

Lexington Reservoir Survey

by Annamarie Leon Guerrero

This past February, I had the opportunity to remember one of my favorite lessons: that archaeology is everywhere. I learned this lesson during the summer I participated in the Cabrillo College

field school. It is a harder lesson to remember these days, as my work as field tech often takes me to places that or are. that may feel like, the middle of nowhere. But, a clear. on gray Saturday morning, along with several memof the bers Santa Cruz

Photo: Laura Eliassen

Archaeological Society (Jorge Aguilar, Rob Edwards, Laura Eliassen, Helen Meservey, Cat Nichols, Ann Ramage, Janet Schwind and Charr Simpson-Smith), recorded a prehistoric, bedrock mortar site near Lexington Reservoir.

Over the past few years, I have driven over Highway 17 at least a hundred times, and I have to admit that what is a beautiful drive has become a rote experience. Every once in a while, when I look away from the miles of windy pavement laid down in front of me, I find myself wondering about the people who traversed this place long be-

fore I came along.

Lexington Reservoir can be seen from the highway. So, when I h a d t h e chance to get *off* of the highway record a prehistoric site with a great group of people, I jumped at it. It is not often that I get to spend

an entire day at a site and not be under pressure and time constraints to record it. I was also excited to work with Rob and Charr again in the field, as well as Laura, Jorge and Cat. It was also great to meet and work with Ann, Janet and Helen.

The survey crew met at about 9 am, and we headed down the tree-lined path toward the site. Over this past

Continued page 2



Photo: Laura Eliassen

Photo: Laura Eliassen.
Left: Annamarie Leon
Guerrero
Middle: Janet Schwind,
Rob Edwards, Jorge Aguilar, Annamarie Leon Guerrero

Right: Jorge Aguilar taking notes, Janet Schwind measuring

year, I have had the opportunity to record several bedrock mortar sites in the East Bay, and I have to admit that sometimes I feel as if I am up to my neck in bedrock mortar features. But, as we approached the site and I saw the sandstone outcrops, all I could think about was exploring the site. I immediately threw down my pack and began inspecting for a few moments before Rob called the crew together to give a brief history of the site. It was just like being back in field school. The site was originally recorded in 1977, when the level of the water in the reservoir was much lower and the site extended out farther. Ann and I went around and flagged and numbered each feature; there were 13 in all. The crew broke into teams of two to record each feature. As I had experience recording bedrock mortars, I showed everyone how to measure each feature and how to draw it to scale. As mapping involves numbers and math, it has not always been my strongest suit. But, it is always worth it when the drawing actually looks like the feature

By drawing the feature and recording the length, width and depth of each mortar cup and boulder, you truly start to get a sense of some sort of pattern

emerging. You can often gauge just by looking at a conical or saucer mortar what its measurements might be. And, while you can see the mathematics emerging in the mortars, I don't think that the people who made these mortars were necessarily making them using the metric edge of a ruler. As I have been at a few bedrock mortar sites over the past year, I often find myself thinking about the people who made them. I wonder about the family or the community that sat at these features and sang and laughed while pounding acorns or seeds. This is not about romanticizing the site or archaeology; I always think that it is important to remember that archaeology is about people and culture and to put all of that into context. Even on a relatively relaxed day such as this one, it is important to record the site as accurately as possible. A site recording is like taking a snapshot of exactly what the site looked like on the day it was recorded and re-creating it for other people who might need the information, and to help maintain the integrity of the site itself.

As we walked off the site that day, I felt confident that we had accomplished everything that we had set out to do—to accurately record a site to the best of our ability and to have fun with old friends and new.

