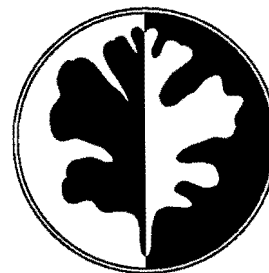


SOCIETY FOR CALIFORNIA ARCHAEOLOGY

NEWSLETTER



Volume 23 Number 4 July 1989

STANFORD UNIVERSITY TAKES A GIANT STEP...BACKWARDS

June 5, 1989

Dear Elders of the Ohlone/Costanoan People:

The issue of human skeletal collections in the Stanford Museum has been the subject of thoughtful deliberation since Ohlone/Costanoan representatives visited the Museum last fall. After considerable discussion, a decision has been reached regarding the final disposition of the remains. It is my privilege to share that decision with you and with other members of the Indian community.

Stanford University honors American Indian beliefs about the humanity and the sacredness of their ancestral remains. We therefore acknowledge that modern descendants of the Ohlone people have the right to determine the final disposition of those remains. Whenever Ohlone descendants choose to request it, the University will return those collections for reinterment.

Because universities place great value on freedom of inquiry, the decision to support reinterment has been difficult. If any of the Stanford collections can be demonstrated to have research significance, we will request your consent to a specified period for scholarly analysis before reburial. However, as stated in the attached Operational Plan, the final decision about whether to permit such research will be up to the Ohlone community.

On behalf of Stanford University I would like to express my gratitude for your patience and your cooperation with this sensitive issue. We appreciate your assistance and look forward to a productive association with the Ohlone people in the future.

James N. Rosse
Vice President and Provost

Operational Plan for the Reburial of American Indian Skeletal Remains

Stanford University is committed to maintaining a community in which diverse religious beliefs and cultural traditions are respected by all. We recognize that traditional Indian religious beliefs hold ancestral remains to be sacred, and we acknowledge that Indian groups have the right to determine the final disposition of these remains. We understand that curation of the remains in our possession is in conflict with traditional beliefs.

As a major educational institution, Stanford is also committed to the support of research and teaching. By foregoing opportunities to use human skeletal collections, we find ourselves in conflict with two important University goals: to encourage new research, and to preserve collections of scholarly materials. Currently, with the Ohlone Indians' permission, San Jose State anthropologists are studying one of Stanford's collections (Ryan Mound), and the University is undertaking an inventory of its other collections.

Upon completion of the inventory and research assessment, estimated for mid-1989, we anticipate the immediate return of most ancestral remains in Stanford's collections. We intend to request permission of the appropriate Indian group to conduct research on one or more collections prior to reburial. However, final decisions about the timing of reburial will be left to the culturally related tribal community.



Politics Outweighs Science at Stanford

In what is described as "the first such agreement ever reached between academic researchers and Indian activists," Stanford University decided last month to turn over the remains of about 550 Ohlone/Costanoan Indians to their descendants.

With this move, Stanford University turned its back on a long tradition of scientific achievement in order to be "politically correct," whatever that may mean this week. In doing so, they have turned their backs on an entire field of scientific and medical investigation.

An example of the critical importance of skeletal collections is found in the *Wall Street Journal*, June 5, 1989 (a related article appears in the June issue of *American Journal of Physical Anthropology*, but the decision-makers at Stanford do not appear to be familiar with *that* journal).

The *Journal* article begins:

"Scientists long have believed that rheumatoid arthritis is triggered in genetically susceptible people by something in the environment—a virus, bacteria or perhaps even a pollen. The trouble is medical sleuths haven't been able to find the mysterious microorganism or allergen.

"Now, a group of arthritis researchers thinks they have stumbled on the trail. It begins thousands of years ago, they say, with North American Indians.

"Based on studies of ancient American Indian bones, the researchers have developed a new theory about the origin and development of rheumatoid arthritis, a bone-destroying ailment that afflicts 2.1 million Americans. They suggest that the disease first attacked American Indians and was transported to Europe in the 18th century. Previously, the origins of rheumatoid arthritis were considered murky, but many believed it began in Europe.

"The group's work has attracted special interest from rheumatologists. The American College of Rheumatology, for example, will highlight the research at its annual meeting in two weeks. Dr. Timothy Harrington, a rheumatologist in Madison, Wis., says the findings should point the way for further studies. Dr. Edward Lally, director of rheumatology at Brown University, agrees. "The origin of the disease may give us information about its epidemiology," he says. "This is a bit of a novel way or looking at it."

"Led by Dr. Bruce M. Rothschild, director of the Arthritis Center at the Northeast Ohio University College of Medicine, the researchers speculate that the triggering agent may have piggybacked to Europe on North American food, wood, animals, or other indigenous products. Indians probably didn't di-

rectly infect the settlers, since the disease isn't thought to be communicable. More likely, something that the Indians ate, used or inadvertently contacted was passed to settlers or traders, Dr. Rothschild says.

"Following the theory could be important in the search for a cause of rheumatoid arthritis. Further research into early North American fossils and bones might just lead to identifying the mystery trigger, says Dr. Rothschild. That's because it may be possible to discover something in nature that was common to the areas where Indians contracted the disease.

"Rheumatoid arthritis probably started out as an American Indian disease," Dr. Rothschild says. "By looking at its spread, we may be able to identify [the trigger], we should be able to prevent the disease," says Dr. Rothschild.

