



# Society for California Archaeology Newsletter

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Volume 35, Number 1

March 2001

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## Substrate

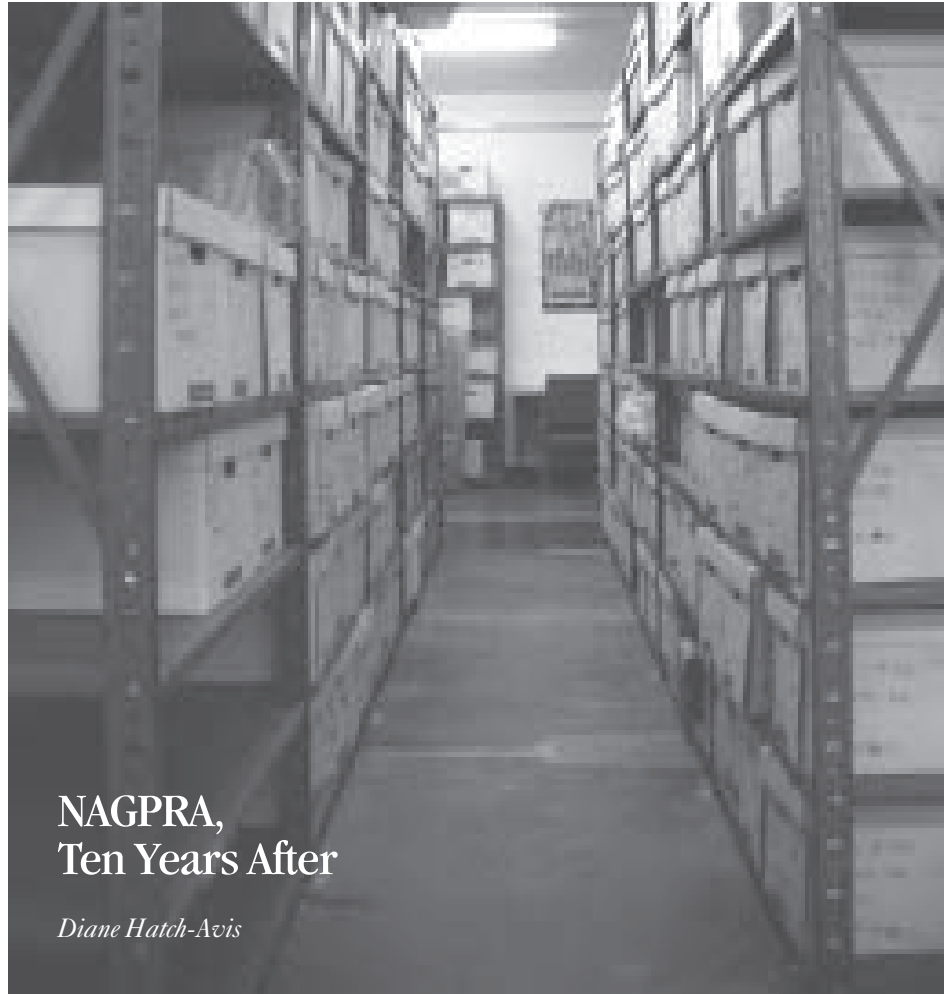
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Newsletter 9(4):2 (September 1975):

Position Open

"The Six Rivers National Forest is considering applications for a full-time assistant to the Forest Archaeologist, starting at \$8500-\$10,500 per year. Tentative requirements are: currently unemployed or underemployed, B.A. in anthropology, field and laboratory experience in California archaeology."

- Jerry Wylie



## NAGPRA, Ten Years After

*Diane Hatch-Avis*

*Fowler Museum storage facility. Ethnographic materials compose this main room and separate secured rooms house human remains and funerary associated objects.*

A bundle of sage bound by red twine rests on tulle mats by the entrance to the Fowler Museum's storage facility, left there by the Chumash consultants who work with the curator to identify funerary associated objects for repatriation. Its been more than a decade since NAGPRA was first introduced in Congress, and, although much work has been done in the inventorying of human remains, actual repatriation has lagged far behind. This article looks at two University of California museums, the Phoebe A. Hearst Museum of Anthropology and the Fowler Museum of Cultural History, and their progress in the repatriation process.

To understand repatriation it is necessary to understand the process itself. John Robbins of the National Parks Service is the Assistant

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A quarterly newsletter of articles and information essential to California archaeology. Contributions are welcome. Lead articles should be 1,500-2,000 words. Longer articles may appear in installments. Send submissions as hard copy or on diskette to: SCA Newsletter, Department of Anthropology, CSU Chico, Chico CA 95929-0400 or as email or attachments to:

<gwhite@csuchico.edu>

The SCA Executive Board encourages publication of a wide range of opinions on issues pertinent to California archaeology. Opinions, commentary, and editorials appearing in the *Newsletter* represent the views of the authors, and not necessarily those of the Board or Editor. Lead article authors should be aware that their articles may appear on the SCA web site, unless they request otherwise.

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*For Issue* . . . . . *Deadline*  
 March . . . . . February 20  
 June . . . . . May 20  
 September . . . . . August 20  
 December . . . . . November 20

#### Calendar Submissions

position open: . . . . . temporarily send submissions  
 to gwhite@csuchico.edu

#### Advertising Rates

1/4 page . . . . . \$70  
 1/2 page . . . . . \$100  
 Full page . . . . . \$175

Ads that run three or more consecutive issues receive a 15% discount.

# Society for California Archaeology Newsletter

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## From the President

This will be my final column and as President and I want to share with you what a pleasure it has been to serve our organization this past year. I have enjoyed working with our Executive Board, committees, and members. However, it is time for change and I look forward to serving on the new Executive Board with President Sannie Osborn and new Board Members Dana McGowan, President-Elect; Tom Wheeler, Northern Vice-President; and Trish Fernandez, Treasurer. I will miss working with our outgoing Board Members Tom Origer, Richard Carrico, and Kathy Dowdall. Over the last two years I have appreciated the counsel, support, expertise, dedication and friendship of all three. I especially appreciate Tom and Kathy bringing financial solvency back to our organization.

One perk I have enjoyed as President is the interaction I have had with my southern California colleagues. Having worked in Eureka for the past 21 years, I seldom had cause to venture south. In my capacity as President I have made several trips south and have met, interacted, and enjoyed working with many of you. I hope to not stay so isolated in the future.

Again, I continue to be amazed at how much time and effort so many of our members and committees devote to our organization and profession. It is this devotion that makes SCA successful. On February 2, I gave an oral presentation to the State Historical Resources Commission (SHRC). I wanted to inform or remind the Commission about who we are and highlight some of our activities. After explaining who we are and our mission, I highlighted our Native American Program activities and provided each Commissioner with a Sourcebook. Each Commissioner was also given a current issue of our *Newsletter*. I also talked about our Archaeology Month poster and

activities. Finally, I discussed the California Archaeological Site Stewardship Program (CASSP) and how successful it is. All of these activities are successful because of Janet Eidsness, Greg White, Nancy Fox, Deborah Tibbetts, Chris and Beth Padon, and all those other members who assist them.

On February 6, I met with Knox Mellon and welcomed him back to his position as State Historic Preservation Officer (SHPO). When I entered his office, he was reviewing the Native American Sourcebook he received at the SHRC meeting. Knox was very impressed with the Sourcebook and requested several more copies. He stated he is very impressed at how far SCA has evolved since his last tenure as SHPO. He stated he would assist our organization in any way he can.

It is a very rewarding experience to serve our organization. I encourage all members to consider serving on a committee or running for an office on the Executive Board. I especially encourage our student members to become involved. Call any SCA Committee Chair or Executive Board Officer for information; phone numbers and email addresses are listed in this *Newsletter*.

Finally, I encourage all members to attend our Annual Meetings in Modesto, scheduled for Friday through Sunday, March 23rd – 25th. Osteology Workshops are going to be held on Thursday, March 22nd. Kristina Roper, John Pryor, Shelly Davis-King, and Roger Lajeunesse have worked very hard in preparing for the meetings. I am very impressed with the quality of the program, social functions, and facilities that our Annual Meeting Team has pulled together. This is an Annual Meeting that nobody should miss.

See you in Modesto!

— Ken Wilson

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#### Tom King Award

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### Committee Reports

## SCA Information Center Liaison's Report

*Lynn Compas*

An Information Center Procedural Advisory Committee meeting was held in January. The information center master plan development subcommittees gave a progress report.

### User Groups-Needs Assessment:

This subcommittee is in the process of developing a survey to assess user needs. The Social Sciences Center at California State University, San Diego will be assisting with the development and review of the survey.

### Native American Issues Committee

This committee is developing strategies for dispelling misinformation about the IC's and getting effective input from the Native American community. In addition, they are developing a presentation to be given for different Native American communities about the electronification of IC data and control of access to it via the internet.

### Electronification/Data Management Committee

This committee reported that the HUB has been disassembled and is now being run by IS-MS, a private GIS company. One of the main issues that arose at the meeting is that there are potential problems with regard to the accuracy of the GIS data that has been created so far. The IC's need to establish procedures and guidelines in order to collect data from cultural resource consultants, electronify

existing and future data, maintain data and to disseminate the data. Other issues that the IC's need to address are employee training, internet security, and charges for use of the electronic data base.

### Miscellaneous Business

The IC's need to be recognized by the state as a system so that they have more support from the government and the Office of Historic Preservation. Once this is done more funding can be generated and policies can be made and enforced.



## SCA Proceedings

*Donna Day*

Submissions for the SCA proceedings are due by July 1, 2001. All submissions must be in Word, Wordperfect or .rtf format. Mail your submissions to Donna Day at day@jps.net.

## Avocational Committee

*Myra Herrman and Jerry Dudley*

### Avocational Luncheon/Workshop

The annual avocational luncheon/workshop will be held this year in Modesto on Friday, March 23rd at the Doubletree Hotel. Again this year, we

## SCA Business and Activities

will collaborate with the Archaeology Month Committee to choose a theme for 2002, discuss issues regarding avocational groups, and how we can better integrate into the SCA annual meetings. We have many thoughts and ideas on that issue and hope to have an open dialogue on our (avocational) commitment to the SCA and their commitment to us. If you haven't already RSVP'd for the luncheon, please contact me ASAP (no later than March 5th) to ensure a paid lunch. If you miss the deadline, you can still attend the workshop, just bring your own lunch or pay at the door (reservations limited to the first 25 people) to RSVP. I'll make sure to order enough just in case. Room location will be provided in the official program and at the registration table. If you have questions regarding the workshop, feel free to contact either Jerry Dudley or myself by phone or email. We look forward to seeing you all in Modesto this March.

### Volunteers Needed for California Preservation Foundation Meeting in San Diego.

The California Preservation Foundation (CPF) will be holding its annual meeting in San Diego this May during Preservation Week (see notice in this *Newsletter*). Volunteers are needed to help with setup, room monitors, registration, transportation assistance, etc. For every four hours of commitment, each volunteer will receive an equal amount of non-ticketed educational sessions, a 2001 CPF Conference T-shirt and our deepest gratitude. For more information on volunteering, contact Linda Espino at 619.702.3777 or via email at laespino@home.com.

### Get Involved!

It is that time of year when we begin to look to the summer and the increased activities in avocational Archaeology that may present themselves. The opportunities to volunteer and learn more about the

different aspects of this profession are often many and varied. These could include site monitoring, laboratory work, and field projects in either historic or prehistoric archaeology. We can offer our assistance to either a private or governmental organization and in doing so will expand the knowledge of that particular project.

To become even more qualified in the field of Archaeology, some education would be valuable and can often be obtained at many local State educational institutions. Also throughout the State of California, many varied Societies or organizations exist which will give a person access to information about local projects. Many of these organizations are planning field trips and activities for the summer, so contact and join them for a great summer. We will be including some information about local projects in the Archaeology Month brochure and would encourage input from interested parties in the future.

## Educational Committee

*Mary Gorden*

The Education Committee has a number of articles written by SCA members for teachers and the general public. The majority of the articles were designed to give a non-archaeologist a brief regional overview of a particular area in California. These articles are available for use in classrooms, outdoor education programs, and museums. Archaeology lesson plans and the Exchange Game are also obtainable upon request.

Please pass the word of the availability of these materials to friends and acquaintances who would find the material useful. Printing and mailing costs are charged.

Available overviews are:

- ▶ *Archaeology of the Sacramento River Region*, Janet P. Eidsness.
- ▶ *Archaeology of the Sierra Nevada*, Dick Markley.
- ▶ *Prehistory and Ethnography of the Central California Coast*, Terry Jones.
- ▶ *Prehistory of Northeastern California*, William Hildebrandt.
- ▶ *Prehistory of Northwestern California*, Sharon Waechter and William Hildebrandt.
- ▶ *The San Joaquin Valley's Prehistoric Human Past*, William J. Wallace.
- ▶ *Santa Barbara Regional Prehistory*, John R. Johnson.

Also available is a monograph by Joseph Chartkoff, Ph.D. titled, "Introduction to California Prehistory" and "Black Gold Rush," a brief history of the oil industry in California by Bill Rentoul.

## California Archaeological Site Stewardship Program 2000 Annual Report

*Beth and Chris Padon*

### Organization and Administration

The California Archaeological Site Stewardship Program (CASSP) is an activity of the Society for California Archaeology (SCA). The officers of the SCA and the CASSP committee provide direction and support. The CASSP committee includes: Richard Carrico, Duane Christian, Mary Gorden, Jim Gorden, Kirk Halford, Stephen Horne, Russ Kaldenberg, Janine McFarland, Beth Padon, Chris Padon, Judyth Reed, Mike Sampson, Anne Stoll, George Stoll, Jay von Werlhof, and Sherilee von Werlhof.



## SCA Business and Activities

CASSP is a network of concerned people who are committed to protecting California's rich cultural heritage. Site stewards promote protection through monitoring, education, research, and public awareness. Their on-site presence enhances the preservation of California's cultural resources for all. CASSP supports current volunteers and fosters new teams of professional archaeologists and trained volunteers as stewards.

Over the past year, CASSP has grown by gaining additional sponsors and supporters, including the Bishop Field Office of the Bureau of Land Management which signed the Memorandum Of Understanding to implement CASSP.

The CASSP committee met on April 21, 2000, during the annual SCA meeting in Riverside. The committee reviewed the program and planned future activities. We discussed funding sources, received updates from Rigdecree and Imperial County CASSP teams, and reviewed the program for the training workshop scheduled for year 2000. Committee members also agreed to continue to hold "virtual" meetings by email and to schedule our next in-person meeting during the annual SCA meeting in Modesto in March, 2001.

During 2000, four articles were prepared for the *SCA Newsletter* in order to report about the program to the SCA membership.

The committee was pleased to learn that the next team of volunteer site stewards will be sponsored by the California State Parks. Leslie Steidl, California Parks archaeologist, will serve as the coordinating archaeologist for a new team of site stewards who will monitor archaeological resources at Lake Oroville. The training workshop is planned for early 2001.

In August, SCA helped CASSP expand our communication capabilities by obtaining the domain

name "www.cassp.org" to use for a new web site about CASSP. The CASSP web site will be a community resource for information about archaeological sites that are open to the public, and about CASSP and the activities of the volunteer site stewards.

In July and August, Russ Kaldenberg, State Archaeologist for the BLM and CASSP committee member, wrote a grant proposal to obtain funds from the State Off-Highway Vehicle (OHV) Grant program, (also known as the Green Sticker program). This grant would fund training sessions to actively recruit volunteers from the OHV community for CASSP. On August 17,



Beth and Chris Padon assisted Russ at the public hearing meeting for the grant held at San Bernardino County Museum. They presented a brief overview of the program and provided handouts, a video program, and posters concerning CASSP. On November 2 in Riverside and on November 17 in Sacramento, Russ and Beth presented the CASSP proposal to the Off-Highway Motor Vehicle Recreation Commission members. The CASSP proposal was one of over 100 applications from local, state, and federal agencies. On November 17, at 5:15 pm, the Commission decided to fund the full required amount of \$98,000 for CASSP. The CASSP committee looks forward to organizing nine new teams of volunteer site stewards in 2001 and 2002.

### Budget

The money budget for CASSP for 2000 showed total revenues of \$2,500. Revenues are from the Bishop training workshop held on May 13, 2000. Total CASSP expenditures were \$2238.19 for the year. Expenditures included: SCA overhead \$375; Training support and preparation for Bishop workshop \$800; Travel reimbursements, expenses & lunches at workshop \$650; Administrative costs (mileage, equipment rental, graphic services) \$413.19.

The overall budget accounting for a volunteer program like CASSP must include time contributed by volunteers. Volunteer site stewards are expected to spend about one half day per month visiting and monitoring their site, and many volunteers spend more time. This means that CASSP received over 1600 hours of time from volunteer site stewards. In addition, committee members volunteered over 160 hours for meetings, presentations, and associated tasks. The total volunteer time for CASSP is approximately 1760 hours for the year 2000.

