

Society for  
**California Archaeology**  
Newsletter

Founded 1976

Volume 36, Number 4

December 2007



## Mammoth Rubs

Don't miss the  
SOA Annual Meeting  
Sacramento, California  
March 27 through 30, 2008



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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#### Newsletter Deadlines

<i>For Issue</i>	<i>Deadline</i>
March	February 20
June	May 20
September	August 20
December	November 20

#### Calendar Submissions

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

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## Society for California Archaeology Newsletter

### Volume 36, Number 4, December 2002

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## From the President



### Greetings members.

With the Annual Meetings quickly approaching, Scott and John are now in full swing making sure that the meetings are a success. They will both likely need some additional volunteer help, so if you think you will have some free time (I know, what's that?) around the meetings, please contact either Scott or John. Don't worry, there are still some good assignments left.

I wanted to remind everyone that, in addition to being fun, the Annual Meetings are also the time when we recognize the significant accomplishments of our members. In past years, the SCA has not had a formal nomination process for most of our awards. However, the Board recently decided to request nominations from the membership for both the *Mark Raymond Harrington Award for Conservation Archaeology* and the *Lifetime Achievement Award*. The reason for this change is to make sure that no deserving individual is overlooked simply because of the Board composition in any particular year. This issue of the *Newsletter* contains information on how to nominate a member for either award (see p. 15).

Late breaking news . . . Sannie and I just got back from a two-day Cultural Resources Summit put on by the Department of Parks and Recreation. Attendance was limited to 80 people, so Sannie and I felt very lucky to have been invited to participate. The summit, which was held at the Getty Museum, was kicked off by a dinner

attended by Clint Eastwood (one of the first major perks of being SCA President). Sponsored by the Getty Foundation, the Hearst Foundation, and the Society for California Archaeology to name a few, the purpose of the summit was to bring together members of the historic preservation community to begin to develop a common agenda for the future.

Discussions centered around three major questions: 1) what is the state of California's cultural heritage resources; 2) where do we want to be in 5-10 years; and 3) how do we want to get there? The forum included presentations by Mary Nichols from the Resources Agency, and Ruth Coleman, Acting Director of California State Parks, followed by panel discussions and audience questions and comments. Highlights of the summit included discussions on how to consolidate the historic preservation functions currently managed under the auspices of several different state agencies into one overarching entity. Several presentations also focused on how Proposition 40 funds should be spent, both in terms of programs and the need to develop a process for distributing the funds fairly. Mary Nichols reported that the input obtained at the summit would be provided to the Governor for action at a later date.

All participants agreed that this summit was simply the first step in what will become an ongoing process to better care for the state's heritage resources. Organizers promise a quick turnaround for publishing the proceedings of the summit which will be used to stimulate future discussions.

This just in . . . the Society for American Archaeology's (SAA) President, Robert Kelly, has appointed SCA's past president, Sannie Kenton Osborn to the SAA's Advisory Committee on Repatriation. The Committee tracks national legislation, testifies at hearings when necessary, and represents SAA in discussions and negotiations on repatriation issues.

- Dana McGowan

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# SCA Business and Activities

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## Committee Reports

### Education Committee

Mary Gorden  
Jillian Fritch-Stump

The past few months the Education Committee activities have centered around Project Archaeology. Tammara Norton of Far Western has been working on the graphics for Central California. The board of the San Diego Archaeological Center has approved Project Archaeology as part of their programming. Cindy Stankowski, Center Director, and Craig Lesh are exploring grants to fund Project Archaeology in the southland.

Archaeology is a scientific discipline that can excite and challenge students. The Bureau of Land Management developed Project Archaeology to help fulfill this need. Project Archeology is a way for teachers to receive accurate and accessible information of the process of archaeology. It teaches students to value and protect our nation's rich cultural heritage.

### Project Archaeology Workshop for Educators May 10 and 17 at El Pueblo de Los Angeles

On May 10 and 17, 2003 a Project Archaeology Workshop will be held at El Pueblo de Los Angeles Historical Monument, Olvera St. The workshop is offered through Division of Extended Education of California State University, Los Angeles. The core of the programs is *Intrigue of the Past* a 145-page book with 28 lesson plans. The workshop is designed for teachers of grades 4 to 8 and museum educators.

Those attending will receive:

- ✓ A copy of *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades* with 28 exciting lessons teacher can immediately use

- ✓ Presentations by archaeologists and teachers experienced in using archaeology in the classroom
- ✓ Hands-on guidance through lessons which include the process of archaeology and issues in preservation of archaeological resources
- ✓ Instruction in experiential techniques
- ✓ Hands-on activities and classroom materials
- ✓ Archaeological tour of the monument
- ✓ 1.5 units for professional development

The Workshop will be led by Craig Lesh and Betsy Pain. For more information e-mail Craig at HeritageEdu@aol.com. The Workshop cost is \$135. To register contact Jim Antonich (323) 343-5964 or JAntoni@CSLANET.CalStateLA.edu refer to course #033567.

### Project Archaeology Workshop, Bakersfield, October 5th/6th.

Megg Heath from the BLM Anasazi Heritage Center in Dolores, Colorado, teamed up with Bakersfield BLM Field Archaeologist Duane Christian, local educator Jillian Fritch-Stump and Native American Robert Gomez on October 5<sup>th</sup> and 6<sup>th</sup> to share *Intrigue of the Past: A Teacher's Activity Guide for Fourth Through Seventh Grades Curriculum*. The seminar covered the 28 lesson curriculum for fourth through eighth graders that focuses on the foundations of archaeology, the process and the ethical issues involved in the field. Duane Christian shared slides and insights gained from his local work as a BLM archaeologist bringing the professional considerations to the class. The Native American perspective was shared by Robert Gomez including NAGPRA issues and current concerns of the Native Americans in our area. The seminar was attended by archaeologists and educators from

## SCA Business and Activities

Long Beach, Bakersfield and one person from Maui who is hoping to start a Project Archaeology program in her region. Attendees were especially interested in the future of Project Archaeology in California, and how they could help to establish this program in our state. They discussed plans to continue facilitator training workshops through out the state with one in the works for the Fresno or Sacramento area coming soon. Currently we are preparing documents showing how the curriculum is aligned with the California Standards to help teachers introduce the program to their administrators. This information will be available to all workshop participants. Postings for future seminars will be found at the Project Archaeology website and on the SCA website.

### ***Call for Nominations:*** **California Indian Heritage** **Preservation Award** **(deadline February 15, 2003)**

#### **Description of the Award:**

The Society for California Archaeology is honored to formally recognize contributions made by California Indians to the preservation of their cultural heritage. The desire to preserve the heritage of this state is something that California Indians and archaeologists have in common. We know that many generations of California Indians have struggled for cultural survival and autonomy. Through this struggle, they have persevered, and in doing so, have given us a greater understanding of their culture and history. Their perseverance has also led to the current blossoming of California Indian heritage. Recognizing that any one individual or group may have participated in many different ways, some examples of the kind of contributions this award is meant to honor include the following:

- \* Maintain traditional ways and knowledge.
- \* Creating cultural centers, demonstration sites, and workshops.
- \* Publishing, and otherwise documenting traditional stories, songs, and history.
- \* Educating archaeologists, anthropologists, and historians, thereby building bridges of understanding between the academic and traditional worlds.
- \* Participating in legal contexts to safeguard the respect of their ancestors, achieve federal recognition of their tribes, or otherwise take part at state and national levels for the well-being of their communities.
- \* Improving the social, economic, and cultural well-being of their communities.

The SCA California Indian Heritage Preservation Award was created to honor California Indians who have contributed to one or more of these important accomplishments. It is with sincere appreciation and respect that we offer this award each year from the year 2000 onward.

Nominees for this award:

1. Need not be a member of the Society for California Archaeology.
2. Must be nominated by a member of the Society for California Archaeology. Nonmembers may request a member to submit a nomination on their behalf.
3. Must be a California Indian that has contributed to the preservation of their culture in a substantial way either through cumulative contributions or one exceptional contribution.

This award is most similar to the Society for California Archaeology's most prestigious award, the Lifetime Achievement Award. It is most often



given for cumulative contributions (by an individual or group) that have spanned a lifetime and therefore tends to be reserved for elder candidates. It may, however, be given to more junior candidates for outstanding onetime contributions. The goal of the award is to recognize one outstanding individual or group. However, occasionally more than one award may be given. It is also possible to give the award to individuals or groups from the past.

The individual or group recipient of the California Indian Heritage Preservation Award is notified well ahead of time so that they and their supporters can plan to attend the banquet. They are identified during the meeting with a special ribbon on their name tag, are provided accommodation and travel by the SCA, and are hosted to the banquet.

Please send nominations to:

Dana McGowan  
Jones & Stokes Associates  
2600 V Street  
Sacramento, CA 95818  
Email: [dmcgowan@jsanet.com](mailto:dmcgowan@jsanet.com)  
Phone: (916) 739-3095

## SCA Business and Activities

### Legislative Liaison Report

Stephen Bryne

#### Author's Note

If SCA members have comments or issues regarding the legislation or have information regarding other current legislation that may be of interest, please feel free to contact sbryne@garciaandassociates.com. Also, the following federal legislation is summarized from the October 2002 Monthly Washington, D.C. Update of the Society for American Archaeology Government Affairs Program. Thanks to David Lindsay, SAA Government Affairs Manager, for his tracking and summary of federal legislation related to cultural resources.

#### Federal Legislation

##### *H.R. 2114 - National Monuments Fairness Act*

Sponsor: Mike Simpson, R-ID

Status: Introduced June 7, 2001; passed by the House Resources Committee April 15, 2002; currently pending before the full House.

Summary: This bill would amend the Antiquities Act of 1906. Under the bill, the creation of monuments of over 50,000 acres, or additions of more than 50,000 acres to an existing monument, would require Presidential notification of the Governor of the concerned state more than 30 days prior to the issuance of the proclamation, and would make any proclamation null and void unless ratified by Congress within two years. President Clinton's creation of the Grand Staircase - Escalante National Monument in Utah angered many Republicans, in part because the President never consulted with the Governor of Utah or anyone in Utah's congressional delegation prior to the issuance of the proclamation. Also, those concerned about federal ownership of large amounts of territory in the West were and remain concerned about the ability of the

President to unilaterally set aside large amounts of land. The move to abridge the President's power under the Antiquities Act has been a favorite cause of some House Republicans since 1995.

##### *H.R. 5155 - Native American Sacred Lands Act*

Sponsor: Nick Rahall, D-WV

Status: Introduced July 18, 2002; referred to House Resources Committee

Summary: This bill codifies Executive Order 13007, which required federal agencies to grant Native Americans access to sacred lands for religious purposes. It also increases protection for Native American sacred sites by establishing a petition process by which Native American or Native Hawaiian organizations can request that lands under jurisdiction of federal agencies be declared

"unsuitable" for "any or certain types of undertakings." "Undertaking" in the bill has the same meaning as it does in NHPA. House Resources Committee Democrats have grown increasingly concerned about the vulnerability of Native American sacred sites to commercial development, especially energy exploration. Specifically, the cases of the Valley of Chiefs in Montana and the "Dream Trails" land in Indian Pass, California have attracted considerable attention.

##### *S. 2598 - Enhanced Protection of Our Cultural Heritage Act*

Sponsor: Sen. Patrick Leahy, D-VT

Status: Introduced June 6, 2002; passed (amended) by Senate Committee on Energy and Natural Resources July 31; reported to the Senate September 9.

Summary: This bill would increase the maximum prison and monetary penalties for violations of ARPA and NAGPRA, and also for embezzlement and theft from Indian tribal organizations. Maximum penalties for violations of ARPA would increase to \$100,000 and/or 10 years in prison; maximum jail terms for trafficking in Native American human and cultural remains would be increased to 10 years. This bill would complement the new, tougher sentencing guidelines that are to go into effect later this year.

##### *S. 2921 - Native American Contracting and Federal Lands Management*



##### *Demonstration Project Act*

Sponsor: Senator Campbell, R-CO

Status: Introduced September 10, referred to the Indian Affairs Committee.

Summary: The bill would create the Native American Federal Lands Management Demonstration Project, in which Native Americans could contract with the Department of Interior to "perform functions including, but not limited to, archaeological, anthropological and cultural surveys and analyses, and activities related to the identification, maintenance, or protection of lands considered to have religious, ceremonial or cultural significance to Indian tribes." A total of 24 tribes, as defined under the Indian Self-

## SCA Business and Activities

Determination and Education Assistance Act, would be selected over the two years following enactment of the bill to participate, provided they meet certain criteria. Once a planning process had been finalized, the Department of Interior would “enter into a contract with the Indian tribe...to plan, conduct, and administer programs, services, functions and activities...requested by the Indian tribe...related to the identification, maintenance, or protection of lands considered to have religious, ceremonial, or cultural significance” to the tribe concerned.

### State Legislation

#### *SB 1247 - California Trust for Historic Preservation*

Sponsor: Co-introduced by State Senators John Burton (Democrat, San Francisco, District 03), Wesley Chesbro (Democrat, Arcata, District 02) and Tom Torlakson (Democrat, Antioch, District 07).

Status: Sent to a joint conference committee, made up of three Senators and three Assemblypersons for review.

Summary: SB 1247 would create a California Trust for Cultural and Historic Preservation and will place it and the Office of Historic Preservation (OHP), now located in the Department of Parks and Recreation, under the auspices of the State Library. SB1247 is one of three bills, along with AB716 and SB1088, which were sent to a joint conference committee. According to *California History Action*, AB 716 is “a somewhat competing bill, introduced back in February 2001, that seeks to create a largely figurehead, judging by the wording in the legislation, California Historical and Cultural Resources Conservancy, which would promote cultural awareness and education and the contributions of ethnic groups in the state.” SB 1088 would create within the Department of Parks and Recreation an Office of California Museums to “assist the state’s museums by providing grants, developing and implementing

policy...and collaborating with other public agencies to recognize the public service that museums can provide” (*California History Action*, Fall 2002).

#### *SB 1816 - Native American Historic Resource Protection Act*

Sponsor: Introduced by State Senator Wesley Chesbro (Democrat, Arcata, District 02) on February 22, 2002. Coauthored by Assembly Member Virginia Strom-Martin (Democrat, Eureka, District 01).

Status: An amended bill was passed unanimously in the State Assembly and Senate and was signed by Governor Davis on Sept. 30.

Summary: This bill established the Native American Historic Resource Protection Act, which would “provide that any person who unlawfully and maliciously excavates upon, removes, destroys, injures, or defaces a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register of Historic Resources, including any historic or prehistoric ruins...is guilty of a misdemeanor.” This bill will impose much stiffer penalties than are currently in place for destruction of Native American historical resources. The bill language was initially so vague that professionally conducted excavations authorized through either CEQA or NEPA review processes could have been considered illegal. Amendments to the bill have now exempted “any act taken in accordance with” CEQA, NEPA, the Z’berg-Nejedly Forest Protection Act of 1973, agreements under specified sections of the Public Resources Code, and conservation easements meeting certain requirements (*California History Action*, Fall 2002). The act will not apply to actions undertaken by or on behalf of a private property owner on his or her own property, specifying, “Legislation is needed to provide additional legal protection for Native American historical and cultural sites...if that protection...on private lands is consistent with

constitutionally protected property rights” (*California History Action*, Fall 2002).