Presenting a contrary view, the article in the *American Journal of Physical Anthropology* suggests that rheumatoid arthritis may have been present in the Sudan 800 years ago. If this is the case, then the theorized North American link to the disease may not be accurate.

The normal solution to such a scientific question is to go back to the data, to reexamine the evidence in search of the new information which is required. And this is where the Stanford decision is shown to be contrary to the very essence of scientific endeavor—if Stanford's lead is followed, the evidence needed to address an important medical question will have been unnecessarily lost for a short-term political gain. If Stanford's lead is followed, medical research which is being conducted in other parts of the world will no longer be able to look to the U.S. for comparative data.

Carrying this decision to its logical extreme would require reburial of fossil remains, such as *Homo erectus*, should they ever be found in the U.S. This points out a major flaw in Stanford's decision—at what point do the descendants of any group have the right to determine the disposition of skeletal remains? It has been traditional that descendants have certain rights concerning their immediate ancestors, but when skeletal remains are hundreds or, more likely, thousands of years old claiming such "rights" is ludicrous!

Stanford's decision to rebury ancient skeletal remains can only be described as "expedient" and "politically-motivated" and "anti-science." It is the same type of decision that has plagued science for centuries—Galileo was one victim of such a short-sighted policy. Stanford has taken a giant step into the past; can the Dark Ages be far behind?

NEWS FROM THE SCA

EXECUTIVE BOARD MEETING ACTIONS, JUNE 3, 1989

The second Board Meeting of 1989-90 was called to order at 9:50 at the home of President-Elect Sonia Tamez in Richmond, with Jim Woodward, Barb Bockek, Christian Gerike, Mike Glassow, Greg Greenway, and Sonia Tamez in attendance. John Johnson was unable to attend as his wife had just had a 6 lb. baby girl.

1. No corrections were made to the Minutes of the Annual Business Meeting of 1989 in Culver City. These Minutes, flawless though they may be, must wait for approval until the next Annual Business Meeting in 1990. The Minutes of the Board Meetings of March 16 and 18 were approved with minor corrections.

2. Gerike gave the Treasurer's Report: the good news that our current balance is \$13,430.27; and the even better news that our bills total only \$1,024.49 (to Coyote Press for Newsletter production, printing, and mailing costs). Gerike had recently visited Jane Gothold and Constance Cameron in southern California and requested reimbursement for his trip. Gerike also asked for authorization to reimburse Glassow \$100 for travel to the present meeting—both requests were approved. Woodward submitted receipts totalling just under \$200 for last year's membership effort (flyers, posters, and mailing). Gerike agreed to follow up with reimbursement for Faith Duncan's phone calls made as last year's Nominations Chair.

Gerike stated that it seemed unnecessary to him to change banks although he is the first Treasurer in 14 years to live at the opposite end of California from the Business Office. Spraker will send xeroxes of checks to Gerike as she deposits them in Fullerton. The Board agreed that this process seemed workable. Gerike noted that bounced checks are now charged to both the bouncer and the bouncee—so please don't write bad checks, to or from the Society!

Woodward summarized this year's budget: approximately \$1,000 per *Newsletter* edition (\$6,000 total); \$500 per election (this year \$1,000, for By-Laws and Officer elections); \$600 in officer travel; \$1,600 for Susan Spraker's salary as Business Office Manager; \$1,000 for the hotel deposit for the '91 Meetings; \$5,000 for printing the *Proceedings* Vol. III; \$300 of office expenses; and \$300 for this year's membership drive. Woodward stated that overall the 89-90 bud-

get looks like \$16,000. Additional memberships and *Proceedings* sales should provide the additional income needed for a balanced budget.

Gerike distributed the Society for Historical Archaeology's new-member letter and suggested it as a model for an SCA welcoming letter. A new-member letter might include: who to contact for complaints (Spraker on business office issues, N/S VP's on policy issues); a copy of the By-Laws; lists of SCA Committees and legislation we support, etc. To better market the SCA *Proceedings*, Gerike would like to distribute a "press release" flyer, as widely as possible, for the *Proceedings* when the volume becomes available. Board members suggested University libraries and anthropology, geography and history departments and research facilities, other archaeological societies, museum bookstores, and American Indian organizations, for starters. Also, at Gerike's suggestion, Woodward had drafted a policy on excluding site location maps from the *Proceedings*, except for maps showing general location. This was approved unanimously.

3. The Board heard Reports from Committees, starting with Membership. Woodward and Greenway discussed ways to build a mailing list "enticing, cajoling and encouraging" SCA membership. Gerike said he still hears comments that SCA is run by the "Same Old People"; perhaps we're suffering from an outdated image problem, because, as Gerike pointed out, the six Board Members present don't look like SOP's.

Glassow reported on the development of the SCA Executive Board Manual. Duties associated with the following positions are in draft form: President, Immediate Past President, Northern and Southern Vice-President, Secretary, Local Arrangements Chair, and Nominations Chair. Lists of officers, committee chairs, meeting sites, are also in draft form. Glassow said that during the summer he will complete several of the position descriptions and revisions on the Local Arrangements duties. He asked for assistance with the other necessary writing, and noted that the Manual will not be complete (in draft form) until fall or winter.

Woodward reported on our Easements, passing on information from Bill Dreyer. SCA owns six conservation easements: five for sites in Butte County and one in Shasta County, all prehistoric middens. Dreyer hopes to field check these sites in the coming year, and to update the files at CSU Chico.

