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# SO FAR AWAY FROM ME? CONSERVATION AND ARCHAEOLOGY

SUZANNE DAVIS AND CLAUDIA CHEMELLO

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## ABSTRACT

Conservation is integral to the practice of archaeology, and many conservators and archaeologists would like more sustained collaboration. However, little has been done to examine archaeologists' need for, access to, and utilization of conservation resources. For example, how do archaeologists identify and hire appropriate conservators? Do they have access to the conservation information and services they need? Is conservation prohibitively expensive or affordable for excavations?

This paper presents part two of a survey-based research project conducted by the authors to examine the working relationship between conservation and archaeology. In this phase of the project, the authors conducted an online, anonymous survey of archaeologists who direct field projects. Completed in 2012, the primarily multiple choice survey collected information about the respondents and the projects they direct, with an emphasis on their knowledge of conservation and their engagement with professional conservators. Funding for conservation on excavations was examined, as was the archaeologists' need for and access to information about conservation. One section of the survey asked specifically about the respondents' familiarity with the American Institute for Conservation and their ability to access, navigate, and use resources available through the organization and its website.

In addition to presenting results from the survey of archaeological field directors, this paper will include brief demographic information on the respondents and will describe the survey's design and methodology. Finally, the authors will discuss how our professional body might use the data generated by this survey to improve outreach and better connect with the archaeological community. Developing and sustaining avenues for communication between archaeology and conservation will not only benefit the preservation of archaeological sites and artifacts, it will also have a positive impact on implementing and disseminating best practices in both of these allied professions.

## 1. INTRODUCTION

As conservators employed in an academic setting and engaged in frequent archaeological fieldwork, the authors interact with a wide variety of archaeologists. Informally, most of these professionals express a desire for more information about conservation, more access to conservators and conservation services, and express frustration with the lack of funding for conservation and preservation on archaeological projects. The authors' primary motivations for conducting this project were to gauge, in a more systematic way, archaeologists' engagement with conservation and to identify areas in which the conservation community might improve outreach and education.

To address these issues, the authors designed an anonymous, online survey. The survey targeted directors of archaeological excavations, the professionals who make overall decisions about research and project goals, client services, staffing, and funding for archaeological projects. The primarily multiple choice survey collected information about the respondents and the projects they direct, with an emphasis on their knowledge of conservation and their engagement with professional conservators. Funding for conservation on excavations was examined, as was the archaeologists' need for and access to information about conservation. One section of the survey asked specifically about the respondents' familiarity with the American Institute for Conservation (AIC) and their ability to access, navigate, and use resources available through AIC and the AIC website.

The data collected in this project complement information from a previous survey on archaeological conservation. That survey, conducted by the authors in 2010, focused on conservators and gathered information on the services they provided and the compensation they received for archaeological field projects (Davis and Chemello 2011). This survey asked archaeologists where they had located appropriate conservators, how much of their project budget was expended on conservation, and whether they perceived conservation services to be affordable.

The primary purpose of this paper is to provide a summary of the data collected by the survey. This paper will also provide information on previous research which informed the structure and content of the survey and will describe the methodology and design of the survey. It will examine the results and suggest directions for outreach and engagement with the archaeological community.

## 2. BACKGROUND

Archaeologists' attitudes towards conservators and conservation have been a topic of some interest in the conservation community, and there have been previous efforts by individuals, institutions, and professional organizations to examine the integration of conservation with archaeology and the development of archaeological conservation practice over time. For example, Caldararo (1987), Johnson (1993), Berducou (1996), and Matero (2000) have written about the development of archaeological conservation and its integration with fieldwork. An article by Susan Rotroff (2001) in the *Journal of the American Institute for Conservation* examined how codes of archaeological ethics and professional standards treat conservation. Jacqueline Zak (2008), in her PhD dissertation, looked at the exchange of knowledge between conservators and archaeologists with a focus on identifying opportunities for increased collaboration.

Numerous conferences have focused on archaeological conservation, for example: the International Institute for Conservation, 1996, Copenhagen Congress, "Archaeological Conservation and its Consequences;" the 5th World Archaeological Congress, 2003, in Washington, D.C.; "The Conservation of Archaeological Materials: Current Trends and Future Directions," 2005, in Williamsburg, Virginia (an effort of the Archaeological Discussion Group of the American Institute for Conservation); and "The Interface Between Field Archaeology and Conservation," 2011, in Abu Dhabi, hosted by New York University's Conservation Center and the New York University Abu Dhabi Institute.

Much effort has also been focused on ways to better integrate conservation and archaeology, especially on the part of the Getty Conservation Institute through their publications as well as programmatic activities. In part to address the need for better trained archaeological conservators, University of California Los Angeles and the Getty Conservation Institute began a graduate level training program that focuses on archaeological and ethnographic conservation. Additionally, since 1991 Harriet F. Beaubien at the Smithsonian Institution has managed a training program in archaeological conservation and hosted interns and fellows (Smithsonian Museum Conservation Institute). For currently enrolled conservation graduate students in any program, the Conservation Center at New York University's Institute of Fine Arts offers a one-week training course in archaeological conservation (New York University).

A number of publications by conservators have been aimed at improving archaeological conservation education and skills (see Further Reading), and many archaeological organizations identify preservation as part of their core mission, for example: the Archaeological Institute of America, the Society for American Archaeology, and the Society for Historical Archaeology (Archaeological Institute of America, Society of American Archaeology, Society of Historical Archaeology).

