

Looking Ahead
for a Better View of the Past

Society for California Archaeology
38th Annual Meeting
Program



March 17-20, 2004
Riverside, California



38th Annual Meeting Hosts and Planning Committee

Statistical Research, Inc., Redlands

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Society for California Archaeology

38th Annual Meeting

Schedule of Events

*All events will take place in the Riverside Convention Center unless otherwise specified.
Some meetings will be in rooms at the Mission Inn or the Riverside Marriott.*

Wednesday afternoon, March 17

- 12:00–6:00 **SCA Board Meeting.** *Mission Inn, Monterey Room.*
- 1:00–5:00 **Early Registration.** *West Foyer.*
- 1:00–5:00 **Exhibitor Set-up.** *Ben H. Lewis Hall North.*
- 1:00–4:00 **Committee for Advanced Annual Meeting Planning.** *Mission Inn, San Gabriel Room.*
- 1:00–5:00 **California Archaeological Site Stewardship Program (CASSP) Training Session for Volunteers.** *Citrus Heritage Room.*

Wednesday evening, March 17

- 5:00–10:00 **Welcome Reception** (no-host bar). *Marriott, Salon A.*
- 6:00–8:00 **Early Registration** (continued). *Marriott, Salon A.*
- 7:00–9:00 **CASSP pizza dinner and social.** Hosted by Discovery Works (Chris and Beth Padon). *Riverside Brewing Company.*

Thursday morning, March 18

- 8:00–9:00 **Volunteer Orientation and Breakfast.** Hosted by LSA Associates, Inc. *East Foyer.*
- 8:00–12:00 **Registration.** *West Foyer.*
- 9:30–10:00 **Welcome and Introductions.** Presentation of Tom King Award. *Raincross Ballroom.*
- 10:00–12:00 **Plenary Session.** DNA Analysis and Archaeology—From Times Ancient to Current Communities. *Raincross Ballroom.*



Thursday afternoon, March 18

- 12:00–5:00 **Registration.** *West Foyer.*
- 1:30–3:30 **Symposium 1.** Applications of Archaeological Science. *Citrus Heritage Room.*
- 1:30–5:00 **Symposium 2.** Reading the Refuse: Material Culture Perspectives in Historical Archaeology. *La Sierra Room.*
- 1:30–4:30 **General Session 1.** Theoretical and Methodological Contributions to California Archaeology. *Arlington Room.*
- 1:30–4:00 **General Session 2.** Studies of California Rock Art. *Raincross Ballroom.*
- 1:30–4:30 **Workshop 1.** How to Consult with the California SHPO. *Aviator's Room.*
- 4:30–5:30 **SCA Native American Programs Committee.** *Citrus Heritage Room.*

Thursday evening, March 18

- 6:30–10:30 **Silent Auction and Beer/Wine-tasting Party.** Live Music by *De Nada*, Gourmet Mexican Food by *Kool Kactus Café*. *Office and Courtyard of Statistical Research, Inc., Redlands.* Presentation of Bennyhoff and Student Paper Awards, and Annual Meeting Certificates. Bus transportation leaves from *East Foyer* and returns to *Riverside Marriott*, starting at 6 p.m. and ending at 11 p.m. Maps are located in registration packets for those who prefer to drive. Limited tickets available at SCA Business Office table. Cost \$25.00.

Friday all day, March 19

- 9:00–4:00 **Wine Country Tour to Temecula wineries.** Includes wine tasting at two wineries, tour and luncheon at Callaway Vineyard and Winery, and 20 percent reduction on purchases. Van transportation leaves from and returns to *East Foyer*. Limited tickets available at SCA Business Office table. Cost \$50.00.