Curation issues were discussed briefly by Woodward, reading notes from a June 1st telephone con-

versation with Johnson, Curation Chair. Johnson reported that many people had volunteered to work on this committee, and that several national organizations have developed guidelines that may be applicable.

The CRM Pamphlet, drafted by John Parker, is still much in need of editing and of additional writing on the historical resource sections. Woodward passed out copies of Kathryn Gualtieri's response to the draft, expressing support for the concept.

Woodward reported on current State Legislation, discussed elsewhere in the *Newsletter*. Tamez distributed a summary of current Federal Legislation.

4. Under Correspondence, Woodward and Tamez discussed a letter to Larry Myers (NAHC), thanking him for inviting SCA to review the Draft Monitoring Guidelines for Native Americans. Woodward had suggested that the concept of Monitors be changed to Consultants, a less passive-sounding role, and he also emphasized knowledge of state and federal legislation. Myers has separated Monitoring from the Most Likely Descendant role, requiring that each be filled by a different individual. Greenway noted that sometimes a tribe will designate a single person to fulfill both functions. Members also expressed concern that the guidelines be flexible, especially for small projects, for areas where there are few Monitors/MLD's, and when MLD identity is problematic.

5. The following New Appointments were announced by Woodward: Kent Lightfoot, 1990 Annual Meeting Program Chair; Marty Rosen, Proceedings Editor; Barb Bocek, Emergency Monitors/Advisors Chair; Scott Carpenter, Fundraising Chair, and Terry Jones, Nominations Chair.

6. Tamez, Woodward and Bocek reported on a meeting with the Holiday Inn Foster City, site of the 1990 Meetings. Woodward also said that Gary Reinoehl has offered to give a seminar on giving papers—perhaps we could schedule this on Wednesday afternoon.

7. Tamez reported on plans for the 1991 Annual Meetings which will mark our 25th anniversary as a Society. At some hotels our preferred Friday-to-Palm-Sunday dates were already booked, two years in advance! Glassow noted that in general, with Annual Meetings, it seems we need to start planning three years in advance. Discussion turned to paper topics for 1991, with requests for a few structured symposia and key invited papers, on the history, contributions, status, and future of California archaeology. Glassow added that we need to focus on the history of the SCA, not just on that of archaeology within the state.

8. Glassow reviewed the newly edited By-Laws Revisions, including Woodward's and his extensive proposed changes. All expressed appreciation for this

huge undertaking. Several minor changes in wording were briefly discussed. The Board spent considerable time discussing proposed changes to language addressing American Indian concerns in the Code of Ethical Guidelines. Several Board Members expressed dissatisfaction with the phrase "Attempts shall be made to rebury whatever human remains the pertinent representatives request..." Other Members expressed concern that deleting the phrase, and substituting language about simply obeying state and federal law, would signify resistance to reburial, somewhat out of keeping with an evolving trend in social values regarding disposition of the dead. All agreed that it is essential to incorporate language recommending assessment of scientific, as well as sociocultural values, prior to reinterment. Glassow offered to rewrite this section and circulate to Board Members for additional comment.

9. Bocek and Woodward described the status of Burials and Associated Artifacts Dispositions at Stanford University and Department of Parks and Recreation. Stanford has decided that culturally related tribal groups may request the return of remains now curated in the museum. At the same time, the University will request a specific period of study for any collection having significant research potential. This decision was approved unanimously by the faculty of the Anthropology Department, a Provost's Advisory Committee charged with reviewing the issue, and the Provost himself. Bocek stated that there had been no pressure and no publicity, simply a respectful request by Indian representatives that the University considered very seriously, and finally approved. General discussion followed; no Board actions were taken on this subject.

At 7:10, Glassow moved (and everyone seconded) that the meeting be adjourned.

THAD VAN BUEREN JOINS OHP

We are pleased to learn from the SHPO that Thad Van Bueren has accepted an appointment to join the Office of Historic Preservation. Van Bueren will be assisting with federal program review, and will provide the office with expertise in historic archeology. Van Bueren worked for many years with Infotec, and prepared many of the maps and illustrations used in Moratto's *California Archaeology*. Van Bueren fills a position in OHP that had long been vacant, which was recently reclassified to archeologist. Marion Mitchell-Wilson's position as senior historian has yet to be filled.

**NEXT NEWSLETTER DEADLINE
AUGUST 25, 1989**

NEWS FROM THE PRESIDENT

HASC Set to Reorganize

Sonia Tamez and Jim Woodward represented SCA at a meeting of the Heritage Action Steering Committee (HASC), the umbrella group set up to advance historic preservation legislation and goals. John Merritt chaired the June 19 meeting at the California Preservation Foundation (CPF) office in Oakland. Also present were Bill Burkhart (Conference of California Historical Societies), Vivian Kahn (CPF), Jim Williams and David Cameron (CCPH).

We agreed to work together to edit and revise John Parker's Guide for Local Planners, to exchange newsletters to improve communications, and to continue support for several state bills (e.g. SB 1188 for a California Register, and SB 1600 to give historic buildings better protection under CEQA).

We also agreed to reorganize as an eight-member Board (two representatives from each member organization) that will be separate from CPF, and set up for political action (non tax-exempt). HASC currently exists under the aegis of Californians for Preservation Action, which technically holds the incorporated status, By-Laws, and bank account for what evolved later as HASC.

We reviewed our limited accomplishments on the heritage action and tourism committee, which will meet again with OHP August 1, and talked about the value of joining the Planning and Conservation League. We continued general discussions over dinner at a wonderful Vietnamese restaurant, and agreed to meet again October 8.