These larger efforts, of which only a few are listed, have been extremely important. They have improved the collaborative relationship between conservation and archaeology and addressed gaps in education for both archaeologists and conservators. In addition, a number of small-scale surveys have examined aspects of archaeological conservation. A survey conducted by Claire Peachey in 2005 looked at training for archaeologists and conservators as well as respondents' thoughts on the working relationship between archaeologists and conservators (Peachey 2010). As part of her graduate work, LeeAnn Barnes Gordon investigated the collaborative nature of archaeological conservation, including the attitudes of both conservators and archaeologists towards archaeological conservation (Gordon 2009). In 2010, a group of conservators in California and the Southwest surveyed archaeologists and other professionals working with archaeological materials about their use of conservation resources and their experiences working with conservators (Gleeson 2012).

The surveys cited above focused on the attitudes of conservators and archaeologists towards conservation and were distributed to a relatively small number of professionals, with 20 or fewer respondents. This survey aimed to be more comprehensive, to reach a larger number of respondents, and to produce quantifiable results suitable for analysis. It was targeted specifically to archaeologists who direct active excavations. Although other professionals on excavations may be intimately involved in conservation decision-making, project directors typically have overall financial and staffing authority, as well as final determination of research and project goals.

### 3. RESEARCH METHODOLOGY

The authors' goal was to create a survey which was clear, simple, and took less than 10 minutes to complete. Various online survey tools were considered, and the authors chose to use Qualtrics<sup>1</sup>, a versatile online survey tool which is used by multiple academic units within the University of Michigan (the authors' employer). Qualtrics is relatively simple to use, has sophisticated analytical capabilities, and allows survey responses to be exported to multiple file formats including Microsoft Excel and SPSS (Statistical Package for the Social Sciences). Qualtrics was used with success in the authors' previous survey of archaeological conservators.

The survey had a total of 28 questions, but employed skip-and-display logic so that the number of questions answered by individual respondents varied. For example, an archaeologist that had never employed a conservator was not asked what percent of his/her budget was typically expended on conservation. The questions were primarily multiple choice, with a few write-in boxes and areas for longer text responses. Answering most questions was mandatory in order for respondents to continue taking the survey (forced validation), but a few questions which the authors thought might be sensitive or difficult to determine quickly, such as the actual rate of compensation, were optional. Respondents had the option of providing their names and contact information, and the responses of individuals who did so were kept confidential.

Otherwise, respondent anonymity was maintained; each response was coded with a unique number generated randomly by Qualtrics.

A group of archaeologists selected by the authors was asked to test the survey. The test group included archaeologists employed in academic settings, in federal and state government, cultural resource management, and private business settings. These archaeologists had excavation experience in the United States, Europe, and Asia, and had worked on a variety of sites including terrestrial and underwater, as well as historic and prehistoric civilizations. The survey was edited based on feedback from this group.

The survey was intended primarily for archaeologists employed by institutions based in the United States, and was distributed accordingly. However, there were responses from archaeologists employed outside the U.S. The survey was distributed in January of 2012 and was active for three weeks. It was distributed by emailing a survey link to 17 lists. Most lists targeted archaeologists<sup>2</sup>, but the link was also sent to 2 lists for museum professionals<sup>3</sup> and 4 lists specific to conservation<sup>4</sup>.

There were 432 responses, 86 of which were removed because they were incomplete. Removal of the incomplete responses resulted in 346 responses which could be used for analysis. No duplications were found. Multiple obvious errors were found and the responses were re-coded to correct them. For example, if a faculty member at a university chose “other” for primary employer, this answer was re-coded to “academic department – faculty.”

Please note that for the purposes of this survey, “conservation” was defined as “encompassing a broad range of preservation activities, from overall site preservation to individual artifact treatment.”

## 4. RESULTS

### 4.1 RESPONDENT PROFILE

This section provides a summary of professional profile information for respondents. Questions in this section of the survey included: years of experience directing archaeological projects, primary employer, location of archaeological projects (United States or elsewhere), and type of site (terrestrial or underwater). As noted in the introduction, the survey was intended primarily for archaeologists based in the United States and was distributed only to U.S.-based archaeology discussion lists and websites. Although respondents were not asked to identify their geographic location, some provided this information voluntarily. In addition to the United States, respondents' geographic locations included: Australia, Canada, the Czech Republic, Germany, Greece, Honduras, Israel, Portugal, South Africa, South Korea, Turkey, and the United Kingdom.



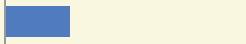

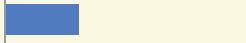

#### 4.1.1 Years of Experience Directing Archaeological Projects

Respondents were asked to indicate for how many years they had directed projects. The largest group, 152 respondents (44%), had been directing projects for more than 15 years. The next largest group, 114 respondents (33%), had been directing projects for between 5 and 15 years. The smallest number of respondents, 80 (23%), had been directing projects for less than 5 years.

#### 4.1.2 Primary Employer

As seen in table 1, the largest group of respondents, 130 (37%), worked as faculty in academic departments. The next largest groups indicated that they worked for cultural resource management firms, 75 respondents (22%), and federal and state government agencies, 65

Table 1. Primary Employer

Which best describes your primary employer?		Response	%
Academic department – faculty		130	37%
Academic department – student		16	5%
Federal or state government		65	19%
Museum or other cultural institution		34	10%
Cultural resource management firm		75	22%
Other		26	7%
Total		346	100%

respondents (9%). 26 respondents (7%) chose “other” and wrote in their own answers. Examples of responses in the “other” category included: freelance, self-employed, research institute, academic department – non-faculty, non-governmental organization, combination of cultural resource management firm and university or museum, and retired.

