

THE SANTA CRUZ ARCHAEOLOGICAL SOCIETY NEWSLETTER-SPRING 2022

Mark Hylkema, Santa Cruz State Parks Archaeologist, Receives 2022 Laura Hecox Naturalist Award

by Pat Paramoure

On Saturday, January 31, 2022, Santa Cruz Museum of Natural History's Laura Hecox Day was celebrated with historical collections and Victorian-era inspired games and crafts, at Tyrell Park, which is adjacent to the museum.

Mark Hylkema, Archaeologist and Tribal Liaison for the Santa Cruz District of California State Parks, was honored as the recipient of the Laura Hecox Naturalist Award, presented by Museum Executive Director, Felicia Van Stolk, and Board President, J. M. Brown.



Image Credit: Pat Paramoure

Additionally, Representative Jimmy Panetta (20th Congressional District, California), and Jonathan Engleman from the Office of Senator John Laird (District 17, California) recognized Mr. Hylkema for his many years of service to the Santa Cruz community and the State of California.



Mark Hylkema and Congressman Jimmy Panetta—Image Credit: Pat Paramoure

Mark will be retiring soon from his position as the Supervisor of the Cultural Resources Program, Archaeologist, and Tribal Liaison with the Santa Cruz District of California State Parks.

Through his work with Santa Cruz State Parks, Mark has made vital contributions to the preservation of our cultural resources.

The Santa Cruz community is very grateful for his vital endeavors during the CZU Lightning Complex Fires during 2020, as he worked tirelessly to save treasured local museum and visitor center collections at risk in the path of the flames.

The event was well attended by museum volunteers, museum members, members of various museum partner organizations, and the public.

Genomic Analysis Supports Ancient Muwekma Ohlone Connection Reprinted from Heritage Daily.com



Image Credit: Far Western Anthropological

A new genetic comparison study between ancient people buried east of San Francisco Bay and modern members of California's Muwekma Ohlone people supports the tribe's assertion – backed by family histories, government records and records from the Bay Area Spanish missions – that they and their ancestors have lived in this area longer than many archaeologists have estimated.

In 2014, the San Francisco Public Utilities Commission proposed the creation of an educational facility near the Water Temple in Sunol, California. When it was determined that the site would likely uncover human remains, the Muwekma Ohlone tribe was contacted. The Tribal Council requested a study of two settlement sites found on the land, which date as far back as 490 BCE, or more than 2,500 years ago.

The Tribe brought in the Far Western Anthropological Research Group, with archaeology principal investigator Brian F. Byrd, to direct the archaeological excavations, analysis and reporting as a collaborative endeavor with the Tribe, and University of Illinois Urbana-Champaign anthropology Professor Ripan Malhi to design a genomic project on any remains identified there. Researchers from Stanford University also joined the collaboration to analyze the genomic data. "It's a project with the participation of both researchers and tribal leadership from beginning to end," said Noah Rosenberg, the Stanford Professor in Population Genetics and Society in the School of Humanities and Sciences and co-author of the paper. The results of that genomic analysis, published this week in Proceedings of the National Academy of Sciences, reveal a thread that connects the ancient genomes and genomes from modern-day Muwe-kma Ohlone. This continuity affirms beliefs held by the Tribe but was somewhat surprising from the point of view of the researchers, given the impacts of European colonization and what is currently hypothesized about the diversity and movement of populations of people who have lived in and around California throughout this time.

One site, which the tribe has named Síi Túupentak (Place of the Water Round House Site – named after the Sunol Water Temple), dates from between 1345-1850 CE and 76 individuals were buried there. The second site, called Rummey Ta Kuččuwiš Tiprectak (Place of the Stream of the Lagoon Site), dates back 490 BCE-1775 CE and contained burials for 29 individuals. Stanford News spoke with three of the co-authors of this paper: Rosenberg, Alissa Severson and Alan Leventhal. Severson was a doctoral student in Rosenberg's lab during this work and is lead author of the paper.

Leventhal is an emeritus lecturer in the Department of Anthropology at San Jose State University and an ethnohistorian and archaeologist for the Muwekma Ohlone tribe.

Native American Tribe Reacquires Hundreds of Acres in Virginia

By Brad Dress

04/02/22 8:38 PM ET

The Hill.com

The Department of the Interior (DOI) announced on Friday the return of more than 400 acres of land to an indigenous tribe in Virginia.

About 465 acres at Fones Cliffs on the eastern side of the Rappahannock River was returned to the Rappahannock Tribe, which regards the sacred site as its ancestral homeland, according to a press release from the DOI.

