, for the most part, ignores creative work and public engagement. They call for definitions of scholarship that are broadened to “value public scholarship and engaged artistic creation in the cultural disciplines” (Cantor and Lavine 2006:B20). All too often, they remind us, graduate students and junior faculty are discouraged from participating in any activities that might detract from the narrow-minded tenure track. If senior scholars are not rewarded for public engagement, what possible incentives could there be for new faculty or graduates, in a climate of *publish or perish*?

The New Graduate Curriculum Forum at the 2005 SAA annual meetings helped to surface the chasm between what is rewarded in academia and what many of us wish to do—work as scholars that are engaged in the real world in substantive ways. Many of us nodded vehemently at the plethora of shortcomings in the systems—the curriculum, the training, the lack of tenure-track jobs. The list of problems quickly outnumbered the potential fixes. And while I agree we have a long way to go and plenty of room for improvement, I thought I would take this opportunity to share how a community approach to these matters can positively transform even the most rigorous of Research I institutions.

I completed my Ph.D. in anthropology at UC Berkeley in 2004. The faculty encouraged me to “think outside of the box” and to push my own boundaries when it came not only to the content of my dissertation, but the form. They gave me the latitude to consider multiple audiences and applications for my work and to produce it in a digital format that would allow me to reach many constituencies much more effectively than the printed word alone.

At the time of filing, however, dissertations at Berkeley were not acceptable in any format other than written text. Supplemental materials could be included, but media content was not considered scholarship, nor could it be referred to in the text. I was encouraged to take my case to the Graduate Division, but campus policies do not change overnight. In 2005, a subcommittee on mixed-media dissertations was formed and successfully changed the policy. Now, doctoral students university-wide can produce scholarship in forms that they and their committees deem to be best suited to their individual work. While it is too late for my dissertation—I published a paper thesis—I am thrilled at the potential of what current and future cohorts of archaeology graduate students may produce, given the supportive climate of our faculty.

Also in 2005, significant changes to the UC Academic Personnel Manual took effect that recognize faculty for excellence not only in teaching and research, but also in activities that “promote diversity and equal opportunity,” including professional and public service. This can include services to the community, state, and nation in a variety of forms, such as the improvement of primary and secondary education (Figure 1). Furthermore, and perhaps most profoundly, creative works, including purely nontextual artistic works in fields such as art, architecture, dance, music, and drama, should be considered with the equivalent seriousness as written publications. Suddenly, faculty and graduate students have the possibility of being rewarded for their creativity, and above all, their actions as scholars in the world.

What does this mean for graduate curriculum in the twenty-first century? At least at Berkeley (there are others: Chicago, University of Washington, Syracuse, Michigan, University of Illinois), the institutional barriers to redefining scholarship from the top down and the bottom up are being lifted. The cultural barriers will take longer to dispel, and it is up to us in our individual communities to push up and pull up to make public scholarship and knowledge sharing a reality. Graduate students need to vote with their feet, in a sense, by actively working for change in their curriculum and in their professional development. In many ways, they are the eyes and ears of our twenty-first-century discipline. I would suggest requesting technical training in visualization, presentation, digital publishing, outreach, and other forms of public engagement. Be resourceful in looking for good tools beyond our discipline that will enhance personal and professional development. Be proactive in suggesting the type of training that will help you be a better scholar and steward of the archaeological record.

And, as Lynne Sebastian remarked in the forum, faculty need to teach writing and critical thinking while providing reality checkpoints to future underemployed graduates who will fight for that one tenure-track job. If public scholarship becomes credible, I sincerely hope that senior faculty will become the inspirational leaders who teach through example, by not only working in and with communities beyond the academy, but in providing graduate students with the guidance *and* rewards to push themselves to become more publicly engaged and to realize that non-tenure-track jobs are not second-rate positions.

Ultimately, I think that the opportunities for graduates in anthropology have never looked so promising, and the need for public scholarship is exceptional. While the commitment to successfully completing a graduate degree can feel overwhelming, the commitment to our local communities of scholarship should be no less serious. We have the potential to create remarkable programs, if not for ourselves, then for the next cohorts that will follow.

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Figure 1: David Phillips (Maxwell Museum of Anthropology at University of New Mexico) introduces children to pictographs by letting them "sign" the rock wall with their handprint. Such outreach efforts are increasingly recognized as a valuable form of public scholarship.

# SUCCESSFUL GRADUATE EDUCATION

## COURSEWORK, PROFESSIONAL DEVELOPMENT, COLLABORATION, AND MULTIDISCIPLINARY EXCHANGE

Alicia Ebbitt

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Several recent projects have focused on revising and redesigning curriculum for undergraduate students in anthropology and archaeology (MATRIX, and the upcoming MAISE project that will include Native American perspectives in an archaeology curriculum). These initiatives join other studies in archaeology and education (Davis 2005; Smith and Bender 2000; Smardz and Smith 2000), where the primary goals have been to develop an understanding of better ways for teaching archaeology, how students learn about the past, and how students view archaeology. There has been less discussion, however, about graduate student education. Changes in coursework, better preparation for job interviews, collaborative work, and multidisciplinary research should become integral components of graduate education.

Coursework provides a strong anthropological foundation for graduate students. Although ethics courses have been a part of some graduate programs for a long time, they are still not widespread; all graduate programs in anthropology should offer an ethics course. Ethics courses compel students to think about salient modern issues in anthropology. Ethics courses can also foster debate among colleagues—debates that graduate students will eventually face in their professional lives. Ideally, I think ethics courses should have a four-field focus and also an applied component. A four-field approach allows graduate students to discuss the ways our ethical codes vary and the ways that our responsibilities and concerns differ because of the nature of our diverse research projects.

An applied component to ethics courses connects students with different stakeholders and serves a greater social need, both important in anthropology. Indeed, almost any course could incorporate applied projects, such as producing educational materials for local populations, designing exhibits for museums, and entering the SAA Ethics Bowl. Many graduate students are now involved in applied projects outside the classroom as well. Connecting with local populations is not only a good way for students to gain hands-on, applied experience in public archaeology, but it is a great opportunity for students to work together on activities.