#### 4.1.3 Location of Site

Respondents were asked to choose whether their projects were located in the United States or elsewhere and could choose both. 155 respondents (45%) indicated that they worked on projects located solely in the United States. 166 respondents (48%) indicated that they worked only outside the U.S. 25 respondents (7%) indicated that they worked on projects located both in the U.S. and elsewhere.

#### 4.1.4 Type of Site

Respondents were asked to indicate whether they directed excavations at terrestrial or underwater sites and could choose both. 293 respondents (85%) directed excavations at terrestrial sites. 12 respondents (3%) directed excavations at underwater sites. 41 respondents (12%) indicated that they directed both terrestrial and underwater projects.

### 4.2 PROFESSIONAL PRACTICE AND EMPLOYING CONSERVATORS

Questions in this section of the survey examined respondents’ engagement with conservators for their projects. Questions included whether or not respondents employed a conservator, whether they excavated in countries that required a conservator on projects, and whether the conservators they employed were professionally trained.

#### 4.2.1 Employment of Conservators

This question asked respondents whether or not they directed archaeological projects that employed a conservator. 143 respondents (41%) indicated that they directed projects that employed conservators. 203 respondents (59%) indicated that they did not direct projects that employed conservators.



### 4.2.2 Requirement for Employment of Conservators

For respondents who indicated that they had employed conservators, there were several additional questions. The first was, “Do you excavate in a country that requires archaeological projects to employ a conservator?” 73 people, or 51% of the group who had employed conservators, indicated that they excavated in a country requiring a conservator for archaeological projects. This represents 21% of all respondents. 70 people, or 49% of the group that had employed conservators, indicated that they did not excavate in a country requiring conservators for archaeological projects. This represents 20% of all respondents.

### 4.2.3 Hiring Appropriate Conservators

The next follow-up question for respondents who employed conservators was, “How have you located appropriate conservators for your projects?” There were five choices and one “other” option which allowed respondents to provide their own answer. As seen in table 2, of the 143 respondents who employed conservators, 88 (61%) located the conservator(s) through a recommendation from a colleague. 67 (41%) had an institutional affiliation with the conservator’s employer. 10 respondents (7%) had located the conservator through a job posting or advertisement. 6 respondents (4%) could not remember how they had found a conservator, and 19 respondents (13%) chose “other.” Many respondents who chose this option indicated that they had a personal relationship with the conservator (friend, spouse, etc.). A few said that the conservator was required, and chosen for them, by local or national authorities. One indicated that conservators came from an internship program, and one said that the conservator, “presented herself to me.”

The 10 respondents who had located conservators through a job posting or advertisement were asked where the position had been posted. Most responded that they had posted the job on a variety of archaeology email lists and websites. Several also listed the websites of state historic preservation offices as well as the state government personnel office.

### 4.2.4 Level of Conservation Training for Conservators Employed

The 143 respondents who indicated that they had employed conservators were asked if the conservator was professionally trained. Respondents were advised that for the purposes of this survey, “professionally trained” referred to someone holding a graduate degree in

Table 2. Hiring Appropriate Conservators

How have you located appropriate conservators for your projects? Please choose all that apply		Response	%
Recommendation from a colleague		88	61%
Institutional affiliation with the conservator’s employer		67	43%
Placing an advertisement or job posting		10	7%
Not sure or don’t remember		6	4%
Other		19	17%

conservation. 121 respondents (85%) indicated that they had employed a professionally trained conservator. 12 respondents (8%) chose “no”, that the conservator they employed was not professionally trained. 10 respondents (7%) were not sure.

#### 4.2.5 Reasons for Not Employing Conservators

Of the 346 total respondents, 203 reported that they directed projects that did not employ conservators. These respondents were asked to choose the primary reason they did not employ a conservator. There were five choices with an “other” option which allowed respondents to write in an answer. As seen in table 3, 70 respondents (35%) indicated their project lacked adequate funds to hire a conservator. 62 respondents (30%) indicated that no conservator was needed. 26 respondents (13%) chose an option indicating that their projects collaborate, for a fee, with local conservators. 21 respondents (10%) indicated that local conservators collaborate with the project at no charge. 8 respondents (4%) were uncertain about how to identify conservation needs and hire an appropriate conservator. 16 respondents (8%) chose “other,” and wrote in a response.

Common responses in the “other” category were: projects could consult with a conservator employed by the home institution; conservation services were not often required on the project, so it was difficult to justify spending significant funds on conservation; and several respondents indicated that they performed their own conservation. One respondent said that conservators were not engaged unless required by the client. Another respondent commented that artifact analysis, study, and display were typically not goals of industrial heritage archaeology. This respondent commented that most conservation strategies were not practical for the large scale common in industrial archaeology.

The 62 respondents who indicated that their projects did not need to employ a conservator were asked to choose the primary reason why. As seen in table 4, the most common reason, with 21 responses, or 34% of this group, was that a lab manager or other staff member performs conservation as necessary. 19 respondents (30%) indicated that they directed archaeological

Table 3. Primary Reason for Not Employing a Conservator





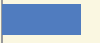

You indicated that you direct projects that do not employ a conservator. Which best describes the primary reason for this? Please choose only one.		Response	%
My project collaborates with local conservators at no charge		21	10%
My project collaborates with local conservators for a fee		26	13%
There is uncertainty about how to identify conservation needs and hire an appropriate conservator		8	4%
There is no money to hire a conservator		70	35%
No conservator is needed		62	30%
Other		16	8%
Total		203	100%



Table 4. Primary Reason No Conservator Was Needed

You indicated that no conservator is needed for your projects. Please indicate the primary reason why.		Response	%
The project(s) is a survey		19	30%
Few artifacts or structures are excavated		6	10%
The artifacts and structures excavated are in good condition		13	21%
Other		3	5%
A lab manager or other staff member performs conservation as necessary		21	34%
Total		62	100%

surveys. 13 respondents (21%) indicated that they directed sites where the artifacts and structures excavated were in good condition. 6 respondents (10%) reported that few artifacts or structures were excavated at the sites they directed. 3 respondents (5%) chose “other” and wrote in an answer. One respondent reported that s/he directed only surveys or projects on private land, where all excavated artifacts are the property of the landowner. Another wrote that s/he excavated structures prior to destruction by developers (no artifact conservation was referenced). The final respondent in this category indicated that s/he is a conservator.

