UCSC Students Return to Excavations

By Benjamin Akey, UCSC Anthropology Major

Another academic year at UC Santa Cruz means another year of excavations at the Cowell Lime Works Historic District on the UCSC Campus. A group of fifteen anthropology students, led by Adjunct Instructor, Patricia Paramoure, local archaeologist, and assisted by TA, David Ingleman, UCSC Ph.D. student, were given the opportunity to expand their skill sets with a class focused on the introduction to archaeological fieldwork. The class convened Friday evenings for lecture and lab work, and all day Saturdays, for archaeological excavations. Efforts over the ten weeks of Spring Quarter 2016, renewed investigations at the site of Cabin H, a lime workers’ cabin, formerly one of a row of buildings on the hill west of Coolidge Drive, behind the Kilns and Cooperage, near the main entrance to the UCSC Campus. Students became familiar with the fundamental skills of archaeological excavation techniques along with methods of artifact cleaning, sorting, and identification, focusing on establishing a solid background in historical archaeology. Special attention was paid to training students in the skills necessary for success in the field of professional Cultural Resources Management archaeology.

While learning about the historical context of the Cowell Lime Works, the Santa Cruz lime industry at large, and their influences on the development of local landscapes and social networks, students excavated, screened, and recovered artifacts from over 200 ft$^3$ of soil. Back in the lab, these artifacts were cleaned sorted, and bagged according to provenience. Future cataloging and analysis will add to a growing body of research that will provide further insight into the people and operations at the lime works. Specifically, this excavation adds to the investigation of the domestic lives of workers in Cowell’s employment, who lived in on-site residences, continuing the trend of other recent excavations at Cabin B and Cabin J, and last year’s initial work at Cabin H.

Students were also given the opportunity to further their own interests within the overall topic of the lime works through the development of written reports (modeled on CRM reports)
that investigated specific components of the historic district, and recommended potential avenues for future research, including the review of existing collections and suggestions for future excavations. This year, reports include studies of environment and landscape changes connected to the lime works, the use of alcohol and social drugs by employees, religion among the workers, and animal husbandry at the ranch. These reports gave students the chance to connect archaeological methods and historical materials with larger questions about the nature of past communities and industries in the Santa Cruz area, while emphasizing the skills necessary in the preparation and writing of CRM-style technical reports.

On a personal level, this experience allowed me to hone and expand skills necessary for employment and success in the field of archaeology, under the supervision of experienced, helpful and friendly mentors. Casual talks over lunch breaks with Patricia and David helped me understand both the positives and negatives of what to expect going forward in the field of CRM, and conversations with newly interested students helped me to conceptualize what it was that I found so rewarding about the work. This opportunity also meant the creation of new personal connections and friendships across the small but tight group of participants, reaffirming my suspicion that there’s no better way to get to know someone than when breaking a sweat digging holes together. While I had been set on pursuing archaeology before this quarter, watching a group of students, mostly fresh to fieldwork, discover their own interest in the discipline was particularly rewarding.

There are not many classes or opportunities that would make me, or many other college students, give up Friday nights and Saturdays for a whole quarter, but I have no doubt that this experience was well worth every day and I will look back on it as one of my favorite classes at UC Santa Cruz.

(Left) 1902 Liberty Head V nickel. (Below) Students prepare to begin excavation.
On the morning of June 25, 2016, members of the Santa Cruz Archaeological Society set up tables at the Cabrillo Farmers Market and began to hand out USGS Topographical Maps. The scene quickly grew busy with strong interest in this free giveaway.

Marketgoers also showed interest in the Society’s Ohlone Basket and Mexican Brand t-shirts, copies of past SCANs. Membership forms were requested by many visitors and $36.00 in donations were received.

SCAS has been selling maps and other merchandise in public outreach efforts in a variety of venues for several years. The SCAS maps were donations from local engineering firm, Bowman and Williams, and from archaeologist Christian Gerike. According to Rob Edwards, SCAS has donated sets of maps to the CHRIS Information Centers in California.