In addition to an ethics course and applied components, students need courses in teaching methods and pedagogy, since many graduate students are funded through teaching assistantships, and many students intend to enter an academic community after graduate school. Training young scholars to think about education and alternative teaching strategies in archaeology will increase the awareness of these issues in the future. Pedagogical discussions are important to our discipline (Hamilakis 2004) and should begin when teaching begins. Graduate students should be familiar with the potential of teaching about anthropology and should have an opportunity to discuss and create innovative teaching methods and activities (see *Archaeologies* issue 1.2 for examples of “teaching as a revolutionary act”).

An important step in preparing for employment after graduate work is professional development, a subject that does not seem to fit into traditional courses. No matter how brilliant someone’s dissertation is or how strong their *curriculum vita*, there are “secrets of the trade” that are important to know but not always apparent. Last year, at Indiana University, a professor organized a professional development seminar that was open to all anthropology graduate students. Seminars like this can cover a variety of topics including how to conduct a successful job interview, write your first book, smoothly navigate the human subjects review process, publish an article, propose sessions for conferences, balance family and academia, and even how to find jobs outside the academy. This is important information for graduate students to have, but unfortunately these are not topics frequently covered in graduate anthropology courses.

In addition to learning about professional development skills, graduate students should take every opportunity to work collaboratively with professors. This is an important part of professional development and should be an integral part of graduate training. I am fortunate to have worked with advisors collecting data for their research projects, writing grants, and organizing conference workshops. Some of these activities are only available to students through their professors, and stu-

dents should be encouraged to approach professors and request involvement.

Finally, collaborative work outside the discipline of anthropology is important to graduate education because anthropology and archaeology are becoming increasingly more applied and diverse fields. Diversifying archaeology to include a host of stakeholders and “alternative histories” (Schmidt and Patterson 1995) will be easier for future generations of archaeologists if students participate in multidisciplinary programs and research that enable exchanges of information about methodology and theory. I have been privileged to participate in a program at Indiana University where students from sociology, anthropology, history, education policy, economics, and other disciplines present research and discuss readings on current issues in the study of education. My experience in this forum provided me with experiential data on current relationships between education and anthropology. Any graduate student would benefit from this kind of experience.

Graduate education in anthropology and archaeology are changing to fit the needs and interests of students and the general public. By revising graduate curriculum, diversifying

the research opportunities available to students, and offering students advice to prepare for professional positions, graduate students will be more flexible and better prepared to serve the needs of the many stakeholders in archaeology.

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no reason why they would know (or in many cases even want to know) a lot of this stuff. These kinds of knowledge and skills need to be incorporated into the graduate curriculum, but they need to be delivered in creative ways that don't fit into the Tuesday/Thursday seminar or Monday/Wednesday/Friday lecture course with lab format. Highly structured internships, short courses, workshops, mentoring arrangements, apprenticeships, summer institutes—these and many other creative approaches should be pursued. CRM professionals have the knowledge and the skills, and they need new Ph.D.s and M.A.s who are well-prepared to work in applied archaeology. Academic programs want to prepare their students to be archaeologists, whatever their career paths. We need to explore non-traditional ways of building partnerships between academia and CRM to reach both of these goals and ensure the best education for tomorrow's archaeologists.

Finally, I would like to speak to what I see as the biggest impediment to achieving the partnership envisioned above, the elephant in the living room with the slipcover over it that we don't talk about in these discussions. When I first started in CRM in the 1970s, I knew that there was a Great Divide between CRM and academia, but I believed it to be a generational problem, one that would fade away over time. I have been disheartened over the past few years to realize that I was wrong. In many ways, the divide is as great as ever. As long as some of our academic colleagues continue to deliver the overt or implicit message to their students that CRM is where people go when they're not good enough to make it in academia, no amount of creativity in curriculum design or delivery will work. In order for this rethinking of the graduate curriculum to succeed, students need to understand that a career path in CRM is not something you settle for—it is a choice that many of us have made, one that can be hugely rewarding.





## 2005 FINANCIAL STATEMENTS

Susan M. Chandler

*Susan M. Chandler, Treasurer of SAA, is President of Alpine Archaeological Consultants, Inc. in Montrose, Colorado.*

Every fall, the audited financial statements for the preceding fiscal year are published in *The SAA Archaeological Record* so that members can see the status of the Society's finances and gain an understanding of how our money is spent. This issue contains the balance sheets and income statements for the fiscal year ending December 31, 2005. Figures for fiscal year 2004 are also provided for comparison. The numbers reflect SAA's strong financial condition.

The accompanying charts graph the 2005 revenues and expenses shown on the financial statements. In 2005, the total income was \$1,717,054. Where did SAA get this money (Figure 1)? Membership dues were the largest source of income, with a total membership of 6,997 for the year. A large portion of income was derived from registration and booth sales at the Annual Meeting in Salt Lake City, followed by subscriptions to SAA journals. Other important sources of income included interest and dividends (listed as "Organization and Administration" on the financials), and cooperative agreements and grants (grouped with "Public Programs and Services" on the financials).

In 2005, SAA spent \$1,491,083, or an average of \$213 per member. Where did that money go (Figure 2)? Roughly equal amounts went to public programs and services (which includes government affairs, public education, public relations, and the work of a number of SAA committees), publications (*American Antiquity*, *Latin American Antiquity*, *SAA Archaeological Record*, and the SAA Press), administration/governance, and the Annual Meeting, which in 2005 comprised less than 20 percent of expenses while bringing in 26 percent of income. Smaller fractions were expended for cooperative agreements and grants (segregated from public programs in the pie chart), member programs and services, membership, and awards.