### 4.3 PROFESSIONAL PRACTICE, FUNDING, AND CONSERVATION EXPENDITURE

Questions in this section of the survey examined general funding sources and conservation expenditures for archaeological projects. Conservation expenditures were investigated primarily for respondents that had employed conservators. All respondents were asked their opinion on the affordability of conservation.

#### 4.3.1 Funding for Archaeological Projects

All 346 respondents were asked about the funding sources for their projects. There were five possible choices, including an “other” category that allowed write-in answers. Respondents were instructed to choose all applicable answers. 172 respondents, or 50% of the overall group, had funded their projects with grant monies. 150 respondents’ projects (43%) were funded by clients, for example developers or government agencies. 140 respondents (40%) used monies from their primary employer for projects. 88 respondents (25%) also used private donations to fund their excavations. 20 respondents (6%) chose “other” and provided a response. Common responses in the “other” category were: tuition from field school students, fees paid by volunteers, self-funded, and all-volunteer labor.

#### 4.3.2 Compensation of Conservators

The 143 respondents who indicated that they directed projects that employed conservators were asked how their projects compensated conservators. There were four choices and respondents were asked to choose all that applied. The largest number of respondents,

116 or 81% of this group, indicated that they paid a fee for conservation services or time. 70 respondents (49%) covered room and board for conservators. 69 respondents (48%) paid for travel expenses. Finally, 6 respondents (4%) did not provide any financial compensation.

### 4.3.3 Expenditure on Conservation

The 143 respondents that had employed conservators were asked what percentage of their overall project budget was typically spent on conservation. As seen in table 5, 45 respondents (31%) indicated that they typically spent between 6 and 15% percent. 42 respondents (29%) spent between 1 and 5%. 28 respondents (20%) spent between 16 and 30% of their overall project budget on conservation. 13 respondents (9%) spent 31–50% of their budget on conservation. 10 respondents (7%) spent less than 1%. 5 respondents (3%) spent more than 50% of the project budget on conservation.

These respondents next had the option of reporting their conservation expenditure in an average field season. Although 20 respondents chose to write answers, only 12 (8%) of the 143 provided numeric figures. These figures ranged from \$3,500/season at the lowest to \$1,000,000/season at the highest. The most frequently occurring number, or mode, was \$10,000/season.

### 4.3.4 Opinion on Affordability of Conservation

As seen in table 6, all 346 survey respondents were asked for their opinion on the cost of conservation. There were five choices, ranging from affordable to prohibitively expensive. Respondents could also choose, “no opinion.” 153 respondents (44%) indicated that they felt conservation was expensive. 73 respondents (21%) chose “somewhat affordable” as their answer. 51 respondents (15%) had no opinion. 37 respondents (11%) said that they felt conservation was “prohibitively expensive.” The smallest number of respondents, 32 (9%), chose “affordable.”

## 4.4 PROFESSIONAL PRACTICE AND CONSERVATION SERVICES

Several questions in the survey examined conservation services for archaeological projects. Respondents who had employed conservators were asked about the services typically provided. They were also asked if any additional services would be desirable. Respondents who had not employed conservators were given the same menu of choices and asked if any would be beneficial.

Table 5. Expenditure on Conservation












In an average field season what percent of your overall project budget is spent on conservation?		Response	%
Less than 1%		10	7%
1–5%		42	29%
6–15%		45	31%
16–30%		28	20%
31–50%		13	9%
More than 50%		5	3%
Total		143	100%





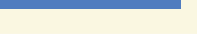


Table 6. Opinion on Affordability of Conservation

Which choice best represents your opinion about the cost of conservation?		Response	%
Affordable		32	9%
Somewhat affordable		73	21%
Expensive		153	44%
Prohibitively expensive		37	11%
No opinion		51	15%
Total		346	100%

#### 4.4.1 Conservation Services Provided

The 143 respondents who indicated that they employed conservators were asked to choose from a menu which conservation services were provided for their projects. As seen in table 7, there were seven choices including “other” which allowed respondents to write in an answer. 130 respondents (91%) received artifact processing. 88 respondents (62%) received a written report detailing conservation activities. 84 respondents (59%) received conservation planning and consultation. 80 respondents (56%) received conservation of architectural elements or structures. There were 8 responses in the “other” category. Several respondents identified “curation” as an additional service, but did not define what they meant by the word. Other responses in this category included: museum creation and exposition, conservation of cemetery markers, conservation of rock art, and investigative analysis.

Table 7. Conservation Services Provided

Which of the following conservation services are provided for the projects you direct?		Response	%
Artifact processing, such as lifting, cleaning, reconstruction, and stabilization		130	91%
Conservation of architectural elements and/or structures		80	56%
Conservation planning and consultation		84	59%
Overall site preservation and heritage management		63	44%
Conservation teaching and training on-site		57	40%
Written report detailing conservation priorities and activities		88	62%
Other		8	6%

#### 4.4.2 Additional Conservation Services Needed

The same group of 143 respondents was asked if, in addition to the services already provided for their projects, any additional conservation services would be useful. As seen in table 8, most respondents, 66 (46%), indicated that no additional services were needed. The next highest number of respondents, 36 (25%), indicated that conservation teaching and training on-site would be beneficial. Overall site preservation and heritage management was identified as desirable by 33 respondents (23%).