Friday morning, March 19

- 7:00–9:00 **CASSP Committee Meeting and Breakfast.** *Marriott, Imperial Room.*
- 8:00–12:00 **Registration.** *West Foyer.*
- 9:00–12:00 **Symposium 3, Part 1.** Returning to the Source: The Ethnographical Layer of Archaeological and Historical Research. *La Sierra Room.*
- 9:00–12:00 **Symposium 4.** A View Across the Cultural Landscape of the Lower Colorado Desert. *Arlington Room.*



- 9:00–11:30 **Symposium 5.** Fortifications and Families: El Presidio de San Francisco Presidio. *Citrus Heritage Room.*
- 9:00–11:30 **Symposium 6.** Holocene Estuarine Adaptations at Goleta Slough in Santa Barbara County. *De Anza Room.*
- 9:00–12:00 **Roundtable.** Get with the Program—An Introduction to the Section 106 Programmatic Agreement (PA) for the Federal Aid Highway Program in California. *Aviator's Room.*
- 9:00–12:00 **Poster Session.** *Ben H. Lewis Hall (Exhibits/Book Room).*

Friday noon, March 19

- 11:30–1:00 **Avocational Committee Workshop and Luncheon.** *Marriott Imperial Room.*

Friday afternoon, March 19

- 12:00–5:00 **Registration.** *West Foyer.*
- 1:30–5:00 **Symposium 3, Part 2.** Returning to the Source: The Ethnographical Layer of Archaeological and Historical Research. *La Sierra Room.*
- 1:30–5:00 **Symposium 7.** China Lake Naval Air Weapons Station—Protecting America's Heritage Resources for Fifty Years: A Symposium Honoring the Leadership of Carolyn Shepherd. *Arlington Room.*
- 1:30–3:30 **Symposium 8.** Beyond the Site Report: Creating Public Interpretive Programs. *Citrus Heritage Room.*
- 1:30–4:00 **Symposium 9.** Holocene Adaptations of the San Joaquin Hills Region, Coastal Orange County, California. *De Anza Room.*
- 1:30–4:30 **Workshop 2.** Geophysical Survey in California. *Aviator's Room.*
- 1:30–4:30 **Poster Session.** *Ben H. Lewis Hall (Exhibits/Book Room).*
- 4:00–5:30 **SCA General Meeting.** *Citrus Heritage Room.*

Friday evening, March 19

- 6:30–9:00 **Awards Banquet.** Presentation of Lifetime Achievement, California Indian Heritage Preservation, Mark R. Harrington, and Special Achievement Awards. Keynote Speaker Dr. John Rick, "Exploring the Foundations of Authority at Chavín de Huántar, Peru." *Raincross Ballroom.* Limited tickets available at SCA Business Office table. Cost \$38.00.



9:00–11:00 **After-dinner Party.** Cash bar, music by Robert Scarano. *East Foyer.*

Saturday morning, March 20

7:00–8:00 **SCA Incoming Board Meeting and Breakfast.** *Marriott Imperial Room.*

9:00–10:00 **SCA Proceedings: Authors' Meeting.** *De Anza Room*

9:00–12:00 **Jobs Fair.** *West Foyer.*

8:00–12:00 **Symposium 10, Part 1.** California Archaeology and Prehistory 2004. *Raincross Ballroom.* Open to the public.

9:00–12:00 **Symposium 11, Part 1.** He Walks, He Talks, He Reads and Writes Archaeology: A Session Honoring Jay von Werlhof's Fifty Years of Archaeological Contributions. *La Sierra Room.*

9:00–12:00 **Symposium 12.** The Santa Rosa and San Jacinto Mountains National Monument: Preserving a Cultural Landscape. *Arlington Room.*

9:00–12:00 **General Session 3.** Southern California Archaeology. *Citrus Heritage Room.*

Saturday afternoon, March 20

1:30–6:00 **Symposium 10, Part 2.** California Archaeology and Prehistory 2004. *Raincross Ballroom.* Open to the public.

