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*Soils and Archaeology*

# SCA/PSSAC Annual Meetings 2003



*Remembering Our Roots*

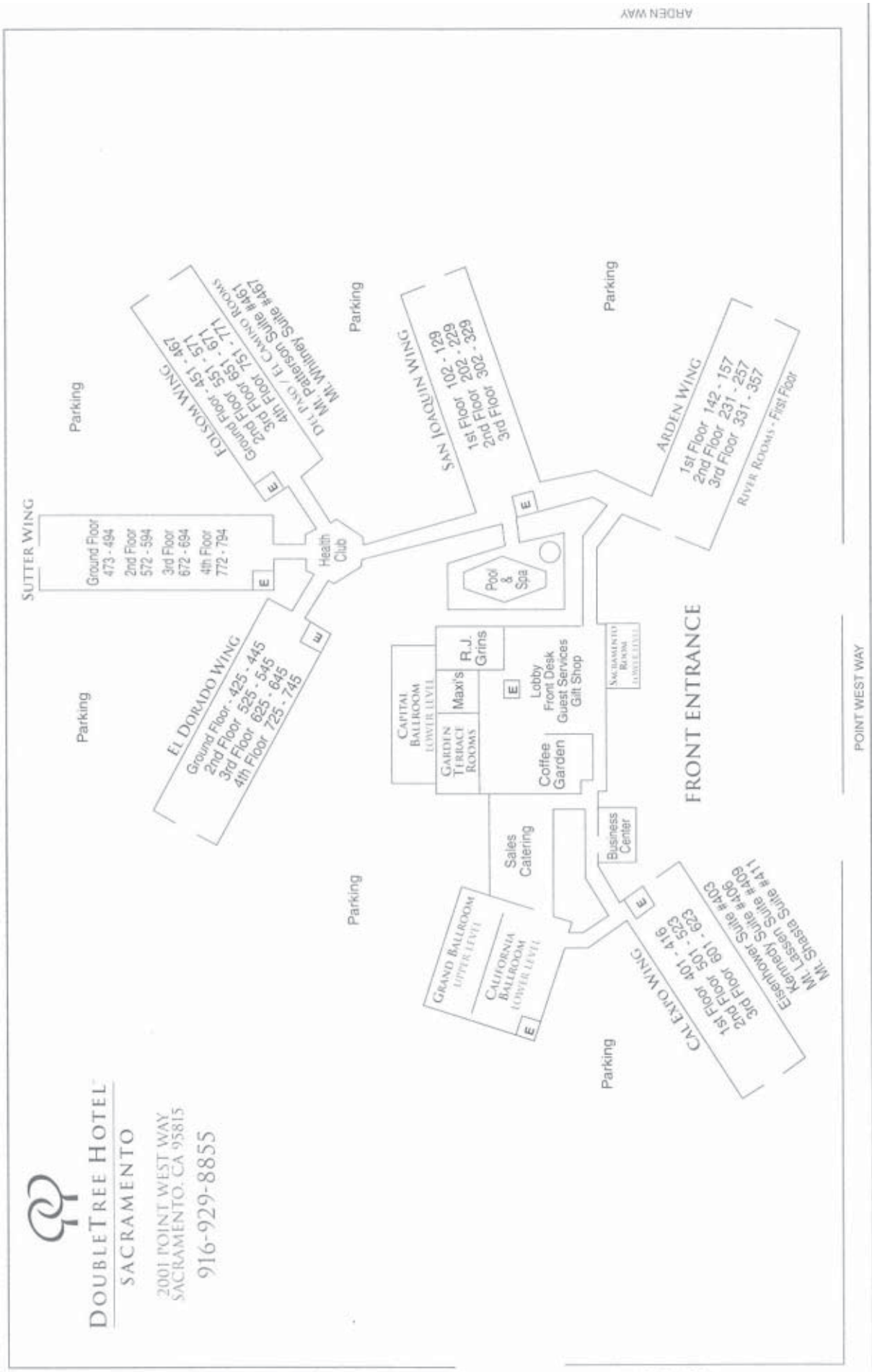


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**Program for the  
Society for California Archaeology  
37<sup>th</sup> Annual Meeting**

**March 27-29, 2003**

**Sacramento, California**

**2002-2003 Executive Board**

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# Society for California Archaeology 37<sup>th</sup> Annual Meeting

March 27-29, 2003  
Sacramento, California

## Schedule of Events

### WEDNESDAY AFTERNOON, MARCH 26

4:00-7:00     **Early Registration.** *Main Lobby.*

### THURSDAY MORNING, MARCH 27

8:00-12:00     **Registration.** *Main Lobby.*

10:00-12:00     **Department of Parks and Recreation Lab Tour.** *Department of Parks and Recreation Laboratory (transportation not provided).*

8:30-2:00     **Workshop 1.** *Ceramics Workshop for Beginners. Department of Parks and Recreation Laboratory (transportation not provided).*

8:00-12:00     **Workshop 2.** *How to Make Money in CRM. Capitol Salon C.*

10:00-2:00     **SCA Board Meeting.** *Yuba Room.*

### THURSDAY AFTERNOON, MARCH 27

12:00-5:00     **Registration.** *Main Lobby.*

3:00-5:00     **Plenary Session 3.** *Tracing our Roots. Grand Ballroom.*

### THURSDAY EVENING, MARCH 27

6:30-10:00     **Wine Tasting/Silent Auction.** *Dinner and live music. Towe Museum. Cost \$25.00, transportation to and from hotel provided starting at 6:15.*



### **FRIDAY MORNING, MARCH 28**

- 8:00-12:00     **Registration.** *Main Lobby.*
- 7:00-8:30     **California Archaeological Site Stewardship Program Meeting.**  
*Sacramento Room.*
- 8:00-12:00     **Symposium 4 (Part 1).** Professional Soil Scientists Association of California  
Annual Meeting. *Capitol Salon A.*
- 10:00-12:00    **Symposium 5.** Mission Archaeology, Wireless Computing, and the Evolution of the Virtual  
Learning Lab. *Capitol Salon B.*
- 9:00-12:00     **General Session 6.** Prehistory Northern California. *Capitol Salon C.*
- 9:00-12:00     **Roundtable 23.** New Standards for Marine Survey of Submerged Cultural Resources.  
*California 1.*
- 9:15-11:00     **General Session 8.** Prehistory Southern California. *California 2.*

### **FRIDAY NOON, MARCH 28**

- 11:30-1:30     **Avocational Lunch.** *Garden and Terrace Rooms.*

### **FRIDAY AFTERNOON, MARCH 28**

- 12:00-5:00     **Registration.** *Main Lobby.*
- 1:30-5:00     **Symposium 4 (Part 2).** Professional Soil Scientists Association of California Annual  
Meeting. *Capitol Salon A.*
- 1:30-5:00     **Symposium 9.** In Search of the Past: Papers in Honor of Jerald Jay Johnson. *Capitol Salon  
B.*
- 1:30-3:30     **General Session 10.** Prehistoric and Historic Archaeology of the Yosemite Area. *Capitol  
Salon C.*
- 2:30-3:30     **General Session 12.** General Late Papers. *California 2.*
- 4:00-5:00     **SCA General Meeting.** *California 2.*



Information on cover and  
inside photos on Page 25.

### **FRIDAY EVENING, MARCH 28**

- 5:00-6:30     **Cocktails and Brian Fagan Book Signing.** Sponsored by Altimira Press. *Garden and Terrace Rooms.*
- 6:30     **Awards Banquet.** Dr. Ruth Tringham: "Real Audiences and Virtual Excavations (RAVE); the construction of a cultural heritage place at Çatalhöyük." *Capitol Salon A, B, and C. Dancing 9-11.*

### **SATURDAY MORNING, MARCH 29**

- 8:00-12:00    **Registration.** *Main Lobby.*
- 8:00-12:00    **Delta Tour in conjunction with Soil Scientists.**
- 8:30-12:00    **Symposium 13 (Part 1).** Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson. *Capitol Salon A.*
- 9:00-12:00    **General Session 14.** Historical Archaeology. *Capitol Salon B.*
- 9:00-11:30    **General Session 15 (Part 1).** Prehistory Central and Southern California. *Capitol Salon C.*
- 9:00-12:00    **Roundtable 16.** Remote Sensing in the 21<sup>st</sup> Century. *Sacramento Room.*
- 9:00-12:00    **Symposium 17.** California Archaeological Site Stewardship Program. *California 1.*
- 9:00-12:00    **Roundtable 18.** Preservation of Recovered Maritime Cultural Resources. *California 2.*

### **SATURDAY NOON, MARCH 29**

- 12:00-1:30    **Founders Lunch.** *Garden and Terrace Rooms.*



### **SATURDAY AFTERNOON, MARCH 29**

- 12:00-5:00     **Registration.** *Main Lobby.*
- 1:30-4:00     **Symposium 13 (Part 2).** Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson. *Capitol Salon A.*
- 1:30-3:00     **General Session 15 (Part 2).** Prehistory Central and Southern California. *Capitol Salon C.*
- 1:30-4:00     **Symposium 19.** Rediscovering the Market Street Chinatown Assemblage: Progress in Curating and Analyzing an “Orphaned” Collection. *Capitol Salon B.*
- 1:30-4:30     **Workshop 22.** Reaping What You Sow: 5 Years of Data Base Development at Edwards AFB. *California 1.*
- 1:30-4:30     **Roundtable 7.** Management Strategies for California’s Underwater Parks. *California 2.*
- 2:45-4:45     **Symposium 20.** Capitol Living: Archaeology of Residential Sacramento. *Garden and Terrace Rooms.*
- 2:30–4:30     **Poster/Video Session 21.** *Sacramento Room.*

### **SUNDAY, MARCH 30**

- 8:00-12:00     **SCA Incoming Board and 2004 Planning Meeting.** *Feather River*

### **ONGOING EXHIBITS AND EVENTS**

- Friday-Saturday     **Exhibits and Book Room.** *Capitol Salon D.*  
8:00-5:00             (Exhibits will be set up Thursday and removed on Sunday)
- Friday-Saturday     **Nursing and Quite Room.** Feather River Room *on cover and inside photos on Page 25.*



## SCA Program

### THURSDAY MORNING, MARCH 27

**Workshop 1: Ceramics Workshop.** Organizer: Julia Costello. *Department of Parks and Recreation Laboratory. 8:30-2:00*

**Roundtable 2: How to Make Money in CRM.** Organizer: Dana McGowan and Kevin Pape. *Capitol Salon C. 8:00-12:00*

### THURSDAY AFTERNOON, MARCH 27

**Plenary Session 3 – Tracing Our Roots.** Chair: John Holson. *Grand Ballroom*

- 3:00 **John Holson.** Introduction.
- 3:05 **Dana McGowan.** Opening Remarks
- 3:15 **Stephen D. Mikesell.** *CRM - Then and Now: Reflections on the Past Quarter Century*
- 3:30 **Dwight Dutschke.** *The Road We Have Traveled*
- 3:45 **Otis Parrish.** *Native Traditions and Archaeology: A Virgin Landscape or a Mine Field*
- 4:00 **Jack Meyer.** *Fertile Ground: Joint Session of the SCA and Professional Soil Scientists Association of California*



4:15 **Michael J. Moratto.** *Looking Back: Advances in California Archaeology Since 1984*

4:30 **Adrian Praetzellis.** *A Ten-Minute History of Everything*

### **FRIDAY MORNING, MARCH 28**

**Symposium 4 (Part 1): Professional Soil Scientists Association of California Annual Meeting.** Organizer: Roger Poff. *Capitol Salon A.*

8:15 **Roger Poff.** Introduction

8:20 **Gerrit L. Fenenga.** *Archaeology for the Soils Scientist*

9:10 **Randal J. Southard.** *Soil Development and Landscape Age as Archaeological Tools*

10:00 Break

10:20 **Jack Meyer.** *Talking Dirt: Uses and Past Abuses of Soil and Geologic Studies in California Archaeology*

10:50 **Nancy E. Sikes.** *Environmental reconstruction using stable isotope (carbon and oxygen) analysis of soil and paleosol organic matter and carbonate*

11:30 **Lewis Somers.** *Geophysical Survey in Archeology: Survey Modeling, Soils, Feature Contrast - - And All That*

**Symposium 5: Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab.** Organizer and Chair: Ruben G. Mendoza. *Capitol Salon B.*

10:00 **Ruben G. Mendoza.** *The Virtual Learning Lab in Archaeology: Preliminary Findings from Lab and Field-Based Applications of Wireless PDA's and Broadband Technologies*

10:15 **Christian Graves.** *Designing and Refining Technology Solutions and Applications in Archaeology and Museum Studies: Prospects, Potentials, and Shortcomings*

10:30 **Gonzalo Nuñez and Ruben G. Mendoza.** *Mission Ceramics: A Virtual Type Collection in Historical Archaeology*

10:45 **Amy Gotshalk-Stine.** *Romancing the Potsherds: A GIS-Based Visualization of the Archaeology of a California Mission*





11:00 **Michelle St. Clair and Ruben Mendoza.** *Bones, Stones, and Cutmarks: Analysis of Faunal Remains from San Juan Bautista*

11:15 **Charlie Wallace.** *Virtual Archaeology and the 3-D Visualization of Artifacts for Historical Archaeologists*

11:30 **Halla, Ken.** *The Fourteenth Colony: An Interactive Investigation of California History*

**General Session 6: Prehistory Northern California.** Chair: Joseph L. Chartkoff. *Capitol Salon C.*

9:00 **Jamie Moore.** *Acculturation Model for the Mountain Maidu*

9:15 **Joseph L. Chartkoff.** *Calories and Construction: Ecology of Extraction Strategies on the Lower Klamath River*

9:30 **Joanne M. Mack.** *Looking for Shasta Villages on the Upper Klamath River*

9:45 **Christopher Dore, Stephen Bryne, Michael McFaul, and Garry L. Running IV.** *Why Here? Settlement, Geoarchaeology, and Paleoenvironment at the West Berkeley Site (CA-Ala-307)*

10:00 **Kenneth W. Gobalet, Allen H. Andrews, and Terry L. Jones.** *Can Seasonality be Determined from Fish Otoliths? A Blind Test*

10:15 **Nick Angeloff.** *Variability and Homogeneity within the Borax Lake Pattern of Northern California*

10:30 **Jack D. Elliott Jr.** *Archaeology and the Conflict of Visions: Radical Preservation and the Search for Common Ground*

10:45 Break

11:00 **Alex DeGeorgey.** *A Single Component Paleo-Indian Site in Northern California*

11:15 **James C. Chatters and Jenna Farrell.** *Ceremonial Feasting by Prehistoric Coastanoans of the Santa Clara Valley: Evidence from CA-SCL-714/H*

11:30 **Heather M. Busam.** *Bucks, Baskets, and Pyrotechnics: Anthropogenic Fire in Northwest California*

11:45 **Michael David Newland.** *CRM Training as Sex Education for Archaeologists*

**Roundtable 23. New Standards for Marine Survey of Submerged Cultural Resources.** Moderator: James Allan. *California 1. 9-12:00*

**Rob Floyd.** Speaker

**General Session 8: Prehistory Southern California.** Chair: James H. Cleland. *California 2.*

- 9:15 **Richard L. Carrico.** *Kumeyaay Settlement Systems and Patterning: A Case Study Using the Village of Pa'mu and Tekamak, San Diego County*
- 9:30 **Theodore Cooley and Laura Barrie.** *Archaeological Excavation at the Village of Pa'mu, Ramona Valley, California*
- 9:45 **James H. Cleland.** *Stratified Patayan Sites near Palo Verde, Lower Colorado River*
- 10:00 **Michael D. Richards, Clarus Backes, and A. Natasha Tabares.** *Preliminary Investigations of Two Spring Sites in Dove Spring Canyon*
- 10:15 **Gregory R. Seymour and Claude N. Warren.** *Joshua Tree National Park: Where Did Those Sherds Come From?*
- 10:30 **Mark M. Campbell.** *A Hypothetical Model of the Prehistory of Edwards Air Force Base and the Western Mojave Desert*

**Avocational Lunch.** Organizer: Myra Herrmann. *Garden and Terrace Rooms. 11:30-1:30*

**FRIDAY AFTERNOON, MARCH 28**

**Symposium 4 (Part 2): Professional Soil Scientists Association of California Annual Meeting.** Organizer: Roger Poff. *Capitol Salon A.*

- 1:30 **D. Craig Young Jr. and Jeff Rosenthal.** *Landscape Evolution and the Structure of the Archaeological Record in Coso Basin, Northern Mojave Desert, California*
- 2:00 **John R. Johnson and Don Morris.** *Interdisciplinary Research at Arlington Springs*
- 2:30 **G. James West.** *Pollen Analysis of Arlington Springs Sediments, Santa Rosa Island, California*
- 3:00 Break





- 3:30 **Thomas K. Rockwell and Thomas W. Stafford, Jr.** *The Geologic Context of the Arlington Springs Site, Santa Rosa Island, Southern California*
- 3:50 **Sid Davis.** *Holocene aggradation, early corn and cotton farming, determined from C14 and pollen analyses in eastern Grand Canyon, Arizona, USA.*
- 4:20 **Randy Milliken and Terry Cook.** "Where are Forensic Soils and Archaeology?"
- 4:35 **Terry Cook.** Field trip briefing

**Symposium 9: In Search of the Past: Papers in Honor of Jerald Jay Johnson.**

Organizer and Chair: Greg Greenway. *Capitol Salon B.*

- 1:30 **Greg Greenway.** Introduction
- 1:45 **Kathleen L. Hull.** *Emergent Cultural Traditions in the Central Sierra Nevada Foothills*
- 2:00 **Eric W. Ritter and Harvey L. Crew.** *The Multiplicity of Prehistoric Flaked Stone Tool Assemblages in the Northern Sacramento Valley*
- 2:15 **Michael R. Polk and Adrienne Anderson.** *Central Pacific Railroad Operations and the Promontory Summit Roundhouse Excavation*
- 2:30 **Makoto Kowta.** *MtDNA and California Prehistory: A View from Chico*
- 2:45 **David Fredrickson.** *Reflections on Fifty-Five Years of Field Methods*
- 3:00 Break
- 3:15 **Greg Greenway and Christopher O'Brien.** *Seasonality Indicators and Site Function at Dead Man's Cave (CA-Teh-290)*
- 3:30 **Christopher J. O'Brien.** *Conserving the Present by Understanding the Past: the Role of Archaeology in Natural Resource Management*
- 3:45 **Russell Bevill and Elena Nilsson.** *Obsidian Hydration: The Squaw Creek Site Revisited*
- 4:00 **Richard E. Hughes.** *Advances in Non-Destructive X-Ray Fluorescence Analysis of Small Obsidian Specimens*

4:15 **Ken Wilson.** *Traditional Cultural Properties and the Megram Fire*

4:30 **Mark E. Basgall.** *Some Reflections on Martis*

4:45 **Jerry Johnson.** Remarks

### **General Session 10: Prehistoric and Historic Archaeology of the Yosemite Area.**

Chair: Laura Kirn. *Capitol Salon C.*

1:30 **Mark Hale and Michael S. Kelly.** *The Lower Yosemite Falls Project: Archeological Investigations at Three Historic Era Sites*

1:45 **Sandra S. Flint.** *Point of Attraction: A Century of Tourism at Glacier Point*

2:00 **Hannah S. Ballard.** *Cultural Landscape Approach: Examples from Hite's Cove, a Multi-Ethnic, Hard-Rock Gold Mining Site*

2:15 **Linn Gassaway.** *Reexamination of Village Sites Identified By Merriam and Powers in Yosemite Valley*

2:30 **Sonny Montague.** *Archeology at Hetch Hetchy and Lake Eleanor, Yosemite Reservoirs*

2:45 **Scott R. Jackson.** *Archeological Compliance In Support Of Yosemite National Park's Trails Maintenance Program*

3:00 **Jun Kinoshita.** *Archeological Survey for Prescribed Fire Unit PW-3, Gin Flat, Yosemite National Park.*