#### 4.4.3 Conservation Services Desired by Archaeologists Not Employing Conservators

In the overall group, 203 respondents indicated that they did not employ conservators for their projects. Of this group, 21 respondents collaborated with conservators at no charge, while 62 respondents indicated that they did not require a conservator.

The remaining 120 respondents were given a selection of conservation services and asked if any would be useful. Respondents could choose all that applied. As seen in table 9, artifact processing was the service selected by most respondents. The next most popular choices were: conservation teaching and training on site, 65 respondents (54%); conservation planning and consultation, 62 respondents (52%); written report detailing conservation priorities and activities, 60 respondents (50%); overall site preservation and heritage management, 58 respondents (48%); and, finally, conservation of architectural elements and/or structures, 51 respondents (43%). 5 respondents (4%) indicated that none of the services listed would be useful, and 3 respondents (3%) chose “other.” Responses in the “other” category were: “need to educate conservators on the real world of archaeological objects,” “public interpretation and outreach,” and “investigative conservation perspectives that match research with conservation.”

Table 8. Additional Conservation Services Needed

















In addition to the conservation services already provided for your projects, would any of the following be useful?		Response	%
Artifact processing, such as lifting, cleaning, reconstruction, and stabilization		17	12%
Conservation of architectural elements and/or structures		24	17%
Conservation planning and consultation		29	20%
Overall site preservation and heritage management		33	23%
Conservation teaching and training on-site		36	25%
Written report detailing conservation priorities and activities		24	17%
Other		3	2%
No additional services needed		66	46%

Table 9. Conservation Services Desired by Archaeologists Not Employing Conservators

Would any of the following services be useful for your project? Please choose all that apply.		Response	%
Artifact processing, such as lifting, cleaning, reconstruction, and stabilization		78	65%
Conservation of architectural elements and/or structures		51	43%
Conservation planning and consultation		62	52%
Overall site preservation and heritage management		58	48%
Conservation teaching and training on-site		65	54%
Written report detailing conservation priorities and activities		60	50%
Other		3	2.5%
None of these services would be useful		5	4%

## 4.5 RESOURCES FOR ARCHAEOLOGISTS

### 4.5.1 Desired Resources

All 346 respondents were asked what conservation resources they would find useful, and they were instructed to choose all that applied. There were eight choices including “other” and “none.” As seen in table 10, the most highly desired resource, selected by 226 respondents (65%) was information about where to find funding for conservation and preservation. The next largest group, 204 respondents (59%), wanted information on how to identify and prioritize conservation needs. 180 respondents (52%) indicated that they would like information on assembling a conservation budget.

There were 8 responses in the “other” category. Interesting write-in responses in this category included the following: “list of conservators with specializations,” “lobby DOT (Department of Defense) [sic] to allow conservation in project budget,” and “specialist conservation, materials analysis.”

### 4.5.2 Location of Resources

333 respondents (all those who did not choose, “none of these resources would be useful” in the previous question) were asked where they would prefer to find conservation resources. There were seven choices, including “other” and “not sure,” and respondents were instructed to choose all that applied. 124 respondents, or 40% of this group, wanted to find conservation resources on the Society for American Archaeology website. The next largest group, 106 respondents (34%), wanted to find resources on the Society for Historical Archaeology website. 91 respondents (29%) wanted to find conservation information on the website of the Archaeological Institute of America. 69 respondents (22%) chose the American Institute for Conservation website. 63 respondents (20%) were not sure where they would prefer to find

Table 10. Desired Resources

Of the following resources, which do you or would you find useful? Please choose all that apply.		Response	%
Where to find funding for conservation and preservation		226	65%
Grant-writing advice for funding conservation/preservation		168	49%
Information on putting together a conservation budget		180	52%
Information on how to identify and prioritize conservation needs		204	59%
Information on how to find a conservator		122	35%
Template interview for prospective conservators		87	25%
Other		9	3%
None		33	10%

conservation resources. 62 individuals (20%) chose “other.” The final group, 34 people (11%) chose the website of the American Anthropological Association.

There were 49 responses in the “other” category. Of these, many respondents made the same or similar suggestions, and these responses have been collated below. They included the websites of the following archaeological organizations:

- American Cultural Resources Association (ACRA)
- American Schools of Oriental Research (ASOR)
- Council of American Overseas Research Centers (CAORC)
- State Historic Preservation Offices (SHPOs)
- Society for Archaeological Sciences (SAS)
- Society for Industrial Archaeology (SIA)

Also suggested were the websites of the following conservation organizations:

- International Council of Museums Committee for Conservation (ICOM-CC)
- International Center for the Study of the Preservation and Restoration of Cultural Property (ICCROM)
- Conservation Online (CoOL)
- Getty Conservation Institute (GCI)
- Australian Institute for the Conservation of Cultural Material (AICCM)

Other, more general suggestions were to post resources on international websites and on the websites of national preservation or archaeological organizations. Specific examples of the latter were the Israel Antiquities Authority website and the website of the National Board of Antiquities, Finland. Several respondents expressed a strong desire to have all the information accessible on one public access website. One respondent suggested that conservation journals would be a good place to find these resources.