Thanks to careful budgeting and wise spending, SAA revenues exceeded expenses in 2005. The SAA Board of Directors allocated a portion of the 2005 surplus to *Latin American Antiquity* for the production of a 268-page issue (148 more than normal); to the Technology fund for implementation of new meeting software; and to the Special Projects Fund for membership development, fundraising, and Native American consultation. Following Board policy, the remaining 2005 surplus was allocated

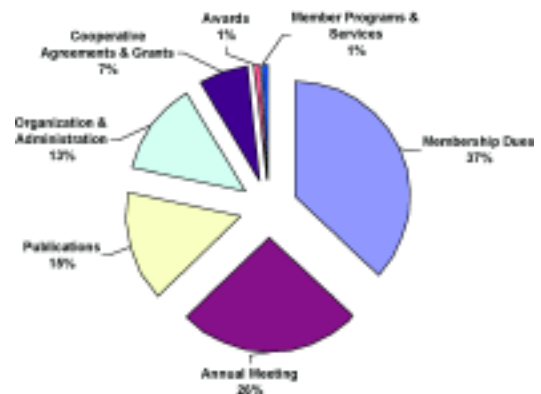


Figure 1: Sources of income for SAA in 2005.

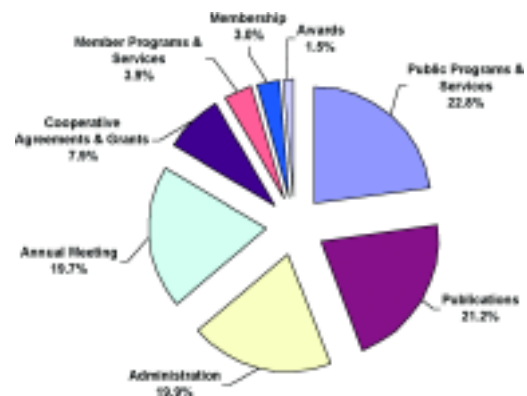


Figure 2: How SAA money was spent in 2005.

to Reserves. Reserves provide SAA with a "safety net" that we can rely on for unexpected expenses or in the event of an unforeseen drop in revenues. In addition, by cautiously managing reserve funds, they are expected to yield interest that can be put to work for SAA over the long term.

Although the 2006 financial statements will not be published until a year from now, SAA's Executive Director provides monthly financial statements to all members of the Board of

➤ MONEY MATTERS, continued on page 44

# SOCIETY FOR AMERICAN ARCHAEOLOGY

## STATEMENTS OF ACTIVITIES

	Year Ended December 31,							
	2005		2004					
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
REVENUE AND SUPPORT								
Membership Dues	\$ 635,214	\$ -	\$ -	\$ 635,214	\$ 637,620	\$ -	\$ -	\$ 637,620
Annual Meeting	444,450	-	-	444,450	436,430	-	-	436,430
Publications	266,087	-	-	266,087	262,521	-	-	262,521
Public Programs and Services	117,450	-	-	117,450	170,028	-	-	170,028
Organization and Administration	131,851	11,848	79,960	223,659	129,672	8,048	30,967	168,687
Member Programs and Services	13,842	-	-	13,842	12,636	-	-	12,636
Awards	16,352	-	-	16,352	-	-	-	-
Net Assets Released from Restriction -								
Public Programs and Services	3,179	(3,179)	-	-	758	(758)	-	-
Total Revenue and Support	1,628,425	8,669	79,960	1,717,054	1,649,665	7,290	30,967	1,687,922
EXPENSES								
Program Services								
Membership	44,979	-	-	44,979	58,954	-	-	58,954
Annual Meeting	293,542	-	-	293,542	318,195	-	-	318,195
Publications	316,786	-	-	316,786	285,367	-	-	285,367
Public Programs and Services	457,976	-	-	457,976	423,592	-	-	423,592
Member Programs and Services	58,635	-	-	58,635	72,260	-	-	72,260
Awards	22,115	-	-	22,115	4,681	-	-	4,681
	1,194,033	-	-	1,194,033	1,163,049	-	-	1,163,049
Supporting Services								
Management and General	260,982	-	-	260,982	257,063	-	-	257,063
Membership Development	29,257	-	-	29,257	23,243	-	-	23,243
Fundraising	6,811	-	-	6,811	-	-	-	-
	297,050	-	-	297,050	280,306	-	-	280,306
Total Expenses	1,491,083	-	-	1,491,083	1,443,355	-	-	1,443,355
CHANGE IN NET ASSETS	137,342	8,669	79,960	225,971	206,310	7,290	30,967	244,567
NET ASSETS, Beginning of Year	1,537,958	57,171	300,158	1,895,287	1,331,648	49,881	269,191	1,650,720
NET ASSETS, End of Year	\$1,675,300	\$ 65,840	\$ 380,118	\$2,121,258	\$1,537,958	\$ 57,171	\$ 300,158	\$1,895,287

SOCIETY FOR AMERICAN ARCHAEOLOGY

BALANCE SHEETS

ASSETS

	December 31,	
	2005	2004
CURRENT ASSETS		
Cash and Cash Equivalents	\$ 1,560,284	\$ 1,535,175
Accounts Receivable	47,269	3,583
Pledges Receivable, Current Portion	2,075	-
Accrued Interest Receivable	1,807	1,653
Prepaid Expenses, Current Portion	54,632	43,437
Total Current Assets	1,666,067	1,583,848
PREPAID EXPENSES, Less Current Portion	20,934	26,250
PLEDGES RECEIVABLE, Less Current Portion	39,110	-
INVESTMENTS	1,301,867	1,177,083
PROPERTY AND EQUIPMENT, Net	69,008	76,617
DEPOSITS	6,076	6,076
	<u>\$ 3,103,062</u>	<u>\$ 2,869,874</u>