1:30–4:00 **Symposium 11, Part 2.** He Walks, He Talks, He Reads and Writes Archaeology: A Session Honoring Jay von Werlhof's Fifty Years of Archaeological Contributions. *La Sierra Room.*

1:30–4:30 **Symposium 13.** The Archaeology of Baja California: Perspectives from a Dynamic and Growing Dialogue. *Arlington Room.*

1:30–3:00 **General Session 4.** Northern California Archaeology. *Citrus Heritage Room.*

Saturday evening, March 20

6:00–8:00 **Closing Reception.** Join the speakers and discussants from the "California Archaeology and Prehistory 2004" symposium. The reception includes a book signing of the 2004 edition of *California Archaeology* by Michael J. Moratto. Sponsored by Coyote Press. *East Foyer.*



Ongoing, Thursday through Saturday, March 18–20

- 8:00 am–8 pm **SCA Café and Bar.** *East Foyer.*
- 8:00 am–5 pm **Exhibits and Book Room.** *Ben H. Lewis Hall North.*
Exhibits will be set up Wednesday, 1–5 pm, and removed by Saturday, 6 pm.
- 8:00 am–5 pm **Quiet Room for Parents and Infants.** *University East.*
- 8:00 am–5 pm **Slide Preview Room.** *University West.*
- 8:00 am–5 pm **SCA Business Office.** Membership Renewal, Archaeology Week posters, SCA Gear, and Silent Auction office. *West Foyer in front of Box Office.*

Sunday, March 21

- 9 am–2 pm **Open House.** San Bernardino County Museum, Anthropology Department and Archaeological Information Center. Behind the scene tours with curator Adella Schroth and AIC coordinator Robin Lakska. Cesar Chavez Community Garden Celebration in the afternoon with special activities for toddlers. Free admission for SCA meeting registrants with name tags. No transportation provided. Museum is located at *2024 Orange Tree Lane, Redlands, I-10 California Street exit.* Maps are located in registration packets.



Annual Meeting Program

Thursday morning, March 18

Welcome and Introductions. *Raincross Ballroom.*

- 9:30 Welcome. Elena Nilsson, SCA President.
Recognition of outgoing SCA Executive Board members.
Introduction of incoming SCA Executive Board members.
Presentation of Tom King Award.
Greetings. Michael K. Lerch, Local Arrangements and Program Chair.
Traditional Blessing by Ernest Siva (Cahuilla/Serrano), Morongo Cultural Heritage Center.

Plenary Session: DNA Analysis and Archaeology—From Times Ancient to Current Communities.

Organizers: Amy J. Gilreath and Randall T. Milliken. *Raincross Ballroom.*

- 10:00 *Studies of Ancient DNA: Successes, Limitations, and Future Prospects.* David G. Smith.
10:30 *Extant Y Chromosome Lineages and Geographic Ancestry.* Peter A. Underhill.
11:00 *Mitochondrial DNA Diversity and Its Implications for Understanding California Indian Linguistic Prehistory.* John R. Johnson.
11:30 *Genetic Archaeology: The Recovery and Interpretation of DNA from Historic Sites.* Julie Schablitsky.

Thursday afternoon, March 18

Symposium 1. Applications of Archaeological Science.

Organizer: Robert M. Yohe II. *Citrus Heritage Room.*

- 1:30 *Immunological Protein Residue Analysis: An Update on Archaeological Applications.* Robert M. Yohe II and Robert E. Parr.
2:00 *Trace Element Characterization of Distinct Obsidian Sources in the Coso Volcanic Field, California, by Laser Ablation ICP/MS.* Anne Draucker, Dirk Baron, Robert Horton, and Robert M. Yohe II.
2:30 *Initial Efforts to Date Holocene Sediments of Tulare Lake Using Paleomagnetic Secular Variation.* Rob Negrini and Lorelea Samano.
3:00 *Characterization of Freshwater and Marine Radiocarbon Corrections at Elk Hills, Southern San Joaquin Valley.* Brendan J. Culleton, Denise DeJoseph, and Thomas L. Jackson.



Symposium 2. Reading the Refuse: Material Culture Perspectives in Historical Archaeology.