#### 4.5.3 Familiarity with the American Institute for Conservation

All 346 respondents were asked if they were familiar with the American Institute for Conservation. 256 respondents (74%) were not. 90 respondents (26%) responded that yes, they were familiar with AIC.

#### 4.5.4 Use of AIC Resources

The 90 respondents who indicated that they were familiar with AIC were asked a follow-up question: whether they had used the AIC website or other AIC resources to find a conservator or other information about conservation. 46 respondents (51%) had, while 44 respondents (49%) had not.

The 46 who had used an AIC resource were asked whether they had used the website or another resource. They were asked to choose all that applied (website or other) and to describe any non-web resource. 45 respondents, or 98% of this group, had used the website. 5 people (11%) had used another resource. 3 of these respondents gave a description of what they had used. One simply listed, "printed material." One had used CoOL, and one had used the Journal of the American Institute for Conservation.

All 46 respondents who were familiar with AIC and had used an AIC resource were asked if they had been able to find the information they were seeking. 37 (80%) responded "yes," while 9 (20%) responded "no."

The 45 respondents who had used the website were asked if the website was easy to navigate. 38 (84%) indicated that it was, while 7 (16%) indicated that it was not.

### 4.6 COMMENTS FROM RESPONDENTS

The survey included a write-in section where respondents could comment. In addition, respondents frequently provided commentary in the write-in areas for "other" options on individual questions. Overall, more than 70 comments were received. It is not possible to record or address every individual comment here, however, multiple themes emerged. Each is introduced below with a representative quote in bold text.

**"I'm not sure if employing someone who specializes as the curator is the same specialty as a conservator."** Multiple respondents expressed confusion between the responsibilities of curators and conservators. One commented specifically that the word "conservator" had been used "inappropriately as a synonym for curation and other curatorial practices." Related to this were comments expressing confusion about what, exactly, the survey meant by "conservator."

**"Many of us recognize that conservation is important, but we have too few finds of the type that might require conservation in the field (such as metal objects)."** Among the respondents who commented, there seemed to be a general feeling that most excavated materials did not require "specialist conservation." For example, one respondent commented, "I have been doing archaeology for 42 years all over the western U.S. and Guatemala and possibly out of the hundreds of thousands of artifacts that have passed before my eyes, those requiring special conservation needs could be counted on my fingers and toes."

**"I have had conservation training so I do our conservation."** Multiple respondents commented that they or a trained staff member who was not a conservator provided conservation for their projects. Many characterized this work as "basic" or "minor." Others indicated that they were trained as conservators and had a good grasp of conservation needs and procedures.

**“One of the big problems we have is the lack of experience most conservators have with archaeological (dry and wet) material...most of our conservators have very limited field experience and lack a practical approach to conservation.”** A lack of conservators trained specifically in archaeological field conservation was frequently cited. Many respondents said that they felt most conservators were trained for museum and fine art conservation and lacked the ability to apply appropriate methods and materials in the field, “...after many years of experience I have watched expensively and meticulously conserved mosaics, frescoes, walls, lost because the practices undertaken were specific to the material, not to the future of it in-situ at the site.”

On a related note, many respondents commented that communication needed to be improved between archaeologists and conservators because they felt that conservators frequently did not understand archaeological research goals. “There needs to be better communication between archaeologists and conservators, and having supervised both, and I do see that sometimes conservators just don’t get it about how archaeologists – the real curators here – make priorities. The perfectly conserved object is not really the end game of archaeological research.”

**“I believe that conservation is essential, otherwise archaeology approximates vandalism. Having said that, I also find it to be quite expensive to pay for conservation services.”** Several respondents commented on the expense of conservation, but characterized it as a necessary and reasonable cost that was in line with other expenditures on archaeological projects. One respondent expressed frustration with the questions about expenditure, saying, “Conservation is required so it does not matter if I think it is affordable. It is necessary. Period.”

**“There is a need to change attitudes to make the costs of artifact conservation acknowledged and accepted.”** Many respondents, especially those working in cultural resource management archaeology and at state agencies, noted difficulty with convincing clients and co-workers that conservation was necessary. “I struggle to educate personnel regarding the importance of historic preservation. On the whole, people at my agency construe anything related to cultural resource management as costly and time consuming. Having better information regarding conservation/preservation initiatives and how-to’s on collaborative partnerships in preservation would be most helpful.” Another representative example was, “It is difficult to convince clients that curation and the associated curation fees are important, let alone that conservation in the thousands of dollars is necessary. A stronger message of preserving our heritage is necessary to convince developers and the state/federal agencies that conservation should be done.”

**“I am delighted to see surveys such as this and hope the results are made available to the broader archaeological community. I do value conservation and wish to see it become more of a staple in the American archaeological arena.”** Multiple respondents commented on the usefulness of the survey and/or remarked that the topic was interesting. However, several respondents also expressed this concern, “It is not clear what information you are seeking or how it will help us ‘in the field.’” One respondent also commented, “This survey seems intended for one purpose, to find out how to get more archaeological conservators hired.” Another wrote, “How relevant is it to non-Americans?”

**“...but the world heritage people OUGHT to know the desperate state the building is in, and its importance to the history of ancient wall-painting...”** Multiple comments did not fit any of the previous categories, but were instead pleas for help with conservation on specific projects, lists of places the respondent had worked, suggestions of organizations to which we should send the survey, and information about the respondents’ publications.

## 5. DISCUSSION

### 5.1 RESPONDENT PROFILE

When considering the results of the survey, an understanding of the respondent profile is beneficial. Almost half the respondents, 44%, are relatively experienced, having directed projects for more than fifteen years. A large percentage, 33%, had between five and fifteen years of experience.