The Rappahannock Tribe will own and maintain the land, but the site, within the Rappahannock River Valley National Wildlife Refuge, will be available to the public. The tribe plans to create trails and a replica 16th-century village at the site to educate visitors.

The U.S. Fish and Wildlife Service (USFWS) also holds a permanent conservation easement on the land, which was donated to them by environmental organization Chesapeake Conservancy.

Secretary of the Interior Deb Haaland, the first Native American to serve as a cabinet secretary, said she was "honored to join the Rappahannock Tribe in co-stewardship of this portion of their ancestral homeland."

"This historic reacquisition underscores how Tribes, private landowners, and other stakeholders all play a central role in this Administration's work to ensure our conservation efforts are locally led and support communities' health and well-being," Haaland said in a statement.

The Biden administration has been working to support indigenous people and tribes through an array of methods, including building out physical infrastructure and financially supporting tribal nations, according to a White House fact sheet released in November.

The Rappahannock Tribe inhabited at least three villages at the Fones Cliffs site, which is where the tribe first came into contact with — and defended their land against — English explorer John Smith in 1608.

The tribe was subsequently removed from the land by force during the colonization of America, according to the Chesapeake Conservancy.

Rappahannock Tribe Chief Anne Richardson applauded the reacquisition of the sacred site on Friday.

"We have worked for many years to restore this sacred place to the Tribe. With eagles being prayer messengers, this area where they gather has always been a place of natural, cultural and spiritual importance," she said in a statement, according to Chesapeake Conservancy.

Pat Hathaway's Photo Collection Documented Life on The Central Coast Will Stay Local.

Reprinted from the article "Pat Hathaway's photo collection goes to the Monterey County Historical Society" originally published January 7, 2022 by Monterey County Weekly



Pat Hathaway's collection includes images from different parts of the Central Coast and Monterey County. This photo shows a scene in 1920s Salinas. Pat Hathaway spent his life taking and collecting photographs, and his historical photo collection includes over 80,000 images from different parts of the Central Coast, documenting daily life and big events, including things like the opening of the Monterey Bay Aquarium, the bridges of Cannery Row and Japanese divers diving for abalone at Point Lobos. His photo collection has been used for publications, research, historical displays and postcards. The maps and images and ephemera go back to the 1840s. "There are photos that give a glimpse of everyday life of Monterey Bay," said Inga Waite, Monterey Public Library Director. The fate of Hathaway's unprecedented collection was called into question after he died, and no will was discovered laying out a plan for the photos. A court battle brewed over who would become administrator of his estate, but was eventually settled when Kent Seavey was the lone contender seeking the role of conservator. On Dec. 24, the court agreed with Seavey as to where the unrivaled collection of photos should go: to the Monterey County Historical Society. On Friday, Jan. 7, the Historical Society, which is based in Salinas, announced the good news. James Perry, executive director of the Historical Society, said in a statement that these images are "way too important to stay locked up in a vault." The photos will remain publicly accessible. "It will take several months to organize the collection for the public to access, it but we look forward to sharing this historic treasure with our local community and beyond," Perry added. "All I truly hoped for was that Mr. Hathaway's collection would remain in Monterey County but still be accessible to visitors. I am very grateful that the Monterey County Historical Society had the appropriate facilities to accept this gift with a secure temperature-controlled safe environment."

Seavey, who considered himself a friend of Hathaway, first became the temporary administrator of the estate on Jan. 26, 2021. According to court papers, Hathaway's entire estate was worth about \$1.5 million.

Bronze Age Community Saw Female Dominated Migration Reprinted from Heritage Daily.com

A study of the Links of Notland site on Orkney has revealed that female dominated migration led to a period of prosperity for the Bronze Age community.

The Links of Notland is a 4000-yearold farming settlement near Grobust Bay on the north coast of Westray in Orkney. Previous excavations have identified over thirty-five buildings, including houses, workshops and a sauna-house, together with a cemetery containing the remains of some 105 individuals. In 2009, archaeologists uncovered a lozenge-shaped



figurine called the Westray Wife, believed to be the earliest representation of a human face ever found in Scotland.