### 3. Volunteer Training Workshops And CASSP Activities

CASSP held its third workshop for volunteers on May 13 at the Owens Valley Paiute Shoshone Cultural Center in Bishop. Kirk Halford, archaeologist with the BLM, coordinates this team of site stewards and participated in the workshop. Twenty-five volunteers attended the workshop, where they learned about local prehistory and natural history, and participated in discussions about their duties as site stewards. The workshop included presentations by Judyth Reed, CASSP coordinating archaeologist for Ridgecrest; Steve Addington, supervisor of the Bishop Field Office; Bertha Moose, Big Pine Paiute/Shoshone elder; Anne Halford, biologist with the Bishop Field Office; and Beth Padon, archaeologist. Volunteers paid a registration fee of

## SCA Business and Activities

\$25. After they signed an agreement concerning ethics and confidentiality, and participated in a second day of training in the field with the coordinating archaeologist, these volunteers became stewards for specific archaeological sites. The people who have completed the two days of training at Bishop are: Pati Nolen, Bob Nolen, Jan Cassel, Dick Schneider, Derrick Vocelka, Mary Vocelka, Donna Vasquez, Toni Richards, Gordon Nelson, Margaret Bradburn, Larry Bradburn, Shalle Wells, Jean Dillingham, Kathy Duvall, Wilma Wheeler, and Bryce Wheeler.

These CASSP volunteers are already making a difference. Bishop site stewards have received their hats and name badges and are putting them to good use. In Ridgecrest, Judyth reports that site stewards continue to provide her with updated information and ready help for a variety of field projects. In May, CASSP site stewards from Ridgecrest and Imperial County participated in historic archaeology fieldwork at the deserted mining town of Reilly in Panamint Valley. CASSP site stewards had the opportunity to partner with the BLM Archaeology and Cultural Awareness Program and they assisted professional archaeologists with the survey, mapping, and test excavations at this site. In November, volunteers and BLM staff returned to Reilly for a three-day field session. In July, Jeff Lafave, CASSP site steward from Imperial County joined Beth and Chris Padon at the San Diego County Archaeological Society meeting. Beth presented an overview of the CASSP program and Jeff shared his own experiences with CASSP.

The CASSP committee is pleased to report such encouraging results for the second year of the program. We congratulate participating volunteers for helping to protect archaeological sites for the future. Currently, our list of people interested in site stewardship totals 191. We are maintaining this database with the desire to produce a CASSP newsletter.

### Plans for 2001

The CASSP has started several action items for 2001: (1) As a result of discussions with archaeologists from the California State Parks we have sent several copies of the workshop notebook from Bishop to California Parks personnel; (2) The next site stewardship training workshop will be held on March 3, 2001, in Lake Oroville with Leslie Steidl of California State Parks acting as the coordinating archaeologist, and (3) In March at Modesto, Committee members, Russ Kaldenberg, Beth and Chris Padon will meet with the BLM archaeologists to start planning for the new CASSP teams with the OHMVR community.

## Native American Programs Committee

*Janet Eidsness*

Baird Bryant has produced a videotape showing the awards ceremony and NAPC program honoring Katharine Silva Saubel at the 2000 Annual Meeting in Riverside, California. Those interested in obtaining this video should contact Baird Bryant for a copy of this professionally done video—he's charging \$30 a copy. His email address is <bryba@pe.net>. Lynn Gamble's presentation of the new award at the Saturday night dinner was very nice (see *Newsletter* 34(3):11-12). Thanks to Baird for finishing up this project and offering the record to interested folks!

## Annual Meeting Update

*C. Kristina Roper*

Information on the upcoming Society for California Annual Meeting is now available at [www.scanet.org/meetings.html](http://www.scanet.org/meetings.html). On our website you will find a meeting registration form.

If you would like to use this form to register, please print and complete the form and then either mail it to the address given or, if using a credit card, you may fax it to the SCA Business Office at (559) 561-6041.

An Osteology Workshop will take place Thursday, March 22, 2001, on the day before the start of the meetings. Only current SCA members are eligible to enroll in this special workshop. Additional information, including an application, is available on the SCA website referenced above. Current members will also receive an application with their registration packet. Space is limited so send in your application ASAP! All current members will receive registration forms in the mail in the next few days. Please note that hotel registration must be done with the hotel directly. The Doubletree Hotel is providing hotel rooms at a discount rate of \$84 for singles/doubles and \$94 for triples/quads. Please call the Doubletree Hotel directly at (209) 526-6000 to make reservations. Make sure you mention the Society for California Archaeology to get the special room rates. All reservations must be received by 3:00 p.m. on February 28, 2001 to get this special rate. After this date, the Hotel may continue this special offer, but no promises!

The program schedule will be posted on SCAnet on Sunday, Feb. 17, 2001. Other information will be posted as it becomes available.

We invite you to participate in this year's Annual Meeting! We are planning a fun and informative gathering! Hope to see you there! If you have any questions, please call me (559) 561-6011 or email me at [kroper@ix.netcom.com](mailto:kroper@ix.netcom.com).

*Contribute to the SCA Newsletter!*

*We need articles,  
committee reports,  
news, and opinion!  
[email gwhite@csuchico.edu](mailto:gwhite@csuchico.edu)*

## SCA Business and Activities

### SCA Wall of Fame

*Thomas M. Origer*

The Executive Board met in Sacramento on February 5, and among the many issues discussed was the Wall of Fame described in the December 2000 issue of the *SCA Newsletter*. The Board requested that I submit this missive to alert the membership that plans are being developed to carry this concept further.

All SCA members are invited to attend the Annual Business Meeting where the Wall of Fame will be an agenda item. Look in your Annual Meeting program for time and place when you get to Modesto. The purpose of the discussion will be to form a committee to guide the development of the Wall of Fame. Get in on the ground floor of this exciting and truly important endeavor.



*Kristina Roper at the February SCA Board Meeting.*



### Summary Minutes of the SCA Executive Board Meeting, February 5, 2001

*Location: Sacramento, California  
 Attending: Ken Wilson (President), Sannie Osborn (President-Elect), Tom Origer (Immediate Past President), Richard Carrico (Southern Vice President), Greg Greenway (Northern Vice President), Kathy Dowdall (Treasurer), Kristina Roper (Business Office), Kim Tanksley (Secretary).*

The Board reviewed the Minutes from November 3, 2000 Executive Board Meeting; minor editorial changes were made. Pending these corrections, the Minutes were accepted. It was suggested the responsibility for reviewing draft Board Meeting Minutes be assigned to each board member on a rotating basis; however, all board members would continue to receive and be invited to comment on the draft minutes. It was also suggested the Northern and Southern Vice Presidents be responsible for reviewing the Summary Minutes for inclusion in the

*SCA Newsletter*. All agreed and a motion to make these administrative changes passed.

Dowdall gave the Treasurer's Report. The monetary figures for the close of the calendar year ending December 31, 2000, showed a net income of \$18,429.85. This was due to \$14,000 in profit over budget projections and \$3,000 less in expenses than expected. Also contributing to this profit was the lack of committee and Executive Board expenses, doubling of business office sales, significant returns from the SCA Annual Meeting 2000, increased funds from Archaeology Week and on target returns for membership renewals.

There was discussion as to the increased costs associated with the production and mailing of the *SCA Newsletter*, the effects on the budget and printing options available. It was agreed more information was needed and the issue will be placed on the agenda for the next Board meeting.

Dowdall reported difficulties in tracking funds from committee and event expenses due to inadequate committee reporting and stressed the importance of accurate and timely reporting in regards to the handling of funds. The SCA must meet audit and IRS reporting requirements; especially critical in regard to labor costs. The SCA is responsible for providing 1099 forms for funds dispersed for labor, in excess of \$600, to people or businesses that have not been incorporated. Discussion with committee members is scheduled for the business meeting at the SCA Annual Meeting in March. Kudos went to Janet Eidsness, from the Native American Committee, whose committee reports are exemplary.

There was discussion on the increasing need for an administrative infrastructure as the SCA continues to expand. The SCA will need to retain an accountant for assistance in fulfilling IRS reporting requirements and as a reference source; the current accountant, working free of charge,



## SCA Business and Activities

will no longer be available. The tracking of labor expenses and reports may also require a bookkeeper, whose services are also currently volunteer labor. There is a strong need for obtaining a centralized post office box for the SCA. There have been long delays in receipt of time sensitive mail that has been caught in the "change of address" trails created by relocations and changes in board members. The cost of this infrastructure need will to be determined and budgeted for in the upcoming year(s).

Faith Duncan requested an extension on the agreement with the SCA to fund the Teachers Workshop ending in 2001. The Teachers Workshop did not take place two of the years covered in the agreed upon funding period; Duncan asked that the agreement be extended two more years. There were more issues to be discussed as to funding requirements so the issue has been carried over to the next board meeting.

Roper gave the Business Office report. The election returns were the most successful to date, with over 50% return rate. Dana McGowan will be the new President Elect, Trish Fernandez is the new Treasurer and Tom Wheeler will be the new Southern Vice President. The board discussed forming the nomination committee earlier to allow more time to recruit board participation.

Membership renewal notices have been successful with \$17,000 returned already. Roper also mailed membership forms to those whose memberships lapsed as far back as 1998. There was a favorable response here as well.

Gene Itogawa, Lynn Dunbar and Paula Jow from the Office of Historic Preservation (OHP) addressed the Executive Board regarding the State Parks Bond Program's \$10,000,000 Heritage Fund that was voted in on March 7th as part of the State Parks Bond Program. Of this \$10 million, approximately \$8.5 million will be used to fund cultural resource projects

within the program's restrictions and provisions. The OHP will administer the funds, which are to go toward restoration, acquisition and rehabilitation of cultural resources currently on or which have already been determined eligible for, the National Register, State Historical Landmarks and State Register. A matching funds requirement is being determined and a maximum distribution amount of \$1 million has been set for any one project. Their goal is to extend the funds as far as possible. The State's proposed schedule for receiving grant applications, determining recipients and funding projects is to be completed by the end of this year. The State Parks and Recreation Department (DPR) is focusing on history and architectural development projects but the OHP is pushing to have archaeology acquisition, protection, curation and interpretation included. Currently the DPR is not recognizing archaeology even though it is a legitimate purpose and has not advertised that archaeological projects are eligible to apply for funding. The OHP has asked the SCA to help

support the push to have archaeology recognized as a legitimate funding target. The Executive Board agreed. The Board agreed to have the OHP conduct a workshop at the Annual Meeting to discuss the Bond Act and get the word out that archaeology projects are eligible for consideration, include a statement in the SCA *Newsletter* and draft letters asking for recognition of archaeology by DPR.

Carrico spoke about an issue raised by Cindy Stancouski, Director of the San Diego Archaeological Center. Stancouski was notified of the discovery 240 boxes of artifacts in a San Diego Parks and Recreation (SDPR) Building that is being torn down. SDPR didn't know they had the artifacts and have no place to put them. Since the CEQA standards on curation facilities are so vague, every agency does it differently. Stancouski is having difficulty requiring developers to provide curation facilities/funding. It is a big issue, which she is trying to get into CEQA. The Executive Board agreed to send a letter of support to the Governor's Office.

*Russ Kaldenberg and Ken Wilson at the February SCA Board Meeting.*



## Reports and Announcements

There was discussion on the nominations for the various awards to be given at the Annual Meeting, production of award plaques and President Award recipients.

**Annual Meeting 2001:** Registration forms are going out. Roper asked that word be spread on the need for silent auction items. The arrangements for vendors are complete and preparations are proceeding smoothly.

**Annual Meeting 2002:** It has been extremely difficult to find a location for the Annual Meeting in the south. San Diego has been determined as the venue but the room costs are higher than usual. The SCA has grown to the extent that it is difficult to find locations large enough to host the event and yet the SCA is too small to obtain the large discounts on room rates given to organizations such as the AIA, who typically have 2000 attendees. Several board members and Myra Herrmann have looked extensively into options and there was general consensus that the Doubletree in Mission Valley will be the most likely venue; after a few space issues are resolved.

**Annual Meeting 2003:** The board is moving forward with holding the Annual Meeting in the Doubletree Hotel in Sacramento.

**Annual Meeting 2004:** The Board agreed to return to the Mission Inn / Holiday Inn Convention Center in Riverside for the 2004 meeting. Arrangements look good and there has been favorable feedback from members in regards to this venue.

Trudy Vaughn had planned but was not able to attend the Board meeting. She sent documentation discussing an easement held by the SCA on a landowner's holding in Shasta County. There is a prehistoric midden site within the easement and the inheritors of the estate want to "make the easement go away" so they may subdivide and sell the land. The site was recorded initially but needs to be rerecorded and evaluated. Discussion

occurred as to the enforceability of the easement, other options to protect the site, the liability of the SCA if we do give up the easement, etc.. The Board plans to review documents associated with the easement, look into the possibility and need of hiring a lawyer, reevaluate the site easement issue, and decide on a course of action. This issue is to be discussed at the next Executive Board Meeting.

Malcom Margolin, from Heyday Books, reported progress on the creation and production of a book on California Archaeology for the public. Brian Fagan is interested in writing it and Margolin is pursuing additional funding sources for high quality graphics. He anticipates the need of \$35,000 for creation of the book; not including his publishing costs. There was discussion on funding sources including OHP and the Forest Service, and the restrictions and timelines associated with the use of these funds. There was discussion on the form of sponsorship from the SCA and avenues of recognition. It was concluded that Margolin will create a business plan and timeline and Wilson, Osborn, Gene Itogawa and Margolin will review and discuss implementation options.

Russ Kaldenberg addressed the Board concerning an application to the Office of Highway Motor Vehicles (OHV) for grant money from "Green Sticker Funds". Funds from the OHV have been obtained through the BLM for site stewardship projects. Russ and Beth Padon have been working with and educating Off Highway Vehicle clubs on site protection and the possibilities of involving them as monitors. Russ Kaldenberg believes he can get \$10,000 for the SCA from the State's Green Sticker Funds.

There was discussion on a proposal by Meg Heath asking for \$16,000 to complete the writing of the California Handbook. Kaldenberg will be able to offer another \$5,000 towards that goal. It was asked and agreed that a representative of the SCA Executive

Board attend the SAA meeting in New Orleans to talk to educators, present the proposal by Heath and elicit support.

There was further discussion regarding the SCA "Wall of Fame" to recognize people who have contributed to California Archaeology and how to implement it. The "Wall of Fame" will be presented at the Annual Meeting and will be an annual occurrence. It will also be included on the SCA web site.

Kaldenberg reported on the Desert Millenium Conference hosted by the BLM, DPR and other groups. The conference discusses issues regarding the health of desert resources so they can be managed better. Kaldenberg asked if the SCA would be willing to sponsor the conference, which would allow the SCA logo to appear on the event poster. The Board agreed to sponsor the event so as to highlight archaeology as a resource also requiring protection. There was discussion as to methods of support the SCA could offer.

Breck Parkman spoke with the board on his plans to publicize the SCA Annual Meeting 2001. He is working with the media in Modesto, Sacramento and the San Francisco Bay Area to publicize the meeting. He is also in the process of developing an SCA expert list for the media to utilize when news stories break and they need input. This will help foster a relationship with the media for future events.

Parkman also reported on his trip to Russia as part of the Global Village Project. During his 21 days in Siberia he attended 50 meetings with groups and individuals such as the mayor, archaeologists, geologists, law enforcement, libraries, poets, artists, etc regarding cultural exchange. It was very successful. He is also working to create relationships with China and is looking into links with Hispanic heritage in California, Mexico, Peru and Cuba. The Global Village project has been very successful. The web

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## *Reports and Announcements*

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These Safety Guidelines refer mainly to the risks of handling ethnographic collections (organic materials such as objects made of feathers, plant fibers, animal skins, etc.) that have been housed for decades in museums or in private collections. The SCA Native American Programs Committee is hosting a special workshop at the Annual Meeting in Modesto on Saturday, March 24 from 9 a.m. to 5 p.m. on the topic: "Health Risks Associated with Contaminated Museum Collections: What We Know and Where We Need to Go."

### **Safety Guidelines for Handling Museum Collections**

<http://bss.sfsu.edu/calstudies/arttest>

*Prepared on Oct. 6, 2000 by:*

*Monona Rossol (Conservation Scientist, Arts, Crafts, and Theater Safety)*

*Jane Sirois (Conservation Scientist, Canadian Conservation Institute)*

- ✓ If you do not have information on any treatments applied to your artifacts, assume that hazardous pesticides are present.
- ✓ Wear nitrile gloves (not cotton nor latex gloves) while handling your artifacts.
- ✓ When removing gloves, do so such that your hands do not touch the exterior surface of the gloves.
- ✓ Always discard gloves and wash hands with soap and water after handling objects, and especially before eating or smoking.
- ✓ Wear a lab coat or other protective clothing to keep dust off clothing. Remove the lab coat when out of the areas or no longer handling contaminated material. Assess your work area. If there is visible surface dust, you should also wear shoe and hair coverings.
- ✓ Keep lab coats clean so as to avoid transferring dust and dirt.
- ✓ If possible, work with your material in a well ventilated area. For example, examine objects in an area outside of the storage location, (i.e. conservation lab with proper ventilation or fume hoods).
- ✓ Make sure you have medical certification to wear a mask or respirator and that you have an up to date fit test for your device. Assess your working situation, and choose an appropriate type of respirator and cartridges.
- ✓ Eating or drinking in the store room/ around artifacts should be prohibited.
- ✓ Ensure that work surfaces are well cleaned after they have been in contact with artifacts. Sponge-clean or wet-mop floors with soap and water.
- ✓ If there is any chance dust has gotten onto your clothing, remove your clothes as soon as you get home, bag and launder separately from other clothing.
- ✓ If you have any concerns about exposure, consult a board certified occupational medical doctor or toxicologist.