LIABILITIES AND NET ASSETS

CURRENT LIABILITIES		
Accounts Payable and Accrued Expenses	\$ 40,004	\$ 40,846
Deferred Revenue		
Membership Dues, Current Portion	418,693	418,970
Subscriptions	158,139	165,250
Grants and Cooperative Agreements	25,201	78,974
Meetings and Other	301,497	229,622
	<u>903,530</u>	<u>892,816</u>
Total Current Liabilities	943,534	933,662
DEFERRED MEMBERSHIP DUES, Net of Current Portion	38,270	40,925
Total Liabilities	<u>981,804</u>	<u>974,587</u>
NET ASSETS		
Unrestricted		
Undesignated	1,260,820	1,231,066
Board-Designated	414,480	306,892
	<u>1,675,300</u>	<u>1,537,958</u>
Temporarily Restricted	65,840	57,171
Permanently Restricted	380,118	300,158
Total Net Assets	<u>2,121,258</u>	<u>1,895,287</u>
	<u>\$ 3,103,062</u>	<u>\$ 2,869,874</u>



## NEWS & NOTES

**Byron S. Cummings Award to Thomas C. Windes.** The Byron S. Cummings award is given annually by the Arizona Archaeological and Historical Society (AAHS). The award is given for outstanding research and contributions to knowledge in Southwestern archaeology, anthropology, or ethnology. It is named in honor of Byron S. Cummings, the principal professional founder of the Arizona Archaeological and Historical Society, who was also the first Head of the Department of Anthropology (then Archaeology) at the University of Arizona, as well as Dean and President of the university. **Thomas C. Windes** is recognized as a leading scholar regarding the Chacoan regional expression, both in Chaco Canyon and beyond. Tom was educated at the University of North Carolina–Chapel Hill (B.A. 1965) and University of New Mexico (M.A. 1967). A long-time employee of the National Park Service, he has been an author or coauthor of more than 65 journal articles, book chapters, monographs, and contract reports. As part of his interest in chronology, Tom collected more than 350 archaeomagnetic samples in New Mexico and helped refine the Southwest Master curve. This work has resulted in the preservation of thousands of ring records and the derivation of thousands of dates that have revolutionized the archaeological chronologies of many areas. Begun in Chaco Canyon, Tom's dendroarchaeological research has expanded to cover the region from Natural Bridges on the northwest to the Pecos Valley on the southeast, and to span time from Basketmaker II to late twentieth century. Among the many significant outcomes of this activity are refined internal chronologies for sites in Chaco Canyon, Mesa Verde, Natural Bridges, and elsewhere; the demonstration that Pueblo Bonito was begun a half a century earlier than previously thought; the char-

acterization of Chacoan wood-use; the detailed chronology of Spanish and Anglo occupations in the middle Pecos Valley; the dating of Colonial and more recent structures in the Rio Grande Valley; and many others. This chronometric activity constitutes a major contribution to Southwestern archaeology whose ramifications have yet to be fully comprehended.

### **Victor R. Stoner Award to Helen and Jay Crotty and Mike Jacobs.**

The Victor R. Stoner award is given annually by the Arizona Archaeological and Historical Society. The award celebrates the promotion of historic awareness and preservation, and is given to someone who brings Southwestern anthropology, archaeology, ethnology, or history to the public for an extended period. It is awarded in honor of the Reverend Stoner, a Catholic priest and scholar, an avocational historian, longtime supporter of the Society, and one of the founders of its journal, *Kiva: Journal of Southwestern Anthropology and History*. **Helen and Jay Crotty** are honored for their long and distinguished service in rock art research, especially its recording and conservation. Their interest in rock art began in the mid-1950s. In 1977, they signed up for the Archaeological Society of New Mexico Rock Art Field School to be held in Chaco Canyon. In 1984, Jay was appointed field director of the field school and, in 1986, the school moved to the Three Rivers Petroglyph site in southern New Mexico, where the Crottys spent six seasons as directors. They also directed the field school when it moved to northern New Mexico in 1993. While bringing their knowledge and organizational skills to the field of rock art recording, they educated dozens of students, some of whom went on to undertake rock art recording projects of their own. They also helped raise the image of what had been a fascinating but often misunder-

stood field. Both served with a variety of organizations: Jay as rock art advisor to the Archaeological Society of New Mexico Board of Trustees and Helen as a Trustee from 1997–2001. She was vice president of the Albuquerque Archaeological Society in 1985 and 1999 and president in 2000. On November 3, 2004, Jay died of complications from pneumonia, but Helen continues her work in rock art and related fields, expanding the understanding of prehistoric imagery within the scholarly world and among the general public. **George Michael (Mike) Jacobs** is honored for his contributions to the field of archaeology, in particular for his 28 years of work as the Curator of Archaeological Collections at the Arizona State Museum (ASM). In this role, he has served his colleagues and his community in providing access to the unsurpassed archaeological collections of ASM that have enabled dozens of significant exhibitions, which have been appreciated by tens of thousands of visitors. Mike has worked with an average of 40 researchers a year, which has enabled important research to be completed. Mike has also provided access to the collections to generations of Tucsonans. His knowledge and enthusiasm have impressed and been appreciated by visitors of all ages and backgrounds. Mike served as assistant editor of *Kiva: The Journal of Southwestern Anthropology and History* from 1978–1980, followed by five years as editor. Thus, this award is in recognition of Mike's service not only to the archaeological community, but also to the many members of the public of Tucson, of Arizona, and of the Southwest who have benefitted from his expertise.