Calendar

All General Meetings are held at Sesnon House Cabrillo College 6500 Soquel Drive, Aptos, California at 7:30 p.m. unless otherwise indicated. SCAS website -www.santacruzarchsociety.org

- April 12 Board Meeting 12:30-2:30 at the Ocean Honda Community Room, 3801 Soquel Drive, Soquel. All SCAS members are welcome. All board meetings will be held here until further notice. Board meetings are held the second Monday of each month.
- April 15 **General Meeting** CCATP alumnus and 2nd year graduate student at Sonoma State University in the CRM program **Annamarie Leon Guerrero** will discuss prehistoric and historic use of and interaction with the landscape and how that is juxtaposed to the way park is being utilized today—primarily as a nature preserve—in a talk entitled "A Cultural Landscapes Study of Morgan Territory Regional Preserve."
- May 10 Board Meeting All members welcome. 12:30-2:30 at the Ocean Honda Community Room
- May 20 **General Meeting** ~ Marco Meniketti, Ph.D., Assistant Professor in the Department of Anthropology at San Jose State University, as well as the Director of the Institute for Advanced Interdisciplinary Caribbean Studies. "C³ meets S³: Caribbean Colonial Capitalism: Sugar Slaves and Ships. An archaeological examination of the forces that shaped the modern Caribbean."
- June 14 Board Meeting All members welcome. 12:30-2:30 at the Ocean Honda Community Room. Please RSVP, as space is limited.
- June 17 **General Meeting** Speaker to be announced. Nominations for SCAS president and secretary due.

Items to add? Corrections to make? Please contact us at editorscan@gmail.com.

Past newsletters can be viewed—in color!—online at: http://www.santacruzarchsociety.org/newsletters.html

Newsletters will be posted online two months after they are mailed out.

You are invited to a Book Release Celebration for

Mamita's House: A True Tale of Tortilla Flat by Lois Robin

You will find a welcome at Mamita's House on May 15 in Carmel!

We will be celebrating the publication of a book by Lois Robin about a California Indian family who lived in this house during the depression era. *Mamita's House: A True Tale of Tortilla Flat* tells how the resourceful Mamita—Maria Dixon de Cruz de Marques de Soto—brought a large family through difficult but lively times. This book also recalls the visits of John Steinbeck to the house where he found models for the characters he put in his first successful novel, *Tortilla Flat*, published in May, 1935.

Expect reminiscent food, conversation and music. Meet those who live this legend today. Fiesta!

WHEN: Saturday, May 15, 2010, 1:00-4:00 PM Open House

WHERE: At the red and white house on the NE corner of Monterey Street and Second Avenue in Carmel. (No address.) There is ample parking on neighborhood streets.

DIRECTIONS: From the Highway I freeway take the Carmel/Carpenter exit.

Do not go straight. Almost immediately swerve left on Carpenter Street.

The first stop sign is Second Avenue. Turn left.

Stay on it until it dead-ends at the house on Monterey Street.

RSVP and Questions: Lois Robin, robin@baymoon.com. RSVP helpful but not necessary.

Historical Walk with the Boulder Creek Historical Society

Take a walk through the California Powder Works on June 6 at 3:00 pm. The speaker will be Barry Brown. Meet at Paradise Park, Highway 9, Santa Cruz, CA. Cost: A donation of \$5 per family is greatly appreciated. For more information about this walk and other San Lorenzo Valley Historical Museum events, go to http://www.slvmuseum.com.

Ancient Pajaro Valley Artifacts to Find New Home at UC Santa Cruz

By Donna Jones

Reprinted from the Santa Cruz Sentinel 1/25/2010

Watsonville—Archaeologists can almost picture the people who lived above Harkins Slough some 7,000 years ago.

They feasted on oysters, fur seals and a now extinct flightless duck. They gathered acorns and berries and seeds. They likely traded with other groups, possibly from Sonoma or the Sierra, for obsidian.

Nearly 10 years after ancient artifacts and the skeletal remains of seven people were uncovered during construction of a water supply project west of Highway 1 near San Andreas Road, the discovery still stirs the imagination.

"It may represent the initial colonization of the area by indigenous people," said Curator Diane Gifford-Gonzalez of the Monterey Bay Archeology Archives at UC Santa Cruz.

The human remains and funerary objects will be reburied, but the rest of the collection, two dozen boxes filled with shell beads, grinding stones, fishing gear and primitive tools, are headed to the archives under an agreement approved by the Pajaro Valley Water Management Agency on Wednesday.

Gifford-Gonzalez said the collection will prove invaluable to researchers. It's not the oldest site found in Santa Cruz County. That distinction belongs to Scotts Valley, where a 9,000-to 10,000-year-old site was found near City Hall.