### **General Session 12: General Late Papers (Mono Basin). California 2.**

2:30 **Ryan T. Brady.** *Living on the Fringe: Land-Use Patterns of the Mono Basin*

2:45 **Wendy Pierce.** *Pottery Use by Hunter-Gatherers in Owens Valley: Spatial and Chronological Results of a Fine Grained, Multi-Level Ceramic Analysis Program*

3:00 **Stephen A. Overly.** *Results of a Comparative Investigation at a Persistently Used Landscape: Spatial and Temporal Structure of the Little Hot Creek Locality, Mono County, California*





## **SATURDAY MORNING, MARCH 29**

### **Symposium 13 (Part 1): Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson.**

Organizers: Steven R. James and E. Breck Parkman. *Capitol Salon A.*

- 8:30 **Steven R. James and E. Breck Parkman.** Introduction  
**John W. Foster.** *Tribute to Francis A. Riddell*  
**Peter D. Schulz.** *Tribute to F. Lee Motz,*  
**Glenn J. Farris.** *Tribute to Norman L. Wilson*
- 9:00 **Makoto Kowta.** *Connecting the Dots: California, Peru, and Fritz Riddell*
- 9:15 **E. Breck Parkman.** *Mammoth Rocks: Rancholabrean Megaherbivore Behavior and the Quest for Paleoamericans*
- 9:30 **Jeff Fentress.** *Archaeological Investigations at a Native American Rock Art Site in Alameda County*
- 9:45 **William D. Hyder and Georgia Lee.** *Rock Art Resources of the California State Parks*
- 10:00 Break
- 10:15 **Michael A. Kennedy, Ann D. Russell, and Thomas P. Guilderson.** *Seasonal Shellfish Foraging Strategies from Bodega Bay, California*
- 10:30 **Kathleen Lindahl.** *North to South—Latitudes of Risk: A Survey of Coastal Sites in State Parks*
- 10:45 **Mark Hylkema.** *Recent Archaeological Investigations at Año Nuevo State Reserve, San Mateo County Coast: Chipped Stone Tool Assemblages*
- 11:00 **Herb Dallas Jr.** *Re-evaluating the Early Millingstone Complex in California: VEN-1, a Case Study*
- 11:15 **Marla Mealey.** *Fire-Affected Rock Features, Lithic Procurement, and the Oldest Site in the Unit: Surveys and Excavations at Torrey Pines State Reserve*
- 11:30 **Michael Sampson.** *Aboriginal Settlement in Mine Wash and Its Role in Local Prehistory, Anza-Borrego Desert State Park*
- 11:45 **Terry Jones.** Discussion: Prehistoric Archaeology

**General Session 14: General Historical Archaeology.** Chair: Noelle Storey. *Capitol Salon B.*

- 9:00 **Eric M. Loewe.** *From the Earth to the Heavens: An Economic and Architectural Examination of the Construction of the Third Santa Clara Mission*
- 9:15 **Mark Walker.** *An Archaeology of Labor: Craft Organization, Nativism, and the Railroad Workers of West Oakland.*
- 9:30 **Joy Longfellow, Christian Gerike, and Sara Palmer.** *Monitoring the Santarini Farmstead, Sonoma County, California*
- 9:45 **Barbara Voss.** *Tales from the Midden: Material Culture and Dietary Practices from an Early Trash Deposit at El Presidio de San Francisco*
- 10:00 **James Barnes, Eric Ritter, Richard Silva, Tammy Sullivan, John Hitchcock, Richard Jenkins, and Claude Singleton.** *Making Inroads: A Progress Report on an Archaeological and Historical Study of the Yreka Trail*
- 10:15 **Sandra E. Hollimon.** *“Wandering between two worlds, one dead, the other powerless to be born.” Archaeology and Identity at Fort Ross State Historic Park, California.*
- 10:30 Break
- 10:45 **Daniel F. Murley.** *A Search for Ethnic/Cultural Identity: Quikertarmiut, Aleuts, Koniags, Pacific Eskimos and the Alutiiq of Kodiak Island*
- 11:00 **Rebecca S. Orfila.** *The Miners Camp at El Mirage: An Inventory of Artifacts and their Significance for the Relative Dating of Historical Activity in the Shadow Mountains, San Bernardino County, California*
- 11:15 **Karen K Swope and Larry M. Vredenburg.** *Historical Mining Claim Markers in the Desert West: Implications for Archaeological Interpretation*
- 11:30 **Noelle Storey.** *The Archaeology of Industrial Agrarian Capitalism and Framework for Evaluation of a Comprised Rural Historic Landscape: A Case Study on San Clemente Island*

**General Session 15 (Part 1): Prehistory Central and Southern California.** Chair: William Shapiro. *Capitol Salon C.*

- 9:00 **Gale Grasse.** *A Preliminary Report on CA-Ker-77, San Emigdio Mountains, Kern County – AKA: Once Upon a Time in a Graduate Student’s Life”*





9:15 **Blendon H. Walker and Bruno Huerta.** *An Analysis of the Archaeological Faunal Assemblage from CA-KER-229, Locus C.*

9:30 **Audry Williams.** *Investigations at Freeman Spring (CA-KER-6106): A Rose Spring Period Site in the Northern Mojave Desert*

9:45 **Jill K. Gardner, Mark Q. Sutton, Robert M. Negrini, and Peter E. Wigand.** *Investigating the Paleoindian Occupation at Tulare Lake: Issues and Problems*

10:00 **William Shapiro.** *Evidence of a Unique Ceremonial Complex in Solano County.*

10:15 **Randy Groza, Randy Milliken, and Jeff Rosenthal.** *Dating Scheme D*

10:30 Break

10:45 **Terry L. Joslin.** *Exploring Late Period Subsistence and Settlement Patterns: A Perspective from the Morro Bay Watershed in San Luis Obispo County*

11:00 **A. Craig Hauer.** *Quantifiable Methods to Assess Lithic Resource Quality in the Long Valley/Owens Valley Area*

11:15 **Alan Gold, Jeanee Day Binning, Elva Younkin, Tom Origer, and Craig Skinner.** *The Little Lake Biface Cache, Inyo County, California*

**Roundtable 16: Remote Sensing in the 21st Century** Organizer/Moderator: Billy A. Silva. *Sacramento Room. 9:00-12:00*

**Symposium 17: California Archaeological Site Stewardship Program** Organizer: Beth Padon. *California I.*

9:00 **Beth Padon.** *Progress Report on the California Archaeological Site Stewardship Program*

9:15 **Alexander and Frances Rogers.** *Monitoring and Recording of the Terese Site (CA-KER-6188)*

9:30 **Bill Wight and Judyth Reed.** *Site Monitoring of the Bedrock Springs Archaeological District*

9:45 **Freida and Dave Branson.** *The Minnietta Mine*

10:00 **Annell and Ron Farris.** *Petroglyphs at Sheep Spring: An Overview*

10:15 **Stephanie Manning.** *The Incomparable Moundsite at Petlenuc in San Francisco*



10:30 Break

10:45 **Barbara Sylvia.** *Keeping Watch in Kern County: Site Stewardship at Tomo Kahni State Historic Park*

11:00 **Rusell L. Kaldenberg.** *Thinking about Site Stewardship*

11:15 **Judyth Reed.** *Beyond Site Stewardship*

**Roundtable 18: Preservation of Recovered Maritime Cultural Resources.** Organizer/  
Moderator: Sheli Smith. *California 2. 9:00-12:00*

**Betty Seifert.** Speaker

**Founders' Lunch.** Participants: Charles Rozaire, Sylvia Broadbent, Claude Warren, Jay Von Werlof, Jerry Johnson, Jim West, Bill Olson, Makoto Kowta, Dave and Vera Mae Fredrickson. *Garden and Terrace Rooms. 12:00-1:30*

### SATURDAY AFTERNOON, MARCH 29

**Symposium 13 (Part 2): Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson.**

Organizers: Steven R. James and E. Breck Parkman. *Capitol Salon A.*

1:30 **Susan M. Hector.** *The Archaeology of Volcan Mountain Preserve, San Diego County: Results 1991-2002*

1:45 **Donna Beddow and Lynn H. Gamble.** *Beads from Dripping Springs (CA-SDI-860) from the Cuyamaca Mountains in Southern California*

2:00 **Joan S. Schneider, Katherine Siva Saubel, and George Harwood Phillips.** *Preliminary Results of Archaeological Investigations at a Site near Santa Caterina Spring in Coyote Canyon, Anza-Borrego Desert State Park*

2:15 **Steven R. James.** *Native American Residential Patterns, Architecture, and Use of Space at Historic Spanish Missions: Comparisons from the American Southwest and California*

2:30 **Kent G. Lightfoot, Otis Parrish, and Edward M. Luby.** *The Kashaya Pomo Interpretive Trail Project*

2:45 **Tom Origer, Janine Loyd, and Robert Douglass.** *Recent Historic Site Investigations along the Sonoma County Coast at Salt Point State Park*





3:00 Break

3:15 **Dan L. Mosier.** *Tesla - When Coal Was King*

3:30 **Phil Hines.** *Sacramento Tesla, the First Commercial Coal Mine in California*

3:45 **Julia Costello.** Discussion: Historical Archaeology

**General Session 15 (Part 2): Prehistory Central and Southern California.** Chair: Blendon Walker. *Capitol Salon C.*

1:30 **Alice Hale.** *A Burial Recovery in Pacific Palisades*

1:45 **Andrew Kinkella.** *Violence in the Park: Burial at Arroyo Seco Park, South Pasadena, California*

2:00 **Henry C. Koerper and Roger D. Mason.** *The Late Prehistoric Coastal Orange County Hokan Hypothesis: A Commentary*

2:15 **Blendon H. Walker and Robert M., II Yohe.** *A Statistical Analysis of the Physical Attributes of Rose Spring and Eastgate Projectile Points from Three Great Basin Sites.*

2:30 **Colleen Delaney-Rivera, and Nancy Jenner.** *Digging through the Files: Archaeology at CSU-Fullerton*

2:45 **Richard W. Deis.** *Spatial and Temporal Distribution of Rose Spring Projectile Points within the North-Central Sierra Nevada*

**Symposium 19: Rediscovering the Market Street Chinatown Assemblage: Progress in Curating and Analyzing an "Orphaned" Collection.** Organizers: Barbara Voss and Rebecca Allen. *Capitol Salon B.*

1:30 Introduction.

1:45 **R. Scott Baxter.** *History of the Market Street Chinatown and its Excavation.*

2:00 **Lillian Gong-Guy and Anita Kwock.** *Chinese Historical and Cultural Project.*

2:15 **Alida Bray.** *History San José.*

2:30 **Barbara Voss.** *The Market Street Chinatown Archaeological Project: Applied Research in the University Classroom.*

- 2:45 **R. Ezra Erb.** *Other People's Questions: Integrating Community, Museum, and Academic Research Goals.*
- 3:00 **Student Panel.** *Daily Life at the Market Street Chinatown: Preliminary Findings of Student Research Projects.*
- 3:30 **Rebecca Allen.** *Importance of the Orphan Fairmont Archaeological Collection.*
- 3:45 Discussion

**Workshop 22: Reaping What You Sow: 5 Years of Data Base Development at Edwards AFB.** Organizer: Roscoe Loetzerich. *California 1. 1:30-4:30*

**Roundtable 7: Management Strategies for California's Underwater Parks** Organizer/Moderator: John Foster. *California 2. 1:30-4:30*

**Charles Beeker.** Speaker

**Symposium 20: Capitol Living: Archaeology of Residential Sacramento** Organizer: M. Colleen Hamilton. *Garden and Terrace Rooms.*

- 2:45 **M. Colleen Hamilton.** *Capitol Living: Archaeology of Residential Sacramento*
- 3:00 **Keith Warren.** *East Enders: Excavation of a Capitol Neighborhood*
- 3:15 **Wendy Nettles.** *Diverse Residents, Modest Businesses, and Incipient Industry: The Archaeology of the CalPERS Headquarters Expansion Project*
- 3:30 **Sherri M. Gust and Peter D. Schulz.** *Victorian Meat Consumption in Sacramento*
- 3:45 **Susan Stratton.** *California Curation in Crisis*

**Poster/Video Session 21 Sacramento Room. 2:30-4:30**

**Ethan Bertrando.** *California Army National Guard Cultural Resource Programs*

**Christyann Darwent, Michael Glascock, Teresa Guiol, Mark Hylkema, Michael Kennedy, Hector Neff, Seth Newsome, Heather Ramsay, and Robert Speakman.** *Results from the Analysis of Human Remains from a Historical Shipwreck Cemetery, Ano Nuevo State Park, California*





**Rob Edwards.** *Multi Media use for Public Education*

**Jelmer Eerkens and Jeffrey S. Rosenthal.** *Chemical Analyses and Sourcing of Olivella Shell from the California Coast*

**Jason Aaron Eshleman and David Glenn Smith.** *An Analysis of Ancient Native American mtDNA from California's Central Valley*

**Myra Herrmann.** *Tracing our Roots*

**Teresa M. Lorden.** *A Social History of California Archaeology and the Changing Role of California Indians.*

**Teresa M. Lorden and James McPherson.** *Archaeology for Cultural Empowerment: The Development of a Culturally Sensitive Archaeological Training Program for Native American Site Monitors.*

**Ruben G. Mendoza, Christian Graves, Amy Gotshalk-Stine, Gonzalo Nuñez, and Charlie Wallace.** *From Stone Tools to Megabytes: Mission Archaeology, Interactive Multimedia and the Virtual Learning Lab*

**Tom Mills, Kelly McGuire, and Phil Gross.** *"The Obsidian Trail" (video approximately 30 minutes)*

**Nicole Pletka.** *A Nearest Neighbor Analysis of Newport Coast Archaeological Sites, Orange County, California*

**René L. Vellanoweth, Laurel D. Edgeworth, Chris M. Mercer, Gnesa E. Reynolds, Serra K. Richey, Monika Stoeffl, and Jon Michael Walton.** *Village Stones Speak: Late Pre-Contact Lithic Tool Production on San Nicolas Island, California.*

**Exhibits Capitol Salon D. Ongoing**

Archaeological Research Facility, University of California, Berkeley

Mesa Technical

Coyote Press

Phoenix Obsidian Designs

Pacific Coast Archaeological Society

SCA Business Office

SCA Archaeology Month

Register of Profession Archaeologists

Louis Collins Rare Books

California Indian Basket Makers Association (CIBA)

Cabrillo College

Waqaq Art

Kumeyaay

Center for Archaeological Research at Davis (CARD)

Society for Historical Archaeology/Mission Studies Association

Amah Band

Millennia Molding and Casting

Ballena Press



## Session Abstracts

### Symposium 4

#### *Professional Soil Scientists Association of California Annual Meeting*

Organizer: Roger Poff. (R.J. Poff & Associates)

The purpose of this symposium is to foster an exchange of ideas between archaeologists and soil scientists. The symposium will begin with keynote presentations on basic theoretical and methodological concepts of modern archaeology, soil properties that might be useful for interpreting landscape age for archaeological studies in California, and a history of collaboration between earth scientists and archaeologists in California. These first three presentations will set the stage for a series of case studies and technical presentations involving interdisciplinary approaches to archaeology, including geophysical techniques, stable isotope analysis, pollen analysis, analysis of geomorphic surfaces, and the uses of soil morphology.

### Symposium 5

#### *Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab*

Organizer: Ruben G. Mendoza (Institute for Archaeological Science, Technology, and Visualization)

This symposium will showcase the design, deployment, and integration of wireless and broadband technologies – including PDA handheld computing devices — equipped for wireless real-time data entry and field project communications in historical archaeology. A **Congressional Award — created to initiate research and demonstration projects for “Wireless Technologies in Teaching and Learning”** was granted the CSU Monterey Bay Institute for Archaeology. The award provided participants of the Alta California Mission Research Project with wireless and broadband devices equipped with GPS and Smartpad scanning capabilities. Instrumentation deployed includes digital handwriting systems and SmartPad devices for the preparation of (a) handwritten electronic field notes, (b) maps and illustrations, (c) online journals, (d) specimens forms, (e) virtual type collections, and (f) real-time data entry and management over the wireless medium. Preliminary archaeological findings from the project’s test site localities at Old Mission San Juan Bautista and San Carlos Borromeo del Rio Carmelo will also be presented.

### Roundtable 7

#### *Management Strategies for California’s Underwater Parks*

Organizer/Moderator: John Foster (California State Parks)

The goals of this roundtable are to discuss in a facilitated manner the management strategies for the Marine Managed Areas of California thereby informing and disseminating vital information to managing agencies, academic institutions and private industry. The roundtable will begin with an overview of the Marine Protected Areas and the types of current research and developments. Discussions will be moderated.

### Symposium 9

#### *In Search of the Past: Papers in Honor of Jerald Jay Johnson*

Organizer: Greg Greenway (Mendocino National Forest)

Jerald Jay Johnson retired from teaching anthropology at California State University, Sacramento in 2002. His retirement marked a 40-year career devoted to teaching and research in both prehistoric and historic archaeology. Perhaps best known as the primary authority on Ishi, and his seminal work on the prehistory of the Yana, Jerry has made significant contributions to archaeological research in the northern and central Sierras, Sacramento Valley, Southern Cascade Mountains, and northeastern California. In acknowledgement of his many accomplishments and contributions to California archaeology, papers will be presented in his honor.

### **Symposium 13**

#### ***Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to the Memory of Francis A. Riddell, F. Lee Motz, and Norman L. Wilson***

Organizers: Steven R. James and E. Breck Parkman

During 2002, the archaeological community lost Francis A. Riddell, F. Lee Motz, and Norman L. Wilson, three men who were closely associated with the archaeology and history of California State Parks throughout most of their careers. This symposium is dedicated to their memory. Recent prehistoric and historic archaeological investigations in the California State Park system are presented by researchers from State Parks, universities, and consulting firms. The papers span the entire range of human occupation in California from the late Pleistocene to the early twentieth century. Topics include Rancholabrean megafauna, Native American rock art, shellfish foraging strategies, fire-affected rock features, Native American residential use of space in Spanish missions, and historic archaeology at logging and mining sites, as well as many other research topics.

### **Roundtable 16**

#### ***Remote Sensing for the 21st Century***

Organizer/Moderator: Billy A. Silva (Caltrans - Sacramento Headquarters)

Over the last five years requests for applying remote sensing to cultural resource management have increased to comply more effectively with regulatory and public demands. Though remote sensing technology has been around for decades there exists a lack of general understanding on what techniques are available, the relationship between information gathered through traditional means and remote sensing, and what qualifications are needed to conduct remote sensing surveys. This roundtable is designed to explore these issues and begin to discuss possible strategies for implementing remote sensing on a regular basis in CRM, which may include certification, helping to establish curricula, training programs, etc. This discussion group will also address general information for the user and practitioner, e.g., discussing practical applications, how to write meaningful RFPs and scopes of work, and bridging theory and method from the specialist to the user.

### **Symposium 17**

#### ***California Archaeological Site Stewardship Program (CASSP)***

Organizer: Beth Padon (Discovery Works, Inc., and Co-chair of Site Stewardship Committee)

The California Archaeological Site Stewardship Program (CASSP) is a partnership between professional archaeologists, public land management agencies, Native Americans, and volunteers. CASSP works toward protecting known archaeological and historical sites on public lands. Volunteer site stewards regularly visit their assigned sites to monitor changes, natural or human-made, and then report to a professional archaeologist. These volunteers and other CASSP participants will report on their activities and findings, and plans for the future.

### **Roundtable 18**

#### ***Preservation of Recovered Maritime Cultural Resources***

Organizer/Moderator: Sheli Smith (Napa Valley College)

The goals of this roundtable are to discuss in a facilitated manner the standards and appropriate conservation of recovered maritime cultural resources in California waters and ultimately produce suggested guidelines for managing agencies, academic institutions and private industry. The roundtable will begin with an overview of the state-of-the-art of waterlogged conservation in maritime archaeology and subsequent discussions will be moderated.





### **Symposium 19**

#### **Rediscovering the Market Street Chinatown Assemblage: Progress in Curating and Analyzing an “Orphaned” Collection.**

Organizers: Barbara Voss (Stanford University) and Rebecca Allen (Past Forward, Inc.)