While the map giveaway was a big success, there are still hundreds available. Another map giveaway will be scheduled later in the year. Look for that date posted at www.santacruzarchsociety.org and in other local media venues.

Kären Johansson and Robyn Houts with merchandise at the Cabrillo Farmers Market

SCAS member Charr Simpson-Smith gives away maps at the Cabrillo Farmers Market. Photos by Rob Edwards
Evidence for a Pre-Clovis Occupation at the Page-Ladson site, Florida


A stone knife, mastodon bones and fossilized dung found in an underwater sinkhole show that humans lived in north Florida about 14,500 years ago, according to new research that suggests the colonization of the Americas was far more complex than originally believed. Archaeologists have known of the sinkhole in the Aucilla River, south of Tallahassee, for years. It was first spotted by Navy Seal diver Buddy Page while diving on property owned by the Ladson family, hence the location's name.

It predates the widespread Native American Clovis culture and is the same age as another pre-Clovis site, Monte Verde in Chile.

Almost 200 ft. wide and 35 ft. deep, the sinkhole was “as dark as the inside of a cow, literally no light at all”, according to Jessi Halligan, lead diving scientist and a professor at Florida State University, Tallahassee.

In the hole, the divers found stone tools including an inch-wide, several inch-long stone knife and a “biface” – a stone flaked sharp on both sides. The artifacts were found near mastodon bones; re-examination of a tusk pulled from the hole confirmed that long grooves in the bone were made by people, probably when they removed it from the skull and pulled meat from its base.

“Each tusk this size would have had more than 15 lbs. of tender, nutritious tissue in its pulp cavity,” said Daniel Fisher, a paleontologist at the University of Michigan who was a member of a team that once removed a tusk from a mammoth preserved in Siberian permafrost. Of the “biface” tool, Halligan told Smithsonian.com: “There is absolutely no way it is not made by people. There is no way that’s a natural artifact in any shape or form.”

Geological evidence and the study of algae and pollen suggest that when ancient people butchered or scavenged the mastodon, the sinkhole was a shallow pond: a watering hole for men, mastodons, bison, bears and apparently dogs. The researchers found bones that appear to be canine, suggesting dogs trailed the humans, either as companions or competitors for scraps. The discovery makes the sinkhole the earliest documented site for humans in the south-eastern United States. The researchers published their findings in the journal Science Advances on Friday, writing that the artifacts show “far better” evidence of early humans than previous work at the site.
“The evidence from the Page-Ladson site is a major leap forward in shaping a new view of the peopling of the Americas at the end of the last Ice Age,” said Mike Waters, an archaeologist at Texas A&M University. “In the archeological community, there’s still a terrific amount of resistance to the idea that people were here before Clovis,” he added, referring to the so-called “Clovis people”, a group long thought the first band of humans in the Americas. Waters said that the watering hole would have made for “easy pickings” for humans looking to corner prey.

At the Florida site, the researchers analyzed twigs in fossilized mastodon dung to date the bones and artifacts, finding them to be about 14,550 years old. The timing casts the Bering Strait theory into doubt, Halligan said: the ice-free land bridge was only open for a few thousand years. “So the ice-free corridor is not our answer for how the Americas were initially colonized,” she told the Smithsonian.

“The logical way people could have come to Florida by 14,600 years ago is if their ancestors entered the Americas by boat along the Pacific Coast,” Waters told Discovery News. “They could have travelled by boat to central Mexico, crossed and come along the Gulf Coast. They could have entered the Americas via the Columbia river and then travelled inland to the Mississippi river and followed it down and entered the Gulf Coast, eventually making their way to Florida.”

In terms of other animals, Waters said, "The animal bones from the site tell us that mastodon, sloth, giant armadillo, dire wolf, mammoth, horse, camel and giant bison were present. These and other animals became extinct by 12,600 years ago." Mastodon remains have been found as far north as Kentucky, Fisher said. He added that the discovery that “humans and megafauna coexisted for at least 2,000 years” casts doubt on another theory: that the Clovis hunters quickly made mammoths and mastodons extinct as they launched a “blitzkrieg” across the continent. “That means that however humans and mastodons interacted, it took at least two millennia for the process of extinction to run to completion,” he said at a press conference. The main reason the giant mammals went extinct, he said, was probably the warming climate.