"But 4,000 to 7,000 is still pretty old for sites in the Monterey Bay," Gifford-Gonzalez said. "Scholars will be coming here for years as new techniques become available to deepen our understanding about what the original settlement was like."

But the collection could be one of the last to find a home at the nonprofit archive, which resides in donated space on the university campus and survives on an annual budget of less than \$1,400.

Gifford-Gonzalez, an anthropology professor and unpaid curator, said the small storage room holds about 100 collections, ranging from a few artifacts to dozens and totaling tens of thousands of items.

For the most part, the collections consist of pre-Spanish artifacts, like the crescent-shaped stone found by Caltrans near 41st Avenue a few years back. Some think the stone, believed to be 9,000 to 11,000 years old, looks like a bear, but it's most likely some kind of scraping or digging tool, she said.

The archives also are responsible for some historical material related to the Cowell lime works on the UCSC campus.

But with the space nearly full, Gifford-Gonzalez said the archives likely won't be accepting collections in the future. Organizations like the Pajaro Valley agency, fulfilling state and federal mandates for the preservation of cultural artifacts, will have to look farther afield for repositories, possibly to Sacramento, where a new archive is in the works at a decommissioned military base.

Santa Cruz-based Pacific Legacy excavated the Harkins Slough site, conducted preliminary studies and is preparing the collection for the official handoff to the archives.

Queen's helps produce archaeological "time machine"

Professor Gerry McCormac and Dr Paula Reimer

Press release from the Queen's University Belfast website, February 11, 2010

Researchers at Queen's have helped produce a new archaeological tool which could answer key questions in human evolution.

The new calibration curve, which extends back 50,000 years, is a major landmark in radio-carbon dating - the method used by archaeologists and geoscientists to establish the age of carbon-based materials. It could help research issues including the effect of climate change on human adaption and migrations.

The project was led by Queen's University Belfast through a National Environment Research Centre (NERC) funded research grant to Dr Paula Reimer and Professor Gerry McCormac from the Centre for Climate, the Environment and Chronology (14CHRONO) at Queen's and statisticians at the University of Sheffield. Ron Reimer and Professor Emeritus Mike Baillie from Queen's School of Geography, Archaeology and Palaeoecology also contributed to the work.

The curve called INTCAL09, has just been published in the journal Radiocarbon. It not only extends radiocarbon calibration but also considerably improves earlier parts of the curve.

Dr Reimer said: "The new radiocarbon calibration curve will be used worldwide by archaeologists and earth scientists to convert radiocarbon ages into a meaningful time scale comparable to historical dates or other estimates of calendar age.

"It is significant because this agreed calibration curve now extends over the entire normal range of radiocarbon dating, up to 50,000 years before today. Comparisons of the new curve to ice-core or other climate archives will provide information about changes in solar activity and ocean circulation."

It has taken nearly 30 years for researchers to produce a calibration curve this far back in time. Since the early 1980s, an international working group called INTCAL has been working on the project.

The principle of radiocarbon dating is that plants and animals absorb trace amounts of radioactive carbon-14 from carbon dioxide in the atmosphere while they are alive but stop doing so when they die. The carbon-14 decays from archaeological and geological samples so the amount left in the sample gives an indication of how old the sample is.

As the amount of carbon-14 in the atmosphere is not constant, but varies with the strength of the earth's magnetic field, solar activity and ocean radiocarbon ages must be corrected with a calibration curve.

Most experts consider the technical limit of radiocarbon dating to be about 50,000 years, after which there is too little carbon-14 left to measure accurately with present day technology.

Further information on the work of Queen's Chrono Centre can be found online at:

http://chrono.qub.ac.uk/

http://www.qub.ac.uk/home/TheUniversity/GeneralServices/News/PressReleases/Title,183016,en.html

Scientists turn migration theory on its head

U.S. anthropologists hypothesize that ancestors of aboriginal people in South and North America followed High Arctic route

By Randy Boswell, Canwest News Service

Reprinted from the Vancouver Sun February 26, 2010

Two U.S. scientists have published a radical new theory about when, where and how humans migrated to the New World, arguing that the peopling of the Americas may have begun via Canada's High Arctic islands and the Northwest Passage—much farther north and at least 10,000 years earlier than generally believed.