Thousands of “orphaned” archaeological collections exist across the United States, mostly as a result of insufficient funding and/or lack of analysis time following excavations. The Market Street Chinatown is typical of such collections – excavated in 1985-86 to make way for the Fairmont Hotel and the Silicon Valley Financial Center, the 400+ boxes of artifacts from the project were never fully analyzed or published. The artifacts have been stored in a warehouse in a manner that was inaccessible to both researchers and to the public. This symposium presents a progress report on a cooperative effort by History San José, Stanford University, Past Forward Inc., Chinese Historical and Cultural Project, and the City of San José Redevelopment Agency to organize, analyze, and properly curate this important collection. In doing so, this project brings back into the public eye a chapter of California’s history that is often neglected in educational and interpretive programs.

### **Symposium 20**

#### ***Capitol Living: Archaeology of Residential Sacramento***

Organizer: M. Colleen Hamilton (Applied EarthWorks, Inc.)

During 2000 and 2001, Applied EarthWorks, Inc. performed recovery excavations in two Sacramento neighborhoods. Prompted by development of multiple blocks by DGS and CalPERS respectively, these excavations resulted in the evaluation of features dating to the 1850s through the early 1900s. Economic and social diversity among Sacramento’s 19<sup>th</sup> century residential neighborhoods is apparent in the historical record, but archaeological investigations are limited. Previous archaeological studies focused on commercial sites in Old Town while exploration of residential sites has been restricted to single urban blocks and/or lots. These projects offer a rare opportunity to report on this segment of Sacramento’s residential population.

### **Workshop 22**

#### ***Reaping What You Sow: 5 Years of Database Development***

Organizer: Roscoe Loetzerich (TYBRIN Corp)

The Cultural Resource Geographic Information System (CRGIS) at Edwards Air Force Base is celebrating its fifth year of employment and currently contains data for over 3,400 archaeological sites. The benefits of a well-designed database system are obvious; however, the majority of agencies underestimate the level of effort that is required to produce a viable system. This workshop will detail the evolution of the CRGIS database and provides an opportunity to demonstrate the utility of the system. Topics to be addressed, in non-computer jargon, include database design, data standardization, data entry, data maintenance and interaction with a statewide database system.

### **Roundtable 23**

#### ***New Standards for Marine Survey of Submerged Cultural Resources***

Organizer/Moderator: James Allan (William Self Assoc. and St. Mary’s College)

The goals of this roundtable are to discuss in a facilitated manner the standards for marine survey of submerged cultural resources in California waters and ultimately produce suggested guidelines for managing agencies, academic institutions and private industry. The roundtable will begin with an overview of the state-of-the-art of remote sensing in maritime archaeology and subsequent discussions will be moderated.



## Avocational Lunch

Organizer: Myra Herrmann (City of San Diego, Development Services Department)

The purpose of the roundtable is to address operational issues that affect avocational societies such as publicity and fund raising; annual meeting involvement; interaction with local, state and federal agencies, preservation groups and or CRM consultants for joint projects; public outreach/education, and Archaeology Month programs. Representatives from societies statewide participate annually in these roundtable discussions and are encouraged to provide input, generate new ideas, and show the SCA board that their support can result in our continued attendance and involvement at the annual meetings. The March 2003 will include a catered lunch for two representatives from each avocational group. All members are welcome to attend the workshop and share ideas. However, those wishing to join the luncheon over the two in attendance can pay for their lunch or bring a bag lunch.



## About the Photos

### Cover photos assembled by Hank Meals and Dennis Stevens

Front Top: Screening system at Mrn-192, 1965

Front Bottom: Taxonomy conference, UC Davis, 1968, James Bennyhoff at the blackboard, William Olsen, Martin Baumhoff, and Norm Wilson looking on.

Back Top: Field crew, San Luis Reservoir Project, 1966

Back Bottom: Tommy Tucker Cave field crew, 1946-47, Francis Riddell, James Bennyhoff, Dave Fredrickson, Jack Mills.

### Inside photos by Trudy Haversat and Gary S. Breschini (copyright by Trudy Haversat and Gary S. Breschini)

Page 6: Albert Elsasser, 1986; Malcolm Margolin and Vera Mae Fredrickson, 1997.

Page 7: Jay von Werlhof, 2001; Betty Rivers, 1999; John Foster and Fritz Riddell, 1995.

Page 8: Roberta Greenwood, 1999; Sylvia Vane, 1999

Page 26: Dave Fredrickson, 2002; Michael J. Moratto, 1986; Makoto Kowta, 2001.



Information on cover and  
inside photos on Page 25.

## SCA Paper and Poster Abstracts

### Allan, James

*William Self Assoc. and St. Mary's College*

#### ***New Standards for Marine Survey of Submerged Cultural Resources***

Roundtable 23 Moderator

### Allen, Rebecca

*Past Forward Inc.*

#### ***Importance of the Orphan Fairmount Archaeological Collection***

Symposium 19: Rediscovering the Market Street Chinatown Assemblage:

Progress in Curating and Analyzing an "Orphaned" Collection

Within the last two decades, excavations have occurred at many Chinatowns in California. Archaeological deposits have been critical to current understanding of the Chinese experience, as these are communities that are not well documented in the archival record. It is too common for sites to be excavated, but never written up. Artifacts hold only limited value for understanding the past. It is interpretation of those artifacts that gives archaeological collections their significance. With our "adoption" of the Fairmount Archaeological Collection, we hope to add to the understanding of the Chinese in California. We also hope to inspire other archaeologists to adopt "orphans," and give those collections meaning.

### Alvarez, Susan H.

*Fort Hunter Liggett Military Installation*

#### ***Cultural Resources Are About People***

Poster/ Video Session 21

Posters are vital for dissemination of information in the ever-changing military community. Fort Hunter Liggett (FHL) Cultural Resources Management (CRM) is augmented with photographs and narratives obtained through a dynamic Oral History Program. Involving FHL staff, military trainers, and the local community in the discovery of landscape use and changes through time demonstrates that resources, heritage concerns, and preservation values are about people. Two posters demonstrate FHL CRM tools for education and to promote land-user participation in CRM.

### Anderson, Adrienne

*National Park Service, Denver, Colorado*

*See Michael R. Polk*

### Andrews, Allen H.

*Moss Landing Marine Laboratory*

*See Kenneth W. Gobalet*

**Angeloff, Nick***California State University, Sacramento****Variability and Homogeneity within the Borax Lake Pattern of Northern California***General Session 6, Prehistory Northern California

This presentation will focus on a discussion of the assemblages found at six Borax Lake Pattern sites; Pilot Ridge, Squaw Creek, Cox Bar, Hupa Mountain, and Buck's Lake (2). These sites represent a broad geographic and environmental range and it had become apparent that it is time to assess the variability that occurs within and between these assemblages over space and time. This presentation marks the beginning of a much larger, more detailed project assessing these and other assemblages, being intended to spark interest in the study and draw out further grey literature on the subject.

**Backes, Clarus***Ancient Enterprises, Inc.**See Michael D. Richards***Ballard, Hannah S.***Pacific Legacy, Inc. /Sonoma State University****Cultural Landscape Approach: Examples from Hite's Cove, a Multi-Ethnic, Hard-Rock Gold Mining Site***General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

The cultural landscape approach provides a framework to integrate theoretical orientations and data derived from primary documents and the physical landscape. This approach is wider reaching than the National Register's more restrictive rural historic landscape. The cultural landscape approach can be used in concert with the rural historic landscape to manage, interpret, and integrate research. The cultural landscape analysis of Hite's Cove, a multi-ethnic, hard-rock gold mining site on the Sierra National Forest, illustrates methods for this approach.

**Barnes, James***Bureau of Land Management, Folsom***Ritter, Eric****Silva, Richard****Sullivan, Tammy****Hitchcock, John****Jenkins, Richard****Singleton, Claude*****Making Inroads: A Progress Report on an Archaeological and Historical Study of the Yreka Trail***General Session 14, Historic Archaeology

In 2000, the Bureau of Land Management, Klamath National Forest, and Northern California Resources Center began a collaborative project to study the Yreka Trail/Pitt River Road, one of the earliest trails to penetrate frontier California. The initial goal of our study was to cast light on the lives of emigrants, soldiers, and others who traversed the trail on their way to the goldfields of the Klamath Mountains, the agricultural settlements of the southern Cascades, and elsewhere. After nearly three years of work, we have learned that the trail's complex archaeological record has much more to offer than insight on the trail's earliest travelers. This record contains telling clues to long-term changes in land use and rural living since the mid-1800s.

**Barrie, Laura***San Diego State University**See Theodore Cooley*



**Basgall, Mark E.**

*California State University, Sacramento, Archaeological Research Center*

***Some Reflections on Martis***

Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Since first being proposed by Heizer and Elsasser a half-century ago, the Martis Complex has remained an enigmatic presence in northern California prehistory. Subsequent years have seen more archaeological sites containing such components investigated, additional assemblages described, chronological data obtained, new artifact types defined, and the geographic range of supposed Martis-related expressions much expanded. But despite increases in substantive knowledge, conceptual elements of the Martis phenomenon are still largely undeveloped. This presentation examines some ideas regarding subsistence-settlement organization, technology, and inter-regional connections in the northern Sierra Nevada between ca. 4000-1500 B.P.

**Baxter, R. Scott**

*Past Forward Inc.*

***History of the Market Street Chinatown and its Excavation***

Symposium 19: Rediscovering the Market Street Chinatown Assemblage:  
Progress in Curating and Analyzing an "Orphaned" Collection

The first buildings to appear in the San Jose Market Street Chinatown were built in 1866, at the corner of Market and San Fernando Streets. The town prospered, and housed single male workers as well as a few families. The Market Street Chinatown burned down in 1870. The town was temporarily moved to Vince Street, while the town was rebuilt. The second Market Street Chinatown burned again in 1887. Part of this revived town was excavated in the 1980s, but the findings were never reported on. The collection has lingered in 'limbo' until its recent adoption by a Stanford University laboratory class.

**Beddow, Donna**

*San Diego State University*

**Gamble, Lynn H.**

***Beads from Dripping Springs (CA-SDI-860) from the Cuyamaca Mountains in Southern California***

Symposium 13, Recent Archaeological Investigations in California State Parks:  
A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Dripping Springs (CA-SDI-860) is a late prehistoric/proto-historic village site located within the southern margin of East Mesa in Rancho Cuyamaca State Park. A broad range of artifacts and features has been recorded at the site. This presentation will focus on the beads found at the site. Fifty-one beads were recovered from Dripping Springs when Del True excavated there in 1962 and 1963. Forty-seven shell beads representing thirteen different types were identified. Some of these have proven to be the most temporally diagnostic artifact types at the site. In addition, one stone bead and three historic glass beads were also identified. The different bead types are discussed and compared with beads from other sites in the region.

**Beeker, Charles**

*Indiana University, Underwater Science Program*

***Management Strategies for California's Underwater Parks***

Roundtable 7 Speaker

**Bertrando, Ethan**

*Cultural Resource Specialist for the California Army National Guard*

***California Army National Guard Cultural Resource Programs***

Poster/Video Session 21

The poster will present the current state of the Cultural Resource Management Program for the California Army National Guard (CA ARNG). It will include the status of cultural resource inventories, resource evaluations, archaeological research and integrated protective measures being applied to archaeological and historical resources on CA ARNG properties.

**Bevill, Russell***URS Corporation***Nilsson, Elena*****Obsidian Hydration: The Squaw Creek Site Revisited***Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Given that most archaeological assemblages from northeastern California prehistoric sites are dominated by flaked stone artifacts, archaeologists are dependent upon obsidian hydration studies to provide reliable age estimates. Hydration readings obtained in the mid-1980s for the Squaw Creek Site (CA-Sha-475) were at odds with results of other dating methods, including stratigraphy and radiocarbon assays. It was suggested that the aberrant readings resulted from temperature variations within site strata. Recent hydration analyses, however, infers that previous readings are not a result of local site conditions alone, but reflect broader, regional patterns of climate change. This paper explores recent site hydration data and offers alternative explanations for noted patterns.

**Binning, Jeanee Day***CALTRANS**See Alan Gold***Brady, Ryan T.***California State University, Sacramento****Living on the Fringe: Land-Use Patterns of the Mono Basin***General Session 12, General Papers

The Mono Basin of eastern California has a unique ecological setting that can be used to test many of our assumptions about the factors that influence hunter-gatherer behavior. By comparing similarities and differences with other western Great Basin environments, one can identify distinct ecological niches within the region. Ethnographic and modern environmental data are used in conjunction with optimal foraging theory to develop predictions about past land-use patterns within the locality. The current model is developed in anticipation of a regional archaeological survey designed to investigate variable problem solving techniques of hunter-gatherers while exploiting a basin environment.

**Branson, Freida***California Archaeological Site Stewardship Program Monitor, Ridgecrest***Branson, Dave*****The Minnietta Mine***Symposium 17, California Archaeological Site Stewardship Program

This presentation will cover four topics: A short history of the Minnietta, Our role as site stewards at the Minnietta, Adopt-A-Cabin program at the Minnietta, and Our view of the effects of the natural and human environment on the site.

**Branson, Dave***California Archaeological Site Stewardship Program Monitor, Ridgecrest**See Freida Branson***Bray, Alida***History San José****History San José***Symposium 19: Rediscovering the Market Street Chinatown Assemblage:Progress in Curating and Analyzing an "Orphaned" Collection

History San José, a private nonprofit corporation founded in 1998, manages an extensive collection of artifacts and historic collections from the Santa Clara Valley. The Market Street Chinatown archaeological assemblage is part of a larger collection of artifacts recovered from redevelopment projects in downtown San Jose in the 1980s. With support from the City of San José Redevelopment Agency, History San José is working to improve collection care and access, expand community service, and create new partnerships in the management of this important collection. We aspire to strengthen the bonds of community by integrating the historical experience into the daily lives of everyone who lives and works in Silicon Valley.



**Broadbent, Sylvia***Founders' Lunch Participant***Bryne, Stephen***Garcia and Associates**See Christopher Dore***Busam, Heather M.***California State University, Sacramento/USDA Forest Service, Pacific Southwest Region****Bucks, Baskets, and Pyrotechnics: Anthropogenic Fire in Northwest California***General Session 6, Prehistory Northern California

Debates in the scientific community rage over the extent of human influence on past ecosystems. Anthropogenic burning has profound implications for modern land management. Historic fire reports on the Orleans Ranger District, Six River National Forest, suggest traditional Native American burning amplified natural fire regimes. Using the Hupa, Karuk, and Yurok of the Northwestern California, Human ecologists argued that fire maintained disturbance-dependant plant communities thereby increasing Native American carrying capacity. Using ethnographic information, ignition models for traditional Native American, accidental/arson, and natural fire regimes will be tested against historic fire data. The results will be compared with vegetation patterns to identify differences between natural and human fire rotations.

**Campbell, Mark M.*****A Hypothetical Model of the Prehistory of Edwards Air Force Base and the Western Mojave Desert***General Session 8, Prehistory Southern California

The Western Mojave Desert is pictured in the literature as an area of little study where little is known, an anomaly, a black hole. It is seen as an area of mixed influences and peoples coming in from adjacent areas. It has been said that the area uses chronology borrowed from elsewhere because there is insufficient local chronometric data to construct a local chronology.

In this paper, I present a hypothetical reconstruction or model of Western Mojave Desert prehistory. It draws heavily on various CRM reports produced at Edwards Air Force Base, especially the various overviews. This model represents my interpretation of the data. I bare sole responsibility for its inadequacies, inconsistencies, and leaps in logic. I present it as hypothesis to be tested to determine its utility in interpreting the archaeological record and understanding Western Mojave Desert prehistory.

**Carrico, Richard L.***San Diego State University/Mooney & Associates****Kumeyaay Settlement Systems and Patterning: A Case Study Using the Village of Pa'mu and Tekamak, San Diego County***General Session 8, Prehistory Southern California

Recent excavation and analysis of a portion of the Kumeyaay village of Pa'mu in the Ramona Valley of San Diego have provided documentation of an important winter/spring village. This paper will place the village of Pa'mu in the context of the overall Kumeyaay settlement systems and patterning as suggested by Kroeber, Shipek, May, and Laylander. Specific emphasis will be placed on seasonality, mobility, fission/fusion concepts, and exploitation of a specific catchment basin.

**Chartkoff, Joseph L.***Michigan State University****Calories and Construction: Ecology of Extraction Strategies on the Lower Klamath River***General Session 6, Prehistory Northern California

Salmon fishing has been crucial along the Klamath River for millennia, but causes for patterning and change are not well understood. Why do net fishing and spearing occur some times and places while larger-scale extraction strategies emerge in others? This study compares strategies in terms of caloric investment and return to better why the fish dam strategy developed when and where it did, and why it was not continued farther upriver once it emerged.

**Chatters, James C.***Foster Wheeler Environmental Corporation***Farrell, Jenna*****Ceremonial Feasting by Prehistoric Coastanoans of the Santa Clara Valley:  
Evidence from CA-SCL-714/H***General Session 6, Prehistory Northern California

Little is known about the pre-contact culture of Coastanoan peoples because depopulation and missionization altered it so early and profoundly. Data recovery for Calpine's new gas-fired power plant near Gilroy, California has made it possible to narrow that knowledge gap. At site CA-SCL-714/H, eleven cooking features found adjacent to a protohistoric cemetery contained no evidence of domestic activity other than food preparation. These features, which date between the 15th and 18th centuries probably represent feasting during annual mourning ceremonies. Data from faunal, macrobotanical, and palynological analyses reveal a remarkably diverse ceremonial menu.

**Cleland, James H.***EDAW, Inc.****Stratified Patayan Sites near Palo Verde, Lower Colorado River***General Session 8, Prehistory Southern California

During construction monitoring for the North Baja Pipeline project, EDAW archaeologists discovered two buried Patayan period habitation sites on the California side of the Colorado River about 20 miles south of Blythe. These sites were originally identified as ashy lenses in the trench profile. Controlled archaeological excavation was undertaken and yielded assemblages that include ceramics, flaked stone, and faunal remains. At the North Stallard Road locality, numerous ashy features were recorded within an alluvial/colluvial formation immediately above the active floodplain. At the South Stallard Road locality, only a few features were found, but these were at the edge of the active floodplain at the foot of a projection of the Palo Verde hills. Preliminary radiocarbon dating of cultural features indicates an occupation of between about 1200 and 350 RCYBP; two sigma calibrations range from Cal AD 660 to Cal AD 1645. This paper focuses on stratigraphic and site!

**Cooley, Theodore***Mooney & Associates***Barrie, Laura*****Archaeological Excavation at the Village of Pa'mu, Ramona Valley, California***General Session 8, Prehistory Southern California

The Kumeyaay village of Pamo appears in ethnographic literature and in early Spanish documents. Archaeological excavation and analysis at Pa'mu in the Ramona Valley of San Diego have provided documentation of this important village. This paper will examine the structure of a Late Prehistoric village, discuss recent developments in sourcing Tizon Brwon Ware, address issues of the prehistoric environment and plant use, describe the results of pollen and blood serum analyses, and place the village in the context of inland Late Prehistoric sites.

**Costello, Julia***Foothill Resources, Ltd.****Ceramics Workshop***Workshop 1 Moderator**Costello, Julia***Foothill Resources, Ltd.*Symposium 13: Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson.*Discussant for Historic Archaeology***Crew, Harvey L.***See Eric W. Ritter*

**Dallas, Herb Jr.***Southern Service Center, California State Parks, San Diego****Re-evaluating the Early Millingstone Complex in California: VEN-1, a Case Study***Symposium 13, Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Several early Period sites have been used to document the Early Millingstone complex in Central Coast and Southern California. These include sites such as C. W. Harris Site in San Diego, Ven-1: the "Little Sycamore" site in Malibu, LAN-2: tank site in Malibu, and Diablo Canyon site SLO-2. There are many similarities between these sites in terms of technology, tools, subsistence, and dates of occupation. There are also differences in technology as well. While earlier, some of these coastal sites were lumped as a Paleo-coastal tradition that emphasized common aspects of subsistence and technology. Recent data indicates that there are similar technologies at work, but the importance of these technologies might have been missed or not completely understood. There may be more important innovations and more complex technologies never identified previously in the data that can shed light on the Early Millingstone Period in coastal California. Certain early period sites may have reached adaptive peaks quickly and then adopted new strategies as a result. New data discovered at VEN-1 will be examined in the larger context of mobility, population growth, subsistence, and settlement patterns as a whole.