Fiddletown and Army Corps Receive Governor's Awards for Historic Preservation

The Fiddletown Preservation Society and the Sacramento District of the U.S. Army Corps of Engineers were among six groups honored by Governor George Deukmejian as part of National Historic Preservation Week May 14-20. SCA members Julia Costello and Judith Cunningham helped the tiny Amador County community of Fiddletown with inventory and restoration work on the Chew Kee Store, an 1850s rammed earth adobe. The artifacts inside, a unique "cache" of traditional Chinese medicines and general merchandise nearly untouched since 1910, were photographed in situ, catalogued, and replaced. A new roof, more like the original was constructed, and foundations to the wood additions were replaced to stabilize the structure. The project was made possible by grants administered by OHP, the National Endowment for the Humanities, and gifts from the Yee family association. The Oakland Museum is preparing a major exhibit on the Chew Kee

Store for display later this year.

Governor Deukmejian commended the Army Corps of Engineers "for committing itself to restoring the Knights Ferry Bridge [constructed in 1862] and preserving a Native American cemetery at the Knights Ferry Recreation Area." Covered bridge restoration experts and craftsmen were brought in from Vermont for the work. Other award winners were Nevada City, Chico Heritage, St. Anthony Foundation of San Francisco, and the Old Towne of Orange.

Growth Issues and Archaeology

Growth is the issue in many California communities, and it threatens to overwhelm all others. California's population, now at 28 million, is increasing by about 700,000 a year, and is expected to grow by at least 500,000 a year for the next three decades. While most of the immigration and highest birth rates are in older urban areas, substantial migration to urban fringes occurs to make room for this growth, to find affordable housing, and to temporarily escape congestion and other perceived problems. Approximately 100,000 acres a year in California are becoming urbanized, converting farms, ranches, forests and natural areas into housing, roads, commercial and industrial areas.

This growth is a tremendous challenge for archeologists in California. Probably less than 30% of these newly developed lands are being surveyed for archeological sites. Many fast-growth counties and cities are still not consulting with the Information Centers on projects subject to environmental review, and are far out of compliance with the California Environmental Quality Act. If there is a statewide average of one site per 50 acres, a conservative estimate, it means approximately 2,000 sites per year may be lost to new construction. The Information Center data base is growing by about 2,400 site records and 1,700 new reports a year, most of which is produced by consulting archeologists in the private sector. From these figures there is reason for hope and encouragement, and for concern as many sites have their first and last professional inspection, with limited salvage or mitigation measures, in too many cases.

We need to do more, individually and through the SCA, to educate cities and counties on their obligations and opportunities under CEQA. Most of this work has fallen to the Information Centers, which depend on growth-related record search fees for the bulk of their support. The need is not just for the sustained growth of the profession, but for adequate assessment, mitigation, and, where possible, conservation of archeological sites in the public and scientific interest.

California's population growth has two other major effects on archeological sites: there is greater recreational use and development pressure on public lands, parks and forests that threatens many sites, even while these same sites assume greater value for possible preservation, stewardship, public interpretation and tourism. The redevelopment of downtown areas for high-rise construction is leading to discovery and salvage of long-buried historic sites in San Francisco, Sacramento, Riverside, and other areas. Predicting these sites and conducting timely excavations with analysis and historic research is a major challenge for those involved.

Finally, as Californians, archeologists are also affected by traffic congestion, skyrocketing housing prices, and "quality of life" concerns. Recruitment of new field workers and researchers has become more difficult in a profession not known for high pay and security. Seasonal positions are already difficult to fill in some areas.

There is hope, though, for increased student interest in archeology as employment prospects have brightened in recent years. A number of universities have recently begun, renewed, or expanded programs on California archeology. New archeologists on faculties include Frank Bayham at CSU, Chico; Richard Hughes at CSU, Sacramento; Mark Sutton at CSU, Bakersfield; Dan Larsen at Long Beach; Kent Lightfoot at UC Berkeley; Jeanne Arnold at UCLA; Scott Fettig at UC Riverside; and Mike Moratto at Fresno State beginning next fall. We offer congratulations to all, and see this as a most encouraging trend for developing talent and research interests for comprehensive understanding of California's archeological past.

At the statewide level we need to continue working for a new state historical resources plan (as required by law) including components on managing some resource types, local land use planning, and standards and guidelines for documentation, curation, and impact mitigation. Helping OHP and the State Historical Resources Commission resume their leadership roles is part of the challenge. Connecting archaeology politically and in the public mind with historic preservation and the environmental movement is in our long-term interest. Environmental degradation is the #1 concern of Californians, primarily related to growth and pollution. That concern should include the threat to the state's archeological and historic heritage, for they will certainly affect "quality of life" values of securing open space, pride of place, and a sense of history and local uniqueness. Historical studies of ethnic diversity and conflict, social and economic stratification may be of increasing interest and value in the future as well.

If the archeological profession is growing to meet the challenges in the 1990s, so must the SCA. More on that in coming issues.

SCA NORTHERN DATA SHARING MEETING DATE CHANGED

The Northern Data Sharing Meeting will be held **November 4, 1989**, at California State University, Chico. The meeting will be sponsored by the Northeast Information Center and CSUC's Department of Anthropology. Those interested in presenting a paper should contact Greg Greenway, Mendocino National Forest, 420 E. Laurel Street, Willows, CA 95988 or (916) 934-3316 before September 15. Northern California usually has an excellent meeting, so mark your calendar now and plan on attending.