The hypothesis—described as "speculative" but "plausible" by the researchers themselves—appears in the latest issue of the journal Current Biology, which features a special series of new studies tracing humanity's proliferation out of Africa and around the world beginning about 70,000 years ago.

The idea of an ancient Arctic migration as early as 25,000 years ago, proposed by University of Utah anthropologists Dennis O'Rourke and Jennifer Raff, would address several major gaps in prevailing theories about how the distant ancestors of to-day's aboriginal people in North and South America arrived in the Western Hemisphere.

The most glaring of those gaps is the anomalous existence of a 14,500-year-old archeological site in Chile, near the southern extreme of the Americas, that clearly predates the time when East Asian hunters are thought to have first crossed from Siberia to Alaska via the Bering Land Bridge at the end of the last ice age some 13,000 years ago.

The new theory also may have implications for a lingering Canadian archeological mystery. For decades, the Canadian Museum of Civilization has stood largely alone in defending its view that the Yukon's Bluefish Caves hold evidence of a human presence in

the Americas—tool flakes and butchered mammoth bones—going back about 20,000 years.

The Utah scientists, pointing to genetic affinities between certain central Asian populations and New World aboriginal groups, suggest an Arctic coastal migration may have begun from river outlets in present-day north-central Russia.

Using skin boats and hunting along glacier-free refuges while the last ice age was still underway, the prehistoric travellers could have moved quickly along the northern Siberian coast to northern Alaska, Canada's Arctic Islands and beyond to eastern and southern parts of the Americas, they say.

"Movement to the interior of the continent via the Mackenzie River drainage," the authors assert, "is plausible."

And suspected gaps among Arctic glaciers means "open coastal areas for continued movement eastward would have provided access to the open water of Baffin Bay and Davis Strait and a coastal route along the eastern seaboard of North America," the study states.

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O'Rourke Told Canwest News Service the theory doesn't exclude existing models, but offers a new way of thinking about the movements of the earliest North Americans that deserves to be considered and "to be tested in rigorous ways."

In recent years, the routes and timing of New World migration have been among the most contentious issues in science.

The Siberia-to-Alaska pathway for early huntergatherers, followed by a southward migration down a mid-continental "ice-free corridor" in present-day Northwest Territories and Alberta, is widely accepted and backed up by numerous archeological findings.

But a growing number of scientists, troubled by the age of the Chilean site and other wrinkles in the conventional migration story, have recently touted the likelihood of an earlier migration by seafaring people along the Pacific Coast.

However, purported coastal archeological sites that could yield traces of humans from 16,000 years ago or earlier are underwater today. Canadians scientists and others are probing potential sites in British Columbia and Alaska, but evidence remains extremely sketchy.

Equally puzzling is the fact that eastern North America has generated far more artifacts from the continent's first-known civilization, the Clovis people, than archeological sites in the West, where more relics would be expected.

Finally, DNA studies of current aboriginal populations—which can provide evidence of the geographic origins and migration patterns of ancient ancestors—have been at odds with the conventional migration models.

"As neither archeological nor genetic data have yet been able to unequivocally resolve many of the longstanding questions regarding American colonization, the generation of new models and hypotheses to which new and more powerful analyses may be applied is essential," O'Rourke and Raff state in their paper.

In an interview, O'Rourke said the possibility of a very early northern migration is supported by recent

research in Russia. In January 2004, a team of Russian scientists reported the remains of a 30,000-year-old human settlement near the Arctic Ocean outlet of Siberia's Yana River, the most convincing evidence ever found for such an early, northerly human presence near the Bering gateway to the New World.

David Morrison, the Canadian Museum of Civilization's director of archeology and an expert in Canada's prehistoric Arctic peoples, applauded the U.S. researchers for floating a fairly "wild" theory because "that's how science advances."

But he said "count me skeptical" about the hypothesis, citing the "unspeakably harsh" conditions that the ancient Asians would have encountered in Canada's Arctic before the full retreat of the glaciers.

"It was," says Morrison, "a terrible environment."

While he still thinks the Bluefish Caves predate the migration times in prevailing theories, he says such remote history is still only dimly understood pending the development of more comprehensive and credible scenarios.