**National Register Listings.** The following archaeological properties were listed in the National Register of Historic Places during the third quarter of 2006. For a full list of National Register listings every week,



check "What's New" at <http://www.cr.nps.gov/nr/>

- Florida, Bay County. *Vamar Shipwreck Site*. Additional Documentation. Approved, 6/14/06.
- Florida, Martin County. *Georges Valentine Shipwreck Site*. Listed 7/19/06.
- Florida, Monroe County. *Angustias Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *Chavez Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *El Gallo Indiano Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *El Infante Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *El Rubi Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *Herrera Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *Populo (Shipwreck)*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *San Felipe Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/14/06.
- Florida, Monroe County. *San Jose Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/14/06.
- Florida, Monroe County. *San Pedro (Shipwreck)*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/14/06.
- Florida, Monroe County. *San Francisco Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *Sueco de Arizon Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Florida, Monroe County. *Tres Puentes Shipwreck Site*. (1733 Spanish Plate Fleet Shipwrecks MPS), Listed 6/15/06.
- Nebraska, Boyd County. *Ponca Agency*. Listed 7/12/06.
- Nebraska, Cheyenne County. *Wild Horse Draw-Leeman's Springs Archeological District*. Listed 7/12/06.
- Nebraska, Knox County. *Ponca Agency Archeological District*. Listed 7/12/06.
- New Jersey, Hudson County. *Van Wagenen House*. Listed 8/16/06.
- Oregon, Lincoln County. *Archeological Site No. 35-LNC-54*. (Native American Archeological Sites of the Oregon Coast MPS), Listed 6/21/06).
- Oregon, Lincoln County. *Archeological Site No. 35-LNC-55*. (Native American Archeological Sites of the Oregon Coast MPS), Listed 6/21/06).
- Oregon, Lincoln County. *Archeological Site No. 35-LNC-56*. (Native American Archeological Sites of the Oregon Coast MPS), Listed 6/21/06).
- Oregon, Lincoln County. *Archeological Site No. 35-LNC-57*. (Native American Archeological Sites of the Oregon Coast MPS), Listed 6/21/06).
- Virginia, Montgomery County. *Kentland Farm Historic and Archeological District (Boundary Increase)*. (Montgomery County MPS), Listed 9/06/06.
- Wisconsin, Door County. *Iris (Shipwreck)*. (Great Lakes Shipwreck Sites of Wisconsin MPS), Listed 7/19/06.
- Wisconsin, Door County. *Ocean Wave (Shipwreck)*. (Great Lakes Shipwreck Sites of Wisconsin MPS), Listed 7/19/06.

**Julian D. Hayden Student Paper Competition.** The Arizona Archaeological and Historical Society is pleased to

announce the ninth annual Julian D. Hayden Student Paper Competition. Named in honor of long-time AAHS luminary, Julian Dodge Hayden, the winning entry will receive a cash prize of \$500 and publication of the paper in *Kiva*, The Journal of Southwestern Anthropology and History. Deadline for receipt of submissions is January 15, 2007. For submission requirements, contact Dale Brenneman at [daleb@email.arizona.edu](mailto:daleb@email.arizona.edu) or see [http://www.statemuseum.arizona.edu/aaahs/hayden\\_comp.shtml](http://www.statemuseum.arizona.edu/aaahs/hayden_comp.shtml).

## SAA COMMITTEES

STUDENT AFFAIRS, from page 22

sionals that know the work ethic and interests of the student. The applicant should provide a *curriculum vita*, self-addressed and stamped envelope, and an abstract or list of objectives pertaining to the proposal. If organizations ask for transcripts, make sure the record is clean, with no incompletes and preferably no "F" grades. Save a copy of all your information.

### After Submission

From application to award, most grant programs take at least nine months to a year. Plan a project being mindful of the amount of time it takes to actually receive the "check in the mail."

The world of academia has changed slightly since my father went through the application process. While it may be more challenging to receive funding via traditional pathways, students with creativity and focus have a wealth of resources at their fingertips.



## POSITIONS OPEN

**POSITION: DEAN, COLLEGE OF SOCIAL SCIENCES AND PUBLIC AFFAIRS**

**LOCATION: BOISE, IDAHO**

**Boise State University** (<http://www.boisestate.edu>) seeks a leader to guide the College of Social Sciences and Public Affairs to new levels of academic excellence. As part of Boise State's mission as a metropolitan research institution of distinction, the dean will serve in an important leadership role in fulfilling Boise State University's state-wide mission in public policy, developing new graduate programs, fostering a quality learning environment, creating a culture of scholarly productivity, and working with our external friends and partners. Please visit: <http://hrs.boisestate.edu/joblistings/faculty>. Boise State University is an EOE/AA Employer. Vets Preferences.

**POSITION: ASSISTANT PROFESSOR IN NEAR EAST/WEST ASIAN ARCHAEOLOGY**

**LOCATION: BOSTON, MASSACHUSETTS**

**Boston University's** Department of Archaeology announces a tenure-track opening for an Assistant Professor in Near East/West Asian Archaeology; regional and period specialization open; expertise in quantitative methods and/or remote sensing welcomed. Ph.D. is required, together with major ongoing research program. Candidates should be prepared to teach general archaeology courses in addition to courses in their special field. Application letter, curriculum vitae, published paper or sample of writing, and the names of three referees and should be sent by December 15, 2006 to Professor Norman Hammond, Boston University, Archaeology, 675 Commonwealth Avenue, Boston, MA 02215. Boston University is an Affirmative Action/Equal Opportunity Employer.

**POSITION: HISTORICAL ARCHAEOLOGIST**

**LOCATION: PENSACOLA, FLORIDA**

**University of West Florida** Anthropology seeks historical archaeologist for tenure-track assistant professor starting 8/2007. Ph.D. in Anthropology required from a North American university. Responsibilities include 3/3 load, summer field schools, advising, service, and theses. Prefer Spanish or British colonial in Southeast. Experience with excavations, students, volunteers, public, and grants and contracts. Research should link to existing programs and include local area. Salary competitive. Application review 1/16/07, but open until filled. Contact Elizabeth Benchley (email: [ebenchle@uwf.edu](mailto:ebenchle@uwf.edu); tel: [850] 474-2795) or Judy Bense (email: [jbense@uwf.edu](mailto:jbense@uwf.edu); tel: [850] 474-2797). Apply online at <https://jobs.uwf.edu>; attach curriculum vitae, letter of application/interest, teaching philosophy, and three professional references. Police background screening required for finalist.