SCA SOUTHERN DATA SHARING MEETING

The Southern Data Sharing Meeting will be held **September 30, 1989**, at the Santa Barbara Museum of Natural History, Santa Barbara. Those interested in presenting a paper should contact John Johnson at the museum, 2559 Puesta del Sol, Santa Barbara, CA 93105 or call (805) 682-4711.

MARINE ARCHAEOLOGY

The Foundation for Field Research is looking for volunteer field assistants for two marine archaeology projects (both divers and non-divers are welcome). The first project is underwater archaeology in the Columbia River, Oregon, working with historic and prehistoric artifacts. It is **September 17-23, 1989**. The second is an investigation of the large stone anchors off Palos Verdes Peninsula, Los Angeles, California, and will run **October 14-15, 28-29, or November 11-12, 1989**.

For more information contact the Foundation for Field Research at 787 South Grade Road, P. O. Box 2010, Alpine, CA 92001 or phone (619) 445-9264.

ANOTHER SUMMER VACATION

The University Research Expeditions Program (UREP) has a variety of projects this summer. Of possible interest to archaeologists is "An Endangered Legacy: Ancient Rock Art of Hawaii," from **August 31-September 12**, and **September 14-26, 1989**. The project leader is Dr. Georgia Lee, of UCLA's Institute of Archaeology. For more information contact UREP at the University of California, Berkeley, CA 94720 or phone (415) 642-6586.

PREHISTORIC ARCHAEOLOGY

CA-FRE-64

Archaeological Data Recovery at Prehistoric Archaeological Site CA-FRE-64, 1989, by Chambers Group, Inc. (Santa Ana) and California Department of Transportation (District 06).

A data recovery program was conducted at CA-FRE-64, Locus C, in response to pending road construction (Highway 168) by Caltrans. Previous test excavations revealed that the site was eligible for the National Register, necessitating data recovery in the area of the site to be effected by road construction. Under Caltrans, Chambers excavated a 1 x 14 m trench through Locus C. The excavations were directed toward addressing a series of research questions relating to site function, intrasite patterning, site temporal placement and cultural chronology, site catchment, paleoenvironmental change, subsistence, and resource procurement, production and exchange. A survey of the area surrounding the site revealed two soapstone quarries, which combined with soapstone sourcing, indicated much local procurement and production.

The excavations at CA-FRE-64 revealed various features including milling slick areas, hearths and acorn leaching pits. Soapstone debitage and production tools were also recovered. A combination of a stratigraphic series of radiocarbon dates, time-sensitive artifacts, obsidian hydration readings, and site stratigraphy suggest that the site was most intensively occupied between A.D. 1100/1200 and 1600. An earlier, more limited occupation of the site took place between ca. A.D. 800/900 to 1100/1200.

Perhaps the greatest significance is the evidence for soapstone production during this early period, which suggests that this industry clearly predates the Madera Phase (A.D. 1500-1800) by several hundred years. Soapstone sourcing was done on artifacts and samples taken from the local quarries. Through this analysis, it was shown that most soapstone artifacts were manufactured from locally quarried soapstone.

Other specialized studies include soil and phosphate analysis (R. Cerreto), obsidian sourcing (R. Hughes), obsidian hydration (T. Origer), steatite replicative analysis (A. Schroth), soapstone petrology (B. Hacker), instrumental neutron activation analysis of soapstone artifacts (R. O. Allen and M. Lockhart), pollen and macrofossils (O. Davis and C. Miksicek), radiocarbon dating (Beta Analytic), and various others.

REDBANK AND FANCHER CREEKS

Redbank and Fancher Creeks Archaeological Data Recovery Program, 1989, by Mitech (Santa Ana) and Department of the Army (Sacramento District).

A data recovery program at four prehistoric archaeological sites (CA-FRE-632, -633, -1154, and -1155) east of Clovis, Fresno County, California was conducted as mitigation for expected impacts to the sites from planned reservoir construction. The Redbank and Fancher Creeks project was carried out on behalf of the U.S. Army Corps of Engineers, Sacramento District by MITECH, a joint venture of Chambers Group, Inc., and Aleutian Associates, Inc. Copies of the report are available on a limited bases from the Army Corps.

Specialized studies included in the report are soapstone sourcing (R. O. Allen and M. Lockhart), obsidian sourcing (R. Hughes), obsidian hydration (T. Origer), radiocarbon dating (Beta Analytic), thermoluminescence dating (J. D. Berry), plant, pollen and macrofossils (O. Davis and C. Miksicek), and various others dealing with lithics, faunal remains, soils, etc.

The project sites are the remnants of camp sites over an extended period of time, perhaps beginning as early as the first millennium B.C. (Chowchilla Phase). All of the sites are typified by bedrock milling equipment and associated middens. The middens contained a variety of artifacts, production wastes and ecofacts, indicating that the sites were used primarily for the extraction, processing and consumption of local plants and animals. The primary occupation of the sites occurred during the late first and early second millennium A.D. During this period (Raymond Phase) the occupants manufactured and used soapstone items, an industry that has previously been associated with the succeeding Madera Phase. The presence of pottery at three of the sites indicate that they were used into the Madera Phase. Soapstone sourcing also revealed that some of the soapstone was procured from the quarry areas near CA-FRE-64. Other artifacts were clearly made from soapstone from a different source, exhibiting a very different chemical fingerprint.