In a study published in the Journal Antiquity, researchers found that the DNA from the settlement suggested an influx of female-dominated migration, leading to a productive period in which new and more complex identities were forged. The study also shows that migrants joined established and resilient households, leading to a blending of new and old ideas. A study of the Links of Notland site on Orkney has revealed that female dominated migration led to a period of prosperity for the Bronze Age community. The Links of Notland is a 4000-year-old farming settlement near Grobust Bay on the north coast of Westray in Orkney. Previous excavations have identified over thirty-five buildings, including houses, workshops and a sauna-house, together with a cemetery containing the remains of some 105 individuals. In 2009, archaeologists uncovered a lozenge-shaped figurine called the Westray Wife, believed to be the earliest representation of a human face ever found in Scotland. In a study published in the Journal Antiquity, researchers found that the DNA from the settlement suggested an influx of female-dominated migration, leading to a productive period in which new and more complex identities were forged. The study also shows that migrants joined established and resilient households, leading to a blending of new and old ideas. As well as providing resilience in the face of the Bronze Age environment, this system also explains the unique pattern of migration by the Beaker people – female migration between communities was the norm in Orkney and it was no different for the new arrivals. Additionally, the fact that the Beaker people were integrating into an established community may explain why it left so little archaeological evidence. However, life on Orkney did not remain totally unchanged: "New and more complex identities were forged which emphasised ties to the household and the village," said Dr Wilson, "These are seen in the cemetery where many different types of burial were found." There were new ways to build community and identity, bringing this increasingly diverse population together with shared rituals and activities, leading to social stability. There was also the adoption of new technologies and farming techniques. Together, this blending of new and old ideas appears to have led to a peaceful and productive period. "Far from presenting an existential threat, as has sometimes been suggested, the influx of people appears here to have coincided with a period of social stability," said Dr Wilson.

Why Did the Vikings Abandon Greenland?

Reprinted from Heritage Daily.com



View of Hvalsey Viking Church and homesteads built in south Greenland by Erick the Red's uncle, Thorkell Farserkur, in the 14th century. –

Image Credit: Shutterstock

A study led by the University of Massachusetts Amherst and published recently in Science Advances, upends the previously accepted theory on why the Vikings abandoned Greenland.

Greenland, or Grænland in Old Norse, was settled by Norwegian and Icelandic explorers during the 10th century AD, where two major Viking settlements emerged until their unexplained abandonment in the 15th century AD

The first successful settlement of Greenland was by Erik Thorvaldsson, otherwise known as Erik the Red. According to the sagas, the Icelanders had exiled Erik during an assembly of the Althing for three years, as punishment for Erik

killing Eyiolf the Foul over a dispute. Erik went in search of land that had been reported to lie to the north and reached the coastline of Greenland where he spent the three years of his exile exploring the new land. Upon returning to Iceland, he is said to have brought with him stories of "Greenland", an auspiciously named land in order to sound more appealing than "Iceland" to lure potential settlers.

The settlements continued to prosper until the 14th century AD, where they entered a period of decline until their abandonment in the 15th century AD. The consensus view has long been that colder temperatures associated with the Little Ice Age helped make the colonies unsustainable. However, new research suggests that it wasn't dropping temperatures that helped drive the Norse from Greenland, but drought.

Using ice core data, the team was able to understand how climate had varied close to the Norse farms and sites of habitation. They combined this with sediment samples from a lake near the Eastern Settlement, mapping a continuous record that dates back the past 2,000 years.

"Nobody has actually studied this location before," says Bo conducted this research for his Ph.D. in geosciences at UMass Amherst and is currently a postdoctoral research associate at Brown University. They then analysed that 2,000-year sample for two different markers: the first, a lipid, known as BrGDGT, can be used to reconstruct temperature. "If you have a complete enough record, you can directly link the changing structures of the lipids to changing temperature," says Isla Castañeda, professor of geosciences at UMass Amherst and one of the paper's co-authors. A second marker, derived from the waxy coating on plant leaves, can be used to determine the rates at which the grasses and other livestock-sustaining plants lost water due to evaporation. It is therefore an indicator of how dry conditions were.

What the results revealed, was that temperatures around the Norse settlements became steadily drier over time, resulting in farmers having to overwinter their livestock on stored fodder. An extended drought, topped with economic and social pressures would likely have tipped the balance to make settlement on Greenland unsustainable.

The Archaeology of Refuge and Recourse

Coast Miwok Resilience and Indigenous Hinterlands in Colonial California

By Tsim D. Schneider

The Archaeology of Refuge and Recourse explores the dual practices of refuge and recourse among Indigenous peoples of California. From the eighteenth to the twentieth century, Indigenous Coast Miwok communities in California persisted throughout multiple waves of colonial intrusion. But to what ends?