#### *SB 1828 - Historical Resources: Affected Native American Sites: California Environmental Quality Act*

Sponsor: Co-introduced by State Senators John Burton (Democrat, San Francisco, District 03) and Wesley Chesbro (Democrat, Arcata, District 02)

Status: Governor Davis vetoed this bill on Sept. 30.

Summary: This bill would have required a lead agency to provide any affected tribe and the Native American Heritage Commission a copy of the lead agency’s initial study or notice of preparation for any proposed project that is within 20 miles of the exterior boundary of a Native American reservation or sacred site. The bill would also have required a lead agency to consult with the affected tribe, the project proponent, and if the lead agency determines necessary, the commission, to seek mutually agreeable methods of avoiding or substantially lessening the potential adverse effects, and would have made any agreement reached during the consultation meetings binding on the affected tribe and the project proponent. Opponents of the bill included a long list of mine operators, utilities, oil companies, real estate agents, builders, and other business groups. The California Chamber of Commerce claimed that the bill was a “job killer” because of its broad impact, including the delays and costs it will add to public works such as highways, schools, and utility lines.

#### *SB 2063 - California Indian Museum and Cultural Center Commission*

Sponsor: Introduced by State Senator James Brulte (Republican, Rancho Cucamonga, District 31).

Status: Governor Davis signed SB 2063 on August 27. The bill passed unanimously in both the State

## SCA Business and Activities

Assembly and Senate, with an urgency clause that allows it to take effect immediately.

Summary: This bill will establish the California Indian Museum and Cultural Center Task Force within the Department of Parks and Recreation for the purpose of developing a California Indian Museum and Cultural Center. The task force will consist of nine members including the Director of California State Parks, Executive Secretary of the Native American Heritage Commission, State Librarian, Secretary for the Resources Agency, and five appointed members. The task force's first duty, due within one year of convening, is to make recommendations to the Department of Parks and Recreation on possible sites for the facility.

### *SB 2084 - California Mission Preservation Fund*

Introduced by State Senator Bruce McPherson (Republican, Santa Cruz, District 15).

Status: This bill has been referred to committee.

Summary: This bill would create the California Mission Preservation Fund in the State Treasury and would require that the moneys in the fund, upon appropriation by the Legislature, be used by the Department of Parks and Recreation, in consultation with the California Missions Foundation, for specified purposes relating to the preservation, restoration, and protection of California's historical missions. All but ten of California's House and Senate members, all Republicans, are sponsoring this bill that would provide \$10 million in Interior Department matching grants to help finance a \$50 million program for saving the State's missions (*San Francisco Chronicle*, October 30, 2002). All 21 of the missions need work to keep them open. Plumbing and electrical systems, some a century old, must be updated, and handicapped accessibility is an issue at many of the missions, 19 of which are still owned

by the Catholic Church or the Franciscan friars (*San Francisco Chronicle*, October 30, 2002). In the case of the San Miguel mission in San Luis Obispo County, \$8 million is needed for a complete reconstruction to prevent an outright collapse.

### *AB 1247 - Official State Gold Rush Ghost Town: Bodie*

Introduced by Tim Leslie (R-4<sup>th</sup>)

Status: Governor Davis signed the bill on September 4.

Summary: This bill designated the town of Bodie as the official state Gold Rush ghost town. *California History Action* states that "After much wrangling about which of the ghost towns of Bodie or Calico was more deserving of being designated our first official State Ghost Town, it appears the Legislature, in its Solomon-like wisdom has chosen to split the baby down the middle yet again... Thus, instead of one town or the other being "the" State's Ghost Town, one will be the Official Gold Rush Ghost Town and, we assume, the other the Official Silver Rush Ghost Town, a quirky enough solution that it was dubbed "The Great Ghost Town Compromise of 2002" by Senator Deborah Bowen... At some point in the next Legislative session, we're sure to see a similar bill sail through for Calico; giving California yet another first, with not one but two official State Ghost Towns."

### References Cited or Consulted

Lindsay, David  
2002 SAA Government Affairs  
Program: Monthly Washington,  
D.C. Update October 2002.  
*San Francisco Chronicle*, October 30,  
2002  
*California History Action* 20(3), Fall  
2002.  
<http://www.leginfo.ca.gov>

## Avocational Committee

*Jerry Dudley*  
*Myra Herrmann*

Great time of year for the avocational archaeologist to be inside, during the rains, helping in the lab. Just ask, as someone may need a little help in catching up on the cleaning, paperwork and the data entry. Hope everyone had a great Fall season as we will be looking forward to the Avocational meeting in Sacramento, March 27-30. It has become evident that a few of our avocational groups have been able to institute some types of curation facilities so we will have presentations at our annual luncheon regarding this possibility.

This year at the annual meeting the avocational committee will be sponsoring a poster session with a theme involving the history of how the societies got started, and of course some pictures showing the founders of the group etc. Information will be sent later on regarding submittal requirements, so start planning now for these posters.

Enclosed in this issue of the SCA *Newsletter* is an application form for the Helen C. Smith award given to a deserving Avocational group each year. We encourage everyone to take a little time and itemize all your activities this last year so that we can honor your efforts.

Help!

I've lost track of the Exchange Game. If you have it or know who does, please let me know. Thanks.

Mary Gorden

magorden@msn.com

559/597-2372

## Award Nomination Form for the 11<sup>th</sup> Annual SCA Helen C. Smith Avocational Society Achievement Award

Please Fill Out This Form and Return by Mail to Either:

Jerry Dudley, 17285 Tamara Ln., Watsonville, CA 95076  
or  
Myra Herrmann, 3230 Ingelow St., San Diego, CA 92106

The Form May Be Typed or Hand Written.  
Responses May Also Be FAXed to (619) 446-5499  
If You Have Any Questions, Please Call (831) 663-2036

**Deadline Is February 1, 2003**

*Person or Organization Submitting Nomination:*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Organization Nominated: \_\_\_\_\_

President Or Director: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

*Describe what significant contribution or contributions this group has made to California archaeology during 2001. Please provide as complete a description as you can and append additional pages to give as much information about the group as possible.*

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*Please Complete:*

*The Information Submitted About My Organization Is Accurate And Correct.*

\_\_\_\_\_  
Signature of President, Director, or Authorized Representative

## SCA Business and Activities

### Research Money for Students !!!! Call for Proposals, James A. Bennyhoff Memorial Fund Award

The Society for California Archaeology (SCA) invites interested undergraduate and graduate student SCA members to submit research proposals for the James A. Bennyhoff Memorial Award. The award is intended to support original research on the prehistory of California and the Great Basin.

Special consideration will be given to projects that are consistent with the scholarly interests held by Dr. Bennyhoff in relation to California and Great Basin prehistory, specifically those emphasizing analyses of artifacts in existing museum collections or regional repositories, and/or those reported in inventories and reports. Appropriate research would include: (1) the development, significant refinement and/or modification of time-sensitive typologies or seriation studies useful in identifying prehistoric spatial or temporal units, or (2) relating primary data to revision of existing culture historical taxonomic frameworks.

Projects may involve more than one subdiscipline of anthropology and may have objectives beyond those of culture history; nonetheless, a significant portion of the study must involve direct work with artifacts or other primary source data (e.g., mission registers, historical/archival documents), and must show promise to enhance the scientific understanding of California and Great Basin prehistory. Research projects may involve preparation of a thesis, dissertation, or a formal refereed publication.

Funds from the award (up to \$1,000) may be used by the recipient for any purpose directly related to the study; e.g., travel for the purpose of studying collections, photography, illustrations, graphics, radiocarbon studies, or obsidian analyses. Additional support is available to conduct up to 100 obsidian hydration readings (courtesy of Origer's Obsidian Laboratory) and up to 50 obsidian source analyses (courtesy of Richard Hughes at Geochemical Research Laboratory). New this year is the addition of AMS dates courtesy of the CAMS facility at the Lawrence Livermore National Laboratory.

Application for the Bennyhoff Memorial Fund Award should include a concise statement of the research problem to be addressed, a detailed budget and time-line for completion of different phases of the project, a resume, and a letter of recommendation from the student's major professor or other knowledgeable project sponsor. The

applicant must complete the proposed research and report within one calendar year of receipt of the award and submit it to the committee. Applications should be mailed to:

Chair, Bennyhoff Memorial Fund Award Committee  
c/o Society for California Archaeology  
20 Portola Green Circle  
Portola Valley, CA 94028-7833

Any questions about the award can be directed in writing to the address above or e-mailed to rehughes@silcon.com. All required materials must be received at the address above no later than February 15, 2003. We will inform the applicants of the outcome in March, and if a Memorial Fund Award is granted, the recipient will be announced during the banquet awards ceremony at the 2003 annual SCA meeting in Sacramento.

## STUDENTS—AVOCATIONALISTS ARE YOU SEEKING AID AND RECOGNITION FOR YOUR ARCHAEOLOGICAL STUDY?



Apply for the  
**James A. Bennyhoff Memorial Fund Award**  
for the year 2003



This award, sponsored by the Society for California Archaeology, supports original research on California and Great Basin prehistory. Consideration will be given to the following types of research:

- Studies which focus on the development, significant refinement, and/or modification of time-sensitive artifact typologies.
- Studies which refine, revise, replace, or expand current cultural historical taxonomic frameworks that model change in prehistory.

The study may be designed to contribute to a formal research project such as a senior or master's thesis, dissertation, or formal refereed publication.

The award offers the following types of support to the award winner, as needed:

- Up to \$1,000 cash
- 50 free obsidian source identifications donated by Richard Hughes
- 100 free obsidian hydration readings donated by Thomas Origer
- AMS dates donated by the CAMS facility at Lawrence Livermore National Laboratory.

Award funds may be used for any purpose directly related to a study or its publication, e.g., travel for collection study, photography, illustrations, graphics, radiocarbon, or other analyses.

### BENNYHOFF AWARD APPLICATIONS DUE FEBRUARY 1, 2003

Send a letter including (1) a concise statement of your research problem, (2) a simple budget request, (3) a general time line for completion of the study, and (4) an attached resume. Separately, we request a letter of recommendation from a professor or other knowledgeable sponsor. Mail to:

Chair, Bennyhoff Memorial Fund Award Committee  
20 Portola Green Circle  
Portola Valley, California 94028-7833

## SCA Business and Activities

### CASSP: New Volunteer Site Stewards at El Centro, Panamint Valley, and Ukiah

*Chris and Beth Padon*

Over fifty volunteers in El Centro, Panamint Valley, and Ukiah recently attended training workshops for the California Archaeological Site Stewardship Program (CASSP). Each of these workshops were held at special locations.

On September 21-22, a CASSP workshop was held at the Community Arts building (the historic post office) in El Centro. BLM State Archaeologist, Russ Kaldenberg, and coordinating archaeologist, Margaret Hangan spoke during the classroom sessions on Saturday. Other speakers included Jay von Werlhof and Preston Arrow-weed, both of whom have been recently honored by the SCA.

The statewide coordinator of the Arizona site stewardship program, Mary Estes, also participated as a speaker and discussant. Mary has provided valuable advice to CASSP, and we were very pleased that she could participate in this workshop. Hopefully, this will lead to greater interaction and cooperation with the Arizona site stewardship program.

Sunday's field trip was led by Karen and Ed Collins (Imperial County Information Center and Imperial Valley College, respectively). In spite of the 90+ degree temperatures, everyone enjoyed seeing rock rings, fish traps, a prehistoric trail, pottery sherds, and flaked stone artifacts. By the end of the field trip, Margaret had already made appointments to take several new volunteers on individual trips to their chosen sites.

On October 26-27, a training workshop was held for Adopt-a-Cabin volunteers for the BLM Field Office Ridgecrest. The Adopt-a-Cabin program was created by Steve Smith in the Ridgecrest Field Office to organize the concerns and energies of people who want to visit abandoned cabins on BLM lands. This group has rehabilitated over 14 cabins at closed mining sites in the Ridgecrest area. We are very pleased to partner with them to protect heritage resources in this area, which include some of the mining sites near these cabins.

This CASSP workshop was held at the Minnietta Mine Cabin in Panamint Valley. Russ Kaldenberg, Judyth Reed, Steve Smith, Linn Gum, and James Barnes gave talks on Saturday. The lack of electricity or running water was more than compensated by the beautiful setting and abundance of good company. We camped in tents and cots and open ground on Saturday, after enjoying lasagna, salads, garlic bread, stew, and apple

pie for dinner. On Sunday, we visited several historic sites, including a Wells Fargo stage stop and the Anthony Mills ruins at Reilly. Judyth and Russ showed the repairs and restorations at Reilly, and James talked about his research at this town site.

On November 16-17, a CASSP workshop was held in Colusa for the BLM Field Office in Ukiah. The Saturday classroom sessions were held at Cachil-dehe, the Colusa Indian Community Center. We were fortunate to have such a good facility with ample space and multimedia capabilities, because there were more than 30 participants. Joe Pina, Kesner Flores, Russ Kaldenberg, Julie Burcell, and Greg White spoke on Saturday. And Beth learned how to use a microphone and to connect Greg's computer to the multimedia projector.

On Sunday, the CASSP volunteers visited prehistoric and historic sites in the Cache Creek area. We were able to apply some of the lessons learned on the previous day. At one of the sites, the volunteers observed new information and, under Julie's supervision, they recorded this information on the CASSP monitoring form.

CASSP recruits and trains volunteers to work with professional archaeologists to protect sites on public lands by making regular monitoring visits. Each workshop lasted two days, with classroom training on Saturday and field training on Sunday. The next training workshop for new site stewards will be held at the Bureau of Land Management (BLM) Field Office in Barstow on February 22-23, 2003. BLM archaeologist Amy Lawrence and National Parks Service archaeologist Bob Bryson will serve as the coordinating archaeologists for this new team. The training workshop will

*CASSP coordinating archaeologist, Julie Burcell, helping CASSP volunteer, Martin Spannaus, complete the site monitoring form during the workshop field trip, November 17.*



## *SCA Business and Activities*

*Workshop for the El Centro BLM Field Office, held at the old Post Office in downtown El Centro, September 21.*



*James Barnes on front porch of the Minnietta Mine Cabin, as we prepared to leave for the workshop field trip, October 27.*

*Judyth Reed describing an artifact at the workshop for the Adopt-A-Cabin volunteers of the BLM Ridgecrest Field Office, held at the Minnietta Mine Cabin, Panamint Valley, October 26.*



*CASSP volunteers for the Ukiah BLM Field Office, November 17.*



## SCA Business and Activities

last two days over a weekend, and cost \$25 per person. To make a reservation or obtain more information, please contact Beth Padon at bpadon@discoveryworks.com or (562) 492-6770.