Several anthropologists not affiliated with the research said it added to the mounting evidence of a complex, many-staged migration into the Americas. “I think this paper is a triumph for underwater archaeology and yet another nail in the coffin of the Clovis-first theory,” Jon Erlandson, an anthropologist at the University of Oregon in Eugene, told Nature magazine. “I don’t know what else to tell you,” archaeologist Michael Faught, one of the reviewers of the research, told National Geographic. “It’s unassailable.”

For more information about the Page-Ladson site, follow the hyperlinks in the online SCAN or visit these sites: www.theguardian.com/science/2016/May/14/archaeology-florida-sinkhole-ancient-humans-mastodon-knife-bones-bering-strait, or http://advances.sciencemag.org/content/2/5/e1600375
**Book Review:** **First Coastal Californians**

**Edited by Lynne H. Gamble**


**Reviewed by Mary Gerbic**

First off, this is a beautiful book. The glossy large format pages (8 ½ x 11 inches) contain black and white, and color illustrations which enhance the text. The seventeen chapters are arranged in chronological order and cover from 13,000 years in the past to the present day, and the challenges of sea level rise with global climate change. The book is intended for the general public, but professionals and students of California prehistory will find it appropriate, and a good starting point for future study.

Each of the book’s chapters are written by a different author or group of authors who are authorities on their subject. Several reference pages support the text. The Forward by Brian Fagan (author of *Before California, The Long Summer, Eyewitness to Discovery, Writing Archaeology*, and many more), puts the reader on the right path to appreciate this book. Following this is a Chronology of California prehistory, and a map of languages present in California at the time of European contact.

As Dr. Fagan writes, most people think archaeology is all about Egyptian, Aztec and Mayan monuments, gold artifacts and spectacular burials. Although California is not known for spectacular treasures, that doesn’t mean that the story of the Native peoples of California isn’t interesting, or that it lacks significance for modern people. Thanks to increasing interdisciplinary research, collaboration with Native groups, and the advent of newer techniques to analyze even microscopic and chemical data, we are learning much more about the deep prehistory of California cultures.

For instance, in Chapter Four, Kent Lightfoot and his co-authors explain how we know why California Indians could live in settlements on the California coast without traditional agriculture. Using the Quiroste Valley Cultural Reserve as their research area, the authors combined traditional knowledge with detailed study of the soil components, and found evidence that grassland fires were more common in the past, with a fire return frequency averaging four years. Most fires before modern times were caused by lightning, which is infrequent on the coast, so was the frequent burning caused by humans? How could the researchers distinguish naturally caused fires from fires deliberately set? How do we know what kinds of plants grew here? Read this chapter and learn.

In Chapter Nine, John Douglass and fellow authors describe for us the history of the Ballona Wetlands north of Los Angeles International Airport. This large wetland was once open to the ocean, but over thousands of years, it filled in to become a lagoon and marsh. For much of that time, people lived here, managing and harvesting the bounty of a land where ocean, creek and wetland met. In modern times, this area was filled in and built upon, obscuring the old landscape. Many details had to be assembled to reconstruct the geoarchaeological, natural, and cultural history of the Ballona to the present. In two examples, the authors were able to excavate village sites and found that they were inhabited or visited for mourning ceremonies well into Mission times.

The seventeenth chapter was written by a Native Californian, Linda Yamane, who takes us along on her quest to recover the lost art of Ohlone basketry, an essential component of her culture. She details the research, collecting, and preparation necessary before she could start weaving a basket.