NEXT NEWSLETTER DEADLINE
AUGUST 25, 1989

ESSAYS ON CURRENT CONCERNS

AN ARCHER'S NOTES

Ron King
University of Nevada-Reno

During the recent SCA meeting, I found myself commenting on Dave Van Horn's paper regarding arrows from southern California not from an archaeologist's point of view, but from the viewpoint of an archer and bow hunter. As this is a position seldom considered and may be of some interest to the archaeologist, the following briefly discusses three facets of this perspective. The first point questions the common assumption that the weight of a projectile point is an adequate criterion to determine whether a particular point was attached to a atlatl dart or an arrow shaft; the second aspect relates to how projectile points kill large game; and, finally, I would like to make some brief observations on hunting strategies.

In California, the ethnographic data regarding bow hunting derives primarily from a single source, Ishi, who not only provided a wealth of information of use to the anthropologist, but also supplied the foundation of modern bowhunting. Indeed, the highest achievement in bowhunting is, fittingly, the Ishi Award. Thus, Ishi and his physician and hunting partner, Dr. Saxton T. Pope (of bowhunting's Pope and Young Records), hold the unique positions of prophet and proselytizer for modern bowhunting ethics and methods to such a degree that they have become mythical characters in a growing body of American archer folklore. With this in mind, we move now to my first point.

Over the years archaeologists have relied on a general rule of thumb to distinguish dart and arrow points, i.e., points weighing more than 2 g were likely used with the atlatl, smaller points with the bow. This criterion has indeed proved useful and a bimodal distribution of projectile point weights has been well documented; however, I would question the assumption that this phenomenon is related to the physics of the propulsion system. Dr. Pope reported that, although stouter bows could be made, the one Ishi preferred had a "pull" of about 45 pounds, and although Ishi never proved the point, it was reportedly capable of "shooting through" deer sized game, i.e., if the arrow did not strike bone, it could enter the body cavity on one side and completely exit the other. Such force is certainly adequate, and while modern bow hunters, in a rush to reinvent the rifle, typically shoot more powerful or mechanically-enhanced bows, 40-45 pounds is generally the lower legal limit for hunting deer size game. Additionally, in the pre-me-

chanically-enhanced bow era such bows were, and to conservative or young archers still are, common. All this is well and good, except the projectile points these 45 pound hunting bows propel typically weigh between 110 and 150 grains, roughly 7.1 to 9.7 g, weights well beyond the cognitive parameters of the archaeologist's arrow point.

So, it would seem, we will have to look elsewhere to explain the bimodal nature of the projectile point weights. To this I have little to add, at least for the moment, except to suggest the phenomenon may be related to hunting techniques peculiar to the bow, the supply of raw material for making points, and the presumed expense of that resource. While the atlatl is an efficient method of delivering a projectile to target and may have a higher potential to kill once penetration occurs, the hunter's shot options are limited by the nature of his technology, i.e., he must make considerable movement which alerts the game, and to make matters worse, he must do it in an exposed position. In the long run, the atlatl hunter gets fewer shots, requires fewer projectiles, and seldom loses lengthy dart shafts and attached points in the brush. On the other hand, a bow hunter can shoot from concealment, may get a number of shots per day at a variety of game, and is forever losing the shorter arrows under grass, duff, or undergrowth. Given a certain unit of lithic material the atlatl hunter can, for reasons discussed below, opt for the greater efficiency afforded by the cutting surface of larger points, while the bow hunter's needs demand many more points from the same volume of material.

This brings us to the second topic, e.g., how projectile points kill large game. What most folks don't seem to understand is that projectile points do not kill by "impact shock": it is the injury created by the point, a combination of penetration and cutting surface, an understanding of how wounded animals behave, and the ability to "read sign" that leads to a successful hunt, and not the force behind the projectile. If we want to kill something, we must first make it bleed, in most cases profusely. In general, the greater the cutting surface of the projectile, as in "atlatl" points, the greater the damage after penetration. If, as is so often stated, all things were equal, the atlatl dart with a larger cutting edge would be the superior killing tool. However, all things seem never to be proverbially equal and all the cutting edge in the world won't do any good until the animal is struck. This then brings us to the third topic, the relationship of technology and hunting strategies.

The bow gives the hunter the ability to shoot through an opening in a tree, or from a tree, or under

a limb, or from any number of positions ranging from standing to lying on his back. Additionally, the technology is conducive to hunting strategies requiring only the individual. The key here is that movement is minimized both by the limited motion of the bow limbs and by the hunter's ability to shoot from concealed positions, a far cry from the highly visible overhand motion of the atlatl hunter, who must somehow control the situations under which he confronts game. Two ways to control these circumstances are to target a particular species and through the use of strategically placed blinds. From such a blind the atlatl hunter or hunters can wait for passing game to provide nearly the same shot, repetitively. Perhaps assisted by drivers or by intimate and species specific knowledge of game movements, such a hunter increases the odds by controlling the encounter and from knowing the kind of shot he is likely to be offered, perhaps even having made that particular shot on a number of occasions- after all, practice makes perfect. The bow hunter, however, can successfully exploit almost any game-taking opportunity, and, therefore, need not be focussed on a target animal. Whether large or small game are encountered, the bow hunter is prepared and may take opportunities as offered and, most significantly, can shoot in almost any reasonable situation. So, where atlatl hunters must seek controllable encounters, at least as far as the mechanics of shooting are concerned, the bow hunter can capitalize on a wide variety of situations and, while he may target a certain species, serendipity may provide additional game.