Also this fall, we learned that CASSP was one of the recipients of the 2002 Governor's Historic Preservation Award. The announcement on the OHP web site ([http://ohp.parks.ca.gov/default.asp?page\\_id=22050](http://ohp.parks.ca.gov/default.asp?page_id=22050)) states that, "The Governor's Historic Preservation Awards are presented annually under the sponsorship of the State Office of Historic Preservation to organizations whose contributions demonstrate outstanding commitment to excellence in historic preservation." Presentation of the award was made in Sacramento on December 6.

*Governor's Historic Preservation Award, December 6. Back row: Russell Kaldenberg (State Archaeologist, BLM), Knox Mellon (State Historic Preservation Officer), Bill Wight (CASSP volunteer), Mike Pool (State Director, BLM), Phil Hines (Archaeologist, Off-Highway Motor Vehicle Recreation Division), Denzil Verardo (Chief Deputy Director, California State Parks) Larry Myers (Executive Secretary, California Native American Heritage Commission). Front row: Sannie Osborn (Past President, SCA), Beth Padon (statewide CASSP coordinator), Elena Nilsson (President Elect, SCA), Judyth Reed (Archaeologist, Ridgecrest BLM Field Office).*

**Congratulations to  
CASSP:  
Recipient  
of the  
2002  
Governor's Historic  
Preservation Award**



## SCA Business and Activities

### SCA Business Office News...

**President's Visit.** On Tuesday, 10 December, the President and President-Elect visited the new Business Office. We reviewed the status of various accounts, membership, archives, and SCA Gear. Several potential new tasks were identified.

**Membership.** In August, shortly after the Business Office arrived at CSU, Chico, SCA membership hit a four year low. We were concerned that a newly installed membership program establishing systematic annual dues at the beginning of the year, combined with a relatively low turnout at the 2002 Annual Meeting (traditionally, the place where we catch tardy dues) had resulted in many allowing their memberships to lag. We suspected that many folks were simply waiting for the new year, and in some cases months or years had slipped away.

We immediately requested and were granted a ruling by the Executive Board reestablishing year long membership from the quarter of receipt of dues. We then queried the membership database for all individuals whose membership had lapsed since 1999 and in late August sent all these folks a postcard indicating "Your Membership Has Expired..." The graph on the right shows the terrific response we received and are continuing to enjoy. We are now at an all-time high, with 933 members (and counting).

Meanwhile, we will monitor your membership status and send a reminder postcard early in the quarter your membership will lapse. In addition, you will find a membership status code on the *Newsletter* mailing label beginning with issue 37(1).

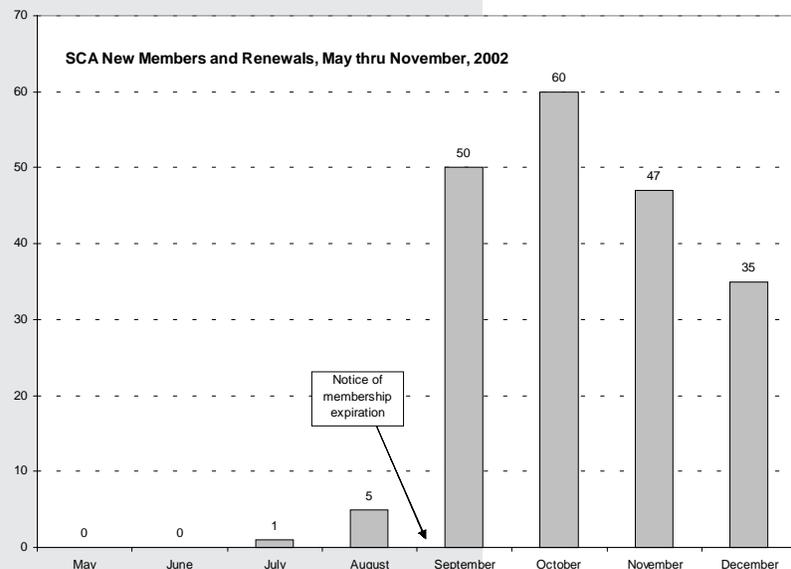
Thanks to former Business Office Manager Kristina Roper, who had the diligence and foresight to develop and maintain a thoughtfully constructed, comprehensive database including data on past members and fields for past expirations.

**Directory.** A couple of folks questioned why the "new" *Directory* we sent out in October did not contain updated addresses. This was, in fact, still the 2001-2002 *Directory*. In order to meet our mailing target (all the new members) we had to print an additional 500 copies of the 2001-2002 *Directory*. It looked a bit different (we couldn't hang with the Hunter Safety color scheme) but content stayed the same. We will develop a new directory with updated membership info in early 2003.

**Operations.** We are pleased that you feel free to contact the Business Office, and are accustomed to daily contact via telephone, FAX, mail, and e-mail. Call us with your questions. If we don't know the answer at least we'll connect you to someone who can help.

*Thanks!*

**1** If you are among the many whose membership expires the first quarter of 2003, please respond to the renewal card enclosed with the ballot and Holiday greeting you received at Xmas!



SCA Business Office  
Department of Anthropology  
California State University, Chico  
Chico, CA 95929-0401

ATTN: Melinda Pacheco  
Phone: (530) 898-5733  
FAX: (530) 898-4220  
e-Mail: SCAoffice@csuchico.edu

Office Hours: 8:00-5:00 M/Th  
12:00-5:00 W

**Look for an SCA e-mail Alert containing:***Award Nomination Forms for the***2003 SCA LIFETIME ACHIEVEMENT AWARD****2003 SCA M.R. HARRINGTON PRESERVATION AWARD**

The award nomination forms will be forwarded to your e-mail address, or can be obtained by contacting the SCA Business Office. Interested parties can complete the forms, and return them by mail or FAX to:

President Dana McGowan  
Jones & Stokes, Inc.  
2600 V Street  
Sacramento, CA 95818  
or FAX: (916) 503-6681

The FAX must be dated or envelope postmarked on or before February 1, 2003.

**Lifetime Achievement Award**

The SCA's highest award, the *Lifetime Achievement Award* is given to honor individuals who have demonstrated a career-long dedication to and lifetime of achievement in California archaeology. The nomination form will ask the signatory(s) to describe the individual's schooling and influences, accomplishments in teaching and training, contributions to theory-building, exemplary scientific studies, achievements in the construction of regional records or methodology, recognition for unique and innovative ideas and discoveries, excellence in the planning and execution of cultural resource management programs, role in developing agency process and policy, and outstanding efforts in public outreach and consultation and coordination with tribal communities.

**Mark Raymond Harrington Award for Conservation Archaeology**

The *Mark Raymond Harrington Award for Conservation Archaeology* recognizes individuals or organizations for excellence in the preservation, stewardship, and public interpretation of heritage resources. The nomination form will ask the signatory(s) to describe the nominee's specific accomplishment or accomplishments, the problems faced, remedies applied, and solutions achieved.

Please note that nominations for the *Lifetime Achievement Award* and the *Mark Raymond Harrington Award for Conservation Archaeology* do not require a petition. A nomination may be filed by a single signatory.

All decisions related to conferring these and other awards of the Society for California Archaeology are the sole province of the Executive Board of the Society for California Archaeology.

**Web Sites of Interest:**

USGS Flagstaff Field Center, DEM Shaded Relief Maps  
<http://www.flag.wr.usgs.gov/USGSFlag/Data/maps/>

The Marmot Burrow: for marmoteers and marmotophiles  
<http://www.marmotburrow.ucla.edu/>

CIA World Factbook 2002  
<http://www.odci.gov/cia/publications/factbook/index.html>

California Plant Names, Word Meanings and Name Derivations  
<http://www.calflora.net/botanicalnames/>

Elliott Avedon Museum and Archive of Games  
<http://www.gamesmuseum.uwaterloo.ca/index.html#brueghel>

SAA e-tiquity  
<http://e-tiquity.saa.org/>

Chesapeake Bay Maritime Museum  
<http://www.cbmm.org/>

New Jersey Turnpike Potters Field Burial List  
<http://www.state.nj.us/turnpike/burial%20list.pdf>

On-Line Science Museum Global Climate Change  
<http://www.sciencemuseum.org.uk/antenna/climatechange/index.asp>

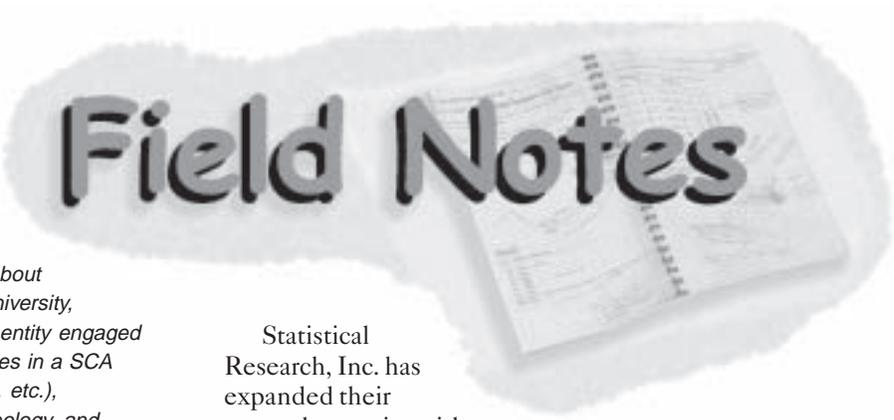


Editor's e-mail:  
[gwhite@csuchico.edu](mailto:gwhite@csuchico.edu)

## News and Announcements

### Michael Sampson

Greg White and I have agreed to initiate a new column in the SCA Newsletter, which I have, at least for the moment, entitled "Field Notes." It is our plan to use this column to publish news and announcements about the following subjects: new hires or retirements at a university, agency, consultant firm, museum, tribal office, or other entity engaged in archaeology, acquisition of a new collection, milestones in a SCA member's career (awards, notable longevity in the field, etc.), milestones for a California institution engaged in archaeology, and similar types of news items. No news item or announcement will be reported in this column that could be construed as inflammatory, controversial, or embarrassing to an individual SCA member or institution. If the Newsletter editor or I have any such concerns, we will ask about the news item prior to printing it. Please send potential contributions to me (4640 E. Talmadge Drive / San Diego, CA 92116 or [msampson@parks.ca.gov](mailto:msampson@parks.ca.gov)).



# Field Notes

Statistical Research, Inc. has expanded their research capacity with the purchase of Archaeological Mapping Specialists of Berkeley. Dr. Chris Dore now heads SRI's Geospatial and Cartographic Department. Chris Dore should be congratulated on his recent election as President-elect of the American Cultural Resources Association. SRI also hired Dr. Manuel Palacios-Fest, who is a paleoecologist with a speciality in ostracode analysis. Manuel and Jeffrey Homburg of SRI won the professional poster of the year at the 2002 SAA Annual Meeting.

California Archaeology was also nicely represented at the 2002 Society for American Archaeology annual meetings with a symposium chaired by John Johnson and one chaired by Jeanne Arnold and Anthony Graesch.

Past SCA President Susan Hector has changed positions and opened a consultant firm, Broken Fragments, LLC. She has been assisting Nature Conservancy, California Fish & Game, and other agencies with planning efforts for archaeological sites. Susan also works with ASM Affiliates, an archaeological consultant firm in Encinitas.

Stan Berryman recently left a position as Base Archaeologist at Camp Pendleton Marine Corps Base and now serves as Forest Archaeologist on the Cleveland NF. Considerable cultural resource work was accomplished at Camp Pendleton while Stan worked there.

Andrew Pigniolo has begun an archaeology consulting firm in San Diego, Laguna Mountain Environmental, Inc. Andrew has been a longtime fixture in San Diego County archaeology.

The San Diego Archaeological Center, a nonprofit repository for archaeological collections, has moved to a permanent home in the San Pasqual Valley. Cindy Stankowski serves as the director of the Center. The San Diego Archaeological Center is the home for many so-called "orphaned" collections from old projects in San Diego County, and serves as a curation facility for new projects in southern California. These collections are open for research purposes, and presently serve as a training ground in lab methods for many college archaeology students.

The Department of Anthropology at California State University, Long Beach has launched a new educational endeavor entitled The Program in Archaeological Science. This program will provide extensive training to students in scientific research methods and the fundamentals of evolutionary theory. To implement the new program, CSU Long Beach has expanded their Archaeology staff with the recent hirings of Drs. Hector Neff, Carl Lipo, and Jelmer Eerkens. Dr. Daniel Larson is the Chairman of the Department. Archaeologist staff and students have the opportunity to collaborate with other disciplines in the university to conduct cutting-edge scientific research with some of the most up-to-date technologies.

In another realm of academia, Past SCA President Lynn Gamble has attained Tenure within the Department of Anthropology at San Diego State University. Lynn also directs the Archaeological Collections facility at the university. San Diego State University is further expanding their opportunities in Archaeology with the hire of Dr. Seth Mallios to teach Historical Archaeology and other subjects. It is encouraging to see Historical Archaeology taught at more colleges in our state. California archaeologists have been some of the leaders in the field of Historical Archaeology since the 1950s with the work of William and Edith Wallace, Paul Schumacher, Roberta Greenwood, staff of California State Parks, and many others.

CSU Channel Islands in Camarillo opened in Summer 2002. William Adams is the lone Archaeologist on the faculty; indeed, Bill was the first of 13 new faculty members to be hired by the school. The university plans to hire two part-time Anthropology teachers in Fall 2003 and one tenure-track Anthropology faculty member in Fall 2004.

## News and Announcements

### 2003 Annual SCA Meetings Sacramento, March 27 through 30, 2003

*Scott Williams, Local Arrangements*  
*John Holson, Program Chair*

#### Schedule and Accommodations

The 37<sup>th</sup> Annual Meeting of the Society for California Archaeology will take place March 26<sup>th</sup>-29<sup>th</sup>, 2002 at the Doubletree Hotel, in Sacramento. The hotel is centrally located near Business 80 and the Capital City Freeway, just minutes from downtown Sacramento and a short ride to Sacramento International Airport. The hotel offers an airport "Super Shuttle" to and from the airport for \$12.00 (between 4:45 AM and 6:45 PM). Local attractions include Old Sacramento, the State Capital, the California State Railroad Museum, the Discovery Museum, the California Military Museum, and Sutter's Fort. Our room rate is \$101.00 for single and double occupancy. For additional information about the hotel you can visit their website at: ([www.doubletreehotels.com](http://www.doubletreehotels.com)). Under "Quick Search" type Sacramento and choose California from the drop down screen. If your planning any pre-conference sessions, please contact Megan Chappell at the Double Tree Hotel at: (916) 924-4929. She can assist you with meeting rooms and insure that you receive the SCA room rate.