"Going back 30,000 years requires you to speculate," he says, "because we really don't have much of an idea what was going on."

But he added that Bluefish "has got to tie into the solution somehow."

Steak Dinners Go Back 2.5 Million Years

A new fossil skull of a bull confirms that beef has been "what's for dinner" since the dawn of humans.

By Larry O'Hanlon

Discovery News, February 9, 2010

The discovery of a new "missing link" species of bull dating to a million years ago in Eritrea pushes back the beef steak dinner to the very dawn of humans and cattle.

Although there is no evidence that early humans were actually herding early cattle 2.5 million years ago, the early humans and early cattle certainly shared the same landscape and beef was definitely on the menu all along, say researchers.

The telltale fossil is a skull with enormous horns that belongs to the cattle genus Bos. It has been re-

assembled from over a hundred shards found at a dig that also contains early human remains, said paleontologist Bienvenido Martinez-Navarro of the Universitat Rovira i Virgili in Tarragona, Spain. Martinez is the lead author of a paper reporting the discovery in the February issue of the journal Quaternary International.

"This means that the humans have been eating Bos since the beginnings of the genus Homo," said Martinez, referring to the genus to which humans belong.

The million-year-old skull of the new Bos species, dubbed *Bos buiaensis*, has features of both earlier and later forms of Bos, which make it essentially a missing link between

Continued page 11

Park Break Fellowship Award

SCAS member Annamarie Leon Guerrero was awarded the Park Break Fellowship, which is sponsored by the George Wright Society in partnership with NPS, USFS and USGS.

The Park Break program is intended to allow students to learn how to manage a park from all points of view—from management to research to administration. According to the Park Break website:

Spend spring break learning in a national park! Park Break is an all-expenses-paid, park-based field seminar for graduate students who are thinking about. a career in park management or park-related research and education. Park Break puts you in a national park unit for up to a week's worth of field and classroom. activities in close collaboration with park scientists and scholars, managers and administrators, and part. ner organizations.

http://www.georgewright.org/parkbreak

This year, the host park was the Delaware Water Gap National Recreation Area in Pennsylvania. This year's focus was on resources management, both natural and cultural. The program consisted of a week long conference meeting with representatives of the NPS (usually at Water Gap), the USGS, and the Forest Service. They spoke to the students about their projects concerning resource management.

Annamarie and other students worked with park officials on a project to nominate Route 209 (which runs roughly south to north through the park) as a scenic byway. They analyzed the natural and cultural resource data in order to identify the six intrinsic qualities (cultural, historic, archaeological, natural, scenic and geological) that made it worthy of being a designated as a scenic byway.

Have you checked out the SCAS website lately?

New pictures. New tabs. New information.

Stella D'oro, our webmistress, has beautifully updated the site. Find new tabs for volunteer opportunities and scholarships, as well as the calendar, the newsletter. Thank you, Stella!

Check it out at:

http://www.santacruzarchsociety.org

SCAS Board Members 2010

Lyn O'Niel President Kären Johansson Vice President Cathy Phipps Treasurer Ellen Albertoni Secretary Pat Paramoure Membership Cat Nichols Newsletter Editor editorSCAN@gmail.com Rob Edwards **Professional Advisor**

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Volunteer Opportunities

Please email us at <u>president@santacruzarchsociety.org</u> if you hear of an opportunity or have an idea for a volunteer project. Comments and suggestions are encouraged.

VOLUNTEERS URGENTLY NEEDED!

Do you enjoy sharing information about local history? Would you give 4 hours a week for 3 to 6 months to help local Historical site parks?

On-site training is available. If you are interested, contact Lyn O'Niel for more information and details. Email Lyn at president@santacruzarchesociety.org, or call 831-338-9738 and leave a message.

LABWORK

The archaeological investigation of the Cowell Lime Works Historic District at UCSC continues. There are several opportunities for volunteers to excavate, perform lab work, and catalog findings. The next excavation day is April 17. For information about this project, including dates and locations, call Pat Paramoure at (831) 465-9809, or email her at: patsunicorn@sbcglobal.net. Sign up with Pat for regular email updates!