☎ If you have questions, email Monona Rossol at <Actsnyrc@cs.com>

## Reports and Announcements

site has had over 200,000 visitors from 100 different countries.

The Board discussed issues arising from the lack of scientific standards for archaeological field schools and will look into and work with other organizations to develop and adopt standards and promote field school accreditation.

There was a request from Myra Herrmann to support the California Preservation Foundation Meeting coming up in May, 2001. In return, the SCA would be allowed a table at the meeting for a display of membership materials. There are currently no funds allocated in the budget for this type of request and the SCA does not have a brochure created to publicize our organization. It is clear, involvement with other organizations is of benefit to the SCA. However, the Board agreed to hold off on this type of support until a formal brochure has been developed, funds in the budget are allocated for this use and a structure is developed as to how these requests are to be handled.

There was miscellaneous discussion on the low response to the request for artwork for the Archaeology Week Poster, ways of increasing involvement and the development of standards and templates for committee and annual meeting reporting requirements.

The Board agreed to supply \$2,500 to the Native American Committee to cover additional funds needed for the Native American symposium at the annual meeting in March. There was discussion as to the need for the NA Committee to develop a plan for future funding needs and ways to keep the committee self supporting.

The meeting was adjourned.

**SCA 35(2) Deadline  
is 20 May 2001**

### Announcements

## I-880 Cypress Replacement Project, Alameda County Public Outreach Highlighted in National Register Bulletin!

*Janet Pape*

Just off the press is a new National Register Bulletin, dated 2000, by the National Park Service dedicated to interpretive programs. The archaeology and architectural history public outreach for the Caltrans I-880 Cypress Replacement Project, Alameda County, is featured as a case study in this bulletin titled "*Telling the Stories: Planning Effective Interpretive Programs for Properties Listed in the National Register of Historic Places.*"

According to the National Park Service, most historic places represent the everyday lives of ordinary people. Many historic places were found in West Oakland and some of the stories of West Oaklanders have been told in the public outreach products for the Cypress project. The video "Crossroads: A Story of West Oakland" tells how the western terminus of the transcontinental railroad transformed a small community into a railroad "company town." Both still photographs and early motion picture footage were used in the video which illustrate the railroad's dominance in the area during the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Interviews with longtime residents portray the different ethnic groups who live in West Oakland, especially the Oakland Point Historic District which was determined eligible for listing in the National Register. The "Point" is still one of Oakland's largest and most intact Victorian neighborhoods. Elizabeth Krase was the Project Coordinator for the Crossroads video, and worked with the

historical consultant, Marjorie Dobkin, and Bill Jersey and Pierre Vallette of Quest Productions of Berkeley. Elizabeth Krase and Mara Melandry coordinated the advisory committee, made up of experts from local museums and libraries, with the consultants' work, and maintained a supervisory and editorial role over the content of the video. The video was a mitigation effort for the built environment.

Public outreach efforts were also created for archaeological sites discovered within the Cypress project area and eligible for listing on the National Register. They consist of a video, "Privy to the Past;" a mobile



exhibit, "Holding the Fort: African American Historical Archaeology and Labor History in West Oakland;" and a book, *Sites and Sounds: Essays in Celebration of West Oakland*. The video concentrates on information provided by archaeological investigations and oral history interviews on the daily lives of ordinary families living in West Oakland from the mid 1800s through the early 1900s. It follows the archeologists as they work ahead of construction activities, excavate archaeological "features," research historical documents, and interpret their discoveries. Artifacts from Chinese, white, and black households are examined for clues to the diverse ways of life of the 19<sup>th</sup> century residents. The video is being used as a teaching tool in many schools and universities. "Privy to the Past" is being marketed and distributed to



## Reports and Announcements

schools and universities worldwide by the University of California Extension – Center for Media and Independent Learning (510/642-0460). The mobile exhibit concentrates on the International Brotherhood of Sleeping Car Porters, the first black union in the United States, and their local struggle for better working conditions and wages against the mighty Pullman Company. This exhibit, which also features an archaeological collection from the Cypress project, will soon be on permanent display at the C. L. Dellums Amtrak station in Oakland. The book of essays tells many stories of the people and culture of West Oakland culled from the archaeological research. Essays cover a range of topics such as progressive women and environmental activism in West Oakland, jazz musicians, and a history of Oakland's Redcap porters. Most of the stories in these interpretive products were unknown until research was undertaken for compliance with state and federal laws.

Janet Pape, Senior Environmental Planner and Archaeology Manager for the Toll Bridge Program at Caltrans in Oakland, is also the archaeology manager for the Cypress project and maintained an editorial role over the public outreach products. She worked with the archaeology consultant, Sonoma State University, Anthropological Studies Center, and with other consultants in the creation of the outreach products. Writers for "Privy to the Past" include producer/director Bill Levinson of Alpha Spectrum Video Productions in Oakland, and Grace Ziesing and Dr. Adrian Praetzellis, both with Sonoma State University. The Sights and Sounds volume has numerous contributors, including Dr. Paul Groth from the Department of Architecture, University of California, Berkeley, and local historian Dr. Willie R. Collins. The volume was edited by Suzanne Stewart and Mary Praetzellis, both of Sonoma State University. The creation and development of the Holding the Fort exhibit was a collaborative effort among Caltrans,

the African-American Museum and Library at Oakland, and Sonoma State University.

The National Historic Preservation Act of 1966, as amended, directs the Secretary of the Interior and the State Offices of Historic Preservation to make available information concerning historic properties. The purpose of the new National Register bulletin is to help individuals and organizations develop effective programs to convey the meaning of historic places to the public. Copies of the bulletin can be ordered through the National Park Service at 202/343-8012 or by email at [nr\\_reference@nps.gov](mailto:nr_reference@nps.gov). The bulletin is also available on the National Register web site at [www.cr.nps.gov/nr/publications](http://www.cr.nps.gov/nr/publications).

### Governor Davis Appoints State Historic Preservation Officer

November 29, 2000, Governor Gray Davis announced the appointment of W. Knox Mellon as State Historic Preservation Officer. Dr. Mellon, 75, of Riverside, has been President of Knox Mellon and Associates, a consulting firm specializing in Historic Preservation, Oral History, Historic Research and

Strategic Planning, since 1984. His experiences as State Historic Preservation Officer from 1977 to 1984, executive secretary to the State Historic Resources Commission, and as a former member of the Riverside Historic Resources Board, provide him with a unique experience and knowledge of California historic preservation. Dr. Mellon will receive a salary of \$90,852. This position does not require Senate confirmation.

### Missoula Historic Preservation Office Seeks Advice

*Philip Maechling*

The Missoula Historic Preservation Office is currently working on a site management process for the "Travelers Rest" site, near Lolo Montana, on the Nez Perce Trail/Lolo Trail/Lewis and Clark Trail. The general location of this 3000 year old campsite is identified, but not completely verified. That process is beginning now. Could SCA members who are interested please let us know of responsible examples of management plans for sites where a full site investigation has not been completed, and where there is considerable site value for native peoples?



## Annual Meeting Agenda

### Preliminary Program, 2001 Society for California Archaeology Annual Meeting March 22-25, 2001 in Modesto, California

#### ***THURSDAY, 22 MARCH***

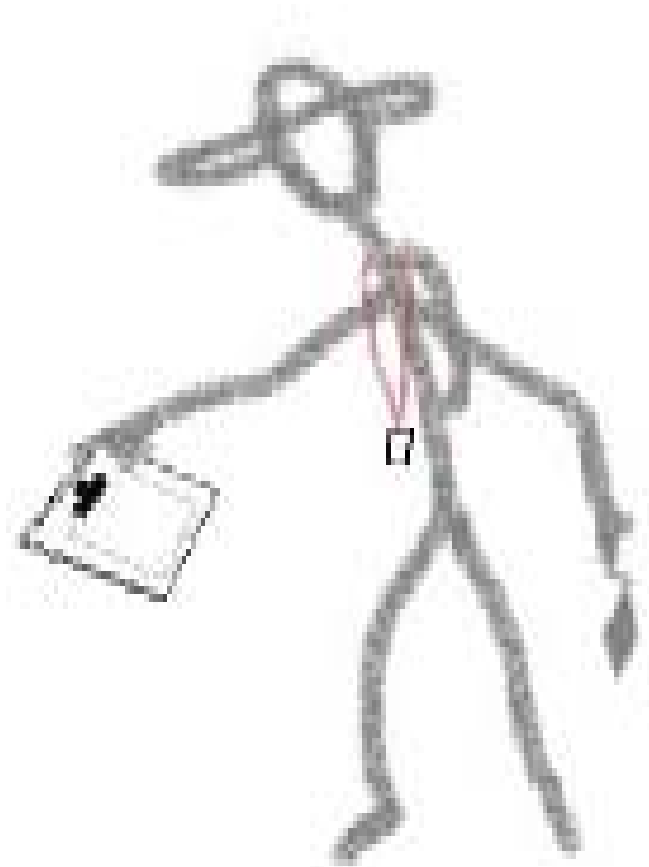
8-11:30 am , *Osteology Workshop*, San Jose Room

1:00 - 5:30 pm, *SCA Executive Board Meeting*,  
Modesto Board Room

1:00 - 4:30 pm , *Osteology Workshop*, San Jose Room

3:00 - 6:00 pm, *Meeting Registration*, Hotel Foyer

6:30 - 10:00 pm, *Exhibit Room Setup*, Arbor Theatre



#### ***FRIDAY, 23 MARCH***

8:00 am - 5:00 pm, *Meeting Registration*, Hotel Foyer

9:00 - 11:30 am, *Plenary Session*:  
**2001: A Space Odyssey – New Perspectives on  
Time and Space in Archaeology**

8:30 am - 5:30 pm, *Exhibits / Book Room*

12:00 - 1:30 pm, *Roundtable*:  
**Avocational Society / Archaeology Month Lunch**

Chair: Myra Herrmann, Jerry Dudley, Nancy Fox

1:30 - 3:30 pm, *Workshop*:  
**State Parks Bond Act - Archaeological Dollars**

Chair: Gene Itogawa, Office of Historic Preservation

1:30 - 3:30 pm, *Workshop*:  
**Field School Standards and Accreditation**

Chair: Don Hardesty, University of Nevada, Reno

1:30 - 4:50 pm, *Roundtable*:  
**CARIDAP: Sparse Lithic Scatters Revisited**

Chair: S. Alvarez and C. Whatford

Participants: G. Gates, K. Miller, S. Alvarez, C. O'Brien, R. Jackson

1:30 - 4:50 pm, *Symposium*:  
**Early Holocene Adaptations of the North Coast Ranges:  
New Perspectives on Old Ideas**

Chair: R. Fitzgerald and W. Hildebrandt

Participants: W. Hildebrandt, J. West, R. Fitzgerald, L. Weigel,  
G. White, A. DeGeorgey, J. Rosenthal, J. Meyer

1:30 - 4:50 pm, *General Session*:  
**Southern Coastal/Island Archaeology**

Participants: A. Graesch, J. Arnold, T. C. Rick, R. L. Vellanoweth,  
J. M. Erlandson, E. Bertrando, J. Sharp, D. Dartt, J. F. Porcas, S. L. Andrews

1:30 - 4:50 pm, *General Session*:  
**New Perspectives on California Prehistory**

Participants: J. L. Chartkoff, S. A. Waechter, M. Kowta,  
K. L. Hull, K. Gobalet, W. Preston

5:00 - 6:30 pm, *SCA Business Meeting*

7:00 - 10:00 pm, *Reception and Silent Auction*, McHenry  
Museum

## Annual Meeting Agenda

### SATURDAY, 24 MARCH

7:30 - 8:30 am, *Breakfast Planning Meeting*

8:00 am - 5:00 pm, *Meeting Registration*, Hotel Foyer

8:30 am - 5:30 pm, *Exhibits / Book Room*

8:50 - 11:50 am *Symposium:*

#### California State Parks Archaeology

Chair: E. Breck Parkman

Participants: E. B. Parkman, J. Woodward, G. Farris, L. Felton, C. Hunter, T. Muranaka, R. Pettus, J. M. Allan, P. Hines, M. Sampson, K. Lindahl, M. Kennedy, H. Dallas, S. R. James, J. Wait, L. Gamble

8:50 - 11:50 am, *Workshop:*

#### Health Risks Associated with Contaminated Museum Collections

Chair: Janet P. Eidsness and Yolanda Chavez

Participants: N. Caldararo, M. Rossol

8:50 - 11:50 am, *Symposium:*

#### Untapped Resources and Unintended Consequences: Archaeology and the Public

Chair: Beth Padon

Participants: A. Praetzelis, J. Pape, J. LaFave, P. Smith, R. F. Beck, R. Allen, R. L. Kaldenberg, G. T. Gross, A. E. Ramsay, D. Gillette, J. Johns

10:30 - 11:50 am, *General Session:*

#### Sierran and Great Basin Archaeology

Participants: K. M. Cuevas, M. A. Giambastiana, M. G. Delacorte, M. E. Basgall, K. R. Way, N. Stevens

1:30 - 4:30 pm, *General Session:*

#### Recent Research in Northern California

Participants: R. J. Losey, C. Morgan, T. Wise-Harthorn, J. Haines, E. Kallenbach, A. Huberland, E. Dwyer, M. Trumbly, S. M. Gleason, C. Dillian

1:30 - 4:50 pm, *Symposium:*

#### California State Parks Archaeology (continued)

1:30 - 4:00 pm, *Workshop:*

#### Health Risks Associates with Contaminated Museum Collections (continued)

1:30 - 4:50 pm, *Symposium:*

#### Material Culture and Site Interpretation in California Historical Archaeology

Chair: S. Silliman, B. Voss, A. Ramsay

Participants: J. Costello, K. Swope, H. McCarthy, J. Marvin, A. P. Graesch, A. Martinez, E. Dwyer, S. Silliman, R. Hirata, R. K. Skowronek, R. L. Bishop, J. Blackburn, S. Ginn, M. G. Heras, R. V. May, B. Voss, E. I. Pappas, A. E. Ramsay

1:30 - 3:10 pm, *Symposium:*

#### Bioarchaeology and California Prehistory

Chair: Robin Cordero

Participants: D. L. Grady, V. A. Andrushko, K. A. Latham, A. Pastron, R. Cordero, E. J. Bartelink, S. E. Hollimon

3:30 - 4:50, , *Poster Session:*

#### Poster authors will be available for questions

Participants: R. LaJeunesse, J. Pryor, M. Glassow, P. Paige, J. Perry, W. Bloomer, J. Betts, S. Lindström, R. Edwards

4:00 - 5:00 pm, *Native American Programs Committee Meeting*

6:30 - 10:00, *Annual Awards Dinner*

#### Theatrical performance by Duende Presentations: *Friendly Fire: A 49er's Life with the Miwok*

### SUNDAY, 25 MARCH

7:30 - 9:30 am, *SCA Executive Board Meeting*, Modesto Room

8:00 - 11:00 am, *Meeting Registration*, Hotel Foyer

8:30 - 12:00 noon, *Exhibits / Book Room*

8:50 - 11:30 am, *General Session:*

#### Recent Investigations in the Southern California Interior

Participants: N. Whitney-Desautels, H. Koerper, M. Macko, J. Couch, M. J. Hale, K. M. Collins, J. Brock, B. D. Smith, J. von Werlhof, D. J. Scott

8:50 - 10:10 am, *General Session:*

#### Challenges in Cultural Resources Management

Participants: J. D. Binning, M. Herrmann, E. Bowden, D. Hubbs

8:50 - 11:30 am, *General Session:*

#### Historic Archaeology and Rock Art Research

Participants: A. Cannon, A. Ruby, N. Thomas, G. Perissinotto, M. Imwalle, R. Edwards, C. Simpson-Smith, N. Smith, J. Rogers, B. M. Crespin

12 noon - 3:00 pm, *Exhibits / Book Room Take-down*

*Thanks for Coming, and Please Drive Safely*

## New Publications



This series offers an annotated bibliography of recent published and some unpublished literature pertinent to current debates and methods in Californian archaeology. Prehistoric and historical archaeology will appear in alternate issues. If you have any news or ideas about how this section can better fit the needs of its audience feel free to email the authors: DThomas2@exchange.csuchico.edu or dellriott@psln.com. Please limit contributions to those that can be easily accessed by all members of the SCA and have appeared within the last five years.

Silliman, Stephen W., Paul Farnsworth, and Kent G. Lightfoot  
2000 Magnetometer *Prospecting in Historical Archaeology: Evaluating Survey Options at a 19th-Century Rancho Site in California*. *Historical Archaeology* 34(2):89-109.

This article evaluates the performance of two magnetometer instruments under variable conditions. Geophysical survey allows historical archaeologists to detect anomalies that may represent subsurface features and architectural remains. This strategy is often cost-effective, time-efficient, and non-invasive. This geophysical survey was done at Petaluma Adobe State Historic Park, consisting of three different surveys using the proton-precession magnetometer and the alkali-vapor magnetometer. The variables considered in this study include data quality, practicality, and relative cost. The authors outline the following sections: Description of study area, methods, instrumentation (magnetometer type, sensor configuration, sensor heights, data collection intensity, and basestation correction procedures), survey cases, data processing, results of survey, and interpretation. In conclusion, the authors report findings in five areas. First, the newer model of the alkali-vapor magnetometer (used in gradiometer mode) tended to function better than the proton precession magnetometer. Second, surveys using gradiometer modes (with both instrument types) produced more refined data sets compared to total field magnetometer surveys. Third, sensor height was the most important variable in evaluating the quality and type of data received by the magnetometer. Fourth, the single-sensor cesium magnetometer allowed for more intensive surveys under the same time constraint due to their high-speed data acquisition rate. Finally, they recommend that technicians should apply basestation correction procedures (except when using gradiometers).