Organizer: Karen K. Swope. *La Sierra Room.*

- 1:30 *Introduction.* Karen K. Swope.
- 1:45 *In with the New and Out with the Old: Interpreting Household Transitions.* Thad M. Van Bueren.
- 2:00 *A Well-Studied Artifact: Irrigation-Related Artifacts and Their Implications to the Study of Homesites in Desert Environments.* Heather R. Puckett.
- 2:15 *Coins as an Artifact Type that Changes Function: Implications for Artifact Analysis.* Margie Akin.
- 2:30 *Glass and Ceramic Poultry Gastroliths, or Grits, in Historical Archaeological Deposits.* Karen K. Swope and Ross Coniglio.
- 2:45 *Historical Archaeological Collections as Evidentiary Proof to Substantiate Scientific Findings.* Ron May.
- 3:00 Break.
- 3:15 *At Home on Gold Mountain: An Historical and Archaeological Study of Chinese Americans in San Diego, California.* Steve Van Wormer.
- 3:30 *Rethinking Ethnic Markers in Material Cultural Analysis.* M. Colleen Hamilton, Wendy M. Nettles, and Keith Warren
- 3:45 *Subtle Ethnic Signatures and Socioeconomic Indicators of a Historic Cahuilla Village: The Spring Rancheria Example.* John D. Goodman II.
- 4:00 *Enhancing the Historical Record with Material Culture Analysis.* Joan S. Schneider and George H. Phillips.
- 4:15 Discussant. Sylvia M. Broadbent
- 4:30 Discussant. Paul G. Chace

General Session 1. Theoretical and Methodological Contributions to California Archaeology.

Chair: Joseph Chartkoff. *Arlington Room.*

- 1:30 *California's Prehistoric Tobacco Farmers and the Problem of Explaining the Absence of Food Production.* Joseph Chartkoff.
- 1:45 *Bear Shamanism and Social Control in Native California Societies.* Sandra Hollimon.
- 2:00 *Obsidian Trade and Cultural Tradition in Northwestern California.* Shannon Tushingam.



- 2:30 *Late-Period Resource Intensification in Sierra Valley, Eastern Plumas County: A Response to the Medieval Climatic Anomaly.* Sharon A. Waechter.
- 2:45 *Archaeological Investigation of Redeposited Shell Midden at San Mateo High School, San Mateo, California.* George McKale.
- 3:00 Break.
- 3:15 *Prehistoric Settlement Patterns and Resource Use Along the San Simeon Reef: New Insights on Maritime Adaptations from the Cambria Coastline.* Terry L. Joslin.
- 3:30 *Seeking Site Structure in the Ballona Wetlands, Los Angeles.* Richard Ciolek-Torrello and Donn Grenda.
- 3:45 *The Politics of Archaeology: Diverse Concerns and Interests at the West Bluffs Project, West Los Angeles.* John Douglass, Cindi Alvitre, and Jeffrey H. Altschul.
- 4:00 *Water and Power: Construction of the First Los Angeles Aqueduct, 1908–1913.* Michael S. Kelly.
- 4:15 *Snap Shot in Time: Life at the Dove Springs Aqueduct Construction Camp.* Mark Faull and Margaret Hangan.

General Session 2. Studies of California Rock Art.

Chair: Donna Gillette. *Raincross Ballroom.*

- 1:30 *An Overview of Esselen Pictographs.* Gary S. Breschini and Trudy Haversat.
- 2:00 *There Once Was a Road: Protecting the Belfast Petroglyphs.* Don W. Manuel.
- 2:15 *Yuman Creation Story: A Pictorial Synthesis.* Jay von Werlhof.
- 2:30 *More than Meets the Eye: Fluorescence Photography for Enhanced Analysis of Pictographs.* Clarus J. Backes, Jr.
- 2:45 Break.
- 3:00 *Excavation Results from Canyon Trail Park: A Rock Art Site in the Bay Area.* Donna Gillette and Kathy O'Brien.
- 3:15 *Pictograph Hand Print Analysis.* Steven M. Freers.
- 3:30 *A Race Against Time: An Intractable Rock Art Legacy (22-minute video).* Steven M. Freers.