**Darwent, Christyann***University of California, Davis***Glascoek, Michael****Guiol, Teresa****Hylkema, Mark****Kennedy, Michael****Neff, Hector****Newsome, Seth****Ramsay, Heather****Speakman, Robert*****Results from the Analysis of Human Remains from a Historical Shipwreck Cemetery, Ano Nuevo State Park, California***Poster/Video Session 21

Osteological, histomorphometric, biomechanical, elemental, and stable isotopic analyses were conducted on a skeletal sample excavated from the Franklin Point Cemetery at Ano Nuevo State Park, California. This sample of eight individuals was part of a multi-disciplinary research project on the remains from two historical shipwrecks prior to reinterment. The skeletal population comprises two females (one of African ancestry) and six males who range in age from late 20s to early 40s. Their diet was a mixture of terrestrial and marine protein and several of the individuals had high lead levels. Nearly all the individuals were suffering from mild to moderate anemia. One male had severe degenerative arthritis and walked with a considerable limp.

**Deis, Richard W.***EDAW, Inc.****Spatial and Temporal Distribution of Rose Spring Projectile Points within the North-Central Sierra Nevada***General Session 15, Prehistory Central and Southern California

Rose Spring corner-notched projectile points have been used within the North-Central Sierra Nevada region primarily to date surface assemblages, in an attempt to develop temporal affinities between sites and to trace technological innovation (i.e. introduction of the bow and arrow). Temporal placements have primarily been based upon projectile point cross-dating using typologies established for the Great Basin, without regard for a demonstrated link to this region of study. This paper presents the results of analysis that addressed the utility of Rose Spring corner-notched points as temporal markers, and presents implications for the results of this study.



**DeGeorgey, Alex***California State University, Chico****A Single Component Paleo-Indian Site in Northern California***General Session 6, Prehistory Northern California

Traces of the Paleo-Indian period are rare, amounting to a handful of isolated artifacts and a few sites statewide. Single component sites are critical to defining artifact assemblages and chronology building. Findings from recent test excavations at CA-Lak-1581 suggest the deposit to represent a single component Paleo-Indian assemblage. Three basic measures are discussed; site structure, artifact diversity and type, and obsidian hydration results.

**Delaney-Rivera, Colleen***California State University, Fullerton***Jenner, Nancy*****Digging through the Files: Archaeology at CSU-Fullerton***General Session 15, Prehistory Central and Southern California

This history of archaeology at CSU-Fullerton mirrors the archaeological profession at large. Earlier work focused on training students in techniques, providing field experience, and engaging in international work and local salvage operations. More recently, although still training students in methods, department archaeologists are interested in limiting collections that need curation. Introductory field methods classes, therefore, stress map reading and pedestrian surveys and other non-destructive field techniques. Our discussion today will document the shift in department philosophy towards the nationwide trend with a concern over curation, and will consider the future directions of the department.

**Dore, Christopher***Statistical Research/University of California, Berkeley***Bryne, Stephen****McFaul, Michael****Running, Garry L., IV*****Why Here? Settlement, Geoarchaeology, and Paleoenvironment at the West Berkeley Site (CA-Ala-307)***General Session 6, Prehistory Northern California

During 2001, in an attempt to define the spatial boundaries and condition of the archaeological deposits that constitute the West Berkeley Site (CA-Ala-307), a systematic sample of sediment cores was taken throughout the streets of Berkeley. While these cores allowed the three-dimensional boundaries of disturbed and undisturbed deposits to be delineated, they also provided new data on the natural setting of this prehistoric settlement. This paper presents the geoarchaeological and paleoenvironmental data, presents an environmental reconstruction of the mouth of Strawberry Creek, and infers the reasons that this location was the location-of-choice for the early settlers of San Francisco Bay.

**Douglass, Robert***Sonoma State University**See Tom Origer***Dutschke, Dwight***California State Historic Preservation Office****The Road We Have Traveled***Plenary Session 3

A look at the past twenty-five years of Archaeologist and Native American coordination. This short history will include the establishment of the Native American Heritage Commission, GO Road Decision, Native American burial protection, involvement of Native American monitors, enactment of NAGPRA and other topics that have influenced the management of cultural resources and interaction of Native Americans and archaeologists.



**Edgeworth, Laurel D.**

*Department of Anthropology, Humboldt State University  
See René L. Vellanoweth*

**Edwards, Rob**

*Director, Cabrillo College Archaeological Technology Program*

**Multi Media use for Public Education**

Poster/Video Session 21

This poster emphasizes ways to use topical inserts in local press and videos for local and national television for public education in archaeology. Examples of each will be available to those interested.

**Eerkens, Jelmer**

*California State University, Long Beach:*

**Rosenthal, Jeffrey S.****Chemical Analyses and Sourcing of Olivella Shell from the California Coast**

Poster/Video Session 21

This poster presents preliminary results of chemical analyses on *Olivella biplicata* shell from the California Coast using Inductively Coupled Plasma-Mass Spectrometry (ICP-MS). The goal of this work is to create a background data base such that beads found at inland sites can be sourced back to their point of manufacture. Preliminary results show some promise for this technique.

**Elliott, Jack D., Jr.**

*Mississippi Department of Archives and History*

**Archaeology and the Conflict of Visions:****Radical Preservation and the Search for Common Ground**

General Session 6, Prehistory Northern California

The ongoing conflicts and misunderstandings between archaeologists and indigenous people is a microcosm of more widespread conflicts of vision characteristic of the modern world. On one side are archaeologists, who often promote science as the only acceptable canon of truth. On the other are indigenous people who are beginning to question this exclusivism, while often insisting that science is but one amongst many equal and unrelated "truths." This paper calls for a widened horizon of understanding that transcends both perspectives in seeing that truth is ultimately one, despite its many and varied representations.

**Erb, R. Ezra**

*Stanford University*

**Other People's Questions: Integrating Community, Museum, and Academic Research Goals.**

Symposium 19: Rediscovering the Market Street Chinatown Assemblage:  
Progress in Curating and Analyzing an "Orphaned" Collection.

Archaeological collections may be approached with a variety of viewpoints and priorities, as suggested by the preceding presentations in this panel. The challenge and necessity of collaboration among different interested parties is particularly highlighted in the case of "orphaned collections". With such collections, analysts do not have the opportunity to design research agendas prior to excavation; the material has already been collected according to the priorities and interests of others. This presents a constraint to the interpretative possibilities for the collection. Additionally, contextual data evolve continuously as further artifacts or records are located, and associated artifacts are identified. In order to integrate the interests of the descendent community, museum personnel, and academic researchers in such a research environment, effected and ongoing communication is critical. In this presentation, I discuss the practices and outcomes of the ongoing collaborative effort and communication between the various parties who are interested in the treatment and analysis of the Market Street Chinatown Collection.

**Eshleman, Jason Aaron***University of California, Davis/Trace Genetics LLC***Smith, David Glenn*****An Analysis of Ancient Native American mtDNA from California's Central Valley***Poster/Video Session 21

Examination of the mtDNA from three burial populations in California's Central Valley was used to test hypotheses regarding prehistoric migrations and the prehistoric peopling of the region. While linguistic and archaeological evidence has long suggested a wave or waves of Penutian speaking peoples entering the region approximately 4500 years before present and replacing older Hokan speaking populations, the mtDNA obtained from 45 individuals dating from the period between 1800 to 3600 years before present is not consistent with this scenario. The mtDNA haplogroup frequencies obtained do not resemble modern Penutians, but instead more closely resemble the modern Takic, speakers of Uto-Aztecan languages who inhabited Southern California at European contact. While the sequences obtained also contradict a replacement beginning with Windmiller, they suggest that some members of haplogroup D did enter the region and admix with older populations at this time and that the prehistory of Central California has likely been marked by multiple migrations into the region.

**Farrell, Jenna***Foster Wheeler Environmental Corporation**See James C. Chatters***Farris, Annell***California Archaeological Site Stewardship Program Monitor, Ridgecrest***Farris, Ron*****Petroglyphs at Sheep Spring: An Overview***Symposium 17, California Archaeological Site Stewardship Program

CASSP stewards provide an overview of a petroglyph site on BLM land adjacent to the El Paso Mountain Wilderness.

**Farris, Glenn J.***Cultural Resources Division, California State Parks, Sacramento**See John W. Foster***Farris, Ron***California Archaeological Site Stewardship Program Monitor, Ridgecrest**See Annell Farris***Fentress, Jeff***Department of Anthropology, San Francisco State University****Archaeological Investigations at a Native American Rock Art Site in Alameda County***Symposium 13, Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

The paper presents a review of fieldwork and data analysis from excavations at CA-ALA-571 conducted by a field archaeology class from San Francisco State University in 1999. The site contains a schist rock boulder with several rock art styles. Excavations revealed subsurface deposits of flaked and ground stone tools, some of which may have been used to manufacture the petroglyphs. The project represents the only excavation of a Native American rock art site to date in the Bay Area



**Flint, Sandra S.***Applied EarthWorks, Inc****Point of Attraction: A Century of Tourism at Glacier Point***General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

CA-MRP-1392H is the site of the Mountain House and Glacier Point hotels built on Glacier Point in Yosemite National Park in 1872 and 1917 respectively. Both hotels and a comfort station burned to the ground during an intense fire in 1969. Construction monitoring during rehabilitation of Glacier Point documented artifacts and features associated with both hotels, the comfort station, and other facilities developed there. This archaeological evidence and archival research have revealed the evolution of the tourist industry at Glacier Point, representing more than 100 years and four major periods of tourist development. Preserved archaeological remains and historical documents further provide insight into recreational and consumer behavior, historical construction techniques, and material culture.

**Floyd, Rob***Thales-Geosolutions, Inc.****New Standards for Marine Survey of Submerged Cultural Resources***Roundtable 23 Speaker**Foster, John W.***Cultural Resources Division, California State Parks, Sacramento***Schulz, Peter D.****Farris, Glenn J.*****A Tribute to Francis A. Riddell, F. Lee Motz, and Norman L. Wilson***Symposium 13, Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson

During 2002, three archaeologists passed away who had served California State Parks for many years. A tribute to Francis A. Riddell, F. Lee Motz, and Norman L. Wilson is presented for their contributions to the archaeology of California and the State Park System.

**Foster, John***California State Parks****Management Strategies for California's Underwater Parks***Roundtable 7 Moderator**Fredrickson, David***Retired****Reflections on Fifty-Five Years of Field Methods***Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Recently I have been reflecting upon the various changes in field excavations methods I've experienced since the initial digs I worked on in 1947 in both the Sacramento valley and Topanga Canyon. Some of the changes in excavation methods advanced the goals of archaeology, while others seem to have been counterproductive. This paper touches only upon my own experiences, some of which I believe were positive, others neutral, and some not as productive as we might wish. As a result of these thoughts, I have come to realize that there are many ways to dig a hole in the ground, and that some ways are more entertaining than others.

**Fredrickson, David**Founders' Lunch Participant**Fredrickson, Vera Mae**Founders' Lunch Participant**Gamble, Lynn H.***San Diego State University**See Donna Beddow*

**Gardner, Jill K.***Center for Archaeological Research, California State University, Bakersfield***Sutton, Mark Q.****Negrini, Robert M.****Wigand, Peter E.*****Investigating the Paleoindian Occupation at Tulare Lake: Issues and Problems***General Session 15, Prehistory Central and Southern California

Continuous human occupation at Tulare Lake since the Late Pleistocene is evident from the array of temporally sensitive projectile point types that have been reported from the basin. However, due to agriculture and other historical disturbances, precise dating of archaeological components at Tulare Lake has proven elusive. Recently, CAR conducted a project on the western shore of Tulare Lake. The project included trenching in an attempt to discover intact deposits in this part of the basin, particularly the Late Pleistocene components. This paper reports the results of that project and discusses the interpretive problems that continue to plague archaeologists in the quest to understand the Paleoindian occupation at Tulare Lake.

**Gassaway, Linn***San Francisco State University/National Park Service****Reexamination of Village Sites Identified By Merriam and Powers in Yosemite Valley***General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

Between 1871-1917 Stephen Powers and C. Hart Merriam identified approximately 40 villages in Yosemite Valley. Since the 1950s, three archaeological surveys have identified different archaeological sites as those representing villages identified by Merriam and Powers. Because of different interpretations of Powers and Merriam's written descriptions and little interpretation of archaeological materials, these studies have differed greatly in which archeological sites they identified as the villages. This paper represents a reexamination of Merriam's field map and other historic maps using GIS and early findings from new archaeological fieldwork based on this GIS analysis.

**Gerike, Christian***LSA Associates, Inc.**See Joy Longfellow***Glascocock, Michael***University of Missouri, Columbia**See Christyann Darwent***Gobalet, Kenneth W.***Department of Biology, California State University, Bakersfield***Andrews, Allen H.****Jones, Terry L.*****Can Seasonality be Determined from Fish Otoliths? A Blind Test***General Session 6, Prehistory Northern California

A technique involving examination of otolith growth zones has been commonly relied on by archaeologists to estimate season-of-capture of prehistoric fishes and to infer the season of site use along the coast of California. These techniques upon which archaeologists have relied have not been subjected to blind testing nor critically evaluated by specialists. A blind test of otolith edge analysis techniques was performed on modern otoliths by estimating season-of-capture for specimens with known dates of capture. Successful identification of season-of capture was low, even in the best case scenario with the age-validated spotted sand bass (*Paralabrax maculatofasciatus*), emphasizing the subjectivity of this kind of analysis and inherent variability of growth zone formation. Of the 19 otoliths sectioned during blind testing, the accurate season of capture was determined for only six. Alteration of the otolith matrix from environmental factors further complicates the determination for archaeological otoliths. Surf-perches (family Embiotocidae), however, hold promise for future studies. This study has called into question the validity of protocols that have not utilized age validated otolith collections and begs caution when estimating season-of-capture.

**Gold, Alan***Caltrans***Binning, Jeanee Day****Younkin, Elva****Origer, Tom****Skinner, Craig*****The Little Lake Biface Cache, Inyo County, California***General Session 15, Prehistory Central and Southern California

The Little Lake biface collection comprises 26 complete biface preforms. The bifaces are believed to have been found in a cache acquired near the vicinity of the town of Little Lake, Inyo County, California. All the complete bifaces have hydration values falling within a very tight range measuring from 3.5 to 3.8 microns and were determined to have come from the West Sugarloaf subfield of the Coso quarry cluster.

These rim readings signify a brief single episode of time and would date to the very late Haiwee or the early Marana Periods in the Owens Valley cultural sequence or ca AD 1300. The cache would lend some limited support to the continued use of large biface cores as a means of production and transport of portable units of toolstone significantly later than might be expected and in a volume/mass that is surprising.

**Gong-Guy, Lillian***Chinese Historical and Cultural Project***Kwock, Anita*****Chinese Historical and Cultural Project***Symposium 19: Rediscovering the Market Street Chinatown Assemblage:Progress in Curating and Analyzing an "Orphaned" Collection

The Chinese Historical and Cultural Project (CHCP) is based in Santa Clara County, California. It was founded in 1987 as a non-profit organization to promote and preserve Chinese American and Chinese history and culture through community outreach activities. The presenters will discuss their involvement in the archaeology of the Market Street Chinatown, from the 1985-86 excavation to the present analysis project; and will also discuss how they hope this collection will be used in educational and interpretive projects in the years to come.

**Gotshalk-Stine, Amy***California State University, Monterey Bay Institute for Archaeology****Romancing the Potsherds: A GIS-Based Visualization of the Archaeology of a California Mission***Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

Geographic Information Systems or GIS has become a major tool for the digital management, manipulation, and interpretation of cultural resources data in archaeology and the social sciences more generally. This presentation will review current progress toward the development of a GIS-based model of the distributional patterning of Mission era ceramics and other archaeological collections recovered from the early California Mission community of San Juan Bautista. The focus of this mapping and analysis centers on recent excavations undertaken by the CSU Monterey Bay Institute for Archaeology in the courtyard sector and quadrangle of Old Mission San Juan Bautista (Site SBN-1h).

**Gotshalk-Stine, Amy***California State University, Monterey Bay**See Ruben G. Mendoza***Grasse, Gale***California State University, Bakersfield****A Preliminary Report on CA-Ker-77, San Emigdio Mountains, Kern County – AKA: Once Upon a Time in a Graduate Student's Life"***General Session 15, Prehistory Central and Southern California

Boulder Cave, the focus of this research, is located in the San Emigdio Mountains. This site, CA-KER-77, consists of a combination of bedrock mortars, cupules, and pictograph features. Boulder Cave, first

recorded in 1922, has been well documented due to the rock art, but until this point, there has never been a “recorded” excavation at this site. The purpose of this presentation will be to offer a preliminary report on the findings to date, and to share with the audience a graduate student’s perspective of a thesis project.

**Graves, Christian**

*Hartnell College*

***Designing and Refining Technology Solutions and Applications in Archaeology and Museum Studies: Prospects, Potentials, and Shortcomings***

Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

Appropriate technologies and solutions for archaeology and museum studies are the focus of this review of the design and deployment of both wireless and broadband technologies, and digital scanning and barcode devices for archaeological data entry and museum management systems. Because the “Wireless Technologies for Teaching and Learning” project initiative undertaken by the CSU Monterey Bay Institute for Archaeology is reliant on a number of new and revolutionary technologies, this paper will review the utility, and both the successes and failures, of specific technology applications and devices deployed for said project on a preliminary basis.

**Graves, Christian**

*Hartnell College*

*See Ruben G. Mendoza*

**Greenway, Greg**

*Mendocino National Forest*

**O’Brien, Christopher**

***Seasonality Indicators and Site Function at Dead Man’s Cave (CA-Teh-290)***

Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Dead Man’s Cave (CA-Teh-290) is a large rock shelter located in Mill Creek canyon, within the ethnographic territory of the Yahi Yana. Principal occupation at the site occurred during the past 2000 years. The site’s deep midden deposit contains an assemblage characterized by a variety of artifacts, large faunal collection, and organic material in the upper levels. Focusing on dental increment and macrofloral data, this paper describes seasonality and site function within the context of Yahi Yana settlement and subsistence.

**Gross, Phil**

*Cinnabar Video Productions*

*See Tom Mills*

**Groza, Randy**

*LSA Associates, Inc.*

**Milliken, Randy**

**Rosenthal, Jeff**

***Dating Scheme D***

General Session 15, Prehistory Central and Southern California

This article presents and interprets AMS dates for 114 time sensitive Olivella shell beads from Central California. Olivella bead forms are recognized markers of material cultural assemblages in California’s past. In 1987, Bennyhoff and Hughes offered two alternative dating schemes with certain Olivella shell bead types characterizing specific dating components. More recent studies favor their Dating Scheme B1. Twenty-six different Olivella bead types were subjected to AMS dating to verify Scheme B1. The resultant data were corrected for isotopic fractionation, and calibrated with a correction for the local marine reservoir effect. These results confirm and challenge Scheme B1.

**Guilderson, Thomas P.**

*Center for Accelerator Mass Spectrometry, Lawrence Livermore National Laboratory*

*See Michael A. Kennedy*



**Guiol, Teresa**

*University of California, Davis*  
*See Christyann Darwent*

**Gust, Sherri M.**

*Cogstone Resource Management Inc.*

**Schulz, Peter D.*****Victorian Meat Consumption in Sacramento***

Symposium 20, Capitol Living: Archaeology of Residential Sacramento

Multiple residential faunas from Sacramento are contrasted. Beef is the most utilized meat in all cases. Smaller components of mutton, pork, and wild or domestic poultry, fresh and salt fish, and wild game are present in most deposits. Of particular interest are native species not previously known from Sacramento historical archeological deposits. Higher overall meat economics are associated with merchant class families, as are smaller serving units of meat.