As a final comment, what seems most striking about the evolution of hunting methods is that as improvements in large game hunting technology developed there was a corresponding shift from group participation to individual effort marked by increasing specialization and a decrease in direct cooperation by the social unit. As an oversimplification, the group bison drives by entire communities during Paleo-Indian times were replaced by smaller hunting parties using blinds on known trails, or by driving of individual or small groups of targeted animals by such blinds or stands during the atlatl period and, finally the individual bow hunter, relying on a wide variety of strategies and capable of exploiting general game resources, becomes the productive hunting unit. While the direct cooperation of the entire group was required to produce a successful hunt during early times and atlatl hunters may have worked best in groups, the latter day bow hunter often had the option of working alone during the actual hunt.

It is hoped that this discussion will prove useful to the archaeologist. It is also hoped that the sharing of this bow hunter perspective will stimulate further discussions regarding hunting technology and methods, perhaps even leading to greater insights into the behavior of prehistoric hunters.

CDF AND THE LAUPENHEIMER CASE: A RESPONSE TO RON MAY

Daniel G. Foster

On page 18 of the May, 1989 issue of the SCA Newsletter Ron May provided commentary on the *Laupenheimer* case. Ron reports how this case relates to the California Department of Forestry and Fire Protection's (CDF) controlled burn program. Ron states that CDF's program EIR "glossed-over CEQA issues on a mega-scale," "vaguely committed to mitigation," and that the removal of brush has "exposed open sites to vandalism and other effects." His article criticizes CDF's controlled-burn program in a very misleading and inaccurate way.

The *Laupenheimer vs. State of California* case had nothing to do with CDF's controlled-burn program or its program EIR!! This case pointed out that CDF did not properly address cumulative effects during its review of timber harvesting plans processed under a program certified as equivalent to the CEQA process. It did not speak to other CDF programs which are conducted under a full CEQA review.

May states that CDF "lacks the regulatory authority to preserve sites on private lands where they contract for the work." This is not so. CDF has the authority to enforce any mitigation made a condition of the approved project contract. It routinely requires projection of archeological sites as a condition for project approval. Violators of a timber harvesting plan have been subjected to a \$30,000 fine and cost of archeological salvage.

CDF does not contend that our program EIR for controlled burn projects "overrides any local program" supported by proper legal authority. The approval of a project by CDF does not provide an applicant license to violate other applicable laws. Where such laws exist and are unknown to CDF, the agency with jurisdiction has a legal obligation to bring such statutes, regulations or ordinances to the state's attention (14 CCR 15207).

May also implies that impacts associated with escaped fires were not addressed in the program EIR. This too is incorrect. These issues are discussed in section III h and the mitigations for such escapes are set forth in section IV h of the document. Contrary to Ron May's opinion—this is not a bad EIR and it does not "gloss-over" CEQA issues. Like all program EIRs, it does not identify specific environmental issues and specific mitigation measures for a particular project. It is designed to deal with broad aspects of the program in impacts, alternatives, and mitigations. Initial Studies conducted for each project address the existence, significant of impacts, and necessary mitigations for archeological resources. Where

potential impacts are not addressed in the EIR in such a manner that they provide for resource protection, then the EIR must be supplemented or the project done under a separate environmental document.

The program EIR, Initial Study, and CDF internal procedures require each project to have a full records search with the Information Centers. This review provides the CDF project manager with information concerning the presence of known archeological sites, the likelihood of unrecorded sites being present, and recommendations concerning the need for survey by a qualified archeologist. CDF archeologists then conduct partial surveys of project areas concentrating efforts on known site locations and areas receiving ground disturbance (such as pre-burn brush-crushing and dozer line construction). The most common mitigation used is avoidance. Normally the sites are left unburned and undisturbed. Occasionally a survey of brushy acreage is done if deemed to be appropriate.

CDF's CEQA review efforts for this program are not perfect. One project in Tehama County resulted in major damage to an unrecorded archeological site when a project manager ignored recommendations to survey a dozer line. A subsequent archeological survey identified the damaged site. CDF contracted with Chico State University to conduct an archeological salvage (an report on this archeological work is published and available to anyone who requests it). More recently, CDF made another mistake in eastern San Diego County. The state initiated a burn with-

out conducting a complete archeological survey and without proper evaluation of potential rare plant and animal habitat.

Both of these incidents are the result of poor planning by the two CDF officials responsible. They do not, as suggested by May's article, however, indicate that the program EIR is flawed, as most project managers are very conscientious in the proper management of archeological sites. The system works quite well most of the time. The burn program is not "exposing open sites to vandalism" on a statewide basis. These instances are quite rare and these sites have burned many times historically...and, they'll burn again. The choice is controlled burn or wildfire.

AT LONG LAST, AN ATLATL OF YOUR VERY OWN

BPS Engineering began researching the atlatl and dart system in 1985 as a problem in archaeological replicative studies. Through years of research and development, they have acquired a healthy appreciation for the engineering skills of the Indians, as well as the power and efficiency of the atlatl and dart system. An efficient atlatl can thrust a dart easily over 100 meters!

They now sell a wide range of atlatl and dart systems. The basic system is called the Mammoth Hunter. It is their most powerful system, using the largest size aluminum darts available. It is made from sturdy maple and features an adjustable leather handgrip. The timing weight is made from cast bronze. Many people can throw a dart 125 yards with this system. The Mammoth Hunter system with two darts costs \$67.00, plus \$4.00 shipping.