Although this article is meant to guide historical archaeologists in the selection and use of magnetometers, the

authors state that site-specific characteristics and research objectives should be considered when choosing geophysical survey equipment.

Mallea-Olaetxe, J.  
2000 *Speaking Through the Aspens: Basque Tree Carvings in California and Nevada*. Reno: University of Nevada Press.

Mallea-Olaetxe continues his research of Basque-American history by investigating arborglyphs located in Nevada and California. Previous publications of aspen carvings have been written by non-Basque individuals. Mallea-Olaetxe, as a Basque immigrant, offers a unique perspective of the literal and substantive interpretation of this type of art and inscription. The images that are carved into the trees are self-evident; however, the words are usually not in English. Therefore, direct translation is critical in comprehending the Basque shepherd's perspective. Beyond the task of interpretation, the author states that many of these etchings provide a large body of historical and cultural information. For instance he states that, "...even though many messages 'scream' loneliness and depression, in many other cases the shepherders seem to have been 'preaching in the desert' when they inscribed their musings on trees. My reaction was that finally, the inscrutable Euskalduna had 'spoken' for history" (2000:14). The majority of the arborglyphs (90%) consist of names and dates. Names and dates placed in their geographic context can provide direct and reliable data about movement patterns or simply provide a "census" of those individuals who were often overlooked on a national level. Other aspen carving themes include female figures, animals, self-portraits, and Euskara. Euskara is the traditional language of the Basque and its many inscriptions suggest ethnic pride in the American West. In addition to narration, the book includes numerous pictures and sketches of the arborglyphs. Mallea-Olaetxe also includes appendices that contain the list of herders by years and geographic location as well as recording methodology.

### Web Sites of Interest:

DoD California Statewide Inventory  
<https://www.denix.osd.mil/denix/Public/ES-Programs/Conservation/Legacy/Historicbuilding/CA/historicldg.html>

California Indian Basketweavers Association  
[www.ciba.org](http://www.ciba.org)

CRM Employment  
<http://www.sscnet.ucla.edu/ia/afs/testpit.html>

CRM Professional Mailing List  
<http://www.acra-crm.org/>

SouthWest US Work Resource Link  
<http://www.swanet.org/jobs.html>



## *The SCA Community*



### **New Corporate Members for 2000**

- ✓ Applied EarthWorks,  
Inc.
- ✓ Brian Mooney &  
Associates
- ✓ Far Western  
Anthropological  
Research Group
- ✓ Holman and Associates
- ✓ KEA Environmental
- ✓ Pacific Legacy, Inc.
- ✓ PAR Environmental  
Services

## The SCA Community

### Society for California Archaeology Membership Survey Report II

Thomas Wheeler

This is the second and final installment of a report on the Membership Survey carried out between April 1999 and April 2000. The survey questionnaire was distributed to all member of the SCA through 1) direct handouts at the Meeting, 2) through the SCA *Newsletter*, and 3) on the SCA Web site. The total population of the SCA at the time of this survey was set at 820 members. This figure is based upon the number of members reported to the Board at the 1999 Annual Business Meeting. Total number of respondents to the survey was 117. A complete discussion of the survey, and how it was carried out may be found in SCA *Newsletter* 34(4) issued in December of 2000.

The following covers responses to six questions. Many of the responses were similar, falling into recognizable categories. Others were singular in their interest, off topic, or too humorous to be considered seriously, as the suggestion to improve the Annual Meeting with “Hosted bars”, and “Free Flowing Booze.” Some questions, such as how to improve the *Newsletter*, or the Society, derived several replies from a single respondent. Each suggestion within a single response was treated and numbered individually as a single response. This allowed the accretion of multiple suggestions under a single question. Consequently, although there were generally between 98 and 111 responses to each questions, each respondent may have provided several suggestions, increasing the total replies to each question. The following are the questions asked and summaries of the responses offered.

**What features of the SCA are most useful to the membership?** This question derived over 122 replies by 99 respondents (Table 1). The Annual Meeting and *Newsletter* were considered the most useful features of the Society. Data Sharing meetings, networking opportunities and the Membership Roster were also considered useful.

**What changes would the membership like the Society to make?** This question received forty-five responses consisting of multiple suggestions. Table 2 marks my best effort to summarize these responses.

**What features of the *Newsletter* are most helpful to the membership?** This question received 77 responses listing over 122 features considered important to the membership. I have attempted to categorize these in Table 3. Lead and current research articles are clearly of greatest interest to the members, with current events, the calendar, and general articles on current research, technical studies following in interest.

**What features of the *Newsletter* could be improved?** This question received forty-three widely varied responses, not all of which could be enumerated within identifiable categories. Table 4 reflects categories of improvements suggested by the respondents. Additional *Newsletter* features requested included reports on ROPA, a Bulletin board, Calendar listings, and a desire to move toward a Journal format. Respondents also requested a stronger voice in standards and compliance issues in local government. Three respondents expressed an interest in an Editorial Column discussing current issues and controversies. Although three respondents expressed an interest in reports from Native American communities, one thought the *Newsletter* was too Indian centered. Interest in reports concerning Cultural Resource Management was also countered by those who thought the *Newsletter* was too centered on CRM issues, and lengthy CRM reports amounted to service advertisements. An increased focus on academic reporting was sought in articles on current research, method and theory, and the presentation of statistical data. While another respondent thought current reporting was too scholarly, and one wanted more emphasis on teaching.

**How important is the society’s pursuit of legislative interests?** This question received 111 responses. A total of 93 % found this activity important to very important to the interests of the Society membership.

**How well do you think California’s cultural resources are being properly protected by the CEQA and NEPA consultation processes?** Two questions were posed to determine how the membership perceives the effectiveness of resource protection under CEQA and NEPA. A total of 98 responses were received from a total of 117 completed questionnaires. Responses are noted in Table 5 and 6. Replies to this question clearly show a perception of greater protection under NEPA than CEQA.

**What course(s) have been most useful to your career in archaeology?** Questions aimed at identifying course work that was considered most valuable in the careers of the membership received 98 responses. Between one and three courses were considered valuable by the respondent. Table 7 reflects a categorization of those responses.

Table 1: Organization Features Considered Useful.

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## *The SCA Community*

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*Table 2: Suggested Changes in the Society.*

*Table 3: Newsletter Features Considered Useful.*

*Table 4 Suggested Newsletter Improvements.*

*Table 5: Pursuit of Legislative Interests.*

*Table 7: Perspectives on NEPA Protection.*

*Table 6: Perspectives on CEQA Protection.*

*Table 7: Perspectives on Useful Course Work.*

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*If you have any questions  
regarding this survey  
please email [2thomas@cwo.com](mailto:2thomas@cwo.com).*

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## Editorials

# Some Aspects of the Prehistory of the California State Information Centers

Thomas F. King



The Information Centers that maintain data on archaeological sites (and sometimes on other historic properties) around the State of California are generally taken for granted by CRM practitioners. It's worth noting that few other states have anything very similar, and that there's a reason for this. The Information Centers are not the fruits of careful planning by the SHPO or anyone else, but the products of their own peculiar history, in many ways an accident that other states have little reason to emulate. Greg White has asked me to reflect on the system's prehistory, and I'm happy to do so, insofar as my failing wits will allow.

Let me take you back to the Early Middle Horizon in the practice of California archaeology. During the Early Horizon, U.C. Berkeley stood like a colossus over the field. Home of the Archaeological Survey, creator of California Archaeologists, and very importantly, sole repository of archaeological site records. But now it's the late '60s. Heizer is aging, and sending most of his students off to ogle the Olmec. Berkeley is beginning to lose its grip. Upstart programs at Sacramento State, San Francisco State, Davis, Chico, UCLA, Long Beach, and San Diego are clamoring for their places in the sun. One bit of warmth and light they would like to steal, Coyote-fashion, from the Creator is the information-energy represented in the State site files, with all those charming trinomials.

There is also this whole new, highly suspicious, cultural influence that's slithering in over the Sierra from Washington DC, of all places – something called the national historic preservation program, built around a “National Register of Historic Places.” Widely believed by archaeologists to be merely a way for pothunters to get into the records, the Register in California is to be coordinated by the always suspect State Department of Parks and Recreation. Which would also like to get the records. And then there are FEDERAL AGENCIES, of all things, notably the Forest Service, that thinks IT'S entitled to records on sites it manages.

Berkeley was not much interested in sharing. So we're not doing California archaeology these days, Heizer would say; but we might again someday, and then my students will need those records, so here they stay. You can come in and look at them, you unwashed State College and lower-echelon University types, and MAYBE even a few of you Staters and Feds, but only on our terms, by our leave, when it's convenient for us. It was infuriating to those who were not

Berkeley grad students. Silly, in retrospect, but infuriating nonetheless.

So raids began to be made; scaling ladders thrown up against the parapets, tunnels driven under the walls. Some of us were dumb enough to plot rather openly about ways to siphon off the records. Well, only one of us was, really, and I managed to dodge the thunderbolts thrown after me. But most were more subtle, and a lot more effective, and the records began to slip out of Berkeley's control.

Naturally, what they slipped INTO were the institutions that were doing research in particular areas, and that were building up their own, independent site files. The hierarchical organization of the Early Horizon collapsed, and the feudal states of the Middle Horizon parceled out and struggled over the riches they had inherited.

But the minor principalities and some of their barbarian allies – avocational groups – had formed an alliance called the SCA, which about this time – about 1970 – came under the heavy influence of a charismatic culture hero from far, far in the east. McGimsey of Arkansas, who brought the message that if archaeologists would just get involved in the political processes of the larger society, they could do great things. Like get major State funding for ongoing, State Archaeological Surveys, as he had in the dismal depths of the Ozarks. Despite some nattering by State Archaeologist Fritz Riddell, who kept saying that we ought to be paying attention to this strange new law called CEQA, by about 1972 the SCA was fully engaged in Arkansas emulation. During my presidency we launched a full-scale effort to get legislation passed creating a California Archaeological Survey, a shameless rip-off of McGimsey's creation.

To promote our legislation, we had to organize, and we did. We acquired a lobbyist (whose soon-to-be ex-wife was to become a major force in contract archaeology – for the rubber Marshalltown, who can name him?), and – more importantly for this tale – managed to develop operatives in virtually every legislative district in the State, who beat the drum for the “CAS.” To coordinate this lobbying effort, we divided the State into regions, each with either an institutional archaeology program or a solid avocational group in charge of rallying the troops and pointing them toward their objectives.

The legislation passed, but was vetoed by then-Governor Ronald Reagan. A major discouragement, though in retrospect perhaps a good thing. But the organization we had developed persisted; the SCA continued to maintain Regional Coordinators, usually based in institutions with regional research interests, but with archeopolitical and public relations duties.

And then came the *Mammoth* Decision, which extended the application of CEQA to all projects regulated by subdivisions of the State government – i.e. virtually all development. The SCA was quick to seize the main chance



by publishing guidelines for dealing with archaeology when doing Environmental Impact Reports. The guidelines had no official standing, of course, but in the wild days following *Mammoth*, they didn't need it; developers were frantic for direction, and the SCA generously provided it. It became boom time for archaeologists; the persona of "free lance archaeologist" – a few years before little more than a joke on Rob Edwards' business card – suddenly became a reality. But the outfits that were in many ways best equipped to cash in on the boom were the institutions that housed the SCA Regional Coordinators – because they had fingers on their regions' political pulses. And they were especially well positioned if they controlled the regional site files. They could become dominant, authoritative forces in defining how archaeology would be done in their regions under CEQA. From this base, the network of regional information centers would evolve.

Having litigated myself into unemployment in the State, I fled across the mountains at about this time, and my knowledge of the centers' development after 1974 is thin and unreliable. But what I know about their deep prehistory leads me to these generalizations:

1. They were developed by archaeologists, for archaeologists.
2. They were never intended to manage information about the full range of historic properties, to say nothing of cultural resources that are NOT historic properties.
3. They were developed, in their early days, with virtually no involvement of Indian tribes or other descendant groups.
4. They were concerned about the information value of archaeological sites, not about other historical and cultural values.
5. They had virtually nothing to do with the State Historic Preservation Office program that was developing under the National Historic Preservation Act. Eventually the two institutions would grow together, but it does not seem to me that it's ever been exactly a marriage made in heaven.

To the extent an information center continues to display these artifacts of its creation, it needs to be understood for what it is. Not a bad thing, but not a qualified interdisciplinary, public-oriented coordinator of cultural resource management – nor even historic preservation — in its region. No doubt some centers have evolved into better things, have grown with the times. But others, I would imagine, remain prisoners of their prehistory.

*Please forward your ideas for future editorials  
gwhite@csuchico.edu*

## Identifying California Indian Consultants

*Janet P. Eidsness, Chair  
SCA Native American Programs Committee*

Because many proposed actions and undertakings in California have the potential to impact Native American heritage resources, it is necessary for CRM practitioners to document efforts to identify and consult with those Native Americans who may have concerns. This article offers suggestions about how to identify the appropriate California Indian consultants with reference to the requirements of State and Federal heritage preservation laws.

*Chuck Striplin, Ohlone Cultural Heritage Consultant, Demonstrates a Traditional Soapstone Lamp on a Recent Archaeological Project.*



Under CEQA as revised, a *building, structure* or *site* shall be considered by a lead agency to be "historically significant" if it has integrity and meets one or more of the criteria for inclusion in the California Register of Historical Resources (Public Resources Code §5024.1, Title 14 CCR, Section 4852). The California Register criteria mirror those established for the National Register of Historic Places. Similar to the provisions of Section 106 of the National Historic Preservation Act (NHPA), CEQA includes consideration of places referred to as *traditional cultural properties* (TCPs). As defined in *National Register Bulletin 38* (P. Parker and T. King 1992), a TCP is defined generally as one that is eligible for inclusion in the National Register "because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community." Examples of TCPs significant to California Indian people include: locations associated with the traditional beliefs of a group about its origins, its cultural history, or the nature of the world (e.g., Ironside Mountain, sacred to the Chimariko); locations where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice (e.g., Helkau District, subject of G-O Road controversy); locations where a community has traditionally

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carried out economic, artistic, or other cultural practices important in maintaining its historical identity (e.g., beargrass collecting areas for basket making). Properties that have been formally determined eligible for or are listed in the National Register automatically qualify for the California Register.

Consultation with Native Americans having traditional ties to a project area is absolutely crucial to identifying whether or not TCPs exist within the area of potential effects (APE) of a proposed action or undertaking (see *National Register Bulletin 38*). Standard archaeological field surveys are unlikely to locate TCPs because artifacts and cultural features may not (and need not) be associated. Published ethnographic accounts may provide data about places that qualify as TCPs, however, consultations with living people are necessary to identify those values that make places critical to maintaining and promoting Indian peoples' unique cultural identities and traditions.

Listed below are suggestions about how to identify the appropriate California Indian consultants when there is a potential for Native American cultural sites (prehistoric archaeological sites, TCPs) that may be affected by a proposed action or undertaking. It should be noted that when your project falls within the boundaries of Tribal (Reservation) lands, protocol requires that you consult with the appropriate Tribal Government.

**(1) Contact the Native American Heritage Commission (NAHC).** The place to start is the NAHC at 915 Capitol Mall, Room 364, Sacramento, CA 95814 (telephone (916) 653-4082, fax (916) 657-5390, website at [www.nahc.ca.gov](http://www.nahc.ca.gov)). NAHC staff maintain a contact list that is inclusive of all interested California Indians (non-Federally recognized and recognized Tribes, organizations, groups and individuals). A request for a contact list must be in writing (mailed or faxed) and include the project name and location by county. Staff will provide you with a contact list compiled at the time of your request for your specific project. The NAPC is a good starting place, but is only that—further contacts should be sought (see below). The confidential “Sacred Lands Inventory” is also maintained by the NAHC. Requests for checks of this incomplete but important inventory must be in writing and provide the name of the project and its map location by Township(s), Range(s), Section(s) and Baseline/Meridian.

**(2) Ask Native Americans for Additional Contacts.** Indian people are in the best position to tell you who might have knowledge or be interested in consulting about a project at a specific locality. Ask for referrals from those you initially contact.

**(3) Check Reports Filed at Information Centers.** CRM reports filed at the regional Information Centers of the California Historical Resources Information System

(CHRIS) often identify Native Americans who were involved in past projects, perhaps as consultants or interested parties, monitors or team members. For a fee, you can check these reports yourself or request that the IC staff review reports in order to compile a list of previously identified Native American consultants.

**(4) Talk to Your CRM Colleagues.** University groups, agency folks and other CRM practitioners who have worked in a region for some time should have a good working knowledge of Native American tribes, groups and individuals who may be interested in being notified about, consulting and/or commenting on your project.