Planning is in progress for events for the 2003 Annual Meetings and include tours, workshops, paper sessions, and receptions. Watch the SCA *Newsletter* and the Website for meeting updates. If you have any questions regarding participation on the planning committee, please contact Scott Williams (Local Arrangements Chair) via e-mail at: ([Scott\\_Williams@dot.ca.gov](mailto:Scott_Williams@dot.ca.gov)) or phone at: (530) 741-4282. For submission of papers, symposia or poster sessions contact John Holson via e-mail ([legacyjh@ix.netcom.com](mailto:legacyjh@ix.netcom.com)) or phone at: (510) 524-3991. Submission forms can also be found in the SCA *Newsletter* or on the SCA webpage, [www.scanet.org](http://www.scanet.org).

#### Second Call for Papers

Proposals for the 37<sup>th</sup> Annual Society for California Archaeology Meeting symposia, workshops, papers and posters are being requested. The meetings will be held in Sacramento on March 27 through 30, 2003. The symposia and workshop proposal deadline is November 29, 2002. Proposed symposia should be submitted as a package with abstracts and forms for all papers. Contributed papers and poster deadline is December 23, 2002. This year's theme is "Discovering our Roots" and the Program Chair would like to encourage academic institutions, avocational societies or agencies to submit poster abstracts regarding the history of their respective archaeology programs. We would like to encourage pictorial posters around this theme. The maximum length for organized symposia and contributed papers is 15

minutes. Please contact the Program Chair if you have any questions about proposed sessions or other presentations.

Our keynote speaker will be Dr. Ruth Tringham from the University of California. She will be talking about her ongoing excavations at the site of Catal Hayuk in Turkey.

Participants are limited to being senior author on only one presentation, but they may be junior authors on additional papers. Please note that participants must supply their own equipment for audiovisual needs other than slide or overhead projectors. Please use the proposal form found in issue 36(3) of the *Newsletter*, or you can submit a proposals electronically via [www.SCANet.org](http://www.SCANet.org). Direct mail or e-mail attachments to the Program Chair are also welcome. Proposals may include the hard copy form included in this issue of the *Newsletter*, but submitters are required to submit an electronic copy of their abstract (PC format). Abstracts should be no larger than 100 words.

For further information or assistance, please contact the Program Chair:

John Holson  
Pacific Legacy, Inc.  
1027 San Pablo Avenue  
Albany, CA 94706  
[holson@pacificlegacy.com](mailto:holson@pacificlegacy.com)

### Southern California Data-Sharing Meetings

*Thomas Wheeler*

This year the Southern California Data Sharing meeting was held in Fleischman Hall at the Santa Barbara Museum of Natural History in Santa Barbara. Dr. Karl Hutterer, Executive Director of the museum, welcomed us on Saturday morning to a schedule of fifteen papers and a tour of the Museum's ethnobotanical garden.

Sherry Gust presented her recent osteological work from early rancho deposits, and Chinese communities in San Diego. Analysis of a boarding house privy deposit in particular was speculated to represent idiosyncratic behavior of secret eating.

Chert debitage and flaked stone implements from the Elk Hills and the Temblor Range in Kern County were shown by Brendan Culleton to provide evidence of different sources, and modes of procurement and reduction of two common types of chert toolstone: Temblor chert and the so-called Monterey or "rootbeer" chert.

Jeanne Binning provided a brief overview of the recent archaeological compliance activities of the Caltans staff at the Central California Heritage Resources Branch.

## News and Announcements

Beth and Chris Padon gave an update on the California Archaeological Site Stewardship program (CASSP). They have conducted eleven volunteer training workshops since 1999, training over 156 volunteers throughout the state to actively serve as site stewards to monitor the condition of archaeological historic resources of the state.

Beth and Chris also described the notable contribution of Burro Schmidt, a lone miner of the Gold Rush, who scraped a solitary life in the mountains and deserts of California, while hands excavating, a 1,836 foot tunnel through Copper Mountain in the northern Mojave Desert area.

Sandy Rogers, a graduate student at CSU Bakersfield and Frances G Rogers, CASSP Docents, described site recording preparatory to his thesis work on the Terese Site, in the El Paso Mountains of eastern Kern County. This site has been selected for monitoring under the California Archaeological Site Stewardship Program (CASSP). Sandy and Frances inventoried the site with BLM archaeologist Judyth Reed finding it to consist of rock rings, bedrock mortars and milling slicks, large numbers of broken metates, extensive lithic scatters, rock art, and a large midden area.

David Ferraro shared with us his recent excavations at the Talega site in Orange County where he uncovered a pit house like feature, dated at 6,000-8,000 B.P. buried 3.5 meters below the surface.

Wayne Bonner described the discovery of a remnant of a Millingstone Horizon village site C-14 dated to over 4,000

years B.P. , comparable to Level II of Malaga Cove. Soil removal during redevelopment of a closed petroleum storage tank farm in the San Pedro section of Los Angeles exposed over one thousand lithic specimens. A brief description by R. F. Racer in 1939, suggest this site (LAn-2875) can be identified with his Harbor Site.

The highlight of the morning's events was a tour of the Natural History Museum's ethnobotanical garden led by Jan Timbrook. Jan, who developed the garden, provided interesting insights into the botanical world of the Chumash.

The afternoon's papers focused on Channel Islands research with papers by John Johnson, Mike Glassow, Kate Ballantyne, and Dustin McKenzie.

John Johnson reported on interdisciplinary research conducted at Arlington Springs, on Santa Rosa Island, in the spring of 2001. Arlington Springs woman has been C-14 dated at 13,000 years B.P. Fieldwork at the Santa Rosa Island Site was aided by 3-D laser scanning, GPS/GIS-mapping, and digital image editing. Doug Hechter introduced digital image editing as a new and useful adjunct to unravel the archaeological record. Through the enhancement and extraction of new information from photographs, he was able to determine and verify the location of Arlington Springs woman in an area of the site since eroded away. Doug's paper was followed by a demonstration of the use of the Cyrax 3D-laser technology as an archaeological measurement and analysis tool. The entire audience was scanned and measured with Cyrax 3D-laser to demonstrate how a digital terrain

model, based on the three-dimensional laser mapping of ten million points to sub centimeter accuracy, was used to scan and measure the Arlington Springs excavation site and canyon.

Mike Glassow provided rare insight into the construction and use of Chumash harpoon foreshafts collected in the late 18th century and the early 19th century. Evidence of sophisticated craftsmanship entailing the use of wood, twine of plant fiber, bone, chert, and ocher, including the flaked stone point and the bone barb, gave insight into the forms of harpoon parts that appear in the archaeological record.

*Ann-Marie Sayers, Brian Ramos, and Tom Jackson at the Northern Data-Sharing Meeting, Cabrillo College.*



Patrick Brunmeier

## News and Announcements

Kate Ballantyne, graduate student at the U.C. Santa Barbara, presented the initial results of her excavation of buried sites on Santa Cruz Island. Dustin McKenzie, also a graduate student at the U.C. Santa Barbara demonstrated the application of his replicated Channel Island fishing equipment. Where “J” and circular hooks have proved successful catching fish from a variety of marine environments, fish toggles have, so far, not produced successful catches.

Mike Sampson and Marla Mealy described recent survey work in Anza Borrego Desert State Park for the Anza Borrego General Plan, and a post fire survey of the Pine Fire that Ravaged 17,000 acres of park land. Additional projects included site rerecording and mapping to update sites recorded by Wallace, Meighan, True and many others.

John Johnson and Linda Agren are especially thanked for their efforts and participation, which made this a memorable meeting. John Johnson kindly made the Fleischmann museum available to us. We are also indebted to Linda Agren who provided invaluable assistance with site logistics. Elise Wheeler provided on site organization pulling together all the important details necessary for the success of this meeting.

An informal get together and museum tour led by John Johnson was held on the museum grounds after the meeting.

## Northern California Data-Sharing Meetings

*Rick Fitzgerald*

This year the Northern Data Sharing Meeting was held in the Forum Room at Cabrillo College in Aptos and was hosted by Rob Edwards of the Archaeological Technology Program and Albion Environmental Inc. A good mixture of students, academics and working professionals heard a program of fifteen papers that ranged from historic to prehistoric topics and geographically from Owens Valley to the central coast. As advertised the morning session was devoted to general papers and the afternoon to coastal archaeology papers. Presented below is a summary of the papers presented.

Stephen Bryne presented a paper on special analysis conducted on a mortar and pestle unearthed from a shell mound site (CCO-283) in Richmond. His analysis included pollen, macrofloral and protein studies, which revealed the presence of several plant species and animal blood proteins. Surprisingly no traces of acorn residue were present, proving once more that the mortar and pestle was an all-purpose tool, and not just for processing acorns.

Christian Goerke gave an excellent presentation on unusual cultural resource early 20<sup>th</sup> century Japanese produce farms. According to Christian the Takahashi and Takuma

farms located in Placer County, represent an important chapter in American farming history and have been all but overlooked for nomination to the National Register of Historic Places. They also represent a dark episode of World War II history in that they are a reminder of the fate of many Japanese Americans who were forcibly sent to “relocation camps” often resulting in the loss of all their property including their land.

Mike Elliot provided a brief overview of a recent large-scale archaeological survey in the Los Banos area of the San Joaquin Valley. Mike provided preliminary results from seventeen newly recorded sites that were located on low rises that ranged from sparse lithic scatters to extensive village sites.

Randall Groza gave a brief overview of her recently completed Masters thesis project, which involved the AMS dating of 104 time sensitive Olivella shell beads derived from burial contexts. This enormous enterprise was undertaken in an attempt to modify and refine the Bennyhoff and Hughes Dating Scheme B1 for central California. The result provide an improved dating scheme for the Alameda District cultural assemblage and may have wide applications for many other geographic/cultural areas

Micah Hale presented the next two papers and both were on an ongoing project in Owens Valley. Micah’s first presentation was on the results of an extensive testing program of sites located between the Sierra Nevada and the shoreline of Owens Lake. Through the testing of fifteen sites Micah documented a variety of sites occupied from the mid-Newberry to the late Marana Period. Micah’s second paper was a fine-grained analysis of bedrock milling features, and non-stationary milling equipment, (handstones, pestles, mortars, etc.) within the same study area of the first paper and their relative importance to subsistence from late Newberry times to historic contact.

Jack Meyer’s paper presented the spectacular results of excavations conducted for the East Sonora Bypass Project. Of particular interest was the extensive, unusually large and complex network of pits found beneath the Edgemont Knoll site, some of which were two meters deep found in apparent association with large, well-constructed subterranean homes.

Thomas Jackson shared with us his interpretations of excavations at CA-PLA-606/H, a site that contained among other things intriguing obsidian hydration reading on Napa and Bodie Hills obsidian debitage that measured 10.0 to 12.2 microns. These hydration readings along with the other artifacts recovered (Olivella L2 small, thick rectangle bead, milling slabs, handstones, and nondescript projectile points) argues for an Early Holocene assemblage comparable to other areas of Northern California.

Just before lunch Kim Tremaine presented an interesting paper on the results of the application of a remote sensing tool to identify subsurface historic features. The tool

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measures soil conductivity and magnetic susceptibility to search for buried features and was in this case used to distinguish between natural and human constructed features associated with an old Southern Pacific Railroad yard in Sacramento.

Brian Ramos presented the results of salvage excavations at the Pescadero Creek site (CA-SMA-367). This site which was threatened by a realignment of Hwy 1 in San Mateo County was found to be a moderately dense lithic scatter, with few formed tools and a smattering of obsidian flakes. The interesting aspect of this site is its complete lack of shell and bone of any type, which is

*Jack Meyer, Bill Hildebrandt, Darrell Cardiff, and Margo Schur confer at the Northern Data-Sharing Meeting*



not typical for sites directly adjacent to the coast. The complete lack of marine resources is unexpected in this context and is possibly indicative of a greater focus on terrestrial resources.

Mark Hylkema gave a presentation on his ongoing research at Año Nuevo State Reserve, assisted by Cabrillo College and Albion Environmental. Mark outlined the current status of the salvage excavations being conducted on the sites that are within the ever-growing area occupied by the Elephant seals. These massive creatures have destroyed many sites by simply moving over their surfaces and removing or flattening the native vegetation, leaving the sites exposed to wind erosion.

Char Smith reported on the recently completed field school conducted at CA-SMA-238 at Año Nuevo. Char highlighted the volunteer partnership between California Department of Parks and Recreation and Cabrillo College Technician Program, whose goal are to train students the fundamentals of archaeology and have fun while doing it.

Seth Newsome graduate student at the U.C. Santa Cruz presented a multi-authored paper that is a spin off from the work being done at Año Nuevo. Seth presented a very technical and detailed study of northern fur seal behavior from faunal materials in part provided by the excavations at Año Nuevo. Using radiocarbon dating and isotope analysis on fur seal bone, Seth demonstrated how human hunting of this species might have altered the seal's breeding behavior.

Brendan Culleton described the environmental context, and results of excavations at CA-SCR-60 an Early to Mid-Holocene deposit located near the mouth of Pajaro River. This fascinating site contains two distinct components one approximately 5000 years old and the other 7500 to 7800 years old. Among the many items uncovered including several human interments, were the butchered remains of the extinct flightless sea duck *Chendytes lawi*, also found in site of the same age just north of Santa Cruz.

Last but not least Bill Hildebrandt gave a "big picture" paper. Bill's paper proposed that Middle Holocene adaptations were greatly influenced by estuaries and their role in providing protein rich diets to expanding populations. This productivity made it necessary to intensify the production of carbohydrates to take full advantage of the expanding source of marine foods; this in turn contributed directly to the acorn intensive economies so well documented in the Late Period of California prehistory.

After the formal presentations a brief question and answer period concluded the meeting, and the party began. A nice large room near the beach, copious amounts of barbecued food, and beer and wine all provided by Albion Environmental made for a fine social evening that did not end until the wee hours of the night.

## News and Announcements

### In Press: *Before California*

AltaMira Press is pleased to announce the imminent publication of *BEFORE CALIFORNIA: An Archaeologist's Look at our Earliest Inhabitants* by Brian Fagan of UC Santa Barbara. This volume, sponsored by the SCA, is the first comprehensive book written for the general public that traces the history of the Golden State prior to the arrival of Europeans.

Authored by America's best known archaeological trade and textbook author, the book describes the process of settlement of the Pacific Coast by Paleo-Indians and the environmental and human transformations of the next 13,000 years, emphasizing themes of adaptation, interconnectedness, and spirituality. More than a rehashing of received wisdom, Fagan explores the controversies surrounding the first human settlement. He then describes the first peoples to colonize the Pacific coast and offshore islands, their watercraft and fishing practices. The transformation from a gathering economy to acorn processing and hunting is highlighted, as is the increasing social complexity, gender differentiation, and intensification of intergroup conflict and trade. Individual chapters describe distinctive societies in widely contrasting environments—northwest salmon fishers, Bay area shell mound communities, Central Valley wetland villagers, desert foragers, and the sophisticated coastal societies of the Channel Islands region. Fagan also devotes a chapter to California's rock art, melding his description with wider cultural events.