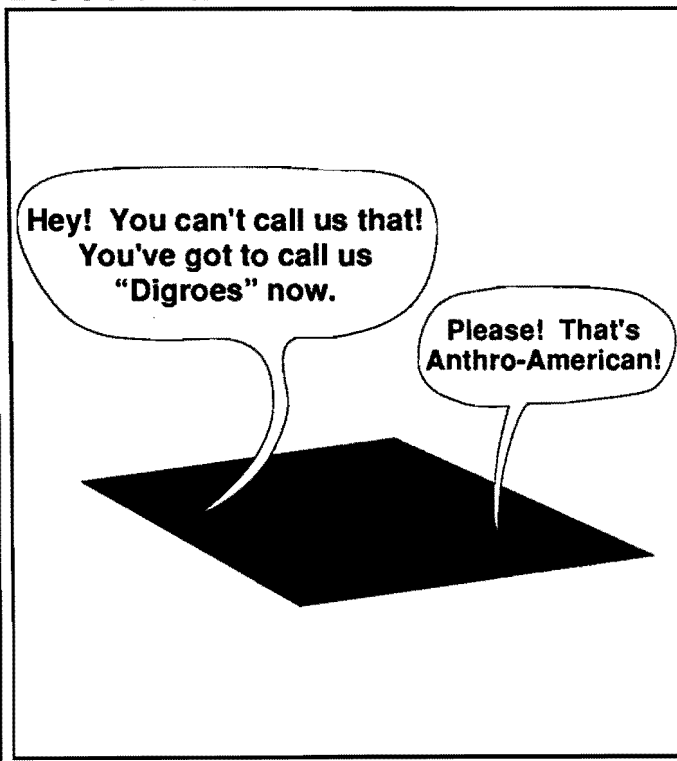
The Warrior Atlatl is designed for the enthusiast who desires the highest performance available. It is smaller and lighter, and provides a faster, flatter shot. It has a maple body and a cast plastic weight which is an exact replica of specimens from the Great Basin region. This system with two darts costs \$82.00 plus \$4.00 shipping.

A number of other items are available, including a full line of foreshafts, darts, and timing weights. Also, they offer museum-quality replicas. These are guaranteed to be authentic in design and construction, and can replicate atlatls from any particular region of the United States or worldwide.

More information can be obtained from:

BPS Engineering
Box 797
Manhattan, MT 59741
(406) 284-3307

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Society for California Archaeology

The Society for California Archaeology is a non-profit scientific and education corporation. Its two purposes are:

To facilitate coordination and cooperation among archaeologists in California: (1) to stimulate scientific research in the archaeology of California, (2) to promote and maintain standards and goals for archaeology in California, (3) to encourage the development and use of new techniques for the better recovery, interpretation, and preservation of archaeological remains, (4) to conduct symposia and meetings for the presentation of archaeological matters, and (5) to publish and disseminate information on archaeological research in California.

To facilitate efforts between archaeologists and all citizens of California: (6) to stimulate greater public interest in and understanding of the techniques and goals of archaeology in California, (7) to disseminate educational information to the public, (8) to encourage and assist in the conservation of archaeological remains for future research and public knowledge, (9) to discourage and curtail the destructive exploitation in California of archaeological resources, and (10) to increase public appreciation and support for scientific archaeology in California.

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UPCOMING EVENTS

- August 2-6, 1989. Circum-Pacific Prehistory Conference, The Seattle Center, Seattle, WA. Contact Dale R. Croes, Conference Coordinator, 1001 4th Avenue Plaza, Seattle, WA 98154-1001 or (206) 464-6580. [Based on the preliminary program, this is a "must attend."]
- August 19, 1989. The 8th Annual World Open Atl-atl Contest, Fort Casper Museum, Casper, WY. Contact the Casper Chamber of Commerce at 307/234-5311 for additional information.
- September 21-22, 1989. A conference on "Vernacular Architecture West of the Rockies" will stress an interdisciplinary approach to the study of the built environment in western North America. Contact Ronald James, Nevada Deputy State Historic Preservation Officer at (702) 885-5138.
- September 30, 1989. Society for California Archaeology *Southern Data Sharing Meeting*, Santa Barbara Museum of Natural History, Santa Barbara. Contact John Johnson, Santa Barbara Museum of Natural History, 2559 Puesta del Sol Road, Santa Barbara, CA 95988 or phone (805) 682-4711.
- October 6, 1989. State Historical Resources Commission meeting, Riverside.
- October 27-29, 1989. California Committees for the Promotion of History, Ninth Annual Conference, Willits, Mendocino County. Contact Dan Taylor, Mendocino County Museum, 400 East Commercial Street, Willits, CA 95490 or call (707) 459-2736.
- November 4, 1989. Society for California Archaeology *Northern Data Sharing Meeting*, California State University, Chico. Contact Greg Greenway, Mendocino National Forest, 420 E. Laurel Street, Willows, CA 95988 or phone (916) 934-3316.
- March 7-10, 1990. The National Council on Public History and the Southwest Oral History Association Annual Meeting, San Diego. Contact Murney Gerlach, History Department, University of San Diego, San Diego, CA 92110 or phone (619) 260-4600 ext. 4756.
- April 4-8, 1990. *Society for California Archaeology Annual Meeting, Foster City (by the San Francisco Airport)*.
- April 4-7, 1990. American Association of Physical Anthropologists Annual Meeting, Omni Hotel, Miami, FL.