**Hale, Alice**

*Greenwood and Associates*

***A Burial Recovery in Pacific Palisades***

General Session 15, Prehistory Central and Southern California

On the last day of monitoring a City of Los Angeles Bureau of Engineering sewer replacement project at Temescal Canyon State Park in Pacific Palisades, human remains were discovered underneath the parking lot. Monitoring had been required because CA-LAN-224, a prehistoric shell midden site the full extent of which has never been determined, lies within the Park. Because of the monitoring relationship established over the previous several months, the contractor was alert to what his backhoe had exposed. The Coroner's office was contacted immediately and the discovery was determined to be Native American within hours of its exposure. The Native American Heritage Commission designated an MLD and it was jointly decided that scientific excavation with Native American monitoring was warranted to determine: 1) if the remains were isolated fragments or an intact inhumation, and 2) to relocate them away from the project impact area. City and Park personnel were fully cooperative. Excavation began within the week of the discovery. The burial proved to be largely intact. At the request of the MLD, full osteological analysis and a radiocarbon date were done, and a DNA analysis is pending. The remains have been returned to the MLD for reburial. Because cultural resource requirements were fully and promptly observed throughout the process, the interests of all concerned received proper attention.

**Hale, Mark**

*URS Corporation*

**Kelly, Michael S.*****The Lower Yosemite Falls Project: Archeological Investigations at Three Historic Era Sites***

General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

URS has been retained by the National Park Service to conduct archaeological investigations for the Lower Yosemite Falls project. These investigations encompass a series of studies, including evaluation and data recovery excavations at sites of both Native American and historic origin. This paper focuses on our investigations of the historic period sites, which include Hutchings Sawmill/Camp Lost Arrow (CA-MRP-1606/H), the Hutchings and Sovulewski Homesites (CA-MRP-1607/H), and the Yosemite Creek Dump (CA-MRP-1622/H). We will present the results of our successful use of archival data, remote sensing, and excavations to identify and interpret historic features associated with Yosemite's rich heritage.

**Halla, Ken**

*California State University, Monterey Bay - Cal State TEACH Special Projects*

***The Fourteenth Colony: An Interactive Investigation of California History***

Symposium 5, Mission Archaeology, Wireless Computing,  
 and the Evolution of the Virtual Learning Lab

Immersive 3-D or three-dimensional modeling applications have increased in sophistication and ease of use, and their respective potentials for the digital restoration and or reconstruction of archaeological and historic sites is still very much a work in progress. This paper will provide an overview of a current



CSU Monterey Bay initiative to model the archaeology and history of the California Central Coast by way of immersive 3-D visualizations of historic sites – including buildings and objects — and interactive mappings and electronic field guides of early California and its historic resources. This paper will in addition review other comparable 3-D visualizations of archaeological and historic resources in California and beyond.

**Hamilton, M. Colleen**

*Applied EarthWorks, Inc.*

***Capitol Living: Archaeology of Residential Sacramento***

Symposium 20, Capitol Living: Archaeology of Residential Sacramento

During 2000 and 2001, Applied EarthWorks performed recovery excavations in two Sacramento neighborhoods. Prompted by development of multiple blocks by DGS and CalPERS respectively, these excavations resulted in the evaluation of features dating to the 1850s through the early 1900s. Economic and social diversity among Sacramento's 19th century residential neighborhoods is apparent in the historical record, but archaeological investigations are limited. Previous archaeological studies focused on commercial sites in Old Town while exploration of residential sites has been restricted to single urban blocks and/or lots. These projects offer a rare opportunity to report on this segment of Sacramento's residential population.

**Hauer, A. Craig**

*Summit EnviroSolutions, Inc.*

***Quantifiable Methods to Assess Lithic Resource Quality in the Long Valley/Owens Valley Area***

General Session 15, Prehistory Central and Southern California

Within California, lithic resources played major roles in prehistoric societies. With tools used for subsistence activities, utilitarian needs drove raw material selection. Archaeologists have used raw material quality, or knappability, as a proxy for utility. However, the determination of raw material quality is related to familiarity with the raw material. This presentation outlines and discusses four methods for determining lithic resource quality in a quantifiable manner. Particularly, point metrics, frequency of manufacture breaks, the presence of reworking, and the amount of reworking in artifacts are used to determine the quality of lithic resources available in the Long Valley/Owens Valley region.

**Hector, Susan M.**

*Broken Fragments LLC*

***The Archaeology of Volcan Mountain Preserve, San Diego County: Results 1991-2002***

Symposium 13, Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Volcan Mountain Preserve includes open space owned by the County of San Diego, Department of Parks and Recreation; California State Fish and Game; San Dieguito River Valley Park; and San Dieguito Land Conservancy. A team of professionals and trained volunteers under the supervision of the author have surveyed over a thousand acres on Volcan Mountain over the past ten years. Over 60 historic and prehistoric sites have been recorded by the team. Several of the sites contain rock features, including rooms and walls. One of the most interesting of these sites is a large prehistoric site complex on the summit of Volcan Mountain. The complex contains stacked stone architecture, unique milling features, trade items, and habitation areas. Volcan Mountain also provided linkage between San Felipe Valley and the Cuyamaca Mountains through Arkansas Canyon, which contains a series of sites related to those in the upper elevations of the mountain.

**Herrmann, Myra**

*City of San Diego, Development Services Department*

***Tracing our Roots***

Poster/Video Session 21

The Avocational Committee is sponsoring this years Poster Session, which revolves around the conference theme "Tracing our Roots."

**Herrmann, Myra**

*City of San Diego, Development Services Department*

***Avocational Lunch***



**Hines, Phil***Off Highway Motor Vehicle Recreation Division, California State Parks***Sacramento Tesla, the First Commercial Coal Mine in California**Symposium 13, Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Tesla Mine is located in Corral Hollow Creek in the foothills of the coastal range between Tracy and Livermore California. Coal was first mined here in 1854. By 1898, the mine employed over 2000 people. Six hundred and twenty-nine thousand tons of coal valued at \$2,169,890, 447,084 tons of gravel, 12,596 tons of sand, and 25,227 tons of manganese had been mined by 1907. The buildings associated with the town site and neighborhoods were either destroyed by the 1911 flood or disassembled and moved off site. Remaining archeological features including root cellars, cabin flats and privies still offer a great opportunity for research and interpretive purposes.

**Hitchcock, John***Klamath National Forest**See James Barnes***Hollimon, Sandra E.***Anthropological Studies Center, Sonoma State University***“Wandering between two worlds, one dead, the other powerless to be born:”  
Archaeology and Identity at Fort Ross State Historic Park, California.**General Session 14, Historic Archaeology

The 1999 discovery of an isolated burial at Fort Ross State Historic Park presented archaeological and historical researchers with interesting interpretive challenges. The excavation of the Russian Orthodox cemetery at Ross established a consistent burial program in this remote colony of the Russian America Company. This skeleton was inconsistent with Orthodox burial rites, but did not fit local native mortuary practice either. Precontact Pomo groups cremated rather than burying. The skeleton's teeth showed wear that was typical of precontact California populations, but the body appeared to be too tall and robust to be either a Native Californian or a Native Alaskan. Mixed ancestry appeared to be the strongest possibility; therefore, mitochondrial DNA analysis was performed. The results suggested an intriguing life experience of “Fort Ross Man.” Inferences made about the identity of this person relied on archaeological and historical data, including reconstructed diet, activity patterns, and gender relations. By researching the life of one individual, it is possible to gain new insight into the broader context of the Russian colonial experience in California.

**Huerta, Bruno***California State University, Bakersfield**See Blendon H. Walker***Hughes, Richard E.***Geochemical Research Laboratory***Advances in Non-Destructive X-Ray Fluorescence****Analysis of Small Obsidian Specimens**Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Despite the successes in applying non-destructive x-ray fluorescence analysis to geochemically characterize geologic and archaeological obsidian, the inability to generate precise and accurate quantitative data on specimens less than ca. 10 mm in diameter and ca. 1.5 mm thick has been problematic. This paper presents the results of recent laboratory experiments on specimens smaller than 10 mm diameter and 1.5 mm thick, demonstrating that composition estimates generated for smaller flakes compare favorably to values determined for larger specimens. The paper concludes with consideration of some benefits to California and Great Basin archaeology that follow from the ability to analyze very small flakes non-destructively.

**Hull, Kathleen L.***University of California, Berkeley***Emergent Cultural Traditions in the Central Sierra Nevada Foothills**Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Study of contact-era archaeological assemblages from sites situated in the lower elevation areas of Yosemite National Park suggests that some projectile points dating to this time period reflect the

blending of cultural traditions of the Great Basin and northern San Joaquin Valley. This same pattern appears to extend down into the central Sierra Nevada foothills, and may mark one consequence of increased non-native presence and pressure on the coast at this time, and displacement of native people from their traditional territories.

**Hyder, William D.**

*University of California, Santa Cruz*

**Lee, Georgia**

***Rock Art Resources of the California State Parks***

Symposium 13. Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

California state parks are responsible for a significant number of rock art sites ranging from little known clusters of cupule rocks and incised stones to impressive and popular sites such as Painted Cave near Santa Barbara. We identify three constituencies whose needs must be addressed in managing these resources: Native Americans for whom the sites are tangible components of their cultural heritage; the research community for whom the sites are data in the quest to understand human behavior; and the general public for whom the park system holds sites in trust. The needs and interests of each constituency must be balanced in developing management plans and strategies for rock art sites.

**Hylkema, Mark**

*Bay Area District, California State Parks, San Francisco*

***Recent Archaeological Investigations at Año Nuevo State Reserve, San Mateo County Coast:***

***Chipped Stone Tool Assemblages***

Symposium 13. Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Año Nuevo State Reserve contains a very high density of prehistoric archaeological sites. Several of these sites have been excavated, most have been looted, and all have produced numerous chipped stone tools along with large volumes of debitage. These tools have also been found in context with abundant terrestrial and marine faunal remains, which provides a rare opportunity to examine the relationship between the tools and their function. The reserve contains the most predictable and accessible source for Monterey chert, and the sites discussed here have been dated and found to span much of the late Holocene period.

**Hylkema, Mark**

*California Department of Parks and Recreation*

*See Christyann Darwent*

**Jackson, Scott R.**

*Yosemite National Park*

***Archeological Compliance In Support Of Yosemite National Park's Trails Maintenance Program***

General Session 10. Prehistoric and Historic Archaeology of the Yosemite Area

Every year, Yosemite National Park trails department rehabilitates some portion of its 700 miles of wilderness trails utilizing several crews. As part of the park's Section 106/110 responsibilities, archeological work has been conducted for four years in response to these undertakings. This paper examines various topics related to project scoping, carrying out the inventory work, issues with backcountry trail camps and pre-contact settlement patterns, and results from the 2002 field season. The Pleasant Valley site (CA-TUO-4256) also demonstrates a case example of using shovel probes to conduct an initial assessment at one backcountry trail camp



**James, Steven R.**

*Cultural Resources Division, California State Parks, Sacramento*

***Native American Residential Patterns, Architecture, and Use of Space at Historic Spanish Missions: Comparisons from the American Southwest and California***

Symposium 13, Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson

Only a few examples of Native American residential patterns at Spanish missions in the American Southwest and California have been identified in the archaeological record. Following the Pueblo Revolt of 1680, the Hopi in northeastern Arizona reoccupied the 17th century Franciscan mission of San Bernardo de Awatovi and subdivided the large Spanish rooms into smaller units to fit their conception of residential space. In contrast, during the late 18th and early 19th century in California, living quarters were constructed for Native Californians who were brought into the Spanish missions as "neophytes." These native-occupied structures have been located at Santa Cruz, San Juan Bautista, and La Purisima missions, all of which are now preserved as State Historic Parks within the California State Park System. Differences between Spanish and Native American use of residential space, as well as intertribal patterns, are examined. The data are based on the results of archaeological investigations at the missions of Awatovi, Santa Cruz, San Juan Bautista, and La Purisima.

**Jenkins, Richard**

*California Department of Forestry and Fire Protection, Redding*

*See James Barnes*

**Jenner, Nancy**

*California State University, Fullerton*

*See Colleen Delaney-Rivera*

**Johnson, Jerry**

Symposium 9: In Search of the Past: Papers in Honor of Jerald Jay Johnson Discussant

**Johnson, Jerry**

Founders' Lunch Participant

**Jones, Terry L**

*Department of Social Sciences, California State University Bakersfield*

*See Kenneth W. Gobalet*

**Jones, Terry**

*California Polytechnic University, San Louis Obispo*

Symposium 13: Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson.

Discussant for Prehistoric Archaeology

**Joslin, Terry L.**

*University of California, Santa Barbara*

***Exploring Late Period Subsistence and Settlement Patterns:***

***A Perspective from the Morro Bay Watershed in San Luis Obispo County***

General Session 15, Prehistory Central and Southern California

Contemporary interpretations of Late Period occupations along the central California coast assert that a decrease in the productivity of maritime environments led to a shift toward an interior oriented settlement and terrestrial resource subsistence system. In the Morro Bay watershed along the San Luis Obispo County coast, temporal and subsistence information from recent excavations and available site data from this interval questions this assumption. This research addresses issues regarding the period's definition. New insights suggest that use of littoral resources from coastal and pericoastal sites within the watershed remained an integral aspect of Late Period adaptations.

**Kaldenberg, Rusell L.**

*Base Archaeologist, Department of the Navy, China Lake Naval Weapons Center*

***Thinking about Site Stewardship***

Symposium 17, California Archaeological Site Stewardship Program

This paper presents some thoughts about the successes of the California Site Stewardship Program and presents some ideas on where it should go from here. It has been driven by the Bureau of Land Management through the California Off Highway Vehicle Program and the Society for California Archeology. Much of the State currently has site stewards monitoring our heritage. Some thoughts are necessary regarding the evolution of the program with the idea of the site stewardship program becoming a fixture in California Historic Preservation.

**Kelly, Michael S.**

*URS Corporation*

*See Mark Hale*

**Kennedy, Michael A.**

*Department of Anthropology, University of California, Davis*

**Russell, Ann D.****Guilderson, Thomas P.*****Seasonal Shellfish Foraging Strategies from Bodega Bay, California***

Symposium 13, Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Recently there has been increased focus on the emergence of intensified maritime adaptations among hunter-gatherers; however, little is known about these strategies along the northern California coast. How intensively did hunter-gatherers utilize marine resources throughout the year in northern California? We measured  $\delta^{18}O$  and  $\delta^{13}C$  from the terminal margins of 14C-dated *Mytilus californianus* shells from the Bodega Bay region. We determined the harvest season by comparing these end values to the annual range of values of contemporaneous shells. Our preliminary results from Duncan's Landing indicate that exploitation of *M. californianus* was predominately seasonal (late summer/fall) during intervals between ~8500-250 BP.

**Kennedy, Michael A.**

*Department of Anthropology, University of California, Davis*

*See Christyann Darwent*

**Kinkella, Andrew**

*Greenwood and Associates*

***Violence in the Park: Burial at Arroyo Seco Park, South Pasadena, California***

General Session 15, Prehistory Central and Southern California

In September of 2002, a Native American burial was accidentally uncovered in the Arroyo Seco Park area of South Pasadena. Greenwood and Associates was called upon to remove and analyze the burial, which was covered by a stone cairn. Our preliminary findings show that this was a young adult male who experienced a violent death (three projectile points were found embedded within the remains). The burial will be related to the Southern California culture area as a whole and issues of violence in the archaeological record will be explored, including possible explanations for the violent acts perpetrated upon this individual.

**Kinoshita, Jun**

*Yosemite Archaeology Office*

***Archaeological Survey for Prescribed Fire Unit PW-3, Gin Flat, Yosemite National Park.***

General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

Yosemite National Park's Gin Flat prescribed burn unit presented unique challenges for cultural resources management in light of its size and limited existing survey coverage. Limited time and personnel available for survey required the development of a survey strategy that would facilitate site identification, preservation and protection. A predictive model of prehistoric sites and a Fire Return Interval



Departure model were used to propose a further survey of 2578 acres or 35%. This paper discusses the development and application of that strategy, and its implications for future work.

**Koerper, Henry C.**

*Cypress Community College*

**Mason, Roger D.**

***The Late Prehistoric Coastal Orange County Hokan Hypothesis: A Commentary***

General Session 15, Prehistory Central and Southern California

"Extraordinary claims require extraordinary proof," and extraordinary claims invite critical analysis. The nearly identical hypothesis that Hokan peoples inhabited coastal Orange County until just prior to contact (Cameron 2000) or into the early Mission period (Cottrell 1991) hold profound implications for ethnographic analogy applied to local past life-way reconstruction and for local culture history. We conclude, among other things, that the Juaneno were, after all, Shoshoneans, not Chumashan, Yuman, or some linguistically related peoples.

**Kowta, Makoto**

*Department of Anthropology, California State University, Chico*

***MtDNA and California Prehistory: A View from Chico***

Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

This paper examines the published mtDNA data on prehistoric and contemporary populations in the American West with the intent to explore the potential of such data to shed light on the culture history of California groups.

**Kowta, Makoto**

*Department of Anthropology, California State University, Chico*

***Connecting the Dots: California, Peru, and Fritz Riddell***

Symposium 13, Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson

The name of Francis A. Riddell will be forever associated with California archaeology, but he spent much of the last years of his career in Peru as President and driving force behind the California Institute for Peruvian Studies (CIPS). This paper traces the connections between Peruvian and California archaeology beginning with the seminal influence of the Peruvian archaeologist, Max Uhle, on the genesis of formal archaeology in California and ending with the completion of the circle with Fritz's involvement with CIPS.

**Kowta, Makoto**

*Founders' Lunch Participant*

**Kwock, Anita**

*Chinese Historical and Cultural Project*

*See Lillian Gong-Guy*

**Lee, Georgia**

*Santa Barbara Museum of Natural History*

*See William D. Hyder*

**Lightfoot, Kent G.**

*University of California, Berkeley*

**Parrish, Otis**

**Luby, Edward M.**

***The Kashaya Pomo Interpretive Trail Project***

Symposium 13, Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddell, Lee Motz, and Norm Wilson

This paper explores the creation of an interpretive trail detailing the culture history of the Kashaya Pomo tribe and their encounters with the Russian colony of Fort Ross (1812-1841). Situated in the Fort

Ross State Historic Park in Sonoma County, the proposed interpretive trail offers an exceptional opportunity for the public to view the archaeological remains of a multi-ethnic colonial community, and to understand how the first mercantile colony in California impacted local Indian peoples. The project is a collaborative effort of California State Parks, the Kashaya Pomo tribe, Caltrans, UC Berkeley, and SFSU. The purpose of the paper is to address several critical issues involving the development of the interpretive program. A significant challenge is the presentation of multiple histories of Fort Ross derived from archaeological research, native oral traditions, and archival documents. Another challenge is the public viewing of archaeological remains — is it possible to interpret and protect archaeological sites at the same time? What are the best mediums for conveying information to the public while walking the interpretive trail? An important issue is how to develop an efficient interpretive program that is cost effective in light of the current economic recession.

**Lindahl, Kathleen**

*Cultural Resources Division, California State Parks, Sacramento*

***North to South—Latitudes of Risk: A Survey of Coastal Sites in State Parks***

Symposium 13, Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

A survey of 92 coastal sites shows that human issues affect site condition and preservation probabilities at equal or greater rates than natural erosion issues. Visitor pressure, community development, changing forms of recreation, and public education (or lack thereof) have had major impacts on our fragile coastal sites. A gradient of impacts was seen from north to south within the state. Data from the survey will be used to develop a program of testing and stabilization during Phase II of this project.