Calling upon a century of archaeological research, Fagan provides an jargon-free, well-illustrated account accessible to the general public interested in the early history and indigenous peoples of the state. *BEFORE CALIFORNIA* also makes an ideal textbook for courses in California archaeology and California Indians.

The hardcover, dust-jacketed book will be available in March or April of 2003. SCA members are entitled to a 20% discount off the \$24.95 list price. To order please call 1-800-462-6420 or use the AltaMira Press website, [www.altamirapress.com](http://www.altamirapress.com). Please provide the promotion code (BF2SCA) to claim your discount and give the book's ISBN number 0-7591-0373-9.

### The First Gathering of the Colorado River Group

Margaret Hangan  
Leslie Mouriquand

Friday, October 4<sup>th</sup> was a clear, gorgeous day on the Torres-Martinez Indian Reservation, located deep in Cahuilla territory near Thermal, California. It was also the perfect setting for the First Gathering of the Colorado River Basin Region Cultural Resource Managers.

The idea for this gathering was the brainchild of Margaret Hangan (BLM- El Centro) and Leslie Mouriquand (City of Coachella) and endorsements for the gathering were obtained from the Coachella Valley Archaeological Society (CVAS) and the Imperial Valley College Desert Museum Society (IVCDMS). An initial letter of invitation was sent out to all known managers of cultural resources within the physiographic region of the Colorado River Basin. This included all levels of government from local to federal, private entities like regional utilities districts such as the Imperial Irrigation District, and tribal leaders. As with all first such endeavors, just identifying who should attend and contacting them was a major task, but the response was very positive. Margaret and Leslie also invited Gary Resvaloso, the Torres-Martinez Tribal Cultural Resource Coordinator, to join them in hosting the Gathering.

The meeting was held at a small church facility on the reservation which provided a neutral and comfortable atmosphere. The group included archaeologists, museum/cultural group staff and paleontologists that represented entities such as the BLM, National Forest Service, Yuma Proving Ground, Agua Caliente Tribe, Torres-Martinez Tribe, National Park Service, California State Parks, 29 Palms Marine Base, Los Angeles County Museum of Natural



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History, San Bernardino County Museum, Cities of La Quinta and Coachella, the SCA-CASSP program, Imperial Valley Archaeological Information Center, Imperial Irrigation District, Imperial Valley College, Ft. Mohave Tribe, the Quechan Tribe and the Cocopah Tribe.

The morning began with welcoming words by Gary Resvaloso and Margaret Hangan, followed by self-introductions. The meeting took on a life of its' own as the morning discussion on Native American perspective and issues became lively and illuminating for most in attendance. The differing perspectives among some tribal members on the nature of heritage preservation and appropriateness was stimulating to witness. It reminded us that for every individual and every ethnic group, and perhaps every agency, there may be differences in perspective that need to be recognized and understood in order to find that "common ground," and to effect the notion of "seamless" management of our collective cultural resources.

A lunch break provided an opportunity for the group to network and socialize. Many folks brought delicious munchies to contribute to the deli-style offerings. Some traditional tribal foods were also available, such as Daniel McCarthy's *wiwish*.

The afternoon session featured talks by various agency representatives on their particular programs and activities, including the California Archaeological Site Stewardship Program (CASSP). A common idea heard throughout the day was the need and desire to form partnerships with various entities to provide technical assistance and much needed "manpower."

Like all such undertakings, there was not enough time to tackle all of the topics on the agenda. But at the conclusion of the day, it was decided by the group that there should be more such Gatherings, and that the day was well spent and worthwhile. A representative from the Yuma Proving Ground extended the offer of hosting the next Gathering. A date has not been determined for, but notice will be made as soon as possible.

The local media was present and reported on the Gathering in the following day's newspaper, highlighting that it was a historical first for the region.

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### Dear Southern California Colleagues:

The SCA plays an important role in facilitating meetings where California Archaeologists can share information about current research. Such meetings help all archaeological practitioners in their daily professional work by keeping us up-to-date about field studies, analytic techniques, and future

events. One such SCA-sponsored event is the Fall Data-Sharing Meetings. The 2002 Southern California Data-Sharing meeting was held on November 2<sup>nd</sup> at the Santa Barbara Museum of Natural History. The latter meeting site represented a terrific setting for the meeting and Santa Barbara is a great town to visit.

I was, however, greatly disappointed by the attendance and conspicuous absence of many active southern California archaeologists from the list of speakers. It is my understanding that many, if not all, consultant firms are very busy with projects, and regional governmental agencies have several projects ongoing within their purview. Why wouldn't you spend a weekend day in beautiful and historic Santa Barbara sharing information about your ongoing efforts with your professional colleagues? Let us all hope that practicing archaeologists in California do not think their obligation to the resource base, the general public, the stakeholders, and the profession end with the completion of a site record and report!

*Michael Sampson  
California Department of Parks and Recreation  
San Diego, CA*

### ...But Let's Keep Enough

We are hoping that the recent article by Praetzellis and Costello (36[3]:30-33) will lead to a constructive discussion of discard policies, and not just adopted as an arbitrary policy without further thought. We suggest that certain of their criteria are too draconian, would jeopardize all hope for continuing research on the discarded cultural materials, and further assume that all studies are preceded by a research design. Moreover, one investigator's research design or analytical priorities may not encompass, let alone anticipate, what others may seek to know either now or in the future.

The statement is made that, "Following a project's research design, all archaeological sites and features are evaluated for legal importance and only those meeting appropriate criteria are recovered for laboratory analysis" (2002:31). An admittedly exaggerated application might be that on a six-block urban site with only two privy pits, everything not in these two "important" features could be discarded. If the research design alone is to drive field and laboratory strategy, it functions as a self-fulfilling prophecy, and unpredicted discoveries or potentially valuable information may be lost.

Much of CRM archaeology is project-oriented, responsive to unanticipated discovery or prompted by construction monitoring or site testing, and limited in space and time. As such, there is often not a research design prior to the data recovery phase. In other words, the site or deposit has not yet been evaluated for "legal importance." Surely, the authors don't recommend discarding the very collections used to

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assess and document significance? They acknowledge that the NPS (1993) and California (1993) curation guidelines stipulate that “Archeological specimens and records...must be curated for future use in research” (48 CFR 44716-42); we would comment that these guidelines pertain to collections, implying that they have already been analyzed and reported, and not the dirty raw materials given a hasty glance in the field. The California standards are explicit that “collections may include...intact or fragmentary artifacts...by-products, waste products, or debris” and that decisions about discard “must be made by qualified archeologists” (1993:2-3). No matter how experienced and knowledgeable field technicians may be, they would not usually have the time, library, or reference collections on the site to make informed identifications about what may be important artifacts that warrant laboratory examination.

A further comment from the trenches: cultural materials do not have to originate from “important features” to have research value. De facto or sheet trash may include diagnostic materials that can be associated with site occupation, function, or abandonment. Cross-mending can suggest processes and direction of disturbance. We are not using our tool kit if we neglect the many approaches to interpreting the whole site, not just what might be called an “important feature” on the basis of a predetermined research design.

We do not agree, for example, with the statement that construction materials lack research value, useful just to “determine the nature of” buildings while the primary focus of urban archaeology is to discover primary deposits (2002:32). Makers’ names on fired bricks are an obvious insight into dating and trade pattern, but even when absent, bricks can be approximately dated by technological attributes and their function in a structure reconstructed by form and firing. Even more can be said about adobe bricks. If one is rigid about discarding fragments smaller than a dime, a ceramic maker’s mark could be missed.

It was suggested that some artifacts “not from [important] features...may be” collected but not subject to laboratory identification or cataloguing. These are said to include whole bottles, distinctive ceramic types, and easily identifiable items such as toys, hardware, jewelry, table wares, and horse tack. It is our experience that such artifacts may contribute important information, may have educational value, and if not identified, described, and catalogued, are lost for all time. To cite one example: the entire recovery from one site was about to be discarded because it did not address the institution’s research priority. When it was rescued, studied, and reported as a volunteer pro bono effort, the laboratory found 29 different makers’ and mold marks on a sample of 49 Hostetter’s Bitters bottles, and compared this assemblage to bitters bottles on other comparable sites. While the excavators had no interest in these materials, all whole or near-whole bottles have been curated and will be available to anyone pursuing future studies. If they were to

be discarded in the field, where would they go - to the town dump, to collectors or antique markets, the machine operators, personal souvenirs to the excavators?

The whole question of long-term research value merits further thought. How is it determined that research value is exhausted? Funding may not be immediately available for special studies such as thermoluminescence, residue analysis, chemical composition studies, etc., and such possibilities were not available for many excavations in the past. We are being urged to go back to older, curated collections and apply the techniques of modern analyses that are developing constantly. This assumes that there will be collections that include expendable, perhaps broken or even “redundant” artifacts.

We have no quibble with discarding rusty barrel hoops or horse shoes - after they have been quantified, described, and listed with a “discarded” notation in the catalogue. For the mounds of unembossed bottle wall fragments, we have found it useful to sort and weigh by color for chronological and even functional implications, prior to discarding the lot. We do quibble with the suggestion that whole strata, or features that do not meet the investigator’s research design, may be discarded. Does one then shovel off an historical deposit if the focus is on the underlying prehistoric site?

If we can agree that archaeology does not end at the excavation, it follows that we should have concern for the both the level of analysis and the disposition of recovered materials. Certainly, curation is a major problem of our time, for both historical and prehistoric collections. One solution is not to throw out the artifacts, but after thoughtful consideration of what should and should not be saved, for both science and the public, work to develop the repositories to preserve them. Technologies evolve, cultural and symbolic values change, and new questions will be asked.

*Roberta S. Greenwood, RPA*

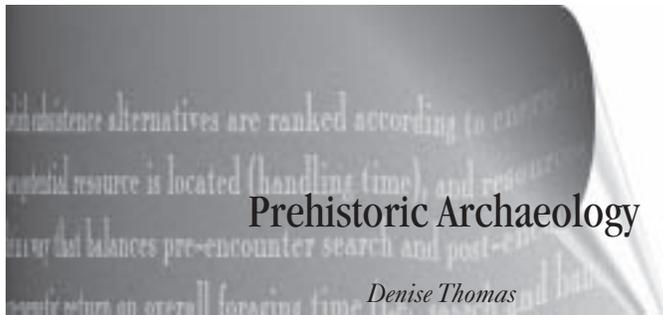
*Alice Hale, M.A.*

*Greenwood and Associates*

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## 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 author: Denise\_L\_Thomas@dot.ca.gov. Please limit contributions to those that can be easily accessed by all members of the SCA and have appeared within the last five years.

Bednarik, R.G.

2002 The Dating of Rock Art: a Critique. *Journal of Archaeological Science* 29:1213-1233.

Bednarik, applying his 20 years of experience in rock art analysis, critically assesses rock art dating techniques used throughout the world. He distinguishes between traditional methods and scientific approaches and discusses the reliability and limitations of each technique.

Traditional methods reviewed include iconography, style, technique, excavation, proximity, patination and weathering, and superimposition. The author states that traditional methods often lead to erroneous dating assessments which provide only supplementary data. Although dating by way of excavation and superimposition can yield sound supporting data, these contexts are usually dependent upon additional scientific data to adequately address period of production. Perhaps the most widely used traditional approach to direct dating is the analytical and microscopic study of patination and weathering. Although utilized since the 1970s, Bednarik states that the science of patination and weathering has been applied inadequately thus far. The primary problem is that these processes are highly inconsistent and dependent upon a wide range of variables including petrography, climate, topography, surface geometry, and environment with no formula for quantifying change and calibration.

In defining direct dating methods, Bednarik states that, "Direct dating does not produce actual ages of rock art, it generates testable propositions about the relevance of specific physical or chemical data to the true age of rock art" (2002:1216). Scientific methods reviewed include radiocarbon analysis of mineral accretions and inclusions in accretions, lichenometry, microerosion analysis, luminescence dating, uranium-series dating, potassium-argon, and macro-waves analysis. The author describes the theory and approach for each method along with a brief history of use

in dating rock art. This is followed by addressing their limitations and potentials for errors in estimating age. In Bednarik's opinion, methods involving geomorphic variables and field microscopy provide the most accurate data for dating rock art.

T.L. Jones, R.T. Fitzgerald, D.J. Kennett, C.H. Miksicek, J.L. Fagan, J. Sharp, and J.M. Erlandson  
2002 The Cross Creek Site (CA-SLO-1797) and its Implications for New World Colonization. *American Antiquity* 67(2):213-230.

As the authors point out, most researchers view early Holocene gathering along the southern coast of California as a logical transition from late Pleistocene hunting. However, evidence from the Cross Creek Site (CA-SLO-1797) and Daisy Cave seem to reflect an adaptation that is distinct from big-game hunters exploiting areas within the interior. The Cross Creek Site is located in the Edna Valley, nine kilometers from the current shoreline in San Luis Obispo County.

Initially identified as a modest concentration of cobbles, shells, and a few grinding tools, a stratigraphically discrete cultural deposit was discovered at 20-80 cm below present ground surface. Further excavation revealed an extensive pericoastal shell midden deposit dating to 9900-9340 radiocarbon years before present (ca. 8350-7700 cal B.C.). The assemblage is distinctly different from Clovis/Folsom hunting complexes. Milling tools are most abundant representing 17 handstones, 12 milling slabs (3 nearly whole and 9 fragments), and 3 anvils throughout the cultural deposit. Crude core and cobble tools (N=20) and hammerstones (N=9) manufactured from chert, quartzite, and basalt, depict a substantial portion of the assemblage recovered. The faunal and floral assemblage is also considerably different from traditional Paleo-Indian sites. Mammal remains are considerably sparse in relation to the substantial amount of shellfish remains discovered. Flotation samples yielded charred seeds from seven edible taxa.

Based on the artifact assemblage (milling tools outnumbering projectile points by a ratio of 6:1) and the floral/faunal remains recovered from Cross Creek, Jones et al. propose that the economic strategy practiced in this region by early Holocene groups focused on gathering activities rather than hunting large terrestrial game. If the site does represent evidence of a Paleo-Coastal culture separate from that of the interior, then the Cross Creek Site would represent the southernmost margin of this type of strategy by early coastal groups.

Wallace, W.J. and F.A. Riddell, editors  
2002 *Essays on California Archaeology: A Memorial to Franklin Fenenga*. Number 60. Berkeley: University of California Archaeological Research Facility.

In recognition of Franklin Fenenga, colleagues and long-term associates present a diverse collection of articles ranging from the specifics of artifact classification to regional-

## New Publications

historical overviews. In the introductory chapter, Wallace briefly outlines some of Fenenga's academic and professional contributions to California archaeology.

In the second article, Foster and Foster review the history and rediscovery of Slakaiya Rock (CA-TRI-1) near the Eel River, an extensive petroglyph site with associated housepits and a midden deposit with chipped and ground stone. Along with site description, the authors evaluate and interpret petroglyph styles following four attribute criteria: 1) method of creation, 2) subject matter, 3) repatination, and 4) evidence of superimposition.