Applying theories of place and landscape, social memory, and mobility to the analysis of six archaeological sites, Tsim D. Schneider argues for a new direction in the archaeology of colonialism. This book offers insight about the critical

The Archaeology of Refuge and Recourse

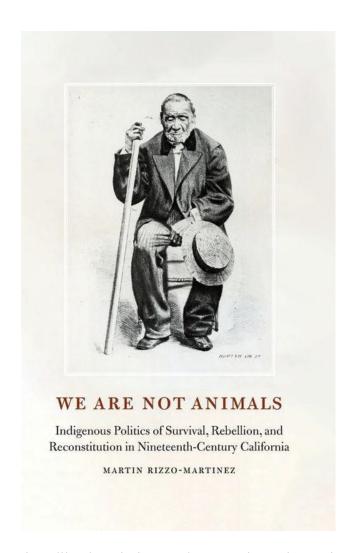
Coast Miwok Resilience and Indigenous Hinterlands in Colonial California

and ongoing relationships Indigenous people maintained to their homelands despite colonization and systematic destruction of their cultural sites.

Schneider is a citizen of the Federated Indians of Graton Rancheria, the sovereign and federally recognized tribe of Coast Miwok and Southern Pomo people whose ancestral homelands and homewaters are the central focus of The Archaeology of Refuge and Recourse. Viewing this colonial narrative from an Indigenous perspective, Schneider focuses on the nearly one quarter of Coast Miwok people who survived the missions and created outlets within and beyond colonial settlements to resist and endure colonialism.

Fleeing these colonial missions and other establishments and taking refuge around the San Francisco Bay Area, Coast Miwok people sought to protect their identities by remaining connected to culturally and historically significant places. Mobility and a sense of place further enabled Coast Miwok people to find recourse and make decisions about their future through selective participation in colonial projects. In this book, Tsim D. Schneider argues that these distancing and familiarizing efforts contribute to the resilience of Coast Miwok communities and a sense of relevance and belonging to stolen lands and waters. Facing death, violence, and the pervading uncertainty of change, Indigenous people of the Marin Peninsula balanced the pull and persistence of place against the unknown possibilities of a dynamic colonial landscape and the forward-thinking required to survive. History, change, and the future can be read in the story of Coast Miwok people.

Source: https://uapress.arizona.edu/book/the-archaeology-of-refuge-and-recourse



WE ARE NOT ANIMALS

Indigenous Politics of Survival, Rebellion, and Reconstitution in Nineteenth-Century California

By Martin Rizzo-Martinez

Foreword by Amah Mutsun Tribal Chair Valentin Lopez

"Deeply researched and fresh in conception, methodology, and breadth, We Are Not Animals is a major contribution to the study of Native California and the missions. . . . In a singular and exceptional way among historians, Martin Rizzo-Martinez identifies Native people by name, family, and tribe and he follows the survivors of the Amah Mutsun nation through the American genocide of the late nineteenth century."—Lisbeth Haas, professor of history at the University of California, Santa Cruz

"Rizzo-Martinez unearths Native voices from the archive to provide an overdue historical account of the Indigenous experience in Santa Cruz and surrounding region. By decentering colonial institu-

tions like the missions and non-Native voices, Rizzo-Martinez effectively places Indigenous space and knowledge at the center of this study, a valuable model for future scholars of the Native experience in California."—Yve Chavez (Tongva), assistant professor of history of art and visual culture at the University of California, Santa Cruz. "Both heartbreaking and inspiring, We Are Not Animals is a history of destruction as well as of California Indian survival against great odds. Rizzo-Martinez has written a deeply researched study of Indigenous peoples in Santa Cruz and surrounding areas that improves our understanding of Native American experiences in California as a whole."—Benjamin Madley, author of An American Genocide: The United States and the California Indian Catastrophe, 1846–1873. By examining historical records and drawing on oral histories and the work of anthropologists, archaeologists, ecologists, and psychologists, We Are Not Animals sets out to answer questions regarding who the Indigenous people in the Santa Cruz region were and how they survived through the nineteenth century. Between 1770 and 1900 the linguistically and culturally diverse Ohlone and Yokuts tribes adapted to and expressed themselves politically and culturally through three distinct colonial encounters with Spain, Mexico, and the United States. In We Are Not Animals Martin Rizzo-Martinez traces tribal, familial, and kinship networks through the missions' chancery registry records to reveal stories of individuals and families and shows how ethnic and tribal differences and politics shaped strategies of survival within the diverse population that came to live at Mission Santa Cruz. We Are Not Animals illuminates the stories of Indigenous individuals and families to reveal how Indigenous politics informed each of their choices within a context of immense loss and violent disruption. Martin Rizzo-Martinez is the California state park historian for the Santa Cruz District.