**Loetzerich, Roscoe**

*TYBRIN Corp*

***Reaping What You Sow: 5 Years of Database Development***

Workshop 22 Moderator

**Loewe, Eric M.**

*Undergraduate Economics Major, Santa Clara University*

***From the Earth to the Heavens: An Economic and Architectural Examination of the Construction of the Third Santa Clara Mission***

General Session 14, Historic Archaeology

The construction of the Third Mission Santa Clara de Asis was a truly monumental task; yet two key questions concerning the construction effort have remained unanswered: how many materials, people and time was needed to complete the Mission? Once that question has been answered, we can ask the even more difficult question of how much would the Mission have cost if the missionaries were forced to pay the natives for their labor?

This first paper will attempt to answer these two key questions by examining the adobe bricks that were used to build the Church.

**Longfellow, Joy**

*LSA Associates, Inc.*

**Gerike, Christian**

**Palmer, Sara**

***Monitoring the Santarini Farmstead, Sonoma County, California***

General Session 14, Historic Archaeology

The Santa Rosa Geysers Recharge Project consists of the construction of a 41-mile pipeline to transport wastewater. Pipeline construction passed between the main house and archaeological features of the Santarini Farmstead, a National Register eligible property for its association with early 20th century Italian immigrants and the viticulture industry of Alexander Valley, and for architectural values. In order to avoid adverse effects to the house during construction geotechnical, structural, and vibration studies were done to develop a monitoring program. Adverse effects to the house and archeological features were successfully avoided through vibration, positional, and visual monitoring, and exclusionary fencing.



ABSTRACTS - L

**Lorden, Teresa M.***Department of Anthropology, University of California, Riverside****A Social History of California Archaeology and the Changing Role of California Indians.***Poster/Video Session 21

This poster will summarize research already undertaken for this project, particularly Oral Histories of some of the pioneering California archaeologists and anthropologists (Malcolm Farmer, Bill Wallace, Edith Taylor Wallace, Bert Gerow, Mark Kowta, Keith Johnson, Fritz Riddell, Bill Olsen, Al Elsasser, Dave Fredrickson, Gerald Smith, Charles Rozaire, Sylvia Broadbent, Florence Shipek, Claude Warren and Lowell Bean. I will also be asking for new contacts and information, particularly among the California Indian community and CRM professionals.

**Lorden, Teresa M.***Department of Anthropology, University of California, Riverside***McPherson, James*****Archaeology for Cultural Empowerment: The Development of a Culturally Sensitive Archaeological Training Program for Native American Site Monitors.***Poster/Video Session 21

The Temecula Band of Luiseño Mission Indians has operated a site monitor training program for several years through their Cultural Resources Department. For the past year, in collaboration with two graduate students from the UC Riverside Anthropology Department, UC Riverside Extension, and the Costo Endowment, a Site Monitor Training Certificate program was developed. The first class received their certificates at the end of September 2002. This program was designed to provide a model curriculum for a culturally sensitive site monitor training program. This program seeks to fuse the interests of sovereign Indian peoples protecting their cultural patrimony with the scientific expertise of professional anthropologists and archaeologists within a student-centered educational program. The prime objective was to create a tribally-focused, academically validated site monitor certification program. While seeking to educate Native Americans to speak "archaeologese", the instructors also learned to view an objectifying discipline from the side of the traditional "objects."

**Loyd, Janine***Tom Origer & Associates**See Tom Origer***Luby, Edward M.***San Francisco State University**See Kent G. Lightfoot***Mack, Joanne M.***University of Notre Dame****Looking for Shasta Villages on the Upper Klamath River***General Session 6, Prehistory Northern California

Between 1907 and 1919, C. Hart Merriam, interviewed Shasta people from Bogus, California, recording the names and locations of known Upper Klamath Shasta villages. From 1997 through 2000, an intensive survey of the Klamath River drainage upriver from Copco, California relocated all of the villages. In addition, other villages were recorded, many upriver from the recognized, eastern boundary for Shasta territory. The Shasta claim these villages and the Upper Klamath River into Oregon. Using characteristics of known Shasta villages, a model is developed and those villages claimed by the Shasta located east of accepted Shasta territory are compared to it.

**Manning, Stephanie***California Archaeological Site Stewardship Program Monitor, Berkeley****The Incomparable Moundsite at Petlenuc in San Francisco***Symposium 17, California Archaeological Site Stewardship Program

This talk will focus on the efforts to save what remains of the ancient native shellmound site in the scenic sandy cliffs of San Francisco overlooking the Pacific Ocean in part of the Golden Gate National Recreation Area. The native language grouping upon contact was identified as the Petlenuc or Yelamu people and their ancestors used this site for many centuries. Discussed will be the threatened condition of the few extant mounded sites that ring San Francisco Bay and citizen efforts to recognize these



important sites and protect them. At one time there were over 425 ancient shellmounds and although their fate was once the best kept secret of archaeologists, their fate depends on public education and the ! best efforts of native descendants, preservationists, history buffs, public agencies, teachers and neighbors. Site stewardship training will help oversee the condition of these moundsites and help guarantee their protection for future generations.

**Mason, Roger D.**

*The Chambers Group, Inc., Irvine*  
See *Henry C. Koerper*

**McFaul, Michael**

*LaRamie Soils Service*  
See *Christopher Dore*

**McGowan, Dana**

*Jones and Stokes*

***How to Make Money in CRM***

*Roundtable 2 Moderator*

**McGuire, Kelly**

*Far Western Anthropological Research Group, Inc.*  
See *Tom Mills*

**McPherson, James**

*Department of Anthropology, University of California, Riverside*  
See *Teresa M. Lorden*

**Mealey, Marla**

*Southern Service Center, California State Parks, San Diego*

***Fire-Affected Rock Features, Lithic Procurement, and the Oldest Site in the Unit: Surveys and Excavations at Torrey Pines State Reserve***

Symposium 13, Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Over the past few years, California State Parks has funded a number of small survey and excavation projects at Torrey Pines State Reserve in coastal San Diego County. During this work, we became aware of the abundance of the feature type that we are calling "fireaffected rock (FAR) features". Out of 79 prehistoric sites currently recorded in the Reserve, 50 have FAR features present. Most of the sites with these FAR features also have lithic components. Excavations on some of the FAR features have produced some interesting information, including the earliest date (7,110±120 YBP) recorded within the Reserve.

**Mendoza, Ruben G.**

*Institute for Archaeological Science, Technology, and Visualization*

***The Virtual Learning Lab in Archaeology: Preliminary Findings from Lab and Field-Based Applications of Wireless PDA's and Broadband Technologies.***

Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

This paper reviews preliminary findings from a Congressional award for "Wireless Technologies for Teaching and Learning" experimental projects initiative in archaeology currently underway at two early California Mission sites. The project, undertaken by the CSU Monterey Bay Institute for Archaeological Science, Technology, and Visualization under the direction of Dr. Ruben G. Mendoza intends to fully explore the potentials of wireless and broadband technology applications and wireless PDA systems in lab and field-based archaeological research. This paper will provide a preliminary assessment of the merits of the wireless research and demonstration project effort in question, and will in turn provide preliminary findings from current archaeological research at Mission San Carlos Borromeo del Rio Carmelo undertaken in January 2003.



**Mendoza, Ruben G.**

*California State University, Monterey Bay Institute for Archaeology*

**Graves, Christian**

**Gotshalk-Stine, Amy**

**Núñez, Gonzalo**

**Wallace, Charlie**

***From Stone Tools to Megabytes: Mission Archaeology, Interactive Multimedia and the Virtual Learning Lab***

Poster/Video Session 21

The deployment of innovative technologies in lab and field archaeology, and the electronic modeling and manipulation of archaeological sites and data, is a longstanding tradition in the discipline. This poster session features examples of some of that technology and multimedia now being brought to bear in the study of the early California Missions of San Juan Bautista and San Carlos Borromeo del Rio Carmelo.

Demonstrations will include both touch-screen and PDA versions of "Mission Ceramics: A Virtual Type Collection in Historical Archaeology," as well as a hands-on overview of a multimedia CD-ROM prototype concerned with Old Mission San Juan Bautista. In addition, this poster will feature charts and maps specific to recent findings obtained from a GPR (Ground Penetrating Radar) mapping and GIS (Geographic Information Systems) analysis of the aforementioned early California Mission sites.

**Mendoza, Ruben G.**

*California State University, Monterey Bay Institute for Archaeology*

*See Gonzalo Nuñez*

**Mendoza, Ruben G.**

*California State University, Monterey Bay Institute for Archaeology*

*See Michelle St. Clair*

**Mercer, Chris M.**

*Department of Anthropology, Humboldt State University*

*See René L. Vellanoweth*

**Meyer, Jack**

*Anthropological Studies Center, Sonoma State University*

***Fertile Ground: Joint Session of the SCA and Professional Soil Scientists Association of California***

Plenary Session 3

Geologists and soil scientists have made a number of significant contributions to the study of California archaeology over the past half a century or more. During that time, soil and geologic studies have become increasingly common and integrated parts of archaeological and cultural resources management investigations. Friday's first ever joint session of the SCA and the Professional Soil Scientists Association of California (PSSAC) examines the multi-disciplinary ties that exist between California archaeologists and earth scientists.

**Mikesell, Stephen D.**

*Deputy State Historic Preservation Officer*

***CRM - Then and Now: Reflections on the Past Quarter Century***

Plenary Session 3

The speaker has had two tours of duty at the Office of Historic Preservation: once in the 1980s and today, separated by almost 20 years of experience in project planning and delivery. The view from the OHP is one of the "big picture," which is difficult to see when focused on project delivery. The speaker will address how radically the "big picture" has changed since the 1980s, focusing on three developments: the broad popularity of historic preservation/CRM, relative to 20 years ago; the large number of stakeholders, relative to 20 years ago; and the degree to which California has fallen behind other states in key areas of archaeology and historic preservation work.

**Milliken, Randy***Consultant**See Randy Groza***Mills, Tom***CALTRANS District 9-Bishop***McGuire, Kelly****Gross, Phil*****“The Obsidian Trail”***Poster/Video Session 21

Half-hour documentary on the prehistory of Owens Valley, California, as seen through the eyes of archaeologists, scholars, and Native Americans. The story is told through a montage of interviews, cutaways, animations, dramatizations, and off-camera narratives. Archaeologists have been working in Owens Valley for over 50 years, trying to piece together the lifeways of its earliest inhabitants. This video helps to reveal the dynamic history of the inhabitants of the Owens Valley over the last 12,000 years.

**Montague, Sonny***Yosemite National Park****Archeology at Hetch Hetchy and Lake Eleanor, Yosemite Reservoirs***General Session 10, Prehistoric and Historic Archaeology of the Yosemite Area

The Hetch Hetchy and Lake Eleanor reservoirs inundate mid-elevation valleys in the northwestern portion of Yosemite National Park. Constructed as part of San Francisco's Hetch Hetchy Water and Power system ca. 1920, the dams pre-date formal archeological work in the park. Beginning in the 1950s, however, reservoir drawdowns have allowed for some archeological inventory. The documented sites represent diverse land uses, including American Indian occupation, homesteading, water and power development, and park administration. Surface observations indicate both positive and deleterious effects to sites as a result of inundation, and further archeological work is recommended to clarify issues of integrity and data potential.

**Moore, Jamie***California State University, Sacramento/Lassen National Forest****Acculturation Model for the Mountain Maidu***General Session 6, Prehistory Northern California

This paper developed an acculturation model for the Maidu of Plumas County. Testing of this model led to the formulation of a two-stage model that explained Mountain Maidu acculturation during the 19th century, and predicted the driving forces of cultural change. It also recognized what historical factors influenced the type of changes chosen by the Mountain Maidu. Lastly, the model suggested what artifacts the proto-historic sites would contain during different periods in the 19th century.

**Moratto, Michael J.***Department of Geography, California State University, Fresno****Looking Back: Advances in California Archaeology Since 1984***Plenary Session 3

Our knowledge of California prehistory has improved steadily during the past 20 years. This paper reviews some notable advances in Pleistocene and early Holocene archaeology, in building regional chronologies, and in such research domains as the evolution of social complexity and the meaning of rock art. Also reviewed is the influence of theoretical debate on the conduct and results of archaeological studies in California.



**Mosier, Dan L.***Tesla Historian****Tesla - When Coal Was King***Symposium 13. Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Tesla was a coal mining company town in eastern Alameda County, California from 1890 to 1915. It was founded by millionaire gold miner John Treadwell. Treadwell formed the San Francisco & San Joaquin Coal Company and opened two major coal mines which produced over 600,000 tons. This made Tesla the largest coal producer in California for nearly a decade and historically the second largest coal producer in the state. In 1901, the company built the first successful coal briquette plant at Stockton which brought it national fame. The town supported a population of 1500 and was built with all of the modern conveniences of the time - piped water and steam, electricity, telephone and telegraph lines, and sewer lines. The Western Pacific Railroad was born from the rails connecting Tesla with Stockton. Tesla clay and sand were also significant products mined in the later years.

**Murley, Daniel F.*****A Search for Ethnic/Cultural Identity: Quikertarmiut, Aleuts, Koniags, Pacific Eskimos and the Alutiiq of Kodiak Island***General Session 14, Historic Archaeology

The ambitious adventures of Russian exploration, expansion, and exploitation adversely affected many of the native people with whom they came in contact. From Siberia to Alaska to California, native lifeways were disrupted and permanently altered. In 1784, the "Russian Columbus," Gregory Shelikov, forcibly established a permanent Russian settlement on Kodiak Island. Seven thousand years of Native Alaskan cultural occupation on the Kodiak Archipelago crossroad would never be the same. The people of Kodiak were forced into settlements convenient for Russian exploitation of marine mammal resources and provisioning of the avaricious "trading" companies that would follow. In its quest for fur, the Russian American Company sent many Alaska Natives to these controversial settlements throughout the North Pacific, and to Hawaii and California in the 1800's. With the sale of Alaska to the U.S. in 1863, these and other Native Alaskans found themselves thrown into a maelstrom of cultural change.

To add insult to a century of injury, ambitious Americanist archaeologists, most prominently, Ales Hrdlicka of the Smithsonian Institution, excavated numerous sites on the Kodiak Archipelago. Hrdlicka, and his mostly well-intentioned colleagues, removed hundreds of human remains from these excavations, the most infamous excavation being at the Uyak Site (KOD-145).

The struggle for identity by this heavily impacted native group has come full circle with the repatriation of human remains from the Smithsonian and the establishment of an Alutiiq Museum and Archaeological Repository. Their story has touched many in the archaeological community, including early ethnohistorians, ethnographers and archaeologists from the Kurile Islands to California.

**Neff, Hector***University of Missouri, Columbia**See Christyann Darwent***Negrini, Robert M.***Center for Archaeological Research, California State University, Bakersfield**See Jill K. Gardner***Nettles, Wendy***Applied EarthWorks, Inc.****Diverse Residents, Modest Businesses, and Incipient Industry: The Archaeology of the CalPERS Headquarters Expansion Project***Symposium 20, Capitol Living: Archaeology of Residential Sacramento

In July of 2001, Applied EarthWorks completed archaeological work at the CalPERS Headquarters Expansion Project in Sacramento. Because of the compressed time frame of the project, remediation issues, and limited CEQA monitoring requirements, a streamlined approach to archaeological recovery was employed. The identification, evaluation, and recovery of deposits was guided by a comprehensive research design and was completed in a single field effort.

Artifact analysis shows that a combination of careful mechanical stripping, precision hand excavations, and specialized analysis renders a compelling view of an ethnically and economically diverse neighborhood which emerged between the gold rush and the turn-of-the-century.

**Newland, Michael David***Anthropological Studies Center, Sonoma State University****CRM Training as Sex Education for Archaeologists***General Session 6, Prehistory Northern California

The debate over teaching Cultural Resources Management (CRM) in academia continues despite research demonstrating that CRM provides jobs for graduates and provides funding to anthropology departments. This paper suggests that the debate, as it is currently structured, stems from attitudes within American culture in general and cannot be resolved within archaeology. It is therefore suggested that the debate be re-structured in terms "sex education" for archaeologists, where academic and private sector archaeologists are extended "family" sharing the responsibility of creating critically-thinking members of society and archaeologists who are well prepared to ethically conduct academic and public archaeological research.

**Newsome, Seth***University of California, Santa Cruz**See Christyann Darwent***Nilsson, Elena***URS Corporation**See Russell Bevill***Nuñez, Gonzalo***California State University, Monterey Bay Institute for Archaeology***Mendoza, Ruben G.*****Mission Ceramics: A Virtual Type Collection in Historical Archaeology***Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

This paper will introduce participants to a newly developed multimedia program intended to provide users with the sort of "virtual type collection" necessary for the analysis and identification of ceramics and other aspects of material culture specific to the archaeological study of the early California Missions. Conceived and designed for the expressed purpose of providing a basis for identifying specialized collections of Mission period (1769-1833) ceramics, one aspect of this program goes one step further in its recent deployment as a PDA handheld computer-based virtual type collection for the field identification of Mission era material cultures at both Old Mission San Juan Bautista and Mission San Carlos Borromeo del Rio Carmelo.

**Nuñez, Gonzalo***California State University, Monterey Bay Institute for Archaeology**See Ruben G. Mendoza***O'Brien, Christopher J.***USDA Forest Service/ California State University, Chico****Conserving the Present by Understanding the Past:  
the Role of Archaeology in Natural Resource Management***Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Excavations within the Ishi Wilderness area of northeastern California have yielded significant numbers of zooarchaeological remains, principally deer. In addition to providing important data on aboriginal subsistence and settlement, these remains also provide clues to the historical ecology of north Sierra Nevada deer herds. As they did in the past, deer play a pivotal role in human economies of northern California today. This paper examines the long-term relationship between human and deer populations as it relates to issues of conservation, game management and human impacts to the environment.

**O'Brien, Christopher***Lassen National Forest**See Greg Greenway*

**Olson, Bill***Founders' Lunch Participant***Orfila, Rebecca S.***California State University, Bakersfield****The Miners Camp at El Mirage: An Inventory of Artifacts and their Significance for the Relative Dating of Historical Activity in the Shadow Mountains, San Bernardino County, California***General Session 14, Historic Archaeology

In 2001, the Center for Archaeological Research at California State University, Bakersfield, in compliance with the contract let by Adella Schroth of the San Bernardino County Museum and the Bureau of Land Management, discovered an encampment suspected to be of a historical nature and focused around the mining of precious ore or minerals. The location was mapped and artifacts inventoried. Non-scientific dating methods are offered to ascertain a relative date of the use of the site.

**Origer, Tom***Santa Rosa Junior College***Loyd, Janine****Douglass, Robert*****Recent Historic Site Investigations along the Sonoma County Coast at Salt Point State Park***Symposium 13, Recent Archaeological Investigations in California State Parks: A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Santa Rosa Junior College archaeology students under the direction of Tom Origer, Instructor, have been conducting investigations at 19th century historic residential and industrial sites in Salt Point State Park. A wildfire in the fall of 1993 completely destroyed a historic barn and damaged other sites. Sites with perishable remains (e.g., wood) are clearly threatened by potential future wildfires and other forms of natural degradation. To date, 13 historic resources have been subjected to limited investigations designed to provide baseline information about their integrity and contents. Most sites and features appear to have been affiliated with 1870s logging and milling activities, tanbarking, and firewood; although some may be associated with earlier sandstone quarrying operations.

**Origer, Tom***Anthropological Studies Center, Sonoma State University  
See Alan Gold***Overly, Stephen A.***Archaeological Research Center, California State University, Sacramento****Results of a Comparative Investigation at a Persistently Used Landscape: Spatial and Temporal Structure of the Little Hot Creek Locality, Mono County, California***General Session 12, General Papers

This presentation details a comparison of site based and non-site biases for investigating a magnet location. Performed as a Masters thesis, each approach contributed information regarding the behavioral structure and chronology of the archaeological record. Application of both methods in one study enabled analysis of converging and diverging lines of evidence across these data-sets. Salient results summarized include the general organizational structure of activity across the locality and variation in the intensity and tempo of recurrent occupation at Little Hot Creek. These comparative results are used to address methodological and regional implications regarding how the archaeological record is typically investigated.