Moratto synthesizes forty years of archaeological studies completed in the New Melones Reservoir area and explores current understanding of the cultural history in the Stanislaus River region. He identifies three phases that represent intensive prehistoric use of the area including Clarks Flat (ca. 7650-4500 B.C.), Sierra (ca. 1000 B.C.-A.D. 500), and Horseshoe Bend (ca. A.D. 1300-1848) phases concluding with the terminal Peoria Basin Phase (A.D. 1849-1910) when Central Sierra Miwok tradition began to change due to foreign intrusion.

Riddell succinctly surveys the current status of archaeological research in the San Joaquin Valley. In the 1960s, archaeological collectors and researchers believed that ninety percent of the archaeological sites had been destroyed primarily due to agricultural leveling operations. However, compliance archaeology has discovered the valley's rich potential for buried cultural deposits increasing the likelihood of remaining intact sites. Riddell concludes by highlighting programs that have the ability to foster future research in the valley.

In the fifth article, Meighan revisits the Stoneware Site (Mrn-307) initially excavated in the 1950s. Archaeological sites dating to the 16<sup>th</sup> Century are extremely rare along the coast of California and most direct evidence of culture change or persistence in response to early Euro-American contact with Coastal Miwok is scarce. Based on the discoveries at the Stoneware Site, Meighan emphasizes the importance of careful and complete analysis of small sites articulated with regional and temporal contexts.

Bates surveys the archaeology of the Palos Verdes Peninsula in the Los Angeles basin representing 8,000 years of continual occupation. Most specifically, the author describes many of the sites located in Lunada Bay and the artifacts, ecofacts, and features discovered thus far.

The McCoy Site, a late prehistoric site, is located near Livermore, California. McGeein gives an overview of the site including descriptions of artifacts (mostly chipped stone), features (eight house pits), and burials (remains of at least two infants). Based on artifacts present and environmental factors, the site has been interpreted as a seasonal camp. The assemblage appears to resemble traits characteristically assigned to San Francisco Bay area Late Horizon.

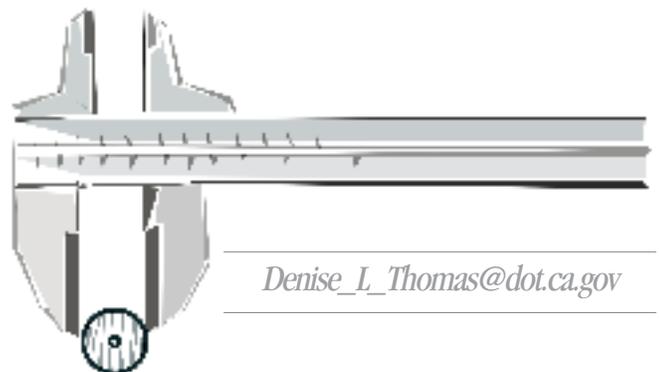
In article eight, Dillon addresses the perceived scarcity and the relative abundance of fluted PalaeoIndian points in the state. After inventorying the state archives, he found that 400 fluted projectile points were located in 28 out of California's 58 counties. Dillon proposes a *California PalaeoIndian Horizon* based on the geographical distribution of the fluted point throughout the state. He suggests that this contradicts the current notion that there were few people exploiting California during the early Holocene.

Warren discusses taxonomy and chronology of Lake Mojave and Pinto Series projectile points. He suggests that variation between point types is likely due to changes in subsistence activities which could have been influenced by increasing aridity of the Mojave Desert.

Wallace draws attention to two ornamental mortars discovered at Palos Verdes Estates in Los Angeles County. Based on the mortars' physical appearance and their evident concealment, he suggests that the artifacts might have served a unique purpose beyond functional use. Based on ethnographic references, Wallace proposes that these mortars could represent narcotic drinking paraphernalia used in the Toloache Ceremony, a boy's initiation rite in Gabrielino society.

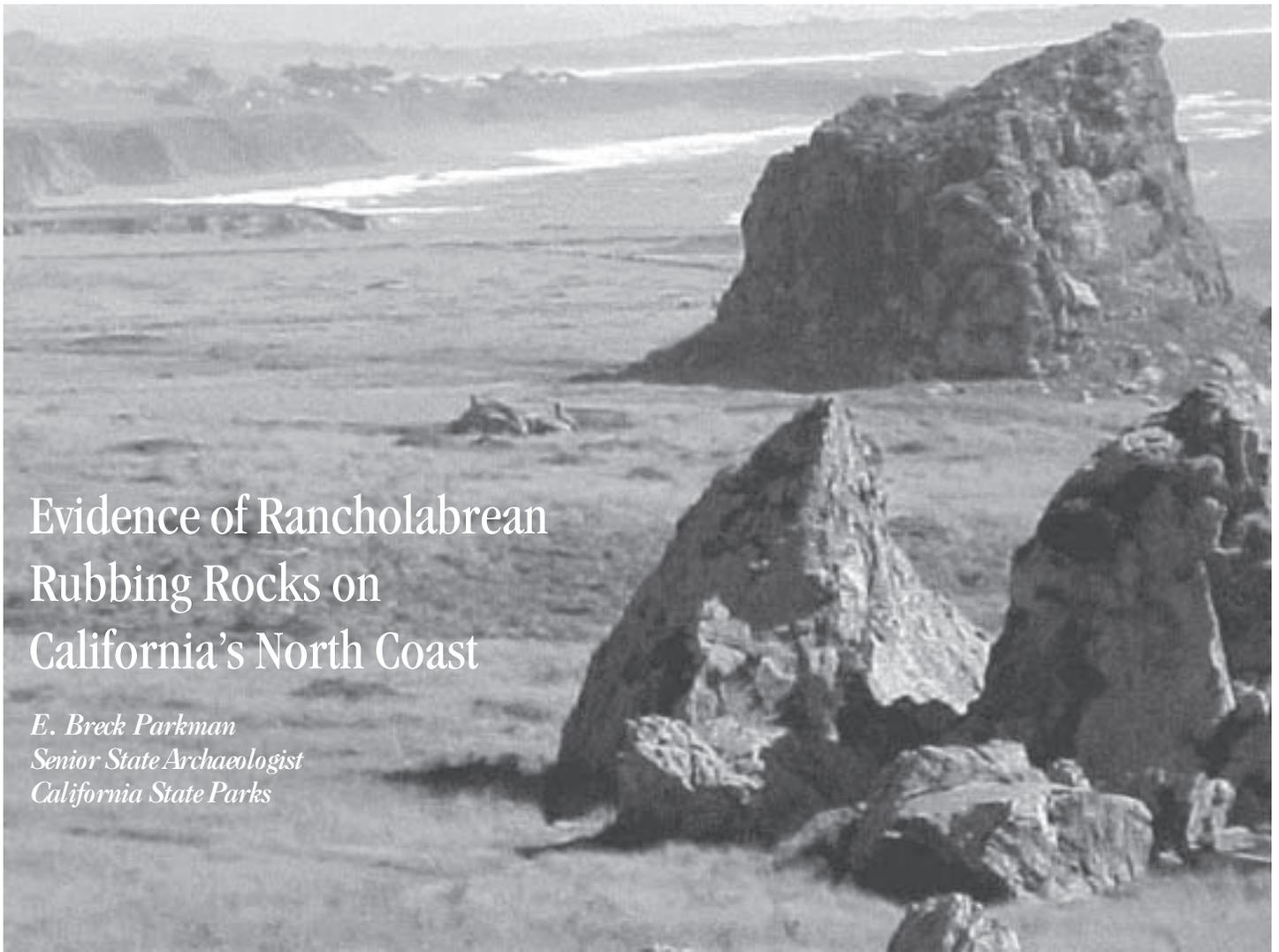
Fredrickson and Origer synthesize obsidian hydration data from sites located around Borax Lake, including sites CA-LAK-36 (Borax Lake Site) and CA-LAK-35 (an important quarry site). All available hydration readings from Borax Lake basin were compiled and compared by site type and hydration value. Based on their analysis, they speculate that the decline of obsidian production in the Borax Lake basin is due to Houx groups assuming control and access to the source.

In the concluding article, Wallace describes the forms and elements illustrated in petroglyphs and pictographs located along the Arrastre Spring Canyon in Death Valley National Monument. Many of the petroglyphs are superimposed over older etchings giving a relative time frame for comparison. The youngest depict design elements that are characteristically attributed to Death Valley Shoshone groups.



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## Articles



### Evidence of Rancholabrean Rubbing Rocks on California's North Coast

*E. Breck Parkman  
Senior State Archaeologist  
California State Parks*

*Figure 1: The Mammoth Rocks site, looking south along the coast. Locus 1 is the fractured rockstack in the right foreground; Locus 2 is the large rockstack in the background; and Locus 3 is the small boulder to the lower left of Locus 2.*

Recently, a paleontological survey was made of Sonoma Coast State Beach (hereafter, the Sonoma Coast), a unit of the California State Park System, located 75 km north of San Francisco. During the survey, unique features were observed on blueschist and chert outcrops located on the uplifted marine terrace (Parkman 2002).<sup>1</sup> The features are highly polished areas that appear to be the by-product of animal rubbing. The placement of the “rubs” indicates a pattern of intentional selection of accessible surfaces, especially those surfaces that are found along intersecting edges or at overhangs, and on the leeward sides of the rocks. The rubs range from ground level to a height of at least 396-cm. Because of their greater weathering, the rubs found above 200 cm are thought to be older, probably of Rancholabrean origin.

The paleontological resources of the Sonoma Coast are relatively unstudied. However, there have been a few previous discoveries. These include the partial remains of a mammoth<sup>2</sup> and a fossil conifer deposit,<sup>3</sup> both located near Bodega Head. Other Rancholabrean-era fossils have been found throughout the North Bay, including a site on the Estero de San Antonio, about 1.5 km from Bodega Bay, that included the remains of mammoth, mastodon, and bison (Jefferson 1991:50; Savage 1951:283).

#### The Evidence

The project area contains several rubbing rock sites. The rubbed rocks consist of blueschist and chert outcrops. The most impressive of the sites is “Mammoth Rocks,” located just south of Goat Rock, and about 14 km north of Bodega Bay.

Mammoth Rocks consists of three loci. Locus 1 is a 20-m tall rockstack composed primarily of blueschist. The rockstack is fractured, with several distinct spires rising up from the terrace. The broken nature of the rockstack provides numerous vertical faces and overhangs, on which many rubs occur.

Locus 2 is a 32-m tall rockstack comprised of blue schist and other schistose materials. It is located 400 m south of Locus 1. There is a minor amount of rubbing on the north side of the rockstack, extending up to about 250 cm.

Locus 3 is a blueschist boulder located 40-m northeast of Locus 2. The boulder measures about 10 m in diameter and 3 m high. The northeastern side of the boulder has been heavily rubbed to a height of about 250-cm.

The rubs at Mammoth Rocks, and those found at the other Sonoma Coast sites, occur only on rock faces that herbivores could have accessed. The heaviest rubbed areas are the edges of intersecting rock faces. There are numerous rubs on broad vertical faces, but almost all of the accessible edges are rubbed. The rubs vary in height from ground level to 396 cm. The lower rubs appear more polished and fresh than those found higher up. Domestic cows and horses have a shoulder

height of under 200 cm so it is likely that the lower rubs (<200 cm) can be attributed, at least in part, to historic grazing patterns. The area was heavily grazed from circa 1880-1980. However, the higher rubs (200-396 cm) appear to predate historic grazing. The majority of these cluster around 300-350 cm.

### Similar Sites

Some of the best known rubbers are bison. Numerous accounts exist regarding the rubbing behavior of North American bison, which often rubbed against rocks to relieve itches and ward off flies. Numerous bison rubbing rocks are known from the Northern Plains, especially the Canadian Provinces of Alberta and Saskatchewan.

Other rubbing rocks are thought to occur at Hueco Tanks State Park in Texas, and 50 km to the west, at Cornudas Mountain in New Mexico. Both sites have rubs occurring to about 300 cm in height. In 1941, Walter Lang, a geologist with the United States Geological Survey, visited the sites and identified what he believed to be animal rubs (Lang 1941). He returned to Cornudas in 1946, and took a single sample of the glassy polish for analysis. The analysis

Figure 2: A view of rubs on an overhang at Locus 1.



Figure 3: A view of rubs up to 396 cm on a rock face at Locus 1.



## Articles

revealed that the surface was coated with an opalized silica measuring about 0.5 mm. To determine whether animal oil or fat was present, a sample of the rock was broken into fragments, treated with carbon bisulfide, and evaporated in a porcelain dish. Even though only a small amount of rock had been tested, “a very sizable spot of honey-yellow oily matter remained on the porcelain dish” (*ibid.* 1947:65). Lang deduced that

the fine silica dust mixed with oily fats was rubbed on the surface of the rocks by animals, and that in the decades, if not centuries, of exposure to the elements since the last animal used the rock for a rubbing post, the silica weathered to opal, and the oil gradually vanished from the surface film. As the oil distilled away in the heat of the sun, the film shrank, and the residuum of opal formed a shriveled and mummified skin on the face of the feldspar phenocrysts (*ibid.*).

### Discussion

The marine terrace, on which the Mammoth Rocks site is located, uplifted during the late Pleistocene (ca. 40,000 B.P.). During the late Pleistocene, the Sonoma Coast consisted of a series of broad coastal terraces extending an additional 10-15 km to the west. While no paleobotanical reconstruction has been done for this general area, it is likely that grassland and/or savanna environments once characterized the now submerged terraces. The interior edge of the present coastal terrace was likely characterized by coniferous forest, similar to that identified further south in western Marin County. A closed-cone pine forest dominated by Monterey pine (*Pinus radiata*) characterizes the well-known late Pleistocene Millerton Formation from Tomales Bay (Mason 1934). Dated to approximately 30,000 B.P., the forest included various woody and herbaceous plants found in the area today (Lipps and Moores 1971:81-82).

The area of the world that in recent times has had a megafaunal menagerie comparable to that of Pleistocene California is in eastern and southern Africa. In southern Africa, rubbing stones are relatively common in the savanna and grassland areas (Skead 1976). African herbivores, including elephant, rhino, zebra, and buffalo, rub against rocks, tree trunks, and termite mounds, usually at the conclusion of bathing activity. The rubbing rocks are used to rub off mud and ectoparasites (Smithers 1983:560-564). Occasionally, South African rock art is found in association with rubbing stones (Ouzman 1996a:40, 1996b, 2001).