**POSITION: BIOLOGICAL ARCHAEOLOGIST**

**LOCATION: PENSACOLA, FLORIDA**

**University of West Florida** Anthropology seeks biological anthropologists for tenure-track assistant professor in anthropology starting 8/2006. Ph.D. in anthropology from a North American university with a specialty in Bioarchaeology and/or Forensic Anthropology required. Responsibilities include 3/3 teaching load, summer field school, advising, service, theses, obtaining outside funding, and managing projects. Research will incorporate students and link to existing programs including local area. Salary competitive. Application review 1/16/07, but open until filled. Contact Joanne Curtin (email: [jcurtin@uwf.edu](mailto:jcurtin@uwf.edu); tel: [850] 474-2795) or Judy Bense (email: [jbense@uwf.edu](mailto:jbense@uwf.edu); tel: [850] 474-2797). Apply online at

<https://jobs.uwf.edu>; attach curriculum vitae, letter of application/interest, teaching philosophy, and three professional references. Police background screening required for finalist.

**POSITION: ASSISTANT PROFESSOR**

**LOCATION: RENO, NEVADA**

Tenure-track faculty involved in research and graduate teaching and mentoring typically teach two courses each semester; Executive Director of Sundance Archaeological Research Fund and Director of three-month Paleoindian archaeological field research program each summer; other duties include advising undergraduate and graduate students; helping review and develop undergraduate and graduate curricula; carrying out research and publishing results; serving on department and university committees; engaging in public outreach and service activities. Qualifications: Ph.D. in anthropology or archaeology at the time of application; specialization in environmental archaeology and Paleoindian research; evidence of a strongly theoretically based research program and a record of publication and grant writing in research; project management experience; experience in teaching introductory and advanced undergraduate and graduate courses. Preferred: Competence in geoarchaeology and lithic analysis; a geographical focus on the American West and interest in a second geographical area; ability and willingness to teach upper division and graduate level courses in archaeology; experience as chair or member of graduate student committees; interests that complement those of existing faculty. How to apply: online at <http://www.unrsearch.com/applicants/Central?quickFind=51314>. Newly hired faculty must have their official transcript of their highest degree received or verification of licensure from

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## POSITIONS OPEN

the Nevada State Board of Medical Examiners (physicians) sent by the degree granting institution(s) directly to University of Nevada, Reno Human Resources within 30 calendar days from the effective date of employment. The University of Nevada, Reno is committed to Equal Employment Opportunity/Affirmative Action in recruitment of its students and employees and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation. The University of Nevada, Reno employs only United States citizens and aliens lawfully authorized to work in the United States. Women and under-represented groups are encouraged to apply. More information: <http://www.unr.edu/cia/anthro>. For full consideration apply by: 12/15/2006. Search Number 70015. II–III Salary Range: \$38,588–\$69,890; 100% FTE (full-time equivalency). Contact information: Gary Haynes, Search Chair, tel: (775) 784-6704, ext. 2020, email: [gahaynes@unr.edu](mailto:gahaynes@unr.edu); Verla Jackson, Search Coordinator, tel: (775)-784-6704, ext. 2001.

### **POSITION: VISITING SCHOLAR**

#### **LOCATION: CARBONDALE, ILLINOIS**

**Southern Illinois University Carbondale**, Center for Archaeological Investigations (CAI) seeks its 2007–2008 Visiting Scholar (VS). The VS organizes and conducts an archaeological conference at SIUC, resulting in an edited volume of selected papers. VS assembles and edits conference volume while in residence. The successful candidate is also expected to pursue his/her research and teach one seminar in his/her specialty. 11-month term appointment as a Visiting Scholar. Qualifications: Ph.D. in anthropology or related discipline with specialization in archaeology. Degree must be completed by August 16, 2007. VS selected on the basis of 5-page proposal outlining nature and structure of the conference and on the strength of vita and references. Pre-application inquiries recommended. Closing date:

February 1, 2007. Send letter, vita, list of references, and proposal to Dr. Heather Lapham, CAI, Mail Code 4527, Southern Illinois University Carbondale, 1000 Faner Drive, Carbondale, IL 62901; tel: (618) 453-5031; email: [hlapham@siu.edu](mailto:hlapham@siu.edu). SIUC is an affirmative action/equal opportunity employer that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcomed and encouraged and will receive consideration.

### **POSITION: WARING PROFESSORSHIP OF ARCHAEOLOGY**

#### **LOCATION: CARROLLTON, GA**

**The University of West Georgia**, Department of Anthropology seeks applications for the Waring Professorship of Archaeology. Applicants must have the scholarly accomplishments that are required for appointment at the rank of Full Professor. Qualifications must include a Ph.D. in Anthropology, undergraduate teaching experience, demonstrated administrative skills, a strong record of research and publication, and an understanding of the issues involved in the curation and management of archaeological collections. Specialty in archaeology of the Southeastern United States, prehistoric or historic, is required. Primary responsibilities of this endowed position (tenure track) include serving as Director of the Antonio J. Waring, Jr. Archaeological Laboratory; teaching a four-subfield Introduction to Anthropology class and an upper-level Archaeology class each semester of the academic year; directing undergraduate student research; offering an Archaeological Field School; pursuing grants and contracts in support of research and laboratory operations; and active participation in departmental/college/university service activities. Applicants should submit a letter of interest outlining qualifications, current vita, and the names of three references to Search Committee, Department of Anthropology, University of West Georgia,

Carrollton, GA 30118. Applications postmarked by January 15, 2007, will receive full consideration. Position starts August, 2007. University of West Georgia is an Affirmative Action/Equal Opportunity Institution.