**Padon, Beth***Archaeologist, Discovery Works, Inc.****Progress Report on the California Archaeological Site Stewardship Program***Symposium 17, California Archaeological Site Stewardship Program

It has been a very busy time for the California Archaeological Site Stewardship Program (CASSP). This paper reviews CASSP activities and accomplishments of the past year, and describes the goals for next year.

**Palmer, Sara***LSA Associates, Inc.**See Joy Longfellow***Pape, Kevin***Gray and Pape, Inc.****How to Make Money in CRM***Roundtable 2 Moderator**Parkman, E. Breck***California State Parks, Silverado District, Sonoma****Mammoth Rocks: Rancholabrean Megaherbivore Behavior and the Quest for Paleoamericans***Symposium 13. Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Unique geological features were recently identified at the Mammoth Rocks Site, within Sonoma Coast State Beach, in northern California. The features consist of highly polished surfaces on Franciscan chert and blueschist outcrops. The features are found on vertical rock faces and on overhangs, and from near ground level up to a height of 396 cm. It is hypothesized that the upper features were produced during the late Pleistocene Epoch by now extinct Rancholabrean megafauna such as the Columbian mammoth and ancient bison. This paper is a discussion of the evidence suggesting that the Sonoma Coast features are indeed Rancholabrean rubbing rocks, and the implications for Paleoamerican archaeology. Attempts to date the site using AMS radiocarbon plasma-chemical extraction techniques, to probe the rocks for ancient DNA, and to recover fossil shed hair of Rancholabrean species from the soil are all discussed.

**Parrish, Otis***University of California, Berkeley / Kashaya Pomo Tribe**See Kent G. Lightfoot***Parrish, Otis***University of California, Berkeley / Kashaya Pomo Tribe****Native Traditions and Archaeology, A Virgin Landscape or a Mine Field***Plenary Session 3 Speaker**Phillips, George Harwood***University of Colorado**See Joan S. Schneider***Pierce, Wendy***California State University Sacramento****Pottery Use by Hunter-Gatherers in Owens Valley: Spatial and Chronological Results of a Fine Grained, Multi-Level Ceramic Analysis Program***General Session 12, General Papers

This paper presents results of a Masters thesis investigating the organization of utilitarian pottery technology in Owens Valley. Textural, morphological, petrographic, and Neutron Activation analyses were performed on sherds from over 30 sites between Big Pine and Manzanar. These data, along with information from existing literature, provide new insights into the spatial and temporal distribution of technological attributes, morphological traits and pottery frequencies in the region. These regional trends in the manufacture and use of pottery by hunter-gatherers demonstrate that ceramic analysis can contribute to the study of subsistence-settlement issues when pottery is viewed as a tool.



**Pletka, Nicole***California State University, Long Beach****A Nearest Neighbor Analysis of Newport Coast Archaeological Sites, Orange County, California***Poster/Video Session 21

The purpose of this study is to understand the distribution of archaeological sites in the Newport Coast area of Orange County, using a nearest neighbor analysis in a geographic information system (GIS). According to ethnographic accounts, the Gabrielino and Luiseno undertook organized trade of specialized resources. Maximizing trade efficiency may have been a strategy to cope with a variable environment. This study will show that clusters of sites are situated in such a way to be closest to clusters in different ecological zones and furthest from clusters in the same zone, thereby facilitating trade, minimizing subsistence risk, and minimizing competition.

**Polk, Michael R.***Sagebrush Consultants, L.L.C., Ogden, Utah***Anderson, Adrienne*****Central Pacific Railroad Operations and the Promontory Summit Roundhouse Excavation***Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Partial excavation of the historic Promontory Summit roundhouse structure was undertaken in 2002 at the Golden Spike National Historic Site at Promontory, Utah. This structure, dating from the 1870s or 1880s, was abandoned about 1913. The excavation, along with documentary information, resulted in identification of the structure's construction which helped to better understand its place in railroad operations over the transcontinental line during the late 19th Century. It is also the only historic railroad structure found at Promontory. The senior author acknowledges his gratitude to his field school professor, Dr. Jerald Johnson. Dr. Johnson taught some of the most refined field techniques, against which the author has measured much of his subsequent work.

**Praetzellis, Adrian***Professor of Anthropology and Director of the Anthropological Studies Center, Sonoma State University****A Ten-Minute History of Everything***Plenary Session 3

Academic field schools aside, the history of historical archaeology in California over the last 30 years is largely a product of CRM. As the opposition of Native peoples here and worldwide has led to a decline in the excavation of prehistoric sites, historical archaeology has become the Next Big Thing. Given this context, the interpretive/scientific potential of CRM-driven historical archaeology is huge, but dangers lurk in the shadows.

**Ramsay, Heather***University of Missouri, Columbia  
See Christyann Darwent***Reed, Judyth***Archaeologist, Ridgecrest Field Office of the Bureau of Land Management****Beyond Site Stewardship***Symposium 17, California Archaeological Site Stewardship Program

Trained volunteer site monitors have become a regular part of the BLM Ridgecrest Field Office cultural resources program. Many of the volunteers have taken the stewardship philosophy to heart and have expanded their interests and activities far beyond simply monitoring their assigned site or area. They have become indispensable crew members for both inventory and excavation work and have supported not only BLM work but research for several master's theses. Under the guidance of professional archaeologists they have acquired and honed skills in artifact and site recognition, inventory strategies, site recordation, site mapping, excavation techniques, and laboratory analysis techniques. While they work with BLM archaeologists they also become well acquainted with the challenges of cultural resource management, the kinds of risks that threaten the resource, the legal framework that applies to



cultural resources on federal lands, and the value and fragility of the local archaeological resource. Concerned site stewards armed with this knowledge and experience become a valuable support group in the local community, influence people around them by sharing their knowledge and experience, and provide important information from the local community to the professional archaeologists with whom they work.

**Reed, Judyth**

*California Archaeological Site Stewardship Program Monitor, Ridgecrest;  
and Archaeologist, Ridgecrest Field Office of the Bureau of Land Management  
See Bill Wight*

**Reynolds, Gnesa E.**

*Department of Anthropology, Humboldt State University  
See René L. Vellanoweth*

**Richards, Michael D.**

*Ancient Enterprises, Inc.*

**Backes, Clarus**

**Tabares, A. Natasha**

***Preliminary Investigations of Two Spring Sites in Dove Spring Canyon***

General Session 8, Prehistory Southern California

Preliminary investigations of two spring sites located in the Dove Spring Canyon area exhibit evidence of repeated occupation over a lengthy time period. The data was compiled based on previous site records and current site updates conducted by Ancient Enterprises, Inc under contract with the Bureau of Land Management (BLM). We compare and contrast the two sites examining the nature of the cultural materials and features observed, such as milling and rock art features, establishing the temporal and functional relationship between the two sites. A discussion of the suggested importance of these types of sites within the regional chronological framework is also offered.

**Richey, Serra K.**

*Department of Anthropology, Humboldt State University  
See René L. Vellanoweth*

**Ritter, Eric W**

*Bureau of Land Management, Redding*

**Crew, Harvey L.**

***The Multiplicity of Prehistoric Flaked Stone Tool Assemblages in the Northern Sacramento Valley***

Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

Archaeological evidence of prehistoric core-flake reduction in the northern Sacramento Valley, primarily derived from clasts of non-obsidian materials, suggests there is a multiplicity of technologies. These include centripetal, bipolar, unifacial, and informal core reduction methods. Cobble cores and flake tools exhibit a wide range of locality size, density, and industry variability. Observed scatters and isolates are thought to primarily relate to more than 3000 years of hunter-forager prospecting/assay work and activities associated with vegetal and animal procurement and processing in situations of low to moderate group mobility. Earlier sites are likely with potentially distinctive core-flake technology such as the unifacial reduction strategy apparently dominant during the Milling Stone Horizon. Chronological, technological and functional details remain poorly understood.

**Ritter, Eric W.**

*Bureau of Land Management, Redding  
See James Barnes*



**Rogers, Alexander***California Archaeological Site Stewardship Program Monitor, Ridgecrest***Rogers, Frances*****Monitoring and Recording of the Terese Site (CA-KER-6188)***Symposium 17, California Archaeological Site Stewardship Program

The Terese Site, located in the El Paso Mountains of eastern Kern County, has been known for years to hunters and off-roaders in the desert. In 2000, it was selected as a site for monitoring under the California Archaeological Site Stewardship Program (CASSP), the site stewards being the authors of the paper. Upon careful investigation, the site was found to be considerably more extensive than thought at first, covering an area of about 200 meters on a side. The site encompasses rock rings, bedrock mortars and milling slicks, large numbers of broken metates, extensive lithic scatters, rock art, and a large midden area. This report describes the site, progress to date, and plans.

**Rogers, Frances***California Archaeological Site Stewardship Program Monitor, Ridgecrest**See Alexander Rogers***Rosenthal, Jeffrey S.***Far Western Anthropological Research Group**See Jelmer Eerkens***Rosenthal, Jeffrey S.***Far Western Anthropological Research Group**See Randy Groza***Rozaire, Charles**Founders' Lunch Participant**Running, Garry L., IV***University of Wisconsin**See Christopher Dore***Russell, Ann D.***Department of Geology, University of California, Davis**See Michael A. Kennedy***Sampson, Michael***Southern Service Center, California State Parks, San Diego****Aboriginal Settlement in Mine Wash and Its Role in Local Prehistory, Anza-Borrego Desert State Park***Symposium 13, Recent Archaeological Investigations in California State Parks:A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

The project area, situated in the Colorado Desert region of eastern San Diego County, lies at the northern end of traditional Kumeyaay (or "Tipai") territory. It may represent an area occasionally shared with Cahuilla people. Ethnographic data for the Kumeyaay indicates that Indian people would have used Mine Wash and surrounding interior valleys for food-procurement and winter/spring settlement. Archaeological investigations during 1950s through 1980s provide support for the ethnographic model of aboriginal land-use. The aboriginal land-use pattern in Mine Wash and environs shows a single relatively large occupation location with abundant cultural remains, a few smaller-sized encampments, and numerous special-purpose sites, including, grinding/milling areas and roasting pits. Excavations conducted at the largest occupation site on Mine Wash yielded considerable evidence of plant-food processing, stone-tool manufacture and use, ceremonial activities, and participation in a wide-ranging trade network in Late Prehistoric times. The issue of ethnicity, explored using ethnographic accounts, artifacts, and the presence of exotic items, suggests aboriginal Kumeyaay most commonly used Mine Wash and surrounding locations.

**Saubel, Katherine Siva***Native American Heritage Commission and Cahuilla Elder**See Joan S. Schneider*

**Schneider, Joan S.**

*Department of Anthropology, University of California, Riverside*

**Saubel, Katherine Siva**

**Phillips, George Harwood**

***Preliminary Results of Archaeological Investigations at a Site near Santa Caterina Spring in Coyote Canyon, Anza-Borrego Desert State Park***

Symposium 13, Recent Archaeological Investigations in California State Parks:

A Symposium Dedicated to Fritz Riddel, Lee Motz, and Norm Wilson

Four rock features, visible after a recent brush fire in Coyote Canyon, Anza Borrego Desert State Park, were suspected to be the graves of four Native Americans of the historical period, executed in 1851 by a military firing squad in the final episode of the Garra Uprising. This paper presents the preliminary report of Native American consultation; archival, historical, and archaeological investigations of the site; as well as plans for future management.

**Schulz, Peter D.**

*Cultural Resources Division, California State Parks, Sacramento*

*See John W. Foster*

**Schulz, Peter D.**

*Cultural Resources Division, California State Parks, Sacramento*

*See Sherri M. Gust*

**Seifert, Betty**

*Jefferson Patterson Park Conservation Lab*

***Preservation of Recovered Maritime Cultural Resources.***

Roundtable 18 Speaker

**Seymour, Gregory R.**

*Las Vegas Springs Preserve*

**Warren, Claude N.**

***Joshua Tree National Park: Where Did Those Sherds Come From?***

General Session 8, Prehistory Southern California

Lower Colorado Buff and Tizon Brown Ware ceramics from a survey in Joshua Tree National Park were analyzed. Wares, types and regional variants based on temper and clay choice show interesting patterns of geographic distributions that correspond to known territories of protohistoric and historic indigenous groups. Ceramic wares can be assigned to Cahuilla, Serrano, Chemehuevi - known to have lived in or traveled through the Park area in the period just before and during first European contact.

**Shapiro, William**

*Pacific Legacy, Inc.*

***Evidence of a Unique Ceremonial Complex in Solano County.***

General Session 15, Prehistory Central and Southern California

Excavations at CA-Sol-379 in Solano County uncovered 29 charmstones associated with two burials dating to the early Middle Period. Unique qualities of the assemblage include that the charmstones were in matching pairs, many were manufactured from baked clay with an applied slip, and most of them exhibited a distinct phallic-like shape with faceted ends. Other burial associations included a beaver incisor, fish spear tips, ceremonial wands, and many shell and stone beads and ornaments. Other excavations at a nearby prehistoric site produced 36 burials, three of which had associated charmstones (n=29). These charmstones were also phallic-like in appearance with distinctive faceted heads, and four of them were baked clay. These two site excavations may indicate the presence of a unique prehistoric charmstone complex in this part of the Sacramento Valley and Delta region.

**Silva, Billy A.***Caltrans - Sacramento Headquarters****Remote Sensing for the 21st Century***Roundtable 16 Moderator**Silva, Richard***Yreka, CA**See James Barnes***Singleton, Claude***Bureau of Land Management, Alturas**See James Barnes***Skinner, Craig***Northwest Research Obsidian Studies Laboratory**See Alan Gold***Smith, David Glenn***University of California, Davis**See Jason Aaron Eshleman***Smith, Sheli***Napa Valley College****Preservation of Recovered Maritime Cultural Resources.***

Roundtable 18

Moderator

**Speakman, Robert***University of Missouri, Columbia**See Christyann Darwent***Stanford University Student Panel***Stanford University****Daily Life at the Market Street Chinatown: Preliminary Findings of Student Research Projects***Symposium 19: Rediscovering the Market Street Chinatown Assemblage:Progress in Curating and Analyzing an "Orphaned" Collection

Students enrolled in Stanford University's course, "Laboratory Methods in Historical Archaeology," share the preliminary findings of their research on the Market Street Chinatown collection.

**St. Clair, Michelle***College of William and Mary/ Pacific Legacy, Inc***Mendoza, Ruben*****Bones, Stones and Cut Marks: Analysis of Faunal Remains from Mission San Juan Bautista***Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

In June of 2001, preliminary analysis of faunal materials from the Southwest Convento of Mission San Juan Bautista was performed. Initial results revealed a varied diet of the mission inhabitants, including wild game, fresh water fish, shellfish, and sea mammals. Further analysis of dietary patterns at the mission are aimed at comparing this specific assemblage to the larger context of the California Mission system, particularly as this pertains to Hispanic and Ohlone dietary patterns and how this pertains to questions of acculturation and/or the cultural retention of traditional dietary patterns of those Native Americans living at Mission San Juan Bautista. The development of an Internet-based Type Collection for Mission era fauna will also be demonstrated.

**Stoeffl, Monika***Department of Anthropology, Humboldt State University**See René L. Vellanoweth***Storey, Noelle***Jones and Stokes****The Archaeology of Industrial Agrarian Capitalism and Framework for Evaluation of a Comprised Rural Historic Landscape: A Case Study on San Clemente Island***General Session 14, Historic Archaeology

Sheep ranching was one of the myriad boom and bust economies that defined Western economic development. On San Clemente Island, the sheep ranching industry successfully functioned from 1860 to 1936. Unfortunately, continued military use of the island since 1936 has either damaged or destroyed a significant portion of the sites and features that comprised the ranching enterprise. Today, much of the physical evidence of ranching activities on the island lies on the remains of various outlying ranch facilities. Because the NRHP landscape framework only allows for regional or site level analyses, future studies are severely limited under current management practices. This paper discusses a methodology for continued evaluation of the remaining ranching sites and features that incorporates landscape studies, new western history, and historical archaeology.

**Stratton, Susan***Department of General Services, Real Estate Division****California Curation in Crisis***Symposium 20, Capitol Living: Archaeology of Residential Sacramento

Is there a curation crisis in California Archaeology? Over the last 25 years, especially during the economic boom of the 1990s, archaeologists have removed material from sites at the highest rate in our history. Though various federal, state and even local laws mandate the proper storage of these recovered items, the large amount of archaeological riches may overwhelm the curatorial facilities in our state. At a time when we have more things to store than ever before, many facilities are more restrictive about what they will take and how much they will charge to store it. This paper discusses the present situation and the hard choices we face in the future.

**Sullivan, Tammy***Northern California Resources Center, Yreka**See James Barnes***Sutton, Mark Q.***Center for Archaeological Research, California State University, Bakersfield**See Jill K. Gardner***Swope, Karen K***Consulting Archaeologist, San Bernadino***Vredenburgh, Larry M.*****Historical Mining Claim Markers in the Desert West: Implications for Archaeological Interpretation***General Session 14, Historic Archaeology

Among the features of historical mining landscapes in the desert west are claim markers in a variety of forms. The interpretive utility of these features is frequently overlooked by archaeologists and at best, only minimal attention is given them as isolated elements of historical activity. These features, however, have the potential to yield important data concerning a patterned behavior of land use integral to understanding western mining heritage. Often, claim markers constitute the entire remaining physical record of mining activity in a particular locale. Typology and chronology for the features are proposed, and implications for archaeological research are provided.



**Sylvia, Barbara***Archaeologist, CALTRANS****Keeping Watch in Kern County: Site Stewardship at Tomo Kahni State Historic Park***Symposium 17, California Archaeological Site Stewardship Program

On June 9, 2001, the California Archaeological Site Stewardship Program (CASSP) launched a new site stewardship program at Tomo Kahni State Historic Park near Tehachapi in Kern County. As one of the first groups formed in partnership with California State Parks, the program has experienced its share of growing pains, but nonetheless has already experienced great success in protecting the sites within Park boundaries. A small group of dedicated volunteers maintains vigilant watch over the precious resources tucked away in the Sand Canyon area, bound on all sides by private property. Recent organization changes based on the unique situation at Tomo Kahni SHP will further enhance the success of the site steward program.

**Tabares, A. Natasha***Ancient Enterprises, Inc.**See Michael D. Richards***Tringham, Ruth***University of California, Berkeley****Real Audiences and Virtual Excavations (RAVE); the construction of a cultural heritage place at Çatalhöyük.***Awards Banquet Speaker**Vellanoweth, René L.***Department of Anthropology, Humboldt State University***Edgeworth, Laurel D.****Mercer, Chris M.****Reynolds, Gnesa E.****Richey, Serra K.****Stoeffl, Monika****Walton, Jon Michael*****Village Stones Speak: Late Pre-Contact Lithic Tool Production on San Nicolas Island, California.***Poster/Video Session 21

This poster focuses on the manufacture of stone tools at CA-SNI-25, a large village site located on the upper plateau of San Nicolas Island. The site, occupied between A.D. 1200 and European contact, contains a variety of features including hearths, house floors, and middens. We examine core and flake artifacts to understand the role of island conglomerate beds as a source of raw material for stone tool production. Mass and use-wear analyses provide data on how Native Peoples made and used stone tools. These results have implications for understanding the diversity of late pre-Columbian Village economies on the Channel Islands.

**Von Werlof, Jay***Founders' Lunch Participant***Voss, Barbara***Stanford University, Department of Social and Cultural Anthropology****Tales from the Midden: Material Culture and Dietary Practices from an Early Trash Deposit at El Presidio de San Francisco***General Session 14, Historic Archaeology

The 1999-2000 Funston Avenue excavations at the Presidio of San Francisco resulted in a remarkable archaeological discovery. Beneath the presidio quadrangle's eastern wing, which was constructed ca. 1815, lies an earlier archaeological deposit: a large, shallow pit filled with household trash and other debris. Sealed by the clay floors and stone foundations of the eastern wing, this midden and its

contents can be securely dated to the late 18th/early 19th centuries. Archaeological sampling revealed that the midden deposit is incredibly dense, yielding in excess of 9000 archaeological specimens per cubic meter. Analyses conducted on these materials by the author and by botanical and zooarchaeological specialists provide a rich source of data about life at the Presidio de San Francisco - especially regarding trade, local craft production, food consumption, social identity, and interactions between colonial and indigenous populations.