I encourage all of you to go on a journey with the authors of this volume. You can read one chapter at a time and set it down, because each chapter stands on its own. The authors, in most cases, have done a masterful job explaining their subject in a conversational tone set at a level that will not intimidate the reader with unexplained jargon, constant footnotes and references. The text flows, leading you through the history of the study of the topic, to our current understanding. Along the way, the authors introduce and discuss important questions that may have formed the basis for their research, or were inspired by what they have discovered. For those who want to know more, the Suggested Reading list is a great place to start.
MISSION SANTA CRUZ
SUMMER ARCHAEOLOGICAL PROJECT

Volunteers Needed!

- Volunteers are needed to sort and process artifacts from a recent archaeological excavation.
- Volunteers will receive formal lab training.
- Volunteers will gain a clear understanding of California Mission life, based upon this latest research.
- Lab work will occur at the Santa Cruz Mission State Historic Park
- Special lectures and field trip opportunities will be available

Volunteer each Monday 6/27 to 8/22 or each Friday 6/24 to 8/19, 10am-2pm!

Recently, Santa Clara University launched an extensive two-year archaeological excavation as part of CEQA (California Environmental Quality Act) requirements during the construction of a new parking garage. The site excavated was part of the neophyte (Indian) housing at the mission. The excavation yielded numerous new findings relating to the day-to-day lives of the mission inhabitants.

Because Mission Santa Cruz State Historic Park is the only remaining neophyte housing preserved as a museum in California, Santa Clara University and California State Parks have entered into a collaboration to work together in processing this new collection of artifacts. The results of this project will help both institutions and eventually a wide array of researchers in understanding what mission life was truly like for the inhabitants who occupied them.

In order to help SCU with its public outreach program, California State Parks and Santa Clara University have created a summer program for volunteers to gain hands-on experience in handling and identifying artifacts. In addition, educational talks will be given by the project director, State Parks staff, and special guest speakers on mission history, based on and relating to this latest research.

FOR MORE INFORMATION, PLEASE CONTACT:

Erik Hylkema, Mission Santa Cruz State Park: erik.hylkema@parks.ca.gov
# Archaeological Society Business

## SCAS Officers and Contact Info

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<th>Phone</th>
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<tbody>
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## SCAS Annual Financial Report FY 2015 and SCAS Membership News

### Submitted by Treasurer, Cathy Phipps

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<tr>
<th>Beginning Bank Accounts</th>
<th>April 1, 2015</th>
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<td>Income FY 2015</td>
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### Income

- All Merchandise Sales: $1,447.39
- Donations: $5,014.76
- Interest Income: $0.72
- Membership Income: $940.00

### Expenses (Summarized)

- Business Insurance: $410.00
- General Expenses: $654.28
- Internet: $131.40
- Merchandise Expense (SCA): $379.04
- Membership Expense (Ballots): $59.05
- SCA (Ads, Dues, Bookroom etc.): $250.20

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The SCAS board wishes to acknowledge Coyote Press for their many years of support, and for printing our SCAN.

Thank you!

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**SCAS Membership 2015-2016**

**As of June 30, 2016:**

**Members in good standing:** 57

**Members not in good standing:** 56

Please renew your membership!

A reminder to our members:

This August and September, the membership will be voting for a new President and Secretary.

Ballots will soon be sent out and must be sent in to arrive by mail no later than September 8th, or hand-delivered to the September 8th General Meeting.
We are pleased to announce the following volunteer training workshops. If you are interested in attending and participating in site stewardship, please register by sending your contact information to bpadon@discoveryworks.com or contact Beth or Chris Padon by phone at (562) 595-3995. Class size is limited to 25. For more information on the program, please visit the CASSP web site, <www.cassp.org>. Thank you.

July 9-10, volunteer training hosted by Lassen National Forest and by BLM Eagle Lake Field Office. Saturday classroom training held at the district office, 2550 Riverside Drive, Susanville, 96130.

September 10-11, volunteer training hosted by BLM Bakersfield Field Office. Saturday classroom training held at the field office, 3801 Pegasus Drive, Bakersfield, 93308.