PASSPORT IN TIME

"Passport in Time (PIT) is a volunteer archaeology and historic preservation program of the USDA Forest Service (FS). PIT volunteers work with professional FS archaeologists and historians on national forests throughout the U.S. on such diverse activities as archaeological survey and excavation, rock art restoration, survey, archival research, historic structure restoration, oral history gathering, and analysis and curation of artifacts. The FS professional staff of archaeologists and historians will be your hosts, guides, and co-workers.

"Over the years, volunteers have helped us stabilize ancient cliff dwellings in New Mexico, excavate a 10,000-year-old village site in Minnesota, restore a historic lookout tower in Oregon, clean vandalized rock art in Colorado, survey for sites in a rugged Montana wilderness, and excavate a 19th-century Chinese mining site in Hell's Canyon in Idaho."

—Jill Osborn, PIT National Coordinator, USDA Forest Service

The goal of PIT is to preserve the nation's past with the help of the public. To find out what projects are available, go to http://www.passportintime.com and click on Current Projects in the menu bar.

I met some PIT volunteers at their a poster presentation during the SCA Annual Meeting, and was intrigued by their program. There are several upcoming projects in California, ranging from a search for the old Yreka Trail in Klamath National Forest, to monitoring prehistoric sites in the Ishi Wilderness, to helping to organize, catalog, and curate historic photographs for the Sierra National Forest. There are also projects in Colorado. Nevada. and eleven other states.—CN

Steak continued from page 8 more modern cow-like species

found in Eurasia and the earlier African cattle ancestors found alongside hominids and dating back 2.5 million years.

"The most important point is that this Bos connects the African Bos with Eurasian bulls," and so confirms the long, uninterrupted coexistence of humans and cattle from the earliest times, he told Discovery News.

There are some researchers who might take issue with some of the details of the cattle family tree as Martinez and his colleagues have described it, but the overall conclusion seems sound, commented Sandra Olsen, curator of anthropology at the Carnegie Museum of Natural History in Pittsburgh.

"One way or the other, hominids are associated with these creatures," Olsen told Discovery News.

The distinctive horns of the new Bos also broach some other interesting matters, said Olsen. For one thing, this was an animal that had to live out in open areas, just like early humans. It's very hard to imagine any animal with such long horns surviving in a forest, she said.

Then there is also a tantalizing resemblance between the newfound Bos and depictions of bulls in ancient petroglyphs found in western Saudi Arabia—along the route once taken by humans out of Africa. The rock art shows exceptionally long-horned cattle being hunted by humans with bows, arrows and dogs, Olsen said. The petroglyphs are at least 5,000 years old, she said, but very hard to date exactly.

"(The new Bos species) look so much like the pictures in Saudi Arabia," said Olsen, "which people have thought were exaggerations."

The ancient pictures also include depictions of some of the other animals known to have left Africa by the same route: lions, cheetahs and hyena, she said.

The message from the new fossil echoes those being discovered about the prehistory of other domesticated animals, including horses, which Olsen has studied, in particular.

"We've seen over and over again," she said: "These are very long relationships."

Name:	Phone:
Address:	City:
State:	Zip Code:
Archaeological interests	or experience:

Mail to: SCAS P.O. Box 85 Soquel, CA 95073

Nominations Requested

The Santa Cruz Archaeological Society is accepting nominations for the 2010 election for the Society's Offices of President and Secretary.

Requirements:

Nominees must be members of the Society in good standing who are willing and able to devote the time and energy required of the positions. Officers:

- serve for a term of two years
- attend monthly board meetings (currently held on the second Monday of each month)
- attend General Meetings (currently held on the third Thursday of each month)
- plan and help with various new and ongoing projects throughout the year

If you are interested in serving in either of these positions, or know of someone who might be interested, please submit name, phone number, and a brief paragraph indicating the position sought and describing your interests to: SCAS, P.O. Box 85, Soquel, CA 95073.

Detailed descriptions of the duties of each position are available. Contact SCAS President Lyn O'Niel for copies. The deadline for nominations is June 17. The election ballots will be sent out with the newsletter in September prior to the first general meeting, when the ballots will be turned in and the new president and secretary will be announced.

~ SCAN ~
Santa Cruz Archaeological Society
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