Very few archaeologists who directed underwater projects took the survey, only 53 out of 346, therefore the views of this group may not be adequately represented. The balance between academic archaeologists and archaeologists working in other settings is almost even, weighted slightly towards those in non-academic settings.

The authors would also like to comment on a phenomenon they came to call “the donkey vote.” This term, commonly used in Australia (the native country of one of the authors), refers to a vote that was inappropriately cast. For example, the survey was emailed to multiple conservation lists with a request for conservators to forward it as appropriate. Several conservators wrote to say they had completed the survey, “just to see what it was like,” despite clear instructions that it was intended for archaeological dig directors. Because the survey was anonymous and these respondents did not clearly identify themselves, their responses could not be removed from the final report. In future, to discourage donkey votes motivated by curiosity, the authors recommend offering interested colleagues a file with the survey questions. In a few other possible cases of donkey voting, respondents made ambiguous comments about their role on projects. For example, several said that they “worked on” projects or managed specific aspects of projects, whereas others identified themselves as directors or co-directors.

### 5.2 EMPLOYMENT OF CONSERVATORS AND EXPENDITURE ON CONSERVATION

41% of respondents directed projects that employed a conservator. Although this represents less than half of the overall group, the percentage is higher than expected based on the authors’ anecdotal information from archaeologists. Furthermore, 85% of this group employed conservators that were professionally trained. 81% paid a fee for conservation work, and 96% compensated conservators in some way. Only 4% of respondents did not compensate conservators.

Certain funding sources correlate with employment or non-employment of conservators. Respondents whose projects were funded by clients like developers or government agencies were less likely to employ conservators. This finding corresponds to comments from respondents on the difficulty of convincing clients of the need for conservation. On the other hand, conservators were more likely to be employed by respondents whose projects were funded with money from private donations. Of the group that did not employ conservators for their projects, 35% (70 individuals) said the primary reason for this was that they could not afford it. Funding sources were examined for this group, and were split evenly between primary employer, grant monies, and clients like developers or government agencies. When this group’s need for resources was examined, 60% or more indicated interest in the following: where to find funding, grant writing advice, information on assembling a conservation budget, and information on identifying and prioritizing conservation needs.

It is interesting to note that 23% of respondents who did not employ a conservator still received conservation services through some level of collaboration with conservators, either fee-based or for free. Another 21 respondents, a third of the group that said no conservator was

needed, were either performing conservation activities themselves or employing non-conservator staff members to do the work. Furthermore, in the group that had not employed conservators, 85% indicated that they would like some level of conservation; when asked to choose potentially useful services from a list, only 15% chose “none of these services would be useful.” Out of the entire group of 346 respondents, only 27 or 8% said that they did not want any kind of conservation service. This suggests that although 59% of respondents indicated they did not employ conservators for their projects, the need for conservation remains high.

Respondents’ opinions about the affordability of conservation were examined against the percentage of their budgets that was spent on conservation. There were respondents in each opinion category from “affordable” to “prohibitively expensive” that spent up to 50% of their project budget on conservation. In the category of “prohibitively expensive”, only two respondents spent more than 30% of their project budget on conservation, with most spending between 1 and 15%. Respondents who directed projects that did not employ conservators also felt that conservation was expensive. Out of 203 respondents who did not employ conservators, 97 thought conservation was expensive and 20 felt it was prohibitively expensive. This suggests that feelings about the cost of conservation are not tied to the percentage of funding allocated to conservation and are instead more subjective.

Related to any discussion about employment of archaeological conservators is the fact that many respondents identified a lack of adequately trained conservators as a significant problem. More than one respondent commented that conservation treatment and methodology for artifacts in museum collections were not necessarily appropriate for excavated artifacts or structures, and expressed frustration with conservators’ inability to adapt conservation approaches in the field. This begs the question, are current training programs producing conservators who are unprepared for the realities of on-site work?

### 5.3 CONSERVATION SERVICES

It may not come as a surprise to practicing archaeological conservators that 90% of respondents employing a conservator received some type of artifact processing, such as cleaning, reconstruction, or stabilization. However, the fact that 38% of projects did not receive a written report detailing conservation activities is troubling. As noted in the authors’ survey of archaeological conservators in 2011, a professional report summarizing conservation activities is an important form of documentation for excavations. In that survey, 22% of the 116 respondents indicated that they did not provide end of season conservation reports (Davis and Chemello 2011). The authors would like to encourage both groups, archaeological conservators as well as field directors, to consider a written report of conservation activities to be essential. The full range of conservation activities on a project may not be visible or documented for excavation directors without such a report.

As noted in the results section on comments, many respondents expressed the belief that conservation is highly specialized and only necessary for certain materials, such as metal objects. One respondent commented specifically that most finds, like ceramics, were “shelf-stable.” This suggests that many of the respondents may not be fully aware of conservation and condition issues for archaeological materials. It also suggests that conservation is perceived by many as relating solely to the treatment of individual finds. The comments about curation, and how this is not the responsibility of conservators, also suggest that conservation is perceived as active treatment and that conservators are not necessarily seen as professionals who can provide preservation information or preventive conservation for excavated material.

## 5.4 RESOURCES

For the overall group, the most highly requested resources were information about funding sources and about how to identify and prioritize conservation needs. As noted in the comments section, respondents expressed a strong desire to have a central electronic source for conservation information.