**(5) California Indian Assistance Program (CIAP) Field Directory.** The CIAP of the California State Department of Housing and Community Development regularly compiles an updated *Field Directory of the California Indian Community* (contact CIAP at 1800 Third Street, Room 390, Sacramento, CA 95814, telephone (916) 445-4727, fax (916) 323-6016). This resource offers a full-page of updated information for each Federally recognized tribal government in the state; lists California Unacknowledged Tribes and California Indian Tribes/Groups without Federal recognition; identifies Unterminated Rancherias; lists Indian Reservations and Rancherias by county; and provides useful references to various State, Federal and other programs for California Indian people (e.g., California Indian Legal Services, California Indian Housing Authorities, USFS and NPS tribal program officials in California, etc.).

*(Author's Note: This article was written in coordination with and in response to comments received from Larry Myers, NAHC Executive Secretary, concerning an article that appeared in Newsletter 34(4) by Richard Jenkins about his efforts to contact the appropriate Native Americans to repatriate a bead collection from a private landowner).*

*Kesner Flores, Environmental Coordinator for Cortina Patwin, Participates in a Recent Investigation in Colusa County, California.*



## Seasonality Studies and Deer Teeth: An Introduction to Dental Increment Analysis in California

Christopher J. O'Brien

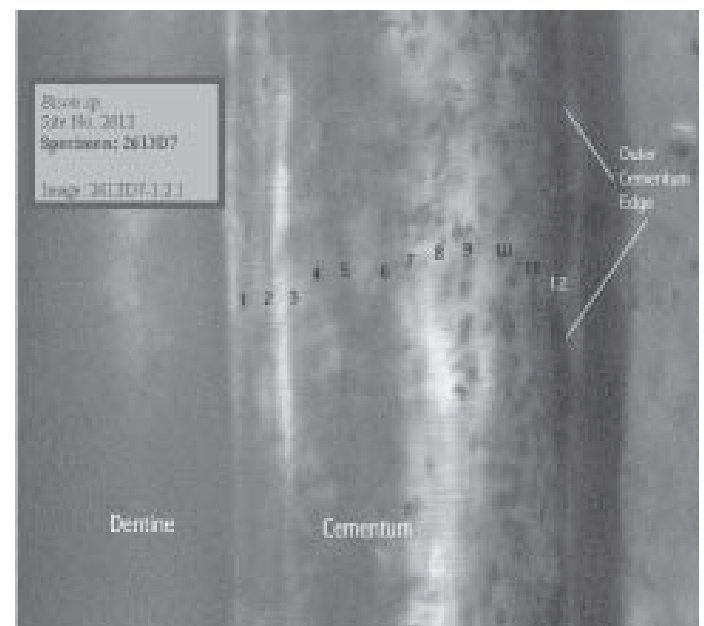
Two decades ago, Monks (1981) lamented that seasonality studies are a “nonexistent phenomenon” in archaeological method and theory. After twenty years of thought on the subject it is difficult to argue that things have much changed. And why should they? As Thomas (1986) noted, the study of seasonality is an empirical domain “rich in archaeological facts: lots of seeds, plant parts, pollen, phytoliths and animal bones” such that its application appears sufficiently straightforward. So straightforward in fact, that determining site seasonality is frequently reduced to an exercise of equating months of occupation with the total range of “seasonal indicators” within the assemblage. However, this superficial appearance of simplicity masks a study whose methodological and theoretical construct is too often taken for granted in the absence of appropriate “middle range” arguments (Thomas 1986; Monks 1981; Pike-Tay 1991; O'Brien 1994). In assessments of site seasonality, rarely is there discussion of the following: the distinction between event and occupation seasonality; methodological variability in measurements of seasonal time; whether direct or indirect methods are employed; or the strength of ethnographic or ecological analogies. Too often, season of site occupation remains an assumption, not a reasoned argument.

This is not to say that Monk's call for the legitimization of seasonality studies in their own right did not go entirely unheeded. Some long-held assumptions of seasonality have been called into question in recent years. In the context of a more robust method and theory, season of occupation estimates for the famous Mesolithic site of Starr Carr were substantially revised (Legge and Rowley-Conwy 1988) despite the fact that the assemblage was initially deemed rich in “seasonal indicators”. Just as importantly, methods for determining season of site occupation have improved, particularly with respect to determining season of death in zooarchaeological assemblages. Perhaps most noted among these is the method of analyzing incremental structures in mammal teeth. Known as “dental” or “cementum” increment analysis, this technique has a long history of use in wildlife biology as a method for determining age-of-death in mammals. Since the late 1960s archaeologists have also adapted the method for establishing both age and season-of-death in zooarchaeological assemblages (Pike-Tay 1991; O'Brien 1994). Incremental structures in the cementum (root) deposits of mammalian teeth take the appearance of alternating translucent (light) and opaque (dark) bands when tooth thin sections are viewed under high magnification (Figure 1). A pair of translucent and opaque increments represents one year of growth and the total number of increments observed provides a relatively precise measure of

the animal's age at the time of death (O'Brien 1994, in press). Increments also accurately record seasonal changes in cementum development, with dark increments reflecting winter periods of slow growth and light increments reflecting faster, summer growth. Seasonality determinations are based on the degree of growth represented by the outer increment, which is in formation at the time of the animal's death (Figure 2). The precision of seasonal estimates is predicated upon documenting growth in a comparative sample of known date-of-death individuals. Analysis of increment formation in black-tailed deer (*Odocoileus hemionus*), for example, has demonstrated that the translucent increment forms between May and November and the opaque increment between December and April (Leigh 1998). Narrower estimates can be made on the relative degree of growth exhibited by the outer increment. For deer, an outer light increment approximately 25% of full growth indicates animals killed sometime between May and June. With a proper control sample established as a reference, season-of-death estimates can be narrowed to within a two-month period (O'Brien 1994).

Unlike many traditional methods of inferring site seasonality, dental increment analysis provides for a “direct” assessment of season-of-death (Monks 1981). Recent work on several zooarchaeological assemblages in northern California is demonstrating how direct methods like dental increment analysis are changing soft seasonality inferences into hard data. Increment research on seasonality at Black Rock rockshelter, located within the ethnographic territory of Ishi and the Yahi, is prompting new questions regarding this site's

Figure 1: Thin section from an archaeological bison (*Bison sp.*) molar magnified at 120X (from O'Brien 2000). Twelve opaque (dark) increments can be identified within the cementum deposit.

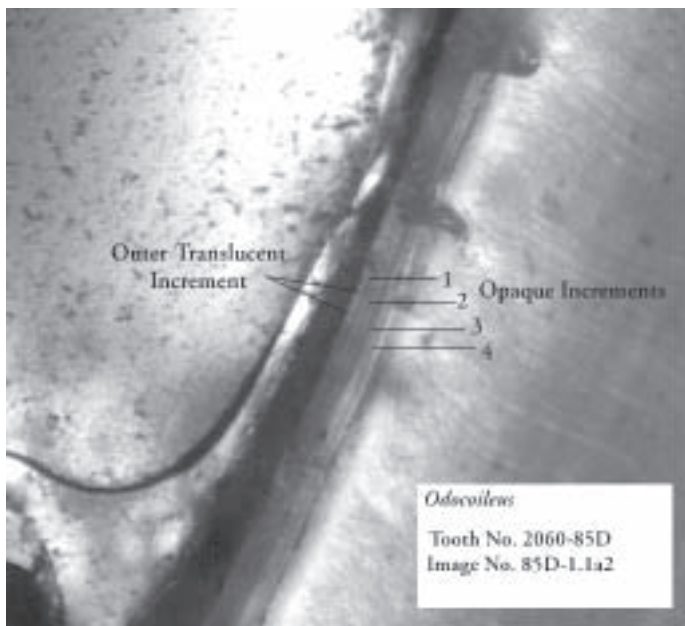




## Articles

function within the broader pattern of the area's aboriginal settlement. The final evaluation report, describing a decade of archaeological testing at ten sites within the Ishi Wilderness area, including Black Rock, is currently in preparation; however, seasonality data based on this report is being assembled in more detailed form (O'Brien n.d.). The conventional wisdom among some archaeologists who have excavated at Black Rock holds that the site is a village or base camp exemplifying the multifarious activities, social groups, and age and sex classes expected of long-term residential habitation. This idea seems to derive principally from an overemphasis on a few ephemerally represented artifact classes (e.g. groundstone). More importantly for the purposes of this discussion, the "residential" argument also relies on uncritical assumptions regarding the nature of seasonality data recovered at the site. For example, perishable items made from a variety of plant materials are assumed to represent occupation during those seasons (typically spring through fall) when the materials were most likely available for collection. The problem here is that these items are also highly curated (i.e. constantly maintained and transported) and may be deposited in a site long after initial raw material collection and item manufacture. Although almost all plant materials carry some inherent seasonality information, the season of "collection" and that of "deposition" are often distinctly different. An additional number of seasonality "fallacies" proposed for this site would

*Figure 2: Thin section from an archaeological deer (Odocoileus hemionus) molar from a site in northern California. The cementum deposit exhibits four opaque (dark) increments indicating an age of approximately 4-5 years for this individual at the time of death. The outermost increment is translucent (light) and almost completely formed. Based on comparative data from Leigh (1998) this animal probably died some time in the late fall.*



allow for a detailed textbook example of what Monks (1981) warned not to do in seasonality studies.

At Black Rock dental increment analysis is suggesting an alternative to the residential argument that is also consistent with other evidence at the site. Dental increment work on Black Rock deer remains was initially begun by Leigh (1998) and revealed a pattern of spring and fall deer exploitation corresponding well with historic patterns of deer migration. From these she hypothesizes that the aboriginal occupants used Black Rock as a hunting camp from which to ambush migrating deer on the narrow ridgetops above the site. My analysis of an additional sample of teeth from the site supports Leigh's view, albeit with an added methodological twist. Following Lieberman et al. (1990), computer enhancement and digital image analysis on Black Rock deer tooth sections is being used to both accurately determine the number and type of increments present (Figure 3) and to precisely measure relative growth of the outer increments. Preliminary results indicate minor variation in the relative width of outer increments for both spring and fall-killed deer (O'Brien n.d.). Elsewhere (O'Brien 1994, 2000) I have argued that it is possible to identify the probability of single-event kills using increment analysis, although problems of sample size and observer error complicate the procedure (Lubinski and O'Brien in press). Although not a single-event kill site, the consistency of increment widths among the Black Rock deer leads me to suspect that hunters took these animals during brief episodes in the early spring and late fall (Figure 4) and did not occupy the site for longer periods of time. This observation is consistent with Leigh's (1998) argument regarding the coincidence of spring and fall deer migrations and use of Black Rock as a hunting camp.

Were the data limited to dental increment analysis alone, one might legitimately question short-term seasonal activity based solely on inferences from sectioned deer teeth. After all, a problem with dental increment analysis is the potential confusion between "event" and "occupation" seasonality as Monks (1981) has warned. In effect, increment analysis is informing us as to the seasonality of deer hunting events, not necessarily the entire seasonal occupation of Black Rock. One could easily envision long term occupation with seasonally restricted periods of deer hunting. This would be a valid argument if there were convincing evidence that other aspects of the assemblage reflect activities in addition to hunting and the processing of deer carcasses. However, the Black Rock assemblage does not support such an argument. Zooarchaeological analysis of the deer remains is particularly telling in this regard. The deer bone assemblage is dominated by low-utility and axial elements, even after accounting for preservation bias due to bone density. Meatier limb elements are few, suggesting the bulk have been transported elsewhere, while metapodials show evidence of intentional fracture and cracking for marrow consumption. Discussion of the lithic and perishable materials is still being prepared, but preliminary reports suggest artifacts consistent with hunting parties and not residential groups. It seems that



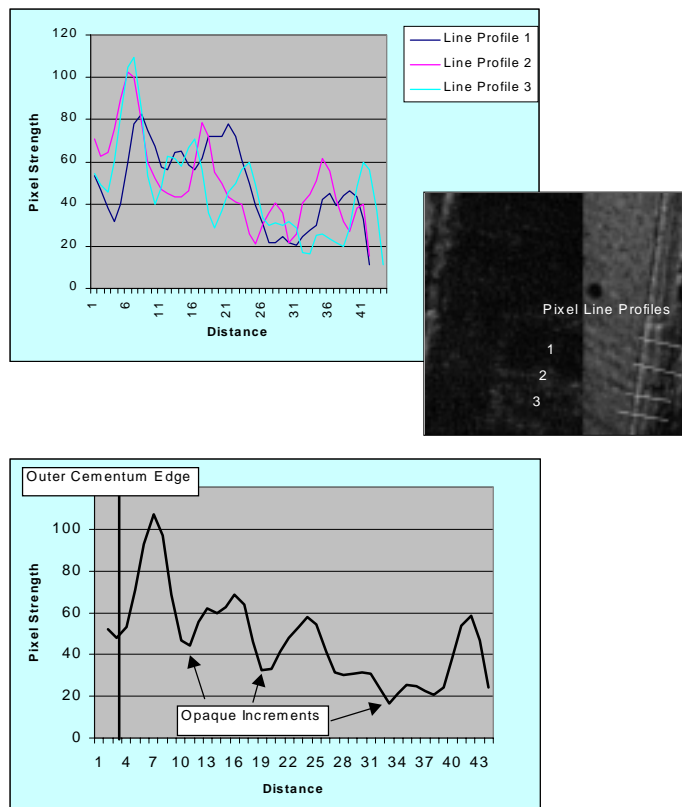


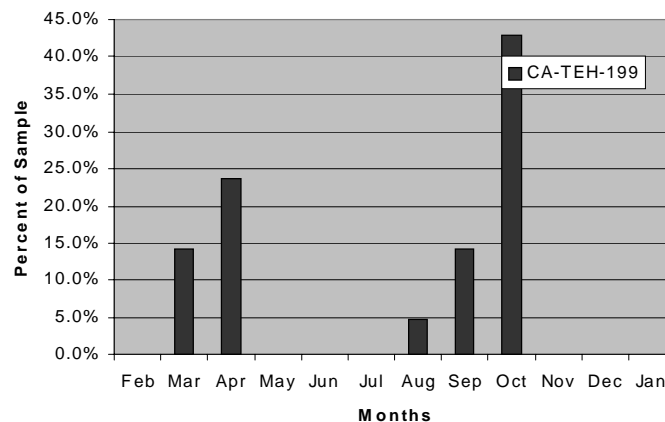
Figure 3: (TOP) Example of line profile graphs measuring pixel strength across several areas on the digital image of a tooth section (inset). (BOTTOM) Graph exhibiting average pixel strengths derived from several line profiles. Three opaque increments are indicated by the sharp troughs in the averaged line graph.

during most of its occupational history (Kingsley and Dye Creek Complexes, 500-2500 BP) Black Rock functioned as a short-term deer hunting camp. Note that this argument applies to the bulk of the archaeological assemblage at Black Rock. To be sure, some artifact classes (e.g. groundstone) perhaps indicative of different human mobility patterns, are present in the assemblage. But these represent a minor complement to the overall assemblage, suggesting a possible “overlay” of site activities (and differing mobility strategies) occurring later in time, perhaps during the Mill Creek Complex (AD 1500 - AD 1845).

While dental increment analysis is certainly providing valuable new insights on aboriginal human settlement and subsistence, it also provides clues on past environmental conditions, at least in terms of wildlife. If aboriginal hunters were staging out of Black Rock to ambush deer on their annual migration routes as the data seem to suggest, then dental increment analysis is not limited to providing data on human behavior alone. It is also revealing valuable

information on the timing of deer migration events. Video capture data on modern deer migration exhibits some interesting patterns when compared to the seasonality of deer kills indicated by dental increment sections. Figure 5 illustrates a comparison of the two data sets. Spring migrations of deer from wintering grounds on the valley floor and lower foothill elevations to mountain elevations appear to occur today much as it did in the past. Today’s herds move through the area on their upward migration during April and May. Black Rock data suggest a prehistoric migration at an equivalent time period. However, today’s fall return migration to the valley and foothill wintering area varies significantly from its prehistoric counterpart. Herds today are on the move during July and August, a good 2-3 months before the September and October migration period suggested by the archaeological record. Reasons for the discrepancy in fall migration periods are just now being explored. However, personal communications with biologists suggests there is some argument as to whether deer herds are following the historical pattern of migration or are being forced into an early migration as a result of increasing pressure by sport hunters during the summer bow-hunting season. Data from the prehistoric deer assemblage at Black Rock would suggest that the early migration observed today is not the historic pattern of deer migration. Whether this is due to modern hunting pressure, climatic changes, an inaccurate understanding of the Black Rock data, or some other phenomenon remains to be clearly articulated. What is clear is that prehistoric data has a role to play in understanding how the distribution and abundance of wildlife has diverged from (or remained consistent with) its historical pattern and why such may be the case.

Figure 4: Bar graph showing the seasonal frequency of deer kills at Black Rock rockshelter (CA-Teh-199). Deer kills are limited to the early spring and terminal fall months. Monthly dates of death are median values derived from the analysis of approximately 30 teeth from the site. Data from Leigh (1998) and O'Brien (n.d.).