Source: https://rizzomartinez.com/publications/ and https://www.nebraskapress.unl.edu/nebraska/9781496219626/

Scientists Analyse Traces of Ingredients in 5300 to 4000 Year Old Cooking Vessels

Reprinted from Heritage Daily.com

How to reconstruct the cookery of people who lived thousands of years ago? Bones and plant remains can tell us what kind of ingredients were available. But to reconstruct how ingredients were combined and cooked, scientists need to study ancient cooking vessels. "Fatty molecules and microscopic remains from plants such as starch grains and phytoliths – silica structures deposited in many plant tissues – get embedded into vessels and can survive over long periods," said Dr Akshyeta Suryanarayan, a reseacher at the Universitat Pompeu Fabra in Barcelona, Spain, and co-author on a new study in Frontiers in Ecology and Evolution. In the new study, Suryanarayan and coauthors analysed such 'leftovers' in Copper and Bronze Age vessels – including pots, vases, goblets, jars, and platters – from today's Gujarat, India. "Our study is the first to combine starch grain and lipid residue analysis of ancient vessels in South Asia," said Suryanarayan. "Our results show how the prehistoric people who made these vessels processed different foodstuffs and mixed them together, transforming them into meals." The authors sampled eleven 4200- to 4000-year-old vessels excavated at Shikarpur, an archeological site from the Bronze Age Indus Valley Civilisation that flourished between 2600 and 2000 BCE in today's Pakistan and northwestern India, the third oldest urban civilisation in the world. To study the effects of cultural change, they also sampled seventeen 5300- to 4300-year-old vessels from two nearby sites, Datrana and Loteshwar. The latter were made by semi-nomadic farmers and herders, during the Copper Age.

"Our results show that during both the Copper and Bronze Age in northern Gujarat, people acquired their ingredients in a variety of ways: some were foraged locally from the wild, others cultivated or herded, and some were traded in from elsewhere," said first author Dr Juan José García-Granero, a researcher from the Spanish National Research Council in Barcelona, Spain. For example, in the vessels from Datrana, 99% of the starch grains were from grasses in the tribe Hordeeae, which includes wheat, barley, and rye and their wild relatives. But these aren't native to Gujarat, which suggests that they were imported from other areas. The vessels from Loteshwar and Shikarpur contained mainly (67% to 73% of starch grains) starch from beans. The researchers also found traces of ginger, which may first have been ground on grinding stones and then used in cooking. The lipids in the vessels from all three sites were mainly fatty acids typical of degraded animal fats. For the majority (78%) of these vessels, the relative abundances of the carbon isotopes 13C to 12C of the fatty acids suggested that this fat was from omnivores, for example pigs, birds, or rabbits. This was unexpected, as animal bones reported from Copper and Bronze Age sites in Gujarat in previous studies have so far mostly been from ruminants: domestic cattle, water buffalo, sheep, goats, and wild deer and nilgai antelope. Yet only in 22% of the vessels analysed here were isotope signatures consistent with ruminant fat. There were no traces of fish or dairy. No phytoliths were found. Because these occur mainly in inedible plant parts, their absence suggests that seeds and grains were thoroughly cleaned before they were put into the vessels, with the less palatable parts removed. To their surprise, the authors found no evidence that the profound cultural change from the Copper Age to the Indus Valley Civilisation had any impact on how animals and plants were processed before and during cooking. "Our results suggest that different ingredients were also used in different methods of cooking. The virtual absence of small millets (the staple in prehistoric Gujarat) in the pottery vessels suggests millets were used exclusively for flour-based meals, such bread-like products, whereas other ingredients (such as beans) would also have been used in a wider range of dishes, such as stews," said García-Granero. Final author Prof Marco Madella from the Universitat Pompeu Fabra concluded: "The combined use of plant microremains and biomolecules of the current study shows the great potential to unravel our understanding of ancient foodways.""The next step for the study of footways in South Asia will be to expand the reference material, especially for biomolecule analyses, for a better understanding of the ingredients and the recipes. We are currently expanding our work to cover the transition from the pre-urban to the urban phase of the Indus Valley Civilisation."

2022 Speaker Lineup

Until further notice, SCAS General Meetings will be held online. For more information, and directions for how to RSVP for meetings, visit the SCAS website:

http://www.santacruzarchsociety.org/calendar

RESERVATION ONLY & SPACE LIMITED, WITH PREFERENCE TO CURRENT SCAS MEMBERS.

• April 14 Dr. Alexis Boutin, Sonoma State University

• May 12 Alec Apodaca, Graduate Student, UC Berkeley

• June 9 Kathy Dowdall, CalTrans

• September 8 Dr. James Flexner, University of Sydney

• October 13 Dr. Elaine Sullivan, Associate Professor, UCSC

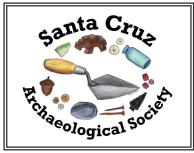
• November 10 Jennifer Farquhar, Albion Environmental

Archaeological Society Business

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