It is likely that a variety of Rancholabrean species utilized rubbing rocks. An animal standing 200 cm or less at the shoulder, like domestic cows, horses, and sheep, obviously could not have created rubs 396 cm above the ground surface, providing there has been no catastrophic ground erosion

during the historic era. However, Rancholabrean megaherbivores, such as the Columbian mammoth, could have rubbed at greater heights. The following Rancholabrean species (shown with their shoulder heights) are likely to have utilized rubbing rocks within the project area: Columbian mammoth (*Mammuthus columbi*), 390-430 cm.; mastodon (*Mammut americanum*), 200 cm.; ancient bison (*Bison antiquus*), 210 cm.; long-horned bison (*Bison latifrons*), 250 cm.; western horse (*Equus occidentalis*), 150 cm.; Harlan's ground sloth (*Glossotherium harlani*), 180 cm.; camel (*Camelops hesternus*), 230 cm.

### Future Research

It will be necessary to sample the rub locus and the general terrace area to determine whether pertinent evidence exists within the fossil plant phytolith record. Like modern elephants, mammoths required an enormous quantity of food, probably more than 350 kg per day. The typical elephant produces 140-180 kg of dung per day, and the Columbian mammoth probably produced considerably more. Like elephants, mammoths digested less than half of what they ate; thus mammoth dung contained a high amount of unprocessed vegetal matter. Based on the analysis of mammoth dung recovered from the Southwest, we know that grass and sedge were the preferred foods. Indeed, the analysis of 25 fragments of mammoth dung from Bechan Cave, Utah, indicated that



Figure 4: A close-up of rubs at Locus 1.



Figure 5: The overhang on the left has rubs up to 330 cm. The area beneath the overhang has a buried compacted layer 50 cm beneath the surface.

more than 95% of each bolus consisted of a matrix of grasses, sedges, and rushes, with less than 5% consisting of browse items (Mol *et al.* 1993:8).

Since mammoths selected certain food plants, it may be possible to see evidence of their preference in the plant phytoliths recovered from in and around the rubbing rocks as compared to the general terrace area surrounding them. If mammoths utilized the rocks as proposed, there may be an increased frequency in the presence of phytoliths from mammoth-preferred food plants in and around the rocks, than is to be seen randomly occurring on the surrounding coastal terrace.

If the rocks have been rubbed to the degree they appear, animal hair was dislodged in copious amounts. Some of it may remain to be found in the surrounding soil. In order to test for the presence of fossil hair, an archaeological excavation will be conducted adjacent to a heavily rubbed overhang in Locus 1. The area to be tested includes a buried compacted layer, located at a depth of 50-65+ cm. This layer may represent a paleosol compacted by the concentrated weight of herd animals.

The work of Robson Bonnicksen and others has documented the presence of fossil hair in archaeological contexts (Beatty and Bonnicksen 1994; Bonnicksen *et al.* 2001; Ream *et al.* 1999). If hair is identified at Mammoth Rocks, it will be important to recover the proximal ends since it is the hair follicle that lends itself to the extraction of DNA.

It appears that ancient DNA (aDNA) can be recovered from specimens 50,000-100,000 years old. Given the fact that Mammoth Rocks has a relatively late Rancholabrean history (i.e., from the initial uplift of the marine terrace at about 40,000 B.P., to the megafaunal extinctions of 12,000-10,000 B.P.) any aDNA found there will not necessarily be degraded.

Should viable aDNA be recovered, its analysis will be crucial to identifying the kinds of animals that utilized the site.

Finally, it will be necessary to examine the rubs themselves. Recently, thin sections from three samples were examined at 20,000x magnification using a scanning electron microscope. Drs. Steve Norwick and Rolfe Erickson of Sonoma State University have determined that the polish is unique and unlike any natural rock polish they have previously observed. Furthermore, they feel that natural process (such as wind or water erosion) can be ruled out as the explanation for the polished features. Comparative samples will be examined under magnification to determine the wear patterns on rubbing stones known to have been used by large herbivores. We are currently awaiting the arrival of comparative samples from the Johannesburg Zoo.4

A recent study documented the subsurface penetration of blood into the microcracks of rocks (Ream *et al.* 1999). Blood residue may also be present on the rubbing rocks, deposited there by injured animals. Blood residue can be used for identifying the species of animals that utilized the rubs. A recent Alaskan study identified mammoth, among other Rancholabrean species, by the blood residues found on Paleolithic stone tools (Loy and Dixon 1998). While it is likely that much of the aDNA deposited on the rocks has long since degraded, there are some scenarios that may have facilitated long-term preservation. For example, if aDNA was deposited in micro-cracks, and the rock surface was then covered with a coating of silica, it is possible that the silica would have prevented the DNA from degrading. Lang's (1947) observations from Cornudas Mountain lend support to such a possibility. Indeed, the body oils of megaherbivores should have served as a preservative, as did the clay that was rubbed onto the rocks following a mammoth's bath or a bison's wallow. It is thought that clay, derived from the mud-encrusted animals, resulted in the glassy polish observed at the site.

Figure 6: A cow rubbing against a sandstone outcrop in northern Marin County.



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### Conclusions

The Sonoma Coast rubbing rocks appear to represent the prehistoric rubbing behavior of late Pleistocene Rancholabrean herbivores, especially the Columbian mammoth and/or ancient bison. Domestic horses, cows, and sheep probably created a lower grouping of fresher-appearing rubs during the historic period. Provided that a Rancholabrean origin can be attributed to the rubbing rocks, they are important for several reasons.

First, the rocks can be perceived as points on a map for identifying the former presence of megaherbivores, their seasonal migration patterns, and social behavior.

Second, the identification of Rancholabrean-era rubbing rocks will have implications for Paleoindian archaeology. For example, the Mammoth Rocks site may have been a “focus” of Paleoindian hunting activity.

Finally, Mammoth Rocks may prove to be an untapped source of aDNA, both in the ground and within the micro-topography of the rock surfaces. Future efforts at recovering fossil hair from around the rocks, and especially aDNA from within the rocks, may prove to be the most important aspect of any future investigation.

There should be other Rancholabrean-era rubbing rocks waiting to be discovered on the California landscape. Large isolated boulders situated on valley floors and plains are the most likely candidates. If anyone is aware of other sites, and are willing to share their information, please contact the author at [bparkman@parks.ca.gov](mailto:bparkman@parks.ca.gov) or 707.938-9548 x19.

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- (Endnotes)
- 1 Raj Naidu, a local paleontologist, was the codiscoverer of these features along with the author.

- 2 In 1972, James West, then with the University of California Museum of Paleontology at Berkeley, salvaged a mammoth tusk and lower jaw with a tooth from an eroding area near Bodega Head.
- 3 This site, discovered by Raj Naidu in 1991, consists of tree remains including small cones. Fossil conifer deposits are also known from nearby Tomales Bay, where they have been dated at about 30,000 B.P.
- 4 Rynette Coetzee, the Johannesburg Zoo's Curator of Large Animals, has agreed to provide the author with samples of old rubbing posts from the Zoo's rhino and elephant enclosures.

## Cultural Resource Management and Really Early Man

*C. Hardaker*

### 1. CRM and Earlier First Americans

Question: If folks were here before the Wisconsin meltdown, how much will that expand the landbase under the stewardship of Cultural Resource Management? CRM may have just inherited a deep cellar: a largely subsurface landbase perhaps five to ten times the temporal depth it currently oversees, maybe more.

How will CRM turn it around in mid-stride and begin to fix its gaze on the consequences of a pre-Clovis and/or non-Clovis bottom line? Or will CRM, true to its original bylines, exempt itself from the research end of archaeology? It was never CRM's mandate to supplant the university and museum archaeological research programs. "The academic community gives us the framework. We give them the business. Therefore we will keep the 12kya cellar for the next decade until *they* sort it all out." Traditional delegation is not a reasonable option. If CRM does not take the reins, who will?

CRM can no longer depend on Academia for its First American guidelines. There are none. The academic community's rigid single working hypothesis of a 12kya cellar never sufficiently covered the contingency of its falsehood. "What happens if Clovis roots *are not* in eastern Asia?" was never seriously entertained. There's a lot of egg on a lot of archaeologists' faces right now as the Atlantic connection dawns on the horizon. It will take time to clean up and recuperate.

CRM does not have the luxury of waiting because it is the branch of the archaeological community most directly subject to felony-level legal actions when pre-Clovis sites are ignored, overlooked and/or destroyed without due mitigation. If we wait for the academic sector to get its act together before CRM changes its temporal framework, how many more early sites could be harmed by development during the interim? Is a moratorium called for?

All CRM budgets and field decisions have been filtered through Clovis First/12kya eyes. Generally, the confidence that ruled those decisions was the same confidence that habitually rebuked the credibility of those who saw earlier evidence. That confidence, essentially tied to artifact identification, is now on trial.

What was it we did not recognize? Besides Pleistocene seafaring. What about those pre-Clovis zealots: George Carter, Dee Simpson, Julian Hayden, Emma Lou Davis, Scotty McNeish, Herbert Minshall? What if they were right? What if they were 20% right? Did we throw some babies out with the bathwater? Is it time to look at East Asian cobble reduction traditions?

The Isolationist framework of American anthropology is in crisis, with veteran professors, CRM professionals and graduate students asking any number of questions. How are we supposed to think about the origins of American prehistoric cultures and/or about transoceanic contact thousands of years ago? What can I begin to research without threatening my tenure track dreams? How far back can I go without getting in trouble? How am I to apply for research grants if I do not know what is politically correct? If there is a deep component to local archaeologies, how much more is it going to cost? What will it look like?

### 2. The Puzzle Palace

You hear it whispered in New Orleans and Mexico City down to Buenos Aires.

*Is Clovis First really dead?*

Yep.

*How dead is it?*

It is so dead that even the Clovis are pre-Clovis.

The clear, unambiguous scenario for the Clovis Culture was defined by its champions (Martin and Wright 1967). Great spearhead makers, the Clovis began in Ice Age Siberia and walked across the Beringian landbridge during the Terminal Pleistocene and then walked south through the Canadian Ice Free Corridor when it was considerably warmer. "Pre-Clovis," the concept, would include any and all cultures below the glacier line before the corridor opened up. The Clovis are now established in the States before the Ice Free Corridor opened up (Jackson 1996; Mandryk 2002a, 2002b). Clovis is a pre-Clovis culture.

## Articles

Clovis First, the going theory of the First Americans, has run out of gas. The presumed terra firma hold on American antiquity has become a surfboard in rough seas. Clovis Firsters were so used to not being wrong, there is a deep sense of shock, imbalance. Pre-Clovis sites are no longer pseudo-science, they are necessities.

This is a grievance about Clovis First by someone who was on the wrong side that has now become correct, by default. Historically, archaeology students were put on notice pretty quick about the professional sanctity of Clovis First. In an upper division archaeology class our professor strongly advised (sic warned) us not to visit a site near Texas Street, San Diego in 1973 when that demon George Carter had returned from exile to pursue his early man contentions. Consequences: death, academically. We would be tossed from the department. The next semester we were taught that archaeology is science or nothing at all.

The Clovis were the only immigrants, they were here by 12kya and it was their direct progeny that inherits the New World. They had it all to themselves until about 1000 B.C. (3kya) when some dispersed Eskimo or Eskimo-like folk made it across in boats along the North Pacific crescent, with another group following behind one or two thousand years later. These later arrivals had no perceivable impact on cultures already in place, say, south of the Mexican border. Vikings left no perceptible impact on the cultural trajectories of Northeastern tribes. The prime directive was safe until Columbus.

Hypothetically there was nothing *wrong* with proposing a coastal entry, but it seems the Clovis school argued: “the west coast might have been the route by which people entered the Americas, but the evidence will never be found to prove it was the route, therefore it wasn’t the route” (Fedje et al 2001:3).

Clovis First made everything American homegrown: pure cultural evolution without Old World influences. Even Clovis culture itself was/remains thought of as an American invention, the signature fluted point affectionately referred to as America’s first patent.

In short, all cultures and civilizations, all inventions and innovations, all biological variability, all languages, all lithic traditions in the prehistoric New World had a single bio-cultural origin: the Clovis.

Many believe that this initial colonization event explains the peopling of the Americas. Over the next 11 millennia, descendants from this initial founding population evolved and were responsible for the enormous diversity of biological populations, cultural groups, and languages found among modern Native Americans at the time of European contact. - Robson Bonnicksen (Nova)

Doing all that they accomplished in the New World, all without knowledge of seaworthy craft, you would think the

ancestral Clovis would have laid a pretty large swath of artifacts and features behind in their Asian/Alaskan homelands. Think about it.

Here was an awesome paleolithic culture with a full-blown, highly sophisticated technology, tearing out of the Canadian north like hungry Huns storming a virgin world, going right up to huge animals and slaughtering them like there was no tomorrow because the animals had never seen these kinds of apes before. They go shooting all over the place, filling in environmental niches in the blink of an eye with radically different sets of adaptations than those used to survive the trip, which they also invented along the way. They conquer it all in less than a millennia, by land.

For twenty..., thirty..., forty years all that greeted this Alpha Theory in NE Asia, Alaska and Canada was negative evidence. The ancestral Clovis Trail was nowhere to be found. We never even got close to what made America’s first lithic tradition immediately devolve into the relative “rubble” of the La Jollan and the San Dieguito assemblages. The closed corridor further supported the notion we were looking in the wrong direction. A few of the more objective archaeologists looked to the east, to the Upper Paleolithic Solutrean of SW Europe where everybody knew Clovis-level lithics skills existed all along.

It took the shock of the closed corridor to slow down the Clovis Train; that was years ago and folks are *still* whispering. Some crowd around the train as it sits in the station, waiting for it to get fixed up so it can make another run. Some have jumped off and taken up sailing.

The best proposal for the origin of Clovis culture on the table today is that they are an extension of the European Upper Paleolithic, a New World expression of Solutrean culture (Chandler 2001). The Clovis hailed from Iberia, not Siberia. Bruce Bradley and Dennis Stanford have finally proposed a hypothesis with technological meat on it. All Asian or inhouse invention options have turned up negative or border on the miraculous. The “Clovis” were probably not the only nor the first Pleistocene culture that migrated to the New World. News from South America reports Pleistocene Africans and Australians (Neves 1999).

It gets better. If the Solutrean Connection works out, we could still salvage the *Clovis* nomenclature by tossing out Clovis, New Mexico as the namesake and adopting King Clovis, the 6th Century French (Merovingian) monarch. Long live the King? A further irony: the lithics books by the French (Bordaz 1971, Bordes 1968) that were staples in 1970s archaeology classrooms may now be appropriate for the study of Clovis roots.

It gets shameful when we consider we have wasted thirty years with this paradigm. During CRM’s formative period, when efforts were afoot to salvage the archaeology in front of the Alaskan pipeline, the dates from a series of Mexican sites were reported in a peer-reviewed journal: Cynthia Irwin-

Williams' discoveries at Valsequillo were over 150kya (Szabo et al 1969).