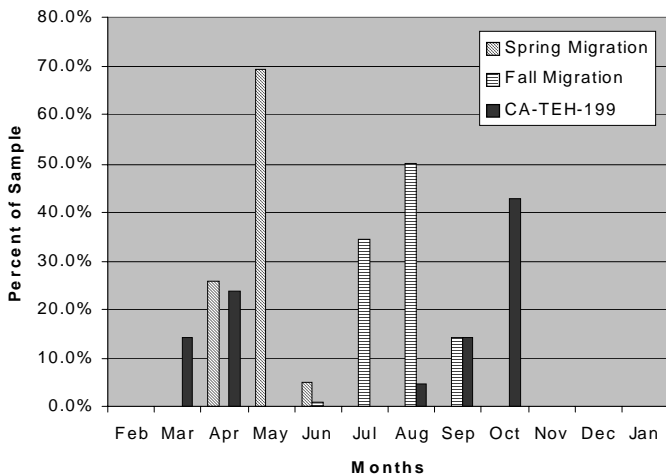


Figure 5: Comparison of deer kill seasonality data collected from the Black Rock rockshelter (CA-Teh-199) with wildlife biology data for current deer migration patterns. As suggested by Leigh (1998) aboriginal use of Black Rock coincided well with the annual deer migrations between the valley floor and higher elevations. However, the fall migration occurs several months earlier today than it did prehistorically.

Detailed data and discussion will be presented on these topics in the future. In the meantime, these preliminary observations suggest that a robust study of site seasonality combined with more sophisticated analytical techniques will necessitate rethinking some long-held assumptions. Both archaeologists and wildlife biologists can benefit from a better understanding of aboriginal human behavior and the dynamics of prehistoric mammal populations. Techniques like dental increment analysis can help achieve this understanding. When used properly, dental increment analysis serves as a valuable tool for determining the season-of-death of mammals in zooarchaeological assemblages. Age data may be obtained as well, and in large samples can allow for significant insights regarding prey population dynamics and health. Almost any mammal tooth can be sectioned for dental increment analysis. Control samples have been established for most North American taxa, particularly the larger ungulates, and cementum development is sufficiently well studied that broad seasons of death can be established in those populations lacking well-studied control samples.

Christopher O'Brien, Lassen National Forest Archaeologist and Adjunct Professor of Anthropology at California State University, Chico. For further information on dental increment analysis contact him via phone at (530) 252-6698 or by email at [cobrien@onemain.com](mailto:cobrien@onemain.com).

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## Articles



Figure 1: Maggie Crow, Graduate Student at CSUS, Watches Bill Silva Boot the CVM at Site CA-LAK-1580.

### Caltrans Uses Modern Technology To Locate Age Old Resources

*Bill Silva, California Department of Transportation*

The use of technology in the discovery and excavation of archaeological resources has been around since the early 1900's when the application of photography and flight were combined and photos from the sky were used for more than just their

applicability in war. Crop marks, expansive walled structures and rock alignments all became visible from a very different perspective. Since this time remote sensing has grown to encompass a wide variety of techniques spurred on by this initial use of photographs. To be concise, remote sensing can be defined as "reconnaissance from a distance" (Avery and Berlin 1992). Through the use of a wide range of techniques, archaeological sites are today studied remotely allowing the researcher to better understand the nature of subsurface features before excavating a single grain of soil. Through the

use of these techniques research designs are developed to target specific subsurface anomalies saving time and money while obtaining the best possible data necessary to answer research questions. Remote sensing covers a wide range of techniques that include aerial and satellite photography using conventional photographic methods (infrared and microwave), resistivity, seismic studies, ground penetrating radar, magnetometers, and chemical prospection. For a more complete list and explanation see Weymouth 1986 (also, Colwell 1983).

Caltrans is no stranger to remote sensing. Geophysical surveys have been used in Caltrans as far back as the 1950's for foundation design and roadway investigations. Typical geophysical investigations that are conducted by the Trans Lab at Caltrans today focus on landslide mitigation and remediation, foundation design, constructability (rippability and earthwork factors), utility detection and location, earthquake ground response analysis and construction emergency support. Also, archaeologists within Caltrans have used remote sensing on an ad hoc basis with good results both on land and in the ocean. Current technology in use by Caltrans staff at the Trans Lab include a proton procession magnetometer (PPM), ground penetrating radar (GPR), and resistivity.

In 1998, as part of the hiring buildup within Caltrans, staff familiar with remote sensing technology were hired. That same year archaeologists and Trans Lab staff combined to conduct a test of a prehistoric site using remote sensing technology in Shasta County. This initial study used a full range of remote sensing technologies to locate any

Figure 2: Contour Plot of Grid 5.

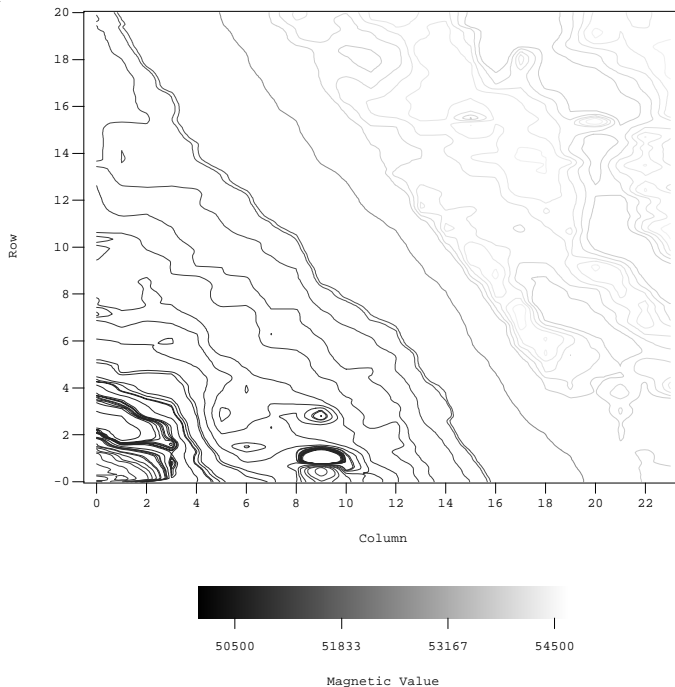
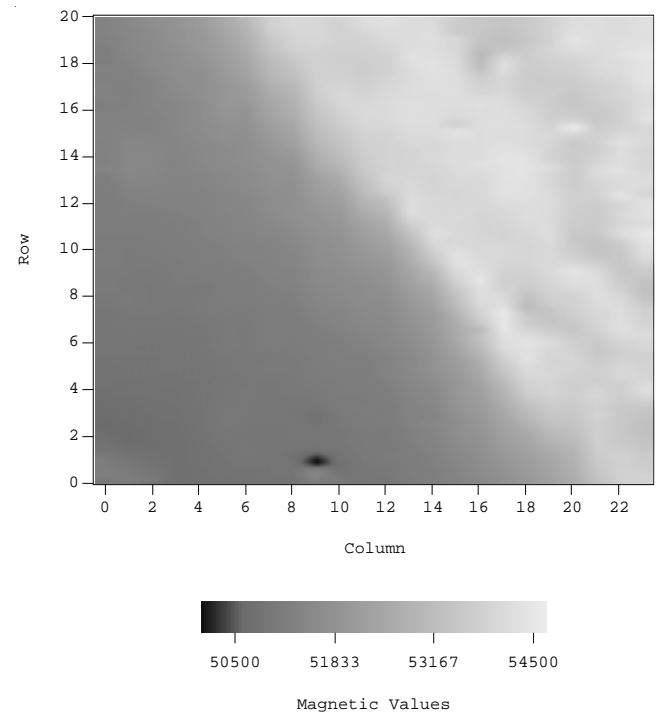


Figure 3: Interpolation of Grid 5 With Test Unit.



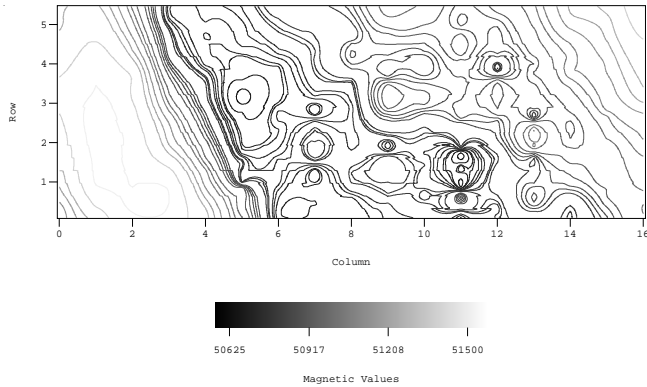


Figure 4: Contour Plot of Grid 4.

subsurface features at this prehistoric site. Along with the usual tools employed by the Trans Lab mentioned previously, archaeologists brought in and tested a cesium vapor magnetometer (CVM). Though the results of this study were inconclusive it marked the first step towards a more focused approach to help determine site eligibility and developing research designs targeted to collect data from specific locations by Caltrans. As a result of this initial study, Caltrans is considering using remote sensing in numerous other current studies.

The most recent Caltrans projects include two historical sites in Stanislaus and Mono Counties, and a prehistoric site in Siskiyou County. At each of these sites the cesium vapor magnetometer was used exclusively to locate subsurface anomalies and then guide the location of test units. In two of the cases the information was used to help determine eligibility, while in the third case the data collected was used to avoid unnecessary damage to private property. Included in this study is the site located in Stanislaus County where the data was used to help locate test units to collect data necessary in determining eligibility. Every site presents its own series of challenges, some applicable to sites that have had extensive disturbance due to construction and some that are consistent with geophysical methods. For instance, sites located within Caltrans right of way that have had all or part of the top layers of the site damaged from past construction that involved either scraping portions of the site away, mixing site layers, bringing in fill to place over a site or several combinations of these activities presents a wide array of challenges that the researcher must take into consideration. In this particular case the site under study was littered with ferrous particles left from mining activities along with the usual nails and tin cans normally associated with a historical site. Because of the problems that one can face while doing magnetometry studies—and the ability of the CVM to locate such minute changes in magnetic susceptibility—the CVM has been used exclusively by Caltrans staff.

The CVM is the most recent and advanced magnetometer in use today and is used on land, air, and in the oceans to locate a wide variety of resources from large geological features to small cultural features (e.g., faults, hearths,

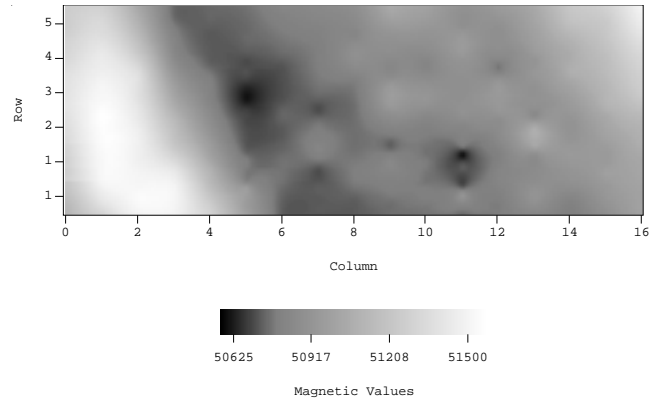
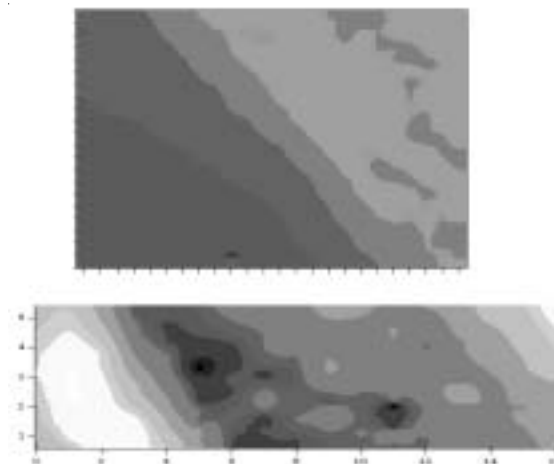


Figure 5: Interpolation of Grid 4 With Test Unit.

privies). The Cesium Vapor Magnetometer measures the magnetic susceptibility within soil down to 10 to the minus 9 gammas. In fact magnetometer technology is so discriminating today that the software used to view the data is the only hindrance to being able to see more clearly what is contained within the data. Because of the ability of the cesium vapor magnetometer to locate such small anomalies, it is expected that any future advances concerning magnetometers will be in the software that is used to view the data collected. Finally, the CVM is quicker and collects more data than its predecessor the Proton Precession Magnetometer. The CVM can run in continuous mode while doing a ‘simple survey’ collecting one reading every 1/10th of a second along a transect. The average 20 x 20-meter grid used in a CVM survey collects tens times more data in 1/3rd the time it takes to complete a similar survey using the PPM. What this means to the archaeologist is that a more complete picture of any subsurface anomalies is obtained allowing for a more focused approach when developing a research design. It very simple to use. Only one operator is needed to handle the CVM (Figure 1), while two others are used to move ropes.

Figure 2: Alignment of Grids 4 and 5.





In this article, only the data collected from the historical site located in Stanislaus County is discussed. The examples below represent a few of the challenges faced while conducting geophysical surveys at this site, but are common at many sites. This historical site consists of several rock walls and the remains of at least 3-4 buildings that are still present on the surface. It was part of a copper mining operation southeast of Copperopolis. The site was being tested for eligibility because of roadwork that Caltrans had programmed to straighten a hazardous turn. As one would expect there is quite a bit of background interference from metallic objects such as nails, tin cans, and copper left over from the mining operation. A field visit was conducted to ascertain whether the CVM could be used and what needed to be accomplished before a remote sensing survey could take place. The job was made more feasible because the location lacked overhead power lines and there were no subsurface utilities. Power lines produce their own magnetic field making it impossible to conduct magnetometer survey if that field is strong enough and close enough to your survey area. Standard procedures for magnetometer studies include the use of a metal detector to pinpoint metal objects, such as nails and tin cans in or near gridded areas to get rid of as much background noise as possible. In this case a metal detector was used and an initial attempt was made to pick up any of the ferrous objects it located. Unfortunately there was so much that this approach was abandoned. The magnetometer was used in spite of this and had some very interesting results. The first test unit was placed in Grid 5 at the location of a low magnetic anomaly. Figure 2 shows the contour plot of Grid 5 (20 x 23-meters) and the location of the anomaly located 9 meters east of the southwest corner. In the upper left portion (light contour color) of the contour plot a subsurface rock outcrop that is indicated by a fairly high magnetic signature. A test unit had been planned for this area because of its proximity to one of the buildings, but was dropped due to this geologic feature. Figure 3 demonstrates the location of the anomaly a little more clearly, and a square has been placed to show its location. The high signature of the rock outcrop combined with other metal objects located in the soil could have masked this particular low, however due to the ability of the CVM to obtain such small anomalies a target was located and excavated. Discovered in this location was the continuation of a sewage system, portions of which had been uncovered in other test units (see figures 4-6) was also located by the CVM. The sewage system was unexpected for this time period and used in the determination of eligibility. The pipe itself was a lead glazed ceramic. The lead glaze accounting for the low magnetic signature in spite of the fired clay. Figure 6 places the two grids in approximate alignment and shows the angle of the pipe (black line). A third grid and test unit exposed another portion of the same pipe and appears to be on this same alignment.

Background noise is a constant problem in using geophysical methods. Having technology that is discrete enough to detect even the smallest anomaly is paramount. In the example given, having the CVM to collect magnetic data

allowed researchers to locate subsurface anomalies in spite of the presence of metal nails and copper. This was necessary to help determine eligibility. The final added benefit to this type of approach is the time saved in locating the necessary information appropriate to the goal at hand. In this case eligibility was the issue, so locating any subsurface features to reach that goal is beneficial. The normal random approach to excavation may not have located these features, especially when one considers the low probability that a sewage system would have existed in this type of setting. The three days of remote sensing and targeted excavation allowed the project supervisor to collect the necessary data with minimal effort and time spent.

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## NAGPRA, Ten Years After

*Continued from page 1*

Director Cultural Resources Stewardship and Partnership, and Manager of the National Center for Cultural Resources in Washington, D.C. He summed up the NAGPRA process in this way: "The federal agencies and museums are required to submit an inventory, which is a list of human remains and associated funerary objects. And then they are required to submit a summary, of unassociated funerary objects, objects of cultural patrimony, and sacred objects. . . . For items that are on an inventory, that have a cultural affiliation, the institutions are to prepare a notice of inventory completion, following their consultation (with tribes), which is published in the federal register and is the notice that these materials, these cultural items, will be repatriated to the tribe to which they are culturally affiliated. . . . Repatriation as practiced under NAGPRA is only to federally recognized tribes."

### UCB and UCLA

The Phoebe Hearst Museum at the University of California at Berkeley have catalogued approximately 8,000 Native American human remains from their collections, which represent assemblages from all over the United States.



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Their NAGPRA inventory was completed in June of 2000, when the Berkeley NAGPRA unit sent a copy of the inventory, including the research data that supports it, to the National Park Service and to every federally recognized tribe that has been determined to have a cultural affiliation. Richard Hitchcock, NAGPRA Coordinator at the museum, explained, “The NAGPRA unit does all the research including consultation of the tribes and all of the total body of evidence goes to the Curators Committee who determine whether it’s affiliated or not.”

Consultations with tribes continues after the initial inventory is sent out. According to Hitchcock, “When a tribe wants to come in they are welcome to come at any time subject top staff availability, but that’s easy to work out usually.” He added, “The consultation between the tribes and the museum is kept at a very confidential level.”

Wendy Teeter, Curator of Archaeology for the Fowler Museum at the University of California Los Angeles, was an independent contractor working at the bone laboratory at UCLA’s Institute of Archaeology in 1992, when the inventory was begun. According to Teeter, the Fowler has about 2,000 human remains, and their inventory was completed and submitted in 1995. “I was hired through the bone lab to go through all faunal material associated with sites that had human remains recovered to find any disassociated human remains. This was something that was not explicit in the regs, but something we felt that was necessary.”