FREE! Visit Santa Cruz County’s next State Historic Park

Castro Adobe Open House Days

Feb 20  Apr 23  Jun 11
Aug 13*  Oct 22  Dec 10

That'sMyPark.org

Saturday 11am to 3pm • 184 Old Adobe Road, Watsonville
Parking limited • *6 to 9pm
Upcoming Events, CONTINUED

Legion of Honor, San Francisco, California

The Future of the Past: Mummies and Medicine

On view May 16, 2016—August 26, 2018

Also at the Legion of Honor June 18, 2016—September 11, 2016

Wild West: Plains to the Pacific  An exhibition of paintings, sculpture, prints, drawings, photographs and historical documents from the archives. This exhibit celebrates the diversity of the west and the human response to the “natural and cultivated landscape” of the west. Artists include Eadweard Muybridge, Albert Bierstadt, Maynard Dixon, Thomas Moran, Fredrick Remington, Albert Ruscha and others.

Oakland Museum of California, Oakland California

Dorothea Lange: Politics of Seeing

On view November 12, 2016—April 23, 2017

100 photographs from the artist’s personal archive which was given to the museum 50 years ago.

All Power to the People: Black Panthers at 50

On view October 8, 2016—February 12, 2017

On October 15, 1966, the Black Panther Party was founded in Oakland, California. This is a contemporary view of the legacy of the Party and how it continues to inspire people around the world today.

Society for California Archaeology Upcoming Meetings

SCA Northern Data Sharing Meeting—Tentatively scheduled for Saturday, Oct 1, in Amador County, Venue TBD.  Contact: SCA Northern Vice-President Susan Stratton at susan@scahome.org

SCA Southern Data Sharing Meeting—Oct 29 at the Steele/Burnand Desert Anza Borrego Desert Research Center.  Contact: SCA Southern Vice-President Barbara Tejada at barbara.tejada@parks.ca.gov

SCA 51st Annual Meeting, Tenaya Lodge (Fish Camp) - March 9-12 2017.

For more information on these events, watch the SCA website.
There will be no meetings in July or August. We resume in September.

Starting September 2016 they will take place on the second Thursday of the month, at the Santa Cruz Live Oak Grange Hall at 1900 17th Ave, Santa Cruz, CA 95062. This building is on 17th Avenue between Capitola Road and Mattison Lane.

September 8, 2016 Speaker to be announced.
October 13, 2016 Karen Gardner—California State University, Chico
November 10, 2016 Sally Evans—Sonoma State University, Evans & DeShazo
December 8, 2016 Steve Hilton—Sonoma State University, California State Parks
January 12, 2017 Bryan Much—Sonoma State University and the Northwest Information Center

Preservation50 is all about celebrating the signing, 50 years ago, of the National Historic Preservation Act, which was a watershed moment for archaeology in the United States. One initiative of the Preservation50 organization to educate the public about the importance of historic preservation, is MAPP (Making Archaeology Public Project). Our state organization, the Society for California Archaeology (SCA), the Bureau of Land Management, the National Park Service, Society for American Archaeology, the Advisory Council for Historic Preservation (ACHP), Society for Historic Archaeology, US/ICOMOS, and many others, are partners in this project.

The SCA is pleased to announce a video contribution from California to MAPP. The website is preservation50.org/mapp, so go see what 50 years of NHPA means to California through the “window of obsidian”. While you’re there, be sure to watch what other states have contributed.
Join us in our efforts to study and preserve the Past for the Future …

- Individual $20
- Students $15
- Seniors $15
- Family $25
- Lifetime $400
- Institution $25

☐ New Member  ☐ Renewal  ☐ Gift Membership (from) __________________________________________________________________________

Name: __________________________________________________________________________

Street Address / Apt.#: __________________________________________________________________________

City, State, ZIP: __________________________________________________________________________

Email Address: __________________________________________________________________________

Phone: __________________________________________________________________________

Please share any archaeological interests or experience:

__________________________________________________________________________________________

Mail completed application with dues to: SCAS Membership, P.O. Box 85, Soquel, CA 95073, or visit our website: http://www.santacruzarchsociety.org/join