### **POSITION: ASSISTANT PROFESSOR**

#### **LOCATION: BETHLEHEM, PA**

**Lehigh University**, Department of Sociology & Anthropology invites applications for a tenure-track Assistant Professor of Anthropology position for an anthropological archaeologist specializing in sub-Saharan Africa. The successful candidate must be able to teach a four-field introductory anthropology course and an ethnographic area course, as well as contribute to the Africana Studies Program, expand the growing opportunities for students to participate in field experiences, and to expand course offerings in the areas of globalization and development. Candidates must have the Ph.D. completed by the starting date of August 2007 and show significant evidence of research productivity and successful teaching experience. The standard teaching load is 2-2. The College of Arts and Sciences at Lehigh University is committed to increasing the diversity of the college community and curriculum. Candidates who can contribute to that goal are encouraged to apply and to identify their strengths or experiences in this area. Lehigh University is an Equal Opportunity Affirmative Action Employer. Women and minorities are particularly encouraged to apply. Lehigh University is a highly competitive, research-oriented university located one hour north of Philadelphia and 90 minutes west of New York City. Send a curriculum vitae and a letter of application indicating teaching and research interests and names of four references to: Judith Lasker, Chair, Department of Sociology & Anthropology, Lehigh University, 681 Taylor Street, Bethlehem, PA 18015. <http://www.lehigh.edu/~insan/socanth.html>. The deadline for applications is December 15, 2006.

**POSITION: ASSISTANT/ASSOCIATE OF MESOAMERICA ARCHAEOLOGY**

**LOCATION: BOSTON, MASSACHUSETTS**

**Boston University's** Department of Archaeology announces a tenure-track opening (pending budgetary approval) for a tenure-track Assistant or beginning Associate Professor in Mesoamerican Archaeology. Regional and period specialization open: those complementing and enhancing current faculty expertise are especially welcome, as is expertise in quantitative methods and/or remote sensing. Ph.D. is required, together with ongoing research program. Candidates should be prepared to teach general archaeology courses in addition to courses in their special field at both undergraduate and graduate levels. Application letter, curriculum vita, published paper or sample of writing, and the names of three referees should be sent by December 1, 2006 to: Professor Norman Hammond, Boston University, Archaeology, 675 Commonwealth Avenue, Boston, MA 02215-1406. Boston University is an Affirmative Action/Equal Opportunity Employer.

**POSITION: ASSISTANT PROFESSOR, ARCHAEOLOGY**

**LOCATION: SACRAMENTO, CALIFORNIA**

**California State University, Sacramento** invites applications for a tenure-track assistant professor beginning August 2007. We seek an archaeologist with experience managing archaeology collections, familiarity with NAGPRA, and ability to conduct research in CRM. The assignment will initially be to bring legacy archaeological collections on-track for compliance with federal and state standards, with limited teaching obligations, but will shift to teaching at both undergraduate and graduate levels and contracting activities of the Sacramento State Archaeological Research Center. Areas of specialization are open, though a background in California prehistory and ethnography is desirable, and preference will be given to individuals having experience working with indigenous

communities. Review of applications will begin December 15, 2006; the position remaining open until filled. Applicants must submit a letter of interest, curriculum vita, and contact information for at least three references to the Archaeology Search Committee, Department of Anthropology, CSU Sacramento, 6000 J Street, Sacramento, CA 95819-6106. Sacramento State is an Affirmative Action/Equal Opportunity Employer with a strong commitment to diversity.

**POSITION: CHAIRPERSON/ASSOCIATE OR PROFESSOR**

**LOCATION: MUNCIE, INDIANA**

**Ball State University,** Department of Anthropology. Three-year term and fiscal year appointment available July 1, 2007. The chairperson presides over a dynamic anthropology program with a four-field emphasis and thirteen full-time faculty and professional employees as well as part-time contract faculty. The department offers undergraduate and MA-level programs. Responsibilities include serving as the department's primary spokesperson and representative; providing leadership in the development and evaluation of academic programs and curricula within the department; engaging with faculty in short- and long-range planning; acting as fiscal agent for the department and allocating funds and resources in a manner designed to achieve excellence; assigning and scheduling department courses and faculty members; hiring, supervising, and evaluating non-faculty employees; recruiting and retaining excellent faculty; all matters relating to appointment, evaluation, promotion, and tenure of faculty members within guidelines adopted by the department, college, and university; administering the departmental evaluation policies concerning teaching, scholarly productivity, and professional service; acting as an advocate for productive faculty members in matters of promotion, tenure, special assigned leaves, release time, etc.; continuously evaluat-

ing the level and rigor of material presented to and required of students; supervising departmental advising; teaching as required by departmental needs; engaging in scholarly or creative endeavor and professional service. **Minimum qualifications:** doctorate in anthropology or closely allied field; record of experience as an effective leader/administrator, earned rank of associate or full professor, and evidence of strong undergraduate teaching effectiveness. **Preferred qualifications:** specialty in biological anthropology (background in some combination of the following; evolutionary genetics, paleoanthropology, human diversity, biomedical anthropology); interest and/or experience in community health or the biocultural dimension of aging; quantitative methods; other research interests that complement those of current department members; skilled in collegiality; interests and experience doing research in applied settings; demonstrated desire to articulate and/or bridge interdisciplinary boundaries. Send letter of application, including statement describing administrative experience and approach to the responsibilities of a department chairperson; full curriculum vitae; copies of transcripts; evidence of excellence in teaching; and the names and contact information for three to five references to: Chair, Search Committee, Department of Anthropology, Ball State University, Muncie, IN 47306. Official transcripts will be required prior to any interviews. Review of applications will begin immediately and will continue until the position is filled. The Department of Anthropology seeks to attract an active, culturally and academically diverse faculty of the highest caliber. Ball State University is an equal opportunity, affirmative action employer and is strongly and actively committed to diversity within its community ([www.bsu.edu](http://www.bsu.edu)).





## CALENDAR

2006–2007

### DECEMBER 5–7

**The IV Congreso de Arqueología en Colombia**, “Transdisciplina, Multiculturalidad y Gestión Patrimonial,” will be held at the Universidad Tecnológica de Pereira in Pereira, Colombia. The Congress will bring together 300–400 national and international professionals and students. This event will include 18 Symposia on different archaeological topics. For additional information, contact Carlos López at cel@utp.edu.co, or visit <http://congresoarqueologia.blogspot.com>.