Unlike Berkeley, whose collection was strictly from the museum and is occasionally available for teaching, UCLA notified the Biology and Anthropology departments on campus to return any Native American or Hawaiian human remains to the Fowler Museum to be included in their inventory. Teeter stated that “UCLA made a formal statement that they would not allow Native American materials for teaching purposes, and we discourage the use of Mexican materials.”

Consultations at the Fowler were open to anyone from the Indian community who showed an interest in NAGPRA. Says Teeters, “Several people had written to us. We also consulted the Native American Heritage Commission for a list of people for each area, so we went to those areas that we thought there was an affiliation, and surrounding areas, and invited them to come in and see what we had... see what they said. And that was all recorded in the inventory under “consultation.” The person that was the liaison was a cultural anthropologist named Diana Wilson. She went to all the Native American groups explained what NAGPRA was, why we felt their input was important, and asked them to come in.”

After the inventory was assembled, the NAGPRA team at the Fowler Museum went to work researching cultural affiliation. “Since NAGPRA is only for federally recognized

groups,” said Teeters, “anybody else has no standing. However our inventory is divided by group that is affiliated, regardless of whether or not they have federal standing. They are listed as “unaffiliated” because they have no federal standing, but the tribe is listed, so if any of these groups do get federal standing, then we just take it (their inventory) from one section and put it in another—but the work is already done.”

At Berkeley, the reevaluation of the Coast Miwok is an example of just such cases. According to Hitchcock, “The Coast Miwok were just federally recognized the first of January, and we’re working on changing that inventory over to “affiliated”... There are materials from the local area. There are no tribes that are federally recognized from our local area... As tribes get federally recognized we have to

*Wendy Teeter, Curator of Archaeology at the Fowler Museum.*



go back and completely review our inventories of “culturally unidentifiable” to see how much of it is affiliated. That determination has not been made yet, so its done on a ongoing basis depending on federal recognition.”

When I asked Robbins why the bulk of collections fall under the category of ‘culturally unidentifiable,’ he explained that, “The institutions are to determine cultural affiliation based on some evidence and, in some collections, the documentation of the collection, old or new collections, can be so poor that there is no evidence on which to determine a cultural affiliation, such as in some cases the museum’s catalogue records say nothing about the origin.”

To increase the accuracy of its interpretation of Chumash archaeological materials, the Fowler and the Chumash have become partners in a National Park grant to improve the curation and interpretation of the Chumash collection. Says Teeter, “The most important thing to understand about NAGPRA is that there is no end date. We will never be finished with it. It constantly has to be updated... When working with elders from the tribes—singers, dancers,

religious practitioners, they remember what they used. We work together and they pick out things that archaeologists aren't going to know. So we're trying to develop a list of items that can be recognized as sacred."

While visiting the Fowler Museum storage facility, Teeter showed me some of the archaeological materials that are being reassessed as sacred objects. Opening a box of Chumash objects, Teeter told me, "We went through, I don't know maybe five hundred boxes of material and this is what they pulled out. This is obviously pigment, and these are what they call altar stones. These have much different meanings for women than men, so at first these stones weren't really thought about much by the men, but then we had a Chumash elder woman, and she said immediately, "Oh these are altar stones, this is a woman and child figure." So their meanings are definitely dependent upon age and sex, and these are things that an archaeologist isn't going to know, isn't going to understand. But someone from that cultural group is certainly going to pick up on."

Holding a pale yellow cylindrical piece of stone about a foot long, Teeter explained, "A lot of things have been labeled in our catalogue as being a pestle. Well, the first thing that a religious practitioner we were working with recognized is that this is a chalk stick, this how you color yourself. The

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*"The most important thing to understand about NAGPRA is that there is no end date. We will never be finished with it. It constantly has to be updated..."*

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immediate reaction of the archaeologist is that it's a pestle. . . Now some of these things you might not be able to argue as being ceremonial . . . Grass skirt weights would obviously be on grass skirts, which would be worn during ceremonies, but are also worn in mundane times. Can you make an argument that these things should be repatriated under "sacred" or ceremonial artifacts? . . . There is a really small mortar which our religious practitioner really felt was used by another religious practitioner in making pigments or that sort of use. Again scientific evidence may not be caught up to altar stones and these smaller mortars and grass skirt weights, but what do we use as a barometer? Those things are so gray."

### **Repatriation**

So after all the consultations and inventories, what has actually been repatriated? At Berkeley, Hitchcock alluded to "a couple of items," explaining, "Its fairly low because at this point in time we're waiting for the National Park Service and also for the tribes to make the claims. We have a couple of repatriations in process where claims were made, but the procedure in NAGPRA is that the nothing can be physically repatriated—a claim can be made at any time—nothing can be physically repatriated until the notice has been placed in

the Federal Register and a period of at least thirty days has gone by for other tribes to make counter claims. So we have several repatriations in process, and there have been one or two repatriations done over the last six or seven years."

UCLA has had much the same experience, except in the case of Hawaiian remains where there was an immediate response. Says Teeter, "Hawaiians were here the next day. Having it (inventory notice) published in the National Park Registry is part of the process—That's the formal recognition. But they have a backlog of about 4 years. So they will give precedence to those who are claiming repatriation. Hawaiians are very interested, so we immediately did their part first . . . published it first . . . they gave us notice first . . . so we went through everything with them really quickly. The only other group that we have actually done repatriation is the Hopi, who came out to look at ethnographic objects."

Robbins explains that the National Parks Service has received 900 notices of inventory completion and they have published 600 of them in the Federal Register. "That's the backlog that's often discussed," Robbins said, "the backlog in publishing notices of inventory completion."

The small number of repatriations could be due to other factors beyond the publishing backlog. One factor that Teeter cites is reburial. "Its a very sensitive and difficult topic for tribes. . . They don't want anyone to know about it because they don't want people to go back out and dig it up, and they are also worried that somebody might grab hold of that land. That is the big issue. And so many tribes are not reclaiming, going through repatriation until those land issues, reburial issues are worked out."

Another factor is the process itself. Teeter explained, "Its up to the tribes to have the money, resources, time, personnel, to go to every institution that has something. . . and see it all . . . Its a helluva job for one institution to do with their own stuff, but imagine the Chumash or any other group. They find out they've got material everywhere. Who's going to have the money or the time to do all that?"

At UCLA, after writing a repatriation request with supporting documentation, the tribes need to submit this first to the UCLA Repatriation Committee, which according to Teeter, is made up of "lawyers, Indians, anthropologists, archaeologists, the museum director, and cultural anthropologists. . . If we approve it, its sent up to the UC Repatriation Committee, and that is comprised of representatives from all five campuses that have a NAGPRA inventory and a group decision is made on whether to accept a repatriation request. So this goes through many levels."

Even if the request passes through both committees, it can still be disputed at the federal level. John Robbins is the designated federal official who provides the administrative support for that Review Committee. He explains, "We are part of the fuller implementation of the law as well as serving

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as an arbiter, a citizens committee, that considers disputes for matters that arise from the repatriation process. . . . It is when either a tribe disputes a cultural affiliation or disputes the other determinations that an institution may have made. Those are the sorts of things that, at the request of either a museum or a tribe, may go before the review committee for consideration.”

I asked Robbins if he felt that NAGPRA has accomplished its original mission. He said, “I think that, considering the backlog, there are success stories and there are frustrations, . . . exactly where the balance is, that’s really for the institutions and the tribes to say.”

Asking Hitchcock this same question, he answered “That’s a really difficult question to answer . . . . Typical of any federal law that’s as complex as this one, it depends on how you define its original mission. It has certainly made the museums more cognizant of inventories, you know getting all that stuff together. For claims that are made, it is repatriating material, that’s going ahead as required by law. But the law has a lot of defects. NAGPRA has placed the tribes and the museums in an adversarial position, and so far, in our case, that has worked out all right. We’ve had tribal consultation. We’ve had good relations with the tribes. In other situations its ended up in court cases, which is not, to my way of thinking, what it was intended to do.”

*“there are success stories and there are frustrations, exactly where the balance is, that’s really for the institutions and the tribes to say.”*

Teeter also responded to the question of whether NAGPRA has fulfilled its mission. “NAGPRA will never be what it was intended to be. . . . If its about human remains just going “home”, no, because in many of these cases, home is not available. For instance, here we have a lot of materials from the Santa Monica Mountains. The most important thing to many traditional Chumash is that those human remains go back as close as possible to where they came from. And, unless the City of Malibu gives us some land we can protect, they’re not going to go back home. We’re trying to work with the National Parks Service and the Santa Monica Conservancy to maybe get some land that we can actually use as a burial ground that those Santa Monica Chumash that are interested can have to rebury items, regardless of whether or not they are federally recognized. You know at some point this isn’t about that. But unless those things can be worked out, and that’s a hard thing, where’s it going to go? It has nowhere to go. “All I can do is hope that people will see that it is not about being antagonistic, its about cooperation. And learn from the good things that have come out of it. I think this facility, the Fowler Museum, is closer now with the surrounding cultural groups than we’ve ever been. And its not a matter of archaeology —its a matter of understanding the past. Its beyond archaeology, its more about culture. . . . the survival and continuity of culture.”

## New Evidence For Early Holocene Acquisition and Production of Bodie Hills Obsidian

*F. Kirk Halford, BLM, Bishop Field Office Archaeologist*

### Introduction

Archaeological investigations at CA-MNO-3125/H and CA-MNO-3126, located in Bridgeport Valley, California, indicate that these sites were used during the past 10,000 years, with the most intensive periods of use occurring during the Early Archaic/Mohave periods (ca.10,000-3,500 B.P.). Surface investigations and limited excavations show that the primary activity at the sites was the acquisition of obsidian tool stone from extant secondary deposits of Bodie Hills obsidian. Contrary to regional production curves, which exhibit bell shaped distributions with peak production between 3,000 and 1,000 years B.P., the Bridgeport sites display a bimodal production curve with peak use periods occurring during the early and later Holocene. The data from the Bridgeport project area provide important information concerning hunter-gatherer land-use strategies during the early Holocene, a period not well represented in the western Great Basin archaeological record, and indicate the importance of secondary obsidian deposits to these strategies.

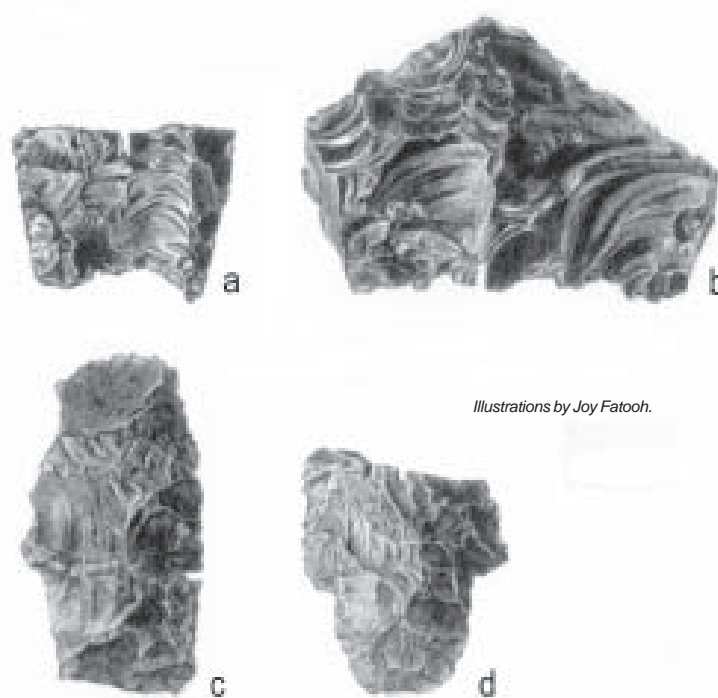
The Bodie Hills source is the northern extension of the seven most well known quarries in southeastern California. The source was a dominant supplier for local and western populations, with distributions reaching far into the central valley of California, and has been the focus of much debate concerning Newberry period (ca. 3,500-1,350 B.P.) trade and acquisition (cf., Basgall 1989; Bouey and Basgall 1984; Ericson 1982; T. Jackson 1984; Singer and Ericson 1977). The regional trend for obsidian production indicates that primary sources were focal points of use during the Newberry and early Haiwee periods (ca. 3,000 to 1,000 B.P.). The central activity was biface production for curatorial use and/or trade. As mapped by Singer and Ericson (1977) the primary source, located in the north-central Bodie Hills, covers a 5.8 km<sup>2</sup> area. During recent investigations by the author, other primary outcrops have been found approximately 2.5 km to the west. A distribution zone of alluvial and colluvial deposits reaches westward, following stream depositional zones for 10 km to Bridgeport Valley. This large depositional zone represents a much more extensive procurement area than previously described (see Ericson 1982; Singer and Ericson 1977).

### Project Description

During March and April 2000, surface and subsurface investigations were conducted at sites CA-MNO-3125/H and CA-MNO-3126 to determine their eligibility to the National

Figure 1:

- (a) Great Basin Concave-base,  
BH/8.1 $\mu$ ;
- (b) Stage 3 Biface, Transverse Form,  
BH/7.7 $\mu$ ;
- (c) Great Basin Stemmed,  
BH/5.3 $\mu$ ;
- (d) Great Basin Stemmed,  
BH/0.0 $\mu$ .



Illustrations by Joy Fatooh.

Register of Historic Places, prompted by a proposed land transfer of 40 acres by the Bureau of Land Management to the Bridgeport Indian Colony. The parcel is located adjacent to the existing Colony, north of the town of Bridgeport, in Mono County, California. The study area is on the western edge of the Bodie Hills in sagebrush steppe habitat at an elevation of 1,975 m. The parcel is situated on an alluvial fan formed by Quaternary alluvial outwash from Aurora Canyon and colluvial activity from the nearby footslopes of the Bodie Hills.

Secondary geologic deposits of Bodie Hills obsidian occurring in cobble form are found across the alluvial fan. The cobbles range from teardrop sized to greater than 10 cm in diameter, with an average size from 5 to 7 cm. The natural raw material was being actively utilized by hunter-gatherer groups traveling through the area as indicated by the seemingly uninterrupted activity loci of flaked stone debris occurring across the fan. For this reason, delineation of “site” boundaries is difficult and some researchers have employed the more tenable designation of “use areas” (Elston and Covington 1977; Halford 1997).

Table 1: Hydration Ranges for the Bridgeport Project Area, Using the Casa Diablo Hydration Rate (Hall and Jackson 1989; years B.P. derived using a 1.195 EHT conversion factor).

### Eastern California Obsidian Studies

The analyses of obsidian use and procurement patterns have played an important role in addressing hunter-gatherer mobility and technology in the eastern California region (cf., Basgall and Giambastiani 1995; Delacorte 1999; Gilreath and Hildebrandt 1997). Obsidian source profiles, compiled from megascopic and X-ray fluorescence (XRF) assays, document the highest degree of source diversity during the early and middle periods, indicating a higher degree of artifact curation and residential mobility. Studies in the Bridgeport area (Bieling 1992; Burton 1995; Halford 1998a, b; Fredrickson 1991; Hall 1980; Rusco 1991) have corroborated the regional pattern of peak use during the Newberry period. Although early Holocene use is evident it is generally limited.

Singer and Ericson (1977; Ericson 1982) constructed a curve for use of the Bodie Hills source which shows initial production beginning roughly 6,000 years ago, reaching a zenith at 2,500 years ago and abruptly dropping off at 1,500 years ago (Figure 2). Notwithstanding the limited sample size (n=98), the lack of radiocarbon pairings, and the lack of empirical evidence in support of their source-specific hydration rate of 650 years per micron (cf., Jackson 1984), the apex of production during the Newberry period and a decline during the late period is consistent with region-wide obsidian source production profiles (cf., Basgall 1989; Bouey and Basgall 1984; Gilreath and Hildebrandt 1997; Hall and Basgall 1994). Evidence suggests that intensive procurement of obsidian at regional sources for use and trade occurred in the pre-Haiwee periods (ca. pre-1,350 B.P.). During the Newberry period (ca. 3,500-1,350 B.P.) obsidian production



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and its movement across the landscape on a predominantly east/west axis reached its zenith, dropping off sharply at the end of the period.

### Methods and Site Chronology

Due to the small sample of chronologically diagnostic projectile points recovered during this investigation (n=5, including two Great Basin Stemmed points, one Great Basin Concave Base point, one transverse point form (Figure 1), and one Elko Eared point), the study relied heavily on obsidian hydration analyses to provide the main chronometric control. The flaked and tool stone sample is dominated by Bodie Hills obsidian (> 90%). Though no acceptable hydration curve has been established for Bodie obsidian, induced hydration experiments of Bodie Hills and Casa Diablo obsidian by Tremaine (1991; see also Michels 1982a, b) indicate that these two sources hydrate at a comparable rate. To provide a general indication of the age of the sites' deposits, the Bodie Hills rim values (n=209) were interpreted using Hall's (1984; Hall and Jackson 1989) Casa Diablo rate where:  $y=129.656x^{1.826}$ .