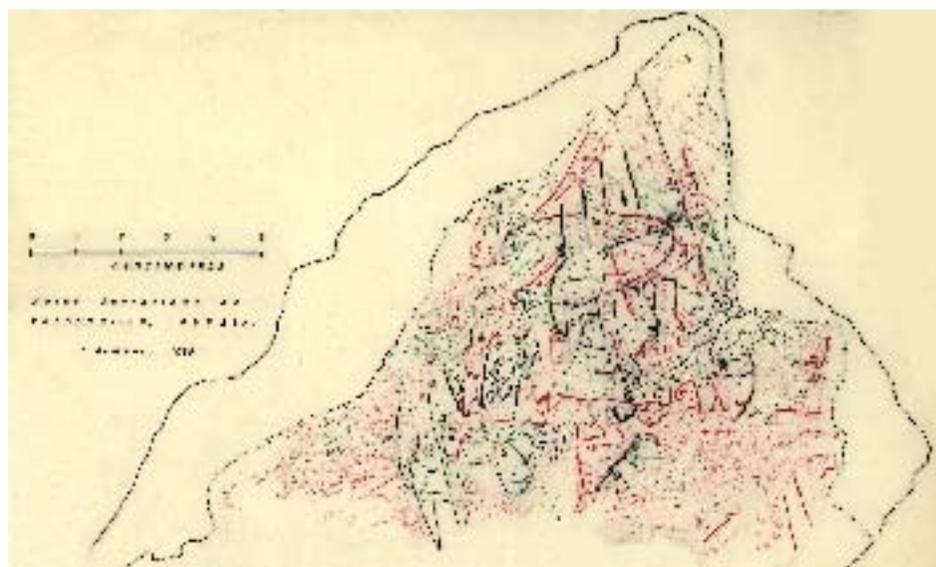
### 3. "Impossible!"

Drs. L. Straus (2000) and G. Clark (2000) wrote vigorous replies that attempted to relegate the Solutrean Hypothesis to the golden round file. There was just no way Solutreans were the Clovis. Impossible, said Straus. Scientifically speaking, this was unmitigated baloney. Shame, shame on the two archaeologists: they should have known better, especially the knapper, according to Clark. Straus was placed front and

center in *American Antiquity*. The Isolationists had their champions. Both sets of arguments were traditional: the Solutrean were too early and there was an ocean in the way.

Both Straus and Clark argued that this Clovis group could have independently invented the gorgeous craft somewhere in between Siberia and Wyoming. *What's so tough about the technology? All it takes is big game animals and big slabs of fine-grained stone and this flintknapping stuff will come about naturally in no time. Happens all the time. Big deal. You do not have to resort to diffusion everytime you get into trouble.* On the other hand, neither provide the teeniest evidence nor precedent for this kind of "spontaneous invention scenario"

Figure 1: In 1959, Juan Armenta Comacho found this mineralized Mastadon pelvis at Hueyatlaco, Valsequillo Reservoir. Cleaning it up, he noticed etchings of extinct elephants, a speared feline, and other elements. A year later, it was on display at the Smithsonian and featured in LIFE magazine. Analysis proved the bone was green when the art was engraved. Comacho recovered three more mineralized art pieces from the basin sediments (adapted from Comacho's privately published manuscript, 1978).



## Articles

for an advanced thinning technology. And they never will find an example because this *is* impossible.

Spontaneous invention scenarios do not wash for lithic technology. If you are a knapper, you do not begin by fluting thin biconvex bifaces. You need to work up to that point, literally. You leave a mess behind and, being rock, it lasts a long time. Take the sudden appearance of the Solutrean in Europe, for example; they also arrived with a full-blown technology.

There is now a much greater depth for African Middle Stone Age platform preparation behaviors and the resulting sophistication of lithic artifacts: 300kya for blades, 200kya+ for bifacial thinning (McBrearty and Brooks 2000). Looking at McBrearty and Brooks' Figure 5 showing Middle Stone Age bifaces in Africa, and suggested in their text, blade types and bifaces out of the Northwest African tradition called the Aterian are reminiscent of the early Solutrean horizons that turn up later in SW Europe. Aterian-Solutrean-Clovis?

As luck would have it, the Straus article was in press when the 16kya dates were returned for the pre-Clovis biface component at Cactus Hill, Virginia, thus dramatically closing the five thousand year gap between Solutrean and Clovis sites. The dates coincided with Solutrean sites in Europe. These findings effectively disposed of half of the "impossible" argument while seriously challenging the other half: the taboo against preColumbian seafaring.

*"Are you now or have you ever been a ... diffusionist?"*

Nowhere in my thirty year acquaintance with the field has there ever been any seriousness thought given to pre-Columbian diffusionist scenarios. That was reserved for renegades and non-Anthroamericans; they had their own conferences and journals. They simply did not count. Period. Whenever the evil head of diffusion rose up, it was generally by someone outside the Anthroamerican community. Thor Heyerdahl and Barry Fell come to mind.

Straus of course was not referring to a couple outsiders. These are two central players on the First American scene today, two mainstreamers deluxe. To castigate Stanford and Bradley as flaming (unthinking) diffusionists was really out of bounds, a meager attempt to kill the messengers. They most certainly knew the job was dangerous when they took it. And until someone comes up with something better, like material evidence for a change, Bradley and Stanford are doing what science does. Exasperated cries of impossible and condescending quips ("they should have known better") may suffice for the politically correct, not science.

#### 4. Requiem: Valsequillo, MX. and National City, CA.

It seems the elder community remains in a state of perpetual recoil since Valsequillo Reservoir's 150-300kya dates were first announced (Szabo et al. 1969), like sticking a live sponge with a cattle prod and then quick freezing it. This

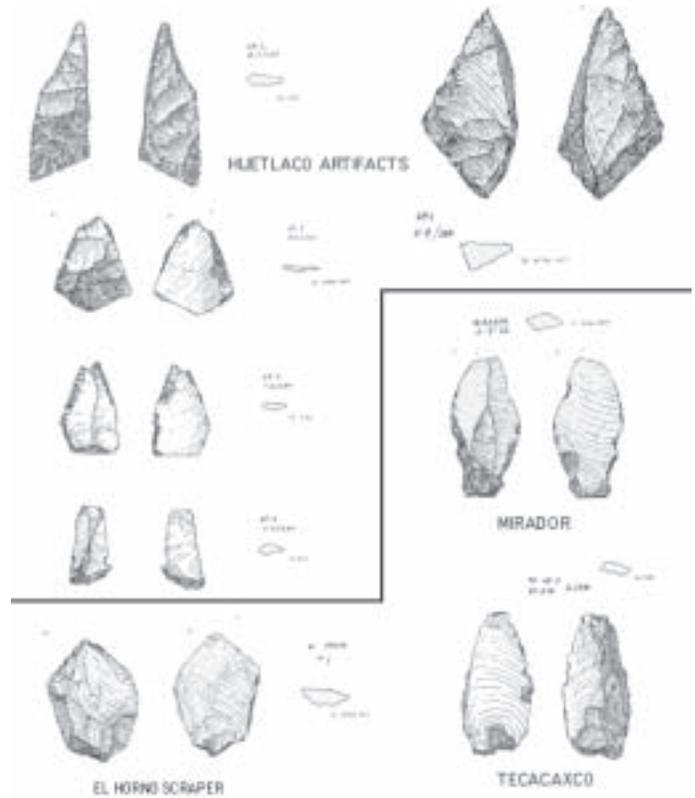


Figure 2: Lithics from the Valsequillo excavations, 1962-1966 (approximately 1/2 size).

was not always the case. A brief summary was included in *Pleistocene Extinctions* (Irwin-Williams 1967a; also 1978). Had the edition come together after 1969, we would not even have that.

Any site that challenged the Clovis model had to be in a pristine context and possess a vestal nature if it was to succeed in busting the Clovis paradigm.

According to James Griffin (1979), a proper candidate must feature a clearly identifiable geological context with no possibility of intrusion or secondary deposition; this would be determined by several expert geologists. Further, there must be a range of tool forms and debris, well-preserved animal remains, pollen studies, macrobotanical materials, human skeletal remains. Dating by radiocarbon and other methods was also required.

*Paul Martin, Letter to Hal Malde (USGS), Valsequillo Geologist, December 7, 1966 Geochronology Lab Tucson, AZ re: 22,000 yr. dates at Valsequillo*

"Until the field evidence is fairly direct, and fairly simple, a la the Lehner Site [Clovis], with charcoal, artifacts and extinct fauna all together and in place, you won't disarm the skeptics."

Just on the basis of site formation factors alone, this was a ridiculous litany of requirements. Go figure. A pre-Holocene

site would have had to have survived some incredible erosional terrors during the course of the Wisconsin's climatic cycles of melting and freezing. If the same restrictions had been placed on Old World Pleistocene sites (i.e., Isaac 1977), can you imagine what would have been lost because they did not live up to these kinds of expectations? Sadly, the Valsequillo sites satisfied all of these requirements in spades, and they were *still* stuffed under the rug.

The four sites were located outside Puebla, Mexico, around the margins of an ancient basin turned into a reservoir: Hueyatlaco, El Mirador, Tecacaxco, El Horno. Art, points and blades, butchered megafauna (sans bison), multicomponent technological transitions, stratigraphic integrity, mappable sections, reports of a human skull recorded by an eminent German paleontologist. It was all there, in stratified cemented lakeshore sediments (Steen-McIntyre et al 1981).

One of these sites, the double component Hueyatlaco with a lower unifacial component and an upper bifacial assemblage, yielded what is arguably the oldest piece of art in the New World, possibly the world: a mineralized mastodon pelvis with engraved images of extinct elephants, a speared feline, and other etchings. It was on display at the Smithsonian in 1960 when *LIFE* Magazine gave it a spread (Figures 1, 2).

One of the dictum's you run across when you bump into the pre-Clovis crowd is their first commandment: *It only takes one*. If you have one site, then there are others, barring miraculous births.

Valsequillo had four, with dozens of other candidates in the wings.

There is not enough room to properly mourn this tragic sacrifice to Clovis First. Suffice it to say, the dates were too old to be taken seriously. As such, the entire shebang was condemned to the same sentence: if the dates are erroneous, then the sites are erroneous. And so the Paleoamerican top brass just walked away. There was nothing left to do but leave it up to Irwin-Williams to work out, even though she had been effectively banished from working in Mexico (1967b).

Most, like Irwin-Williams herself, criticized the [then new] radiometric techniques, a form of killing the messenger. She nor anyone else could shake the inconsistency of a 20kya technology in a 200kya context, let alone the context. (They were originally nervous about the 22kya C14 and U Series dates from a site miles away; Caulapan was thought to have associated sediments — it did not.) One scholar was even anxious about what Calico's Louis Leakey would say when *he* heard the dates. Time drifted on.

The principles, Cynthia Irwin-Williams and Juan Armenta Comacho, are now dead. The primary data is largely lost or misplaced, and some was possibly destroyed intentionally by a malevolent colleague in Mexico. There's just enough left to show that the Paleoamerican experts of the day really

dropped the ball on this one. They all knew about it, and those who are living still remember it. There is no cover up, they just don't bring it up. Had the scholars tried to actually work with the various elements, form an international committee, team, whatever — anything but just walk away — all would have quickly agreed that the reservoir was at least as old as Clovis, hence worthy of serious attention. Maybe even an occasional attention?

The last thirty years of CRM could have been different had the core Paleo community taken the bull by the horns instead of running for cover. The art pieces alone demanded more. The good news: Valsequillo is beginning to wake up.

Up until yesterday, most American archaeologists were of the belief that bifacial thinning was fairly recent, about 20kya in line with the Solutrean (Alan Bryan: 2002 pers. comm). It seems science may have finally caught up to the Valsequillo finds. With the stunning precedent-setting dates for African Middle Stone Age bifaces, the Valsequillo spearheads are no longer anachronistic, no longer impossible.

All bones found in the four sites were too mineralized for carbon dating. This led to the dependence on U Series to begin with. Because the U Series dates (bone) and the C14 dates (shell) from Caulapan jived so neatly at 22kya, U Series was thought to be a good choice for dating the bone at the Valsequillo sites. Oops.

Recent excavations at Hueyatlaco uncovered faunal materials that appear suitable for carbon dating. The results will hopefully be available early next year. Does "baited breath" about cover it?

If you are interested in a fresh, reasonable, and philosophically scientific take on the Valsequillo Affair, see Webb and Clarke (1999).

The Valsequillo affair was not an isolated occurrence. Ten years ago, the San Diego Museum of Natural History responded to an emergency down in National City: a tusk had been clipped by a bulldozer widening a local road. A small circular disconformity met their eyes as the scientists looked down on the scraped silty sediments. It was a tusk cross-section, meaning it was a tusk that was situated vertically like a post.

Subsequent excavation revealed the tusk had penetrated several geological strata. Other anomalies followed: anvil-sized boulders amidst fractured bone, bone arrangements. Many lively discussions transpired around the discoveries south of San Diego: Was it archaeological or a radical series of unexplained coincidences? The certainty that it was archaeological was growing among the archaeologists, paleontologists and geologists either working or visiting the site.

One notable paleontologist who visited the site thought so too, but with a provision: "If it is less than 12kya, I will call

## Articles

it cultural; if it is greater than 12kya, it is natural.” The collective overconfidence among Clovis Firsters provided a professional climate where such glib statements could be made without batting an eye. He sure saved his bacon, though, because the site ultimately measured over 200kya. There were no bison there, either.

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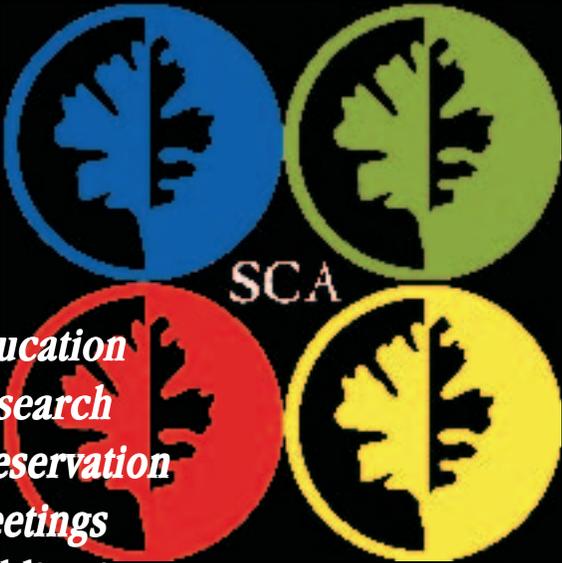
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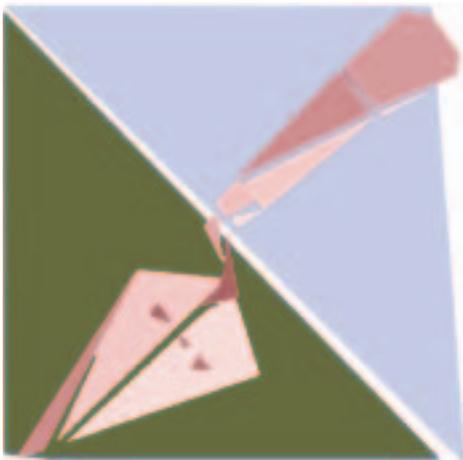
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