### FEBRUARY 2–4

**The 4th Annual Tulane Maya Symposium**, titled “Murals and Painted Texts by Maya Ah Tz’ibob,” will be held in New Orleans, Louisiana. For more information, visit <http://stonecenter.tulane.edu/MayaSymposium/>.

### MARCH 23–24

**The Archaeology of Anthropogenic Environments, the 24th Annual Visiting Scholar Conference** sponsored by the Center for Archaeological Investigations, will be held at Southern Illinois University, Carbondale. The conference will consider the archaeological evidence for human manipulation of the environment, both as a context for modern environments and as a source of data about past societies. Please submit

a title and abstract of 200–250 words by November 27. Abstracts will be reviewed by the visiting scholar committee, and authors will be notified of acceptance in January. Selected papers from the conference will be published as a peer-reviewed volume by the Center for Archaeological Investigations, in its Occasional Papers series. For further information, contact Rebecca Dean, tel: (618) 453-5032; email: [rdean@siu.edu](mailto:rdean@siu.edu); web: <http://www.siu.edu/~cai/vsconference2007.html>.

### APRIL 25–29

**72nd Annual Meeting of The Society for American Archaeology** will be held in Austin, Texas. [www.saa.org](http://www.saa.org).

## MONEY MATTERS

*MONEY MATTERS*, from page 36 ↩

Directors and to the Investment and Finance Committee so that we can track the Society's finances throughout the year. The SAA staff and board continue to look for ways to streamline procedures that will save the Society money. Online submission of abstracts, meeting registration, and dues payments are excellent examples of effective money-saving strategies, and we appreciate your participation in these new electronic endeavors. I would be happy to answer any questions that you might have about SAA financial matters. I can be reached at [susan\\_chandler@alpin-earchaeology.com](mailto:susan_chandler@alpin-earchaeology.com).

## VOLUNTEERS: SAA NEEDS YOU NEXT APRIL!

Would you like the opportunity to meet people interested in archaeology, have fun, and save money? Then apply to be an SAA volunteer!

Volunteers are crucial to all on-site meeting services, and we are currently looking for people to assist the SAA staff at the 72nd Annual Meeting in Austin, Texas, April 25–29, 2007.

In return for just 12 hours of your time, you will receive:

- complimentary meeting registration,
- a free copy of the Abstracts of the 72nd Annual Meeting,
- a \$5 stipend per shift.

For details and a volunteer application, please go to SAAweb ([www.saa.org](http://www.saa.org)) or contact Darren Bishop at SAA (900 Second St. NE #12, Washington, DC, 20002-3560, phone [202] 789-8200, fax (202) 789-0284, e-mail [darren\\_bishop@saa.org](mailto:darren_bishop@saa.org)). Applications are accepted on a first-come, first-serve basis through February 1, 2007, so contact us soon to take advantage of this great opportunity. See you in Austin!



# Give the SAA a Gift on its 75<sup>th</sup> Endowment Campaign Pledge Form

*I want to invest in the mission of the Society for American Archaeology and the Society's future by making a gift as indicated below.*

☐ I choose to make a lump-sum gift of \$ \_\_\_\_\_.

☐ My check is enclosed.

☐ Please charge my credit card:

☐ VISA

☐ Mastercard

☐ AmEx

Card Number

Expiration Date

Signature

**or**

☐ I choose to make a gift in five annual payments  
to achieve the total pledge amount circled below:

Annual Payment	Five-Year Pledge Amount
\$75	\$375
\$100	\$500
\$150	\$750
\$200	\$1,000
\$500	\$2,500
\$750	\$3,750
\$1,000	\$5,000
\$1,500	\$7,500
\$2,000	\$10,000
\$5,000	\$25,000
other:	other:

**Please credit my donation to the following  
SAA Endowment fund(s):**

*(Please indicate a specific dollar amount to each  
fund.)*

\_\_\_\_\_ SAA General Endowment

\_\_\_\_\_ Native American Scholarships

\_\_\_\_\_ Public Education

\_\_\_\_\_ Total



SOCIETY FOR  
AMERICAN ARCHAEOLOGY

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name (as you would like to be formally recognized):

*(For example: Jane Smith, Anywhere University and John Doe, Big CRM Firm)*

☐ I wish to remain anonymous.

**Return form to:**

Attn. Tobi Brimsek  
Society for American Archaeology  
900 Second St. NE, #12  
Washington, DC 20002-3560  
(fax) 202-789-0284



## Give the SAA a Gift on its 75<sup>th</sup>!

### The SAA Endowment Campaign

In 2005, the SAA Board approved a five-year campaign to add \$500,000 to our endowment totals.

**The choice is yours! Your donation can benefit Public Education, Native American Scholarships, or the SAA General Endowment. Or you can divide your gift between all three.**

**Your generosity today can help insure the SAA's future!**



One goal of the SAA's education program – to bring archaeology into K-12 classrooms.

### The Big Impact of a Multi-Year Pledge

*"Buying over time"* incurs extra costs for you in the form of interest charges. But *"giving over time"* costs you less and can greatly expand the size and impact of your gift. That is why this is a five-year campaign. A simple example illustrates this point.

A \$500 dollar gift to the Public Education Endowment can be spread over the five years of the campaign. And every 20 years thereafter your \$500 gift will reproduce itself through the \$25 in annual earnings it generates. Your short-term sacrifice will help the SAA reach a broad public audience, now and into the distant future. It is a satisfying way to leave a legacy.

**Please, consider becoming a donor and help ensure the future of the Society for American Archaeology.**

To the generous people who have already stepped up to "Give the SAA a Gift on its 75<sup>th</sup>," thank you!

### How to Give?

Use your 2007 dues invoice to make a donation—on-paper or on-line. Your generous five-year pledge will make a difference for the SAA and for American archaeology in the 75 years to come! If you have any questions, please contact Tobi Brimsek at 202-789-8200.



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