Various studies (Basgall 1998; Bieling 1992; Halford 1998a, b) have applied the Casa Diablo formula to Bodie Hills obsidian with some success. To further correlate the Casa Diablo rate to the study area an adjustment for effective hydration temperature (EHT) was employed to achieve a higher degree of accuracy. The difference of the EHT from the point of origin for the derivation of the rate (i.e., Long Valley for Casa Diablo) and the location where the rate is applied is important to consider (Basgall 1998; Gilreath and Hildebrandt 1997; Hull 1996). A correction factor of 6% per degree C (from Basgall 1998:29) was employed to adjust for the variation in EHT between Long Valley and the Bridgeport Valley. Table 1 shows the temporal ranges constructed for the project sites utilizing the Casa Diablo rate and an EHT conversion factor.

A sample of 68 tools and 132 pieces of debitage from the project sites were submitted for obsidian hydration analyses. One hundred and ninety one of the samples provided readable rim measurements with 22 artifacts having multiple hydration rims. Hydration rim readings range from 1.2 to 16.2  $\mu\text{m}$ . Figure 3 shows the project sites' hydration curve (three outliers 13.6, 14.2 and 16.2  $\mu\text{m}$  were trimmed). The curve was smoothed using a ten point standard weighted moving average. These data show a distinctly bimodal distribution of hydration readings and reveal a long period of use of the area, with Early (ca. 10,000-3,500 B.P.) and Late (ca. post 650 B.P.) periods of intensified use.

From the 200 samples submitted for obsidian hydration analyses, 20 of the tools were subjected to XRF analyses. The remainder of the specimens were visually sourced as Bodie Hills obsidian with a high degree of confidence (see Bieling 1992 and Halford 1998b). Of the twenty XRF assignments 18 (90%) are Bodie Hills, one item (5%) from Mono Craters (Elko Eared point), and one item from the Double H Mountains, Humboldt County, Nevada (Great Basin Stemmed point base).

To assess the accuracy of the application of the Casa Diablo rate to the study sites, data from 82 projectile points chemically attributed as Bodie Hills obsidian (Table 2) were collected from reports from Bridgeport Valley (Bieling 1992; Burton 1995; Halford 1998b; Skinner and Thatcher 1999), Mono Basin (Burton 1987), the Dry Lakes Plateau (Halford 1998a), and this report (Halford 2000). All of these data are taken from elevations near 1,980 meters except for the Dry Lakes Plateau, located 458 meters higher. The raw hydration readings from the Dry Lakes Plateau were converted to fit with the Bridgeport data using an EHT conversion factor of 1.162.

As illustrated in Table 2, significant overlap occurs between point series especially in terms of the earlier periods (e.g., Little Lake and Mohave). This trend has been

*Table 2: Bodie Hills Hydration Range for Temporal Periods Based on 82 Samples Taken from Bieling 1992; Burton 1987, 1995; Halford 1998a, 1998b, 2000; and Skinner and Thatcher 1999. DSN/CTN =Desert Side Notched/Cottonwood Series; RSG =includes Rose Spring and Eastgate variants; ELK= Elko Series, includes contracting stemmed variants (Gypsum, Gatecliff, Elko); LLSS=Gatecliff/Little Lake Split Stemmed (\*sample does not include Pinto forms); GBS/GBC = Early Stemmed variants/concave base variants. Outliers were trimmed.*



recognized throughout the region (cf., Gilreath and Hildebrandt 1997). Nonetheless, using the mean as an indicator there is clearly a correlation between the temporal designation of diagnostic point types and their hydration rim measurement (i.e., the older the point type the greater the mean value). A good fit occurs with the Newberry, Haiwee and Marana period point forms. Due to the significant variation and overlap within the early periods (i.e., Little Lake and Mohave), for the purposes of this discussion these periods were collapsed into a broad temporal span of 10,000-3,500 B.P. designated as the Early Archaic/Mohave or Early period.

### Early Period Use of the Study Area

The obsidian hydration data indicate use of the project area occurred for the past 10,000 years B.P. As illustrated by Figure 3, the most intensive use occurred during the Early Archaic/Mohave period. Early use is further corroborated by the recovery of one Great Basin Concave Base point (8.1  $\mu\text{m}$ ), two Great Basin Stemmed points (5.3 and 0.0) and one transverse form (7.7  $\mu\text{m}$ ) recovered from the site (Figure 2). The hydration data show that three peak periods of use occurred, from 7,000 to 6,000 B.P., 5,350 to 4,000 B.P. and 650 to 100 B.P.

The tools sampled (n=68) primarily have hydration values which place their production during the Early period (ca. 10,000-3,500 B.P.). The majority of the tool hydration values (n=51: 75%) indicate Early period manufacture, while 90% of these (n=41) can be assigned to pre-5,000 year old contexts. Of the 209 hydration values 101 (48%) are values of 6  $\mu\text{m}$  or greater. Of the 22 multiple rim readings 45% are assigned to the Marana period.

The hydration data indicate that the periods of most intensive use of the project area are not consistent with the pattern recognized at other regional quarry locations (Figure 3). Though Gilreath and Hildebrandt (1997) found at Coso that the use of lag deposits (pyroclastic deposits) removed from the main quarry outcrops were primarily used during the Early period, their robust data set (n=4111) shows chronological use patterns similar to the regional model (see Gilreath and Hildebrandt 1997:172, Figure 26d) with peak use occurring during the late Newberry period (ca. 2,300-1,275 B.P.). Their data strongly emphasize the regional pattern illustrated by Figure 3 and reflected by the production curves from Coso (Elston and Zeier 1984), Casa Diablo (Hall and Basgall 1994) and the primary Bodie Hills source (Ericson 1982; Singer and Ericson 1977). During the late Newberry use of the Bridgeport sites is near its lowest point. The data from this study indicate that much more intensive use of Bodie Hills obsidian occurred during both the Early and Late periods than has been previously recognized.

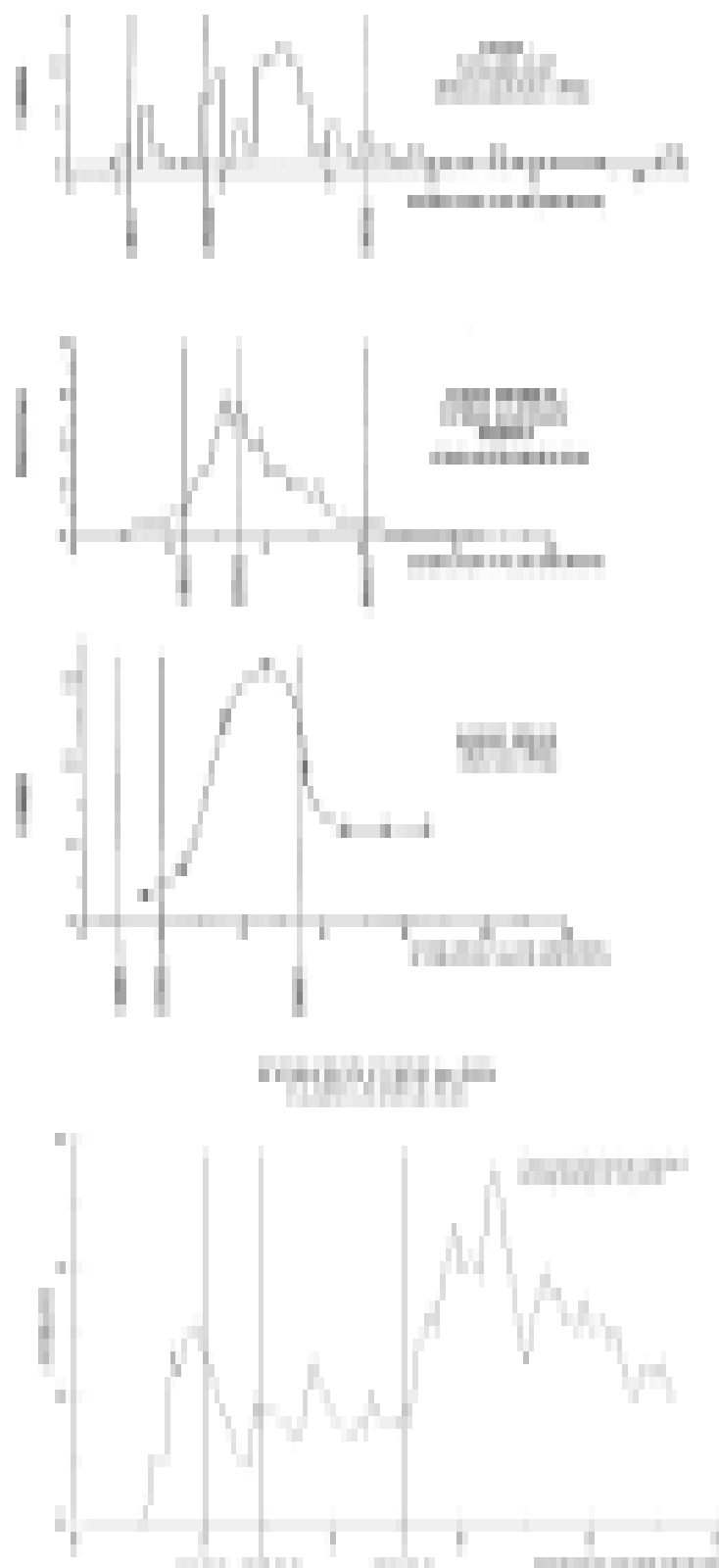


Figure 2: Hydration/Production Curves for Coso-Sugarloaf, Casa Diablo, and Bodie Hills obsidians (from Gilreath and Hildebrandt 1997:19), and Bridgeport Area.

## Articles

### Conclusions

Based on the hydration data, it is clear that exploitation of secondary deposits of Bodie Hills obsidian near the Bridgeport project area persisted throughout the last 10,000 years B.P. The most intriguing result of this investigation is the bimodal production curve (Figure 3) which shows peak periods of use during the Early Archaic, dropping off through the Newberry and Haiwee periods, and peaking again during the Marana period. These trends are juxtaposed with other regional quarry data which generally show a zenith of production use from 3,000 to 1,000 B.P. under a bell shaped curve. The data from this study suggest that Bodie Hills secondary deposits were important tool stone production areas, especially during the Early period. The data also indicate that more intensive Early and Marana period use occurred in the Bridgeport Valley area than has been indicated by previous studies.

From the perspective of Foraging Theory (cf., Bettinger 1991; Kelly 1995; Simms 1987), it can be hypothesized that the project area was used during the Early Archaic/Mohave periods by opportunistic groups or individuals exploiting a high quality, cost effective tool stone source. Due to the abundance and quality of material there was no cost benefit for acquiring raw material from the primary source located 10 kilometers to the east. As a result of intensive Early period use, depletion of the secondary deposits would have compelled Newberry period inhabitants to travel to the primary source to acquire raw material desirable for curation and the production of trade items. The increased use during the Marana period is consistent with the regional pattern which indicates that recycling of earlier deposits of flaked stone debris was prevalent. The project sites would have provided an abundance of reusable debris for Marana period inhabitants. As shown in this discussion, further study of secondary deposits at regional sources may shed new light on early Holocene hunter-gatherer tool stone acquisition, land-use strategies and behavior during a period not well represented in the archaeological record.

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## Positions Open

### California Indian Basketweavers Association Vacancy Announcement - Executive Director

DATE: January 15, 2001

**DESCRIPTION:** The California Indian Basketweavers Association (CIBA) is a nonprofit public benefit corporation that works to safeguard and perpetuate the rich basketweaving traditions of California's numerous and diverse tribes, as carried on today by several hundred contemporary Native weavers. Through our main office in Nevada City and a field office in northwestern California, we carry out programs to support the study and practice of basketweaving, protect natural resources, and educate the public. Our nearly 10-year record of accomplishments working at the local, state, and national levels on behalf of basketweavers and their communities has earned for CIBA a reputation as the nation's leading advocacy group for Native American basketweaving and gathering traditions. We are seeking an experienced management professional to lead our organization to new levels of growth and service to our constituents. The Executive Director will oversee a staff of nine professional and support personnel working with a budget of over \$400,000. Reporting to the Board of Directors, the Executive Director serves as the CEO of the organization with all the duties and responsibilities inherent therein. S/he has responsibility for strategic planning, financial development, administrative and program management, staff and board development, and constituent and public relations.

**QUALIFICATIONS:** Bachelor's Degree required; Master's preferred. Preferred experience: minimum of 5 years in cultural, environmental or community development field. Familiarity with California Indian culture, history, and current issues preferred. Desirable candidates will have proven skills in all aspects of nonprofit management. Successful candidates must be willing to make a long-term commitment to CIBA, and will possess most, if not all, of the following qualifications:

- § Demonstrated planning, financial management, and organizational skills, including experience in managing change
- § Strong interpersonal, team-building, and leadership skills, with ability to empower, motivate, and develop staff
- § Ability to articulate a vision for the future and engage others in achieving the vision
- § Ability to inspire enthusiasm and support for CIBA and its goals
- § Ability to motivate, understand and communicate with diverse audiences
- § Ability to respect and build relationships with a diversity of people, organizations, and communities
- § Exceptional oral and written communication skills
- § Proven grant writing and other fund raising skills
- § Proven success working with boards of directors

**LOCATION:** The position will be headquartered at CIBA's main office in Nevada City, in the Sierra Nevada foothills 70 miles northeast of Sacramento, California.

**SALARY:** DOE/DOQ. This is a full-time permanent position. Health, holiday, vacation, and leave benefits are available. Some travel will be required and work-related travel expenses will be reimbursed.

**TO APPLY:** The position will remain open until filled. Motivated applicants should send a letter of interest, together with a resume, salary history/requirements, and names and phone numbers of three professional references to CIBA, PO Box 2397, Nevada City, CA 95959, or via email to <edsearch@ciba.org>. Persons of California Indian descent are especially encouraged to apply. (Website: <http://www.ciba.org>).

### Notice: Upcoming NEIC Assistant Coordinator Position

The CSU, Chico Research Foundation anticipates to soon be seeking applicants to fill the position of Assistant Coordinator of the Northeast Information Center of the California Historic Resources Information System (NEIC-CHRIS). For further information about this forthcoming position please contact:

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### Archaeological Positions Available

Brian F. Smith and Associates is a consulting firm located in San Diego County specializing in prehistoric and historic studies in southern California. We are seeking to fill the following temporary and full-time positions as soon as possible.

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## Calendar of Events

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**March 22-25, 2001. Society for California Archaeology,** Modesto Doubletree Inn. For more information visit the SCA website: <http://www.scanet.org> or the 2001 Annual Meeting Planning Committee: C. Kristina Roper, [kroper@ix.netcom.com](mailto:kroper@ix.netcom.com), Roger La Jeunesse, [LaJeunesse@zimmer.cusfresno.edu](mailto:LaJeunesse@zimmer.cusfresno.edu), or John Pryor, [JohnPrior@zimmer.cusfresno.edu](mailto:JohnPrior@zimmer.cusfresno.edu) of California State University, Fresno (tel: 559-278-3002), Shelly Davis-King, [shellydk@mlode.com](mailto:shellydk@mlode.com), of Davis-King & Associates, and Susan Kerr, [kerrs@yosemite.cc.ca.us](mailto:kerrs@yosemite.cc.ca.us), of Modesto Junior College.

**April 18-22, 2001.** SAA 66th Annual Meeting. New Orleans, Louisiana. New Orleans Marriott. For more information: <http://www.saa.org/Meetings/index.html>

**May 10-13, 2001.** The 30th Annual Society for Industrial Archaeology Conference, Washington, DC. Renaissance Hotel, 999 9th St, NW, Washington, DC. Contact: Dean Herrin at 301-624-2773 or email: [dean\\_herrin@nps.gov](mailto:dean_herrin@nps.gov) or Christopher Marston at 202-343-1018 or email: [christopher\\_marston@nps.gov](mailto:christopher_marston@nps.gov) or visit the SIA website, <http://www.ss.mtu.edu/IA/sia.html>

### Exhibits

Reflections of Culture: Basketry from the Southwest Museum. Southwest Museum at LACMA West, 6067 Wilshire Blvd., Los Angeles. (323) 933-4510.

Discovery, Devastation, Survival: California Indians and the Gold Rush. California State Indian Museum, 2618 K St., Sacramento. Through December 31. (916) 324-0971.

Through the Eyes of Children. Clarke Memorial Museum, 240 E St., Eureka. Native American children's art exhibit from Orleans Elementary, Weitchpec Elementary, Hoopa High School, Trinity Valley. (707) 443-1947.

### Publications

Check out *\*assemblage\**, an online, peer reviewed archaeological journal produced by the graduate students of archaeology and archaeological science at the University of Sheffield, England. *\*assemblage\** covers diverse topics and issues in archaeology. Past issues can

be found at <http://www.shef.ac.uk/assem/3/3comment.html> and Issue 4 is currently on the Web at <http://www.shef.ac.uk/~assem>

### Websites/eDiscussion Groups of interest:

Bulletin board-style Field Archaeology forum: <http://clubs.yahoo.com/clubs/fieldarchaeology>

Directory of Archaeological Societies and Newsletters has been compiled by Michael "Smoke" Pfeiffer, Archaeologist, Ozark-St. Francis National Forests with hyperlinks added by Tom Mallard. This web resource can be found at <http://serv.net/~mallard/archsoc.html>

Federal Preservation Forum is online at <http://www.ca.blm.gov/cdd/fpforum.html>

The Archaeological Data Service provides international guidelines for the collection and preservation of archaeological data. Their website is at <http://ads/ahds.ac.uk>

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