An important finding of this survey is the fact that 74% of the respondents were not familiar with the American Institute for Conservation (AIC). To make this statistic more personal, in the test group, multiple archaeologists who knew the authors well and had worked with them had not heard of AIC. This lack of awareness of AIC as a resource is something that could be improved, both at institutional and individual levels. For AIC, a consistent presence at professional archaeology conferences would be a way to reach out to affiliated organizations and increase awareness among large numbers of archaeologists. The year 2012 was a good first step, when AIC and the Archaeological Institute of America arranged to have a booth swap at their respective annual meetings. For individual conservators, the authors would like to encourage outreach about AIC at an institutional level as well as through personal interactions with colleagues. If attending the annual AIC meeting, for example, conservators could submit a post to their institution's blog or a news item to the newsletter. In conversations with non-conservator colleagues, AIC and its professional journal could be referred to by name. For conservators in private practice, their participation in AIC meetings and service work might be something that could be featured on the company website. For conservators presenting at archaeological conferences, mentioning AIC even briefly would be a way to raise awareness.

More encouraging is the fact that of the 26% of respondents who were familiar with the American Institute for Conservation, slightly over half, (51%), had used the AIC website or other resources and 80% of those individuals were able to find the information they were seeking. Most respondents who had used the website found it easy to navigate. One respondent did suggest creating a more integrated structure that would allow end users without much knowledge of conservation to search and find multiple types of relevant information. For example, a search for "industrial heritage conservation" would bring up related articles, links, and funding sources, as well as contact information for individual conservators with the appropriate specialization. Another important comment was that archaeologists are often charged with the care and preservation of complex sites, structures, and artifact assemblages, whereas the AIC resources tend to be geared toward helping people deal with individual objects or material types. For conservation resources to be successful and useful for archaeologists, conservators need to take a more comprehensive approach to what is needed for the preservation and stewardship of sites.

## 6. SUMMARY

In summary, a number of aspects of this survey are worth noting. First, there are many reasons for conservators and archaeologists to feel encouraged by the results. Participation was higher than the authors expected and significantly higher than with previous projects of this type. The willingness of more than 20% of survey respondents to provide detailed comments was encouraging, as was the interest in conservation expressed by most respondents. Additionally, more projects had conservation support than expected by the authors, and many respondents were expending significant resources to ensure conservation and preservation for their sites.

Second, the survey identified several specific areas for improvement. The most important of these is increased education for conservators and archaeologists. For archaeologists, a better



understanding of how artifacts and sites deteriorate, and of how conservators can assist not only with preservation but also with archaeological research, would be highly beneficial. In part, this can be accomplished by increased and sustained outreach on the part of conservators to archaeologists and archaeological organizations. For archaeological conservators, more comprehensive training is needed; training that moves away from a focus on individual artifacts and material types and towards an approach that embraces the realities of fieldwork, integrates site and artifact preservation, and seeks to understand and support archaeological research goals.

Additional areas for improvement include providing the comprehensive conservation resources desired by archaeologists and increasing advocacy among United States government agencies for conservation support on excavations. In conclusion, archaeology and conservation are not so far away from each other. This survey identified a strong interest in conservation on the part of archaeologists, and the results can be used as a guide for where and how the conservation community can improve education, outreach, and resources for archaeological conservation.

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## NOTES

1. The data and data analysis for this paper were generated using Qualtrics Labs, Inc. software, Version 2009 of the Qualtrics Research Suite. Copyright 2010, Qualtrics Labs, Inc. Qualtrics and all other Qualtrics Labs, Inc. product or service names are registered trademarks or trademarks of Qualtrics Labs, Inc., Provo, UT, USA. [www.Qualtrics.com](http://www.Qualtrics.com)

2. The survey link was sent to the following archaeology lists: Agade, a news list covering the Ancient Near East run by Jack Sasson at Vanderbilt University; HISTARCH, a discussion list covering historical archaeology, run from Arizona State University (1,191 subscribers); SUB-ARCH, a discussion list focusing on underwater archaeology, also from Arizona State University (539 subscribers); ACRA-L, the email list of the American Cultural Resources Association; Anthro-L, a discussion list on anthropology topics, run from the State University of New York at Buffalo; Classics.Conferences, a list run by the University of Michigan, including Classical Studies departments in the U.S. and Canada as well as University of Michigan graduate students (192 subscribers); AegeaNet, a discussion and news list on Aegean archaeology (survey link posted by John Younger, 900 subscribers); ANE-2, a moderated academic discussion list that focuses on topics and issues of interest in Ancient Near Eastern Studies (survey link posted by Charles Jones); AWOL, The Ancient World Online, a blog focusing on ancient studies run by Charles Jones (3500 readers); ROMARCH, a discussion list for early Italian and Roman



art and archaeology, run by Pedar Foss at DePauw University (800 subscribers); Society of Archaeological Sciences wiki and listserv (posted by Rob Sternberg). Attempts were also made to post to websites or email lists maintained by the Register for Professional Archaeologists, the Archaeological Institute of America, the Society for American Archaeology, the Society for Historical Archaeology, and the American Anthropological Association. These lists were either closed for posting, or the schedule for list or site moderators to evaluate the response request was too long to be useful for this survey (in one case, the lead time for evaluation was nine months).

3. The survey link was sent to the following museum lists: RC-AAM, the Registrars Committee of the American Association of Museums, and MUSEUM-L, a general purpose discussion list for museum professionals run by University of New Mexico (3854 subscribers).

4. The survey link was sent to the following email groups within the American Institute for Conservation, with instructions for conservators to forward the link to archaeologists as appropriate: OSG-L, the list of the Objects Specialty Group; ASG-L, the list of the Architecture Specialty Group (posted by Joshua Freedland); WAG-L, Wooden Artifacts Group (posted by Alexander Carlisle); and CIPP, Conservators in Private Practice (posted by George Schwartz).

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