Workshop 1: How to Consult with the California SHPO. 1:30–4:30

Presenters: John Sharp, Mike McGuirt, Jennifer Darcangelo, and Andrea Galvin. *Aviator's Room.*



SCA Native American Programs Committee.

Chair: Janet Eidsness. *Citrus Heritage Room.*

4:30 Open Meeting.

Friday morning, March 19

Symposium 3, Part 1. Returning to the Source: The Ethnographical Layer of Archaeological and Historical Research.

Organizers: John R. Johnson and Shelly Davis-King. *La Sierra Room.*

9:00 *Introductory Remarks.* John R. Johnson and Shelly Davis-King.

9:20 *Places and People: California's Native American Heritage Resources.* Janet P. Eidsness.

9:40 *The Colors of Native American Research: Red, White, and Blue.* Shelly Davis-King.

10:00 *A Search for Shasta Presence on the Upper Klamath River.* Joanne M. Mack.

10:20 Break.

10:40 *Ethnohistoric Accounts of the Interaction of the Bodega Miwok and Kashaya Pomo with the Russian American Company.* Glenn Farris.

11:00 *A Black Sickness in Yosemite: Ethnohistoric and Archaeological Evidence of Catastrophic Depopulation.* Kathleen Hull.

11:20 *The Early Mission Period Chumash-Salinan Boundary on California's South Central Coast.* Randall Milliken and John R. Johnson.

11:40 *Ethnohistoric Baseline Data for Interpretation of Archaeological Sites.* Chester King.

Symposium 4. A View Across the Cultural Landscape of the Lower Colorado Desert.

Organizer: Rebecca Apple. *Arlington Room.*

9:00 *Introduction.* Carrie Gregory.

9:15 *Ogilby: A Desert Station on the Southern Pacific Railroad.* Christy Dolan.

9:30 *Ethnohistoric and Ethnographic Context for the North Baja Pipeline.* Jackson Underwood.

9:45 *Petroglyphs at Palo Verde Point.* Ken Hedges.

10:00 *Pathways to the Past.* Rebecca Apple.

10:15 Break.



- 10:30 *Archaeological Investigations at the North and South Stallard Localities on the Lower Colorado River, California.* James H. Cleland.
- 10:45 *Flaked Stone Studies.* Brian Ludwig.
- 11:00 *Ceramics in Context.* John Hildebrand.
- 11:15 *The Sacred and the Mundane—Cultural Landscape Concepts and Archaeological Interpretation in the Colorado Desert.* James H. Cleland.
- 11:30 *Commentary of a Federal Archaeologist.* Joan Oxendine
- 11:45 Discussants. Jerry Schaefer and Jay von Werlhof

Symposium 5. Fortifications and Families: El Presidio de San Francisco.

Organizers: Cheryl A. Smith and Sannie Kenton Osborn. *Citrus Heritage Room.*

- 9:00 *If These Walls Could Speak.* Eric Blind.
- 9:15 *Beyond the Walls: Investigating Culture Contact at El Presidio de San Francisco—The Tennessee Hollow Watershed Archaeology Project.* Barbara L. Voss.
- 9:30 *Real Time Feedback: Implementing the Field Laboratory at the Presidio of San Francisco, El Polín Springs Summer 2003 Excavations.* Heather Blind and Michelle C. St. Clair.
- 9:45 *Public Interpretation at the Presidio of San Francisco.* Karis A. Eklund.
- 10:00 Break.
- 10:15 *Global Influences in New Spain's Remote Outpost.* Megan Wilkinson.
- 10:30 *What Do All These Bones Really Mean?: Zooarchaeological Method at the Presidio of San Francisco.* Cheryl A. Smith.
- 10:45 *Layers of History and Telling the Story.* Amy E. Ramsay.
- 11:00 *Plan to Plan: An Archaeology Management Strategy for the Future.* Sannie Kenton Osborn.

Symposium 6. Holocene Estuarine Adaptations At Goleta Slough In Santa Barbara County.