**Voss, Barbara**

*Stanford University*

***The Market Street Chinatown Archaeological Project:  
Integrating Research, Pedagogy, and Community Involvement***

Symposium 19: Rediscovering the Market Street Chinatown Assemblage:  
Progress in Curating and Analyzing an "Orphaned" Collection

The first phase of the re-curation and analysis of the Market Street Chinatown collection is being undertaken as part of a laboratory methods course taught in Winter Quarter 2003 at Stanford University. Through a "coaching" approach to classroom learning, students apply topics covered in traditional lectures and readings through hands-on participation in archaeological research – a process that culminates in the development of independent student research projects. Fieldtrips, guest lectures, public events, and a project website forge connections between the classroom and the communities and agencies involved in the larger project. Perhaps most importantly, conducting research on an orphaned collection leads students to engage with broader ethical and methodological issues in archaeology and cultural resource management.

**Vredenburg, Larry M.**

*Geologist, Bureau of Land Management  
See Karen K. Swope*

**Walker, Blendon H.**

*California State University, Bakersfield*

**Huerta, Bruno**

*An Analysis of the Archaeological Faunal Assemblage from CA-KER-229, Locus C*  
General Session 15, Prehistory Central and Southern California

As part of their archaeological investigations at the Nettle Springs site (CA-KER-230) in the mid-1950s, the Archaeological Survey Association of Southern California (ASA) conducted limited testing at the CA-KER-229 site. In 1971, Antelope Valley College (AVC) engaged in further work at CA-KER-229, recording a number of rock rings and milling features, and conducting surface collections and excavating at a number of features. This paper provides a report on the analysis of the faunal collection from CA-SCL-229, Locus C that resulted from these earlier investigations.

**Walker, Blendon H.**

*California State University, Bakersfield*

**Yohe, Robert M., II**

***A Statistical Analysis of the Physical Attributes of Rose Spring and Eastgate  
Projectile Points from Three Great Basin Sites***

General Session 15, Prehistory Central and Southern California

There has been some controversy over the last decade regarding the merging of Rose Spring and Eastgate projectile points into a single typological category. The so-called "Rosegate" points seem to fall morphologically into distinct groups that are distinguishable visually. These two groups are those that are basally-notched (previously referred to as Eastgate points) and those that are stemmed or corner-notched (traditional Rose Spring points). Statistical analysis was conducted on a set of visually segregated Rose Spring points and a similar grouping of Eastgate points from three Great Basin archaeological sites to determine if there were any significant differences in the physical attributes of each. Discriminant analysis and multivariate analysis of covariance demonstrate that there are statistically significant differences between Rose Spring and Eastgate points.



**Walker, Mark***Sonoma State University****An Archaeology of Labor: Craft Organization, Nativism, and the Railroad Workers of West Oakland.***General Session 14, Historic Archaeology

The working class is not a monolithic bloc, and the struggles of different groups of workers with each other are as significant in U.S. labor history as their struggles with employers. Archaeological work conducted by Sonoma State University during the Cypress Freeway Replacement Project afforded an unusually detailed glimpse into a late Victorian working-class neighborhood. This work permitted an analysis of the symbolic roles material culture played in the tensions and divisions between different groups of railroad workers in West Oakland.

**Wallace, Charlie***California State University, Monterey Bay - Social and Behavioral Sciences****Virtual Archaeology and the 3-D Visualization of Artifacts for Historical Archaeologists***Symposium 5, Mission Archaeology, Wireless Computing, and the Evolution of the Virtual Learning Lab

Recent efforts to model the archaeological record have taken on many and varied forms and media, including, but not restricted to multimedia. This presentation will review the merits and prospects of multimedia applications specific to the use of QuicktimeVR and related applications for modeling three-dimensional or 3-D objects and buildings specific to archaeology and related cultural resources. In this instance, materials specific to ongoing projects at the early California Missions of San Juan Bautista and San Carlos Borromeo del Rio Carmelo will be the subject matter of this demonstration and overview of appropriate technology applications in archaeology.

**Wallace, Charlie***California State University, Monterey Bay - Social and Behavioral Sciences**See Ruben G. Mendoza***Walton, Jon Michael***Department of Anthropology, Humboldt State University**See René L. Vellanoweth***Warren, Claude N.***University of Nevada, Las Vegas, Department of Anthropology**See Gregory R. Seymour***Warren, Claude**Founders' Lunch Participant**Warren, Keith***Applied EarthWorks, Inc.****East Enders: Excavation of a Capitol Neighborhood***Symposium 20, Capitol Living: Archaeology of Residential Sacramento

During the summer of 2000, Applied EarthWorks undertook archaeological excavations at the east end of Capitol Park in Sacramento. The East End Expansion project covered five city blocks that is to provide office space for state employees. Sandwiched between the wrecking ball and the ribbon cutting ceremony, and faced by contractors' deadlines and brazen bottle collectors, was some revealing archaeology.

This paper presents an overview of the excavations and artifact analysis. The diversity of once city neighborhood is represented in assemblages attributed to German brewers, Irish truckers, the city treasurer, contemporary writers, educators, socialites, and Weinstock Lubin veterans; Sacramentans all.



**West, Jim**

Founders' Lunch Participant

**Wigand, Peter E.**

*Center for Archaeological Research, California State University, Bakersfield*

*See Jill K. Gardner*

**Wight, Bill**

*California Archaeological Site Stewardship Program Monitor, Ridgecrest*

**Reed, Judyth*****Site Monitoring of the Bedrock Springs Archaeological District***

Symposium 17, California Archaeological Site Stewardship Program

The Bedrock Springs Archaeological District consists of approximately 800 acres of public land located in the northwest part of San Bernardino County, California. The area has been designated as an Area of Critical Environmental Concern (ACEC) since 1980. Monitoring of the area by the CASSP has occurred on a regular basis since June, 1999. A description of the variety of prehistoric cultural resources including middens, petroglyphs, pictographs, rock shelters, and milling features is provided. Some historic uses of the area are also described. Present day recreational activities and their impact on the resources are described. Site Steward monitoring experiences over the course of the last three years are presented.

**Williams, Audry**

*California State University, Bakersfield*

***Investigations at Freeman Spring (CA-KER-6106):******A Rose Spring Period Site in the Northern Mojave Desert***

General Session 15, Prehistory Central and Southern California

This paper presents the results of excavations at Freeman Spring, a Rose Spring period site in the Mojave Desert. The site is located along Walker Pass at Freeman Junction. Due to construction of an historic road and the Las Angeles aqueducts, some damage has occurred to the site. However, considerable materials were recovered. The Faunal assemblage consists of mostly rabbit bones. This paper will present the results of the analysis to date.

**Wilson, Ken**

*Six Rivers National Forest*

***Traditional Cultural Properties and the Megram Fire***

Symposium 9, In Search of the Past: Papers in Honor of Jerald Jay Johnson

The Megram Fire of 1999 on the Six Rivers National Forest impacted significant cultural resource values. Resources impacted include two large Traditional Cultural Properties (TCP) associated with Karuk, Hupa, and Tsnungwe traditional spiritual values. Both TCP were impacted by the fire and fire suppression activities. Traditional gathering areas associated with ethnobotanical plants for basket weaving, traditional spiritual activities, and subsistence were also impacted by the fire. This paper will discuss how the Forest worked with the Tribes and traditional practitioners to inventory, monitor, and restore these important cultural properties.

**Yohe, Robert M., II**

*California State University, Bakersfield*

*See Blendon H. Walker*

**Younkin, Elva**

*Maturango Musuem*

*See Alan Gold*





# Professional Soil Scientists Association of California

## Soils and Archaeology Symposium Abstracts

### **Cook, Terry**

*Soils Consultant  
See Randy Milliken*

### **Davis, Sid**

*Davis2 Consulting Earth Scientists, Georgetown, CA*

#### ***Holocene Aggradation, Early Corn and Cotton Farming, Determined From C14 and Pollen Analyses in Eastern Grand Canyon, Arizona, USA.***

Abandoned fields in Colorado River alluvium in eastern Grand Canyon show signs of primitive agriculture. Fine-sandy deposits that were farmed are now stranded approximately 15 meters above present river grade. Presence of maize pollen in association with buried soils near Comanche Creek suggests that farming began prior to 3130 yr B.P. Cotton, identified in buried soils near Nankoweap Creek, dates to 1310 yr B.P., approximately 500 years earlier than previously reported anywhere else on the Colorado Plateau. Farming spanned three millennia in this reach of the canyon. Entrenchment, starting approximately 700 yr B.P., making water diversion to fields infeasible, was likely responsible for field abandonment. Many tools and pottery fragments scattered on the surface are identified as artifacts associated with the Pueblo cultures. However, radiometric ages associated with the buried soils on the main stem Colorado River are contemporaneous with earlier cultures, Basketmaker II and III or Archaic.

### **Fenenga, Gerrit L.**

*California Department of Forestry and Fire Protection*

#### ***Archaeology for the Soils Scientist***

Archaeology is an inherently multidisciplinary field of science, which often calls upon the knowledge, and expertise of the soils scientist to help resolve an archaeological problem. This paper describes some basic theoretical and methodological concepts of modern archaeology and illustrates by example the relevance of soils science to archaeological science.

### **Johnson, John R.**

*Santa Barbara Museum of Natural History*

#### **Morris, Don**

#### ***Interdisciplinary Research at Arlington Springs***

In 1960, Phil Orr of the Santa Barbara Museum of Natural History excavated two human femora eroding from a depth of 11.5 meters in an arroyo wall at Arlington Canyon, Santa Rosa Island. Subsequent radiocarbon dating indicates that "Arlington Springs Woman" lived during the terminal Pleistocene. Recent field investigations by a multidisciplinary team have relocated the position where the human bone was originally found and have gathered new data on the chronological, geologic, and paleoenvironmental contexts of this extraordinary discovery.

**Meyer, Jack***Anthropological Studies Center, Sonoma State University, Rohnert Park, CA****Talking Dirt: Uses and Past Abuses of Soil and Geologic Studies in California Archaeology***

Geologists and soil scientists have made a number of significant contributions to the study of California archaeology over the past half a century or more. During that time, soil and geologic studies have become increasingly common and integrated parts of archaeological and cultural resources management investigations. While many studies have generated excellent technical data, most have failed to provide information that is directly relevant for addressing archaeological problems. By examining the historical context of important case studies, ranging from earliest attempts to current "state of the art" approaches, the nature and probable cause of such failures are revealed, as are the directions that may improve future studies.

**Milliken, Randy***Prehistory Consultant*

Cook, Terry

***"Where are Forensic Soils and Archaeology?"***

Human bone was exposed in a trench adjacent to a runway at a San Joaquin Valley military air base in 2001. The disarticulated bone was embedded in a yellow brown sandy sediment package beneath the runway. All exposed bone was recovered and later reburied by landholders and the local Indian community. This short paper will describe the proofs for the conclusion that the bone and its sandy matrix was imported from the Kings River Delta in the early 1960s, as part of runway sub-base preparation.

**Morris, Don***Channel Islands National Park**See John R. Johnson***Rockwell, Thomas K.***San Diego State University***Stafford, Thomas W., Jr.*****The Geologic Context of the Arlington Springs Site, Santa Rosa Island, Southern California***

The Arlington Springs archaeological site is embedded within a fill terrace deposit with over 200 discrete layers that span from about 20 to 8 ka in age. The horizon from which the human bones were recovered lies 14-15m in stratigraphic depth below the surface, although the horizon itself lies only 11.5m in depth, reflecting fluvial incisions and associated fills within the section. The filling was interrupted by at least two periods of incision, both before about 10 ka. These incisions may correlate to periods of temporary sea level stability superposed on the overall rise of late Pleistocene sea level.

**Rosenthal, Jeff***Far Western Anthropological Research Group, Inc.**See D. Craig Young Jr.***Sikes, Nancy E.***SWCA® Environmental Consultants****Environmental Reconstruction Using Stable Isotope (Carbon and Oxygen) Analysis of Soil and Paleosol Organic Matter and Carbonate***

Stable carbon and oxygen isotope values are used to reconstruct vegetation context and local climate of two paleolake basins. Paleosols were collected from landscape archaeology projects in East Africa. Modern soil and plant community analogs are used to interpret the isotopic data. During a warm, dry period in upper Member 1 (0.99 Ma), open C4 grassland with >90% C4 plants was present at Olorgesailie. A cooler and moister climate at Olduvai Gorge supported mixed grassy woodland and wooded grassland (40-55% C4 plants) in middle Bed I (~1.8 Ma) and a grassy woodland to wooded grassland with minor C4 grassland (55-85% C4 plants) in lowermost Bed II (~1.74 Ma).





### **Somers, Lewis**

*Geoscan Research (USA)/ArchaeoPhysics LLC*

#### ***Geophysical Survey in Archeology: Survey Modeling, Soils, Feature Contrast - - And All That***

Resistivity / conductivity, magnetic and ground penetrating radar (GPR), the simplest and most cost effective geophysical survey methods available for large area archaeological investigation, are intrinsically electromagnetic methods. As such, their responsiveness to an archaeological feature is directly proportional to the contrast between the feature and the surrounding soils. The contrasts of interest are resistivity / conductivity, magnetic susceptibility, and electrical permittivity (dielectric constant). Magnetic survey, the only passive method, also responds to the remanent magnetization (permanent magnetic effect) of an archaeological feature.

Modern numerical analysis tools can solve the three dimensional partial differential equations associated with modeling realistic archaeological problems. For a feature of known depth, geometry and contrast, it is possible to predict the survey instrument response. This is of value to cultural resource management and to field archeologists. Survey cost can be minimized while simultaneously ensuring sufficient data quality to meet the survey purpose. Conservation, in contrast to excavation, would also be well served.

This paper will present a graphic review of contemporary magnetic, resistivity and GPR surveys drawn from both historic and prehistoric archaeological sites. In addition, it will present a simple site-model suitable for numerical analysis and demonstrate the need for better knowledge of soil and feature electromagnetic properties. An interesting analogy with the traditional soils triangle is suggested. And, a few questions will be raised for discussion.

### **Southard, Randal J.**

*University of California, Davis.*

#### ***Soil Development and Landscape Age as Archaeological Tools***

Soils evolve from parent material via energy and matter fluxes. The extent of development, and possible subsequent destruction, of a given soil property is a function of the duration and intensity of those fluxes. Soil morphological horizons and features may be correlated to landscape age, provided other environmental variables are suitably constrained. Soil properties that might be useful for interpreting landscape age for archaeological studies in California include carbonate redistribution, soil reddening, organic matter accumulation, subsoil clay accumulation, and development of soil structure.

### **Stafford, Thomas W., Jr.,**

*Stafford Research Laboratories  
See Thomas K. Rockwell*

### **West, G. James**

*U.S. Bureau of Reclamation*

#### ***Pollen Analysis of Arlington Springs Sediments, Santa Rosa Island, California***

Sediments exposed within Arlington Springs Canyon were examined for their pollen content. Preservation was found to be highly variable and most sediments do not contain pollen grains. When present the concentration of pollen grains is low, with evidence of reworking of grains from earlier deposits in some of the later deposits. Nonetheless, sufficient numbers of identifiable grains thought to be contemporaneous with the sediments provide significant insights into the composition of late Pleistocene and Holocene vegetation communities of Santa Rosa Island.

**Young, D. Craig, Jr.**

*Far Western Anthropological Research Group, Inc.*

**Rosenthal, Jeff**

***Landscape Evolution and the Structure of the Archaeological Record in Coso Basin,  
Northern Mojave Desert, California***

Coso Basin contains a record of human occupation spanning the early through late Holocene. Detailed mapping of Quaternary deposits was conducted to better understand the geomorphic history and temporal variability of surface landforms and the way in which landscape evolution has influenced the nature and structure of the archaeological record in the basin. Independent archaeological information, including obsidian hydration and temporally diagnostic artifacts, confirm a relative sequence of landform development and provide insight into the timing and extent of Holocene aeolian and alluvial processes. This geo-archaeological information does not support previous claims for Pleistocene human occupation in the region.



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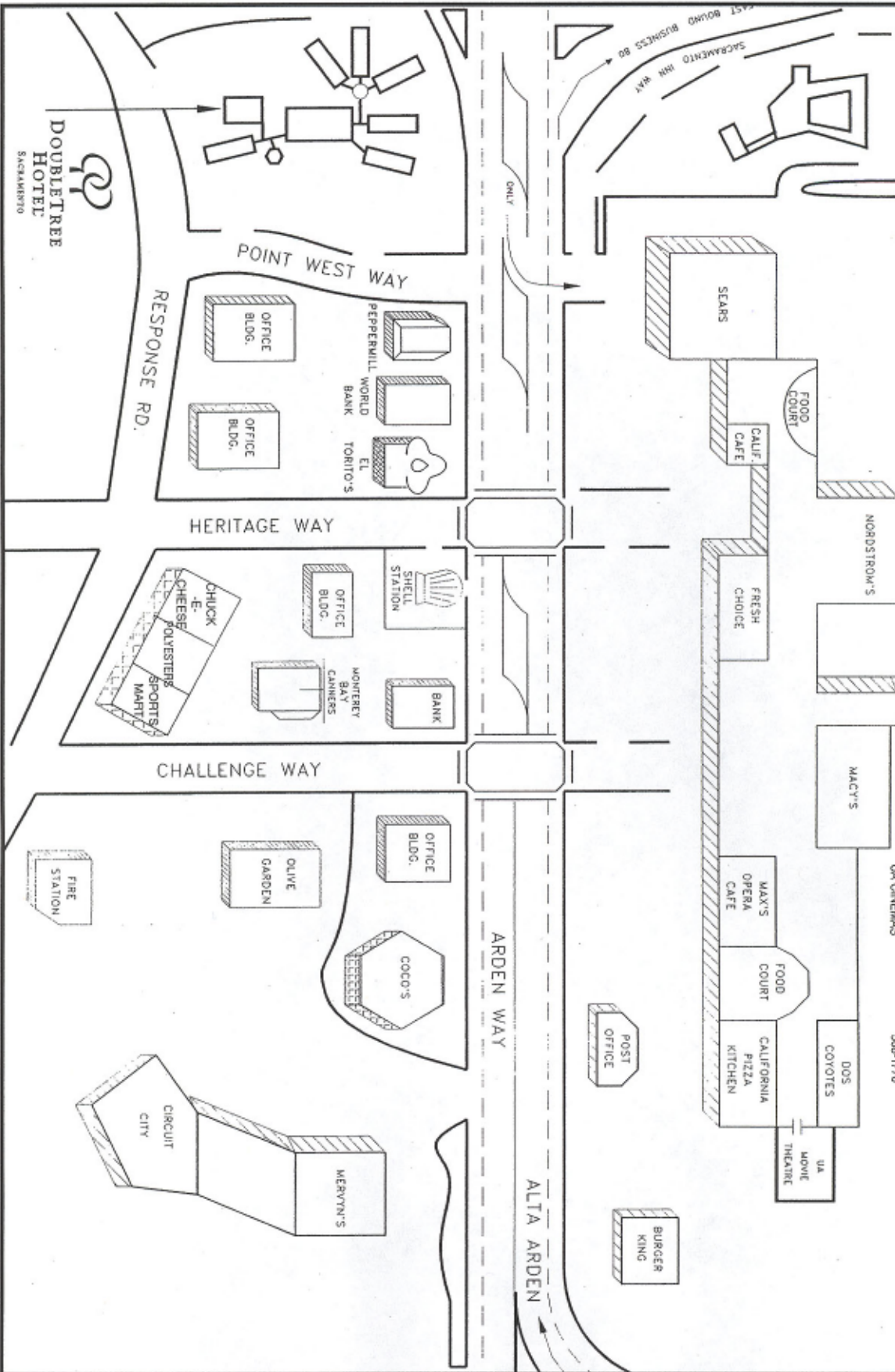
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