Organizer: Clayton Lebow. *De Anza Room.*

- 9:00 *Setting the Stage for Human Occupation: Large-scale Quaternary Climatic and Geomorphological Events at Goleta Slough.* Dina Coleman.
- 9:15 *Chronology and Technology at the West Campus Entrance Site, CA-SBA-51.* Michael A. Glassow and Dustin McKenzie.



- 9:30 *The Archaeology of CA-SBA-56: A Milling Stone and Canalino Site on the Goleta Estuary.* Jon M. Erlandson and Todd Braje.
- 9:45 *Goleta Slough Subsistence Activities at 5,500 Years Ago.* Michael A. Glassow.
- 10:00 Break.
- 10:15 *Middle Holocene Adaptations on Goleta Slough: A View from the Corona Del Mar Site (CA-SBA-54).* Valerie Levulett, William Hildebrandt, and Deborah Jones.
- 10:30 *Middle Holocene Rock Features and Subsistence Remains at CA-SBA-59.* Clayton Lebow.
- 10:45 *Late Holocene Adaptations at S'axpilil (CA-SBA-60).* Ann M. Munns.
- 11:00 *Mescalitan Island (CA-SBA-46): Anatomy of a Chumash Center.* Lynn Gamble.

Roundtable: Get with the Program—An Introduction to the Section 106 Programmatic Agreement (PA) for the Federal Aid Highway Program in California. 9:00–12:00

Organizers: Glenn Gmoser, Tina Biorn, Marty Rosen, and Stephanie Stoermer. *Aviator's Room.*

Poster Session, morning

Chair: Mark Allen. Posters will be displayed all day; authors will be present for one hour at the indicated times. *Ben H. Lewis Hall North (Exhibits/Book Room).*

- 9:00 *Late Prehistory Subsistence in the Northwestern Mojave Desert: Preliminary Faunal Analysis at the Red Mountain Spring Archaeological District.* Brooklyn Burns.
- 10:00 *Three-Dimensional Analysis of Late Prehistoric Hunting Tactics at Red Mountain.* Josine Jones, Jamie Walker, Mark W. Allen, Hubert Switalski, and Victoria Harvey.
- 11:00 *Historic Activity within the Red Mountain Archaeological District.* Heather Lynn Hudec.

Friday afternoon, March 19

Symposium 3, Part 2. Returning to the Source: The Ethnographical Layer of Archaeological and Historical Research

Organizers: John R. Johnson and Shelly Davis-King. *La Sierra Room.*

- 1:30 *Sacred Island Landscapes: Identifying Possible Ritual Features on Santa Cruz Island.* Jennifer E. Perry.
- 1:50 *Ethnohistoric Observations on the Material Culture of the Nicoleño.* Steve Schwartz.
- 2:10 *Myths about Myths: Clues to the Time Depth of California's Ethnographic Record.* Don Laylander.



- 2:30 *The Chemehuevi and Foreign Penetration of the Mojave Desert in the 19th Century: Population Movements and New Subsistence Adaptations.* David D. Earle.
- 3:00 Break.
- 3:15 *People and Plants in Bautista Canyon, Riverside County.* Michael K. Lerch, Donna Largo, William Pink, and Daniel F. McCarthy.
- 3:45 *The Relocation of the Capitan Grande Bands to Barona and Viejas in the 1930s.* Tanis C. Thorne and Heather Ponchetti Daly.
- 4:15 *The Varieties of Mission Experience: Continuities and Coalescences of Southern California Indian Tribal Groups.* John R. Johnson.
- 4:45 Discussants: Lowell J. Bean and Thomas C. Blackburn

Symposium 7. China Lake Naval Air Weapons Station—Protecting America’s Heritage Resources for Fifty Years: A Symposium Honoring the Leadership of Carolyn Shepherd.

Organizers: Russell L. Kaldenberg and Amy Gilreath. *Arlington Room.*

- 1:30 *A Review of the History of Archaeological Inquiry at China Lake between 1910 and 1950.* Russell L. Kaldenberg.
- 1:45 *Archaeological Resources at the China Lake Naval Air Weapons Station: “It Doesn’t Get Any Better Than This.”* C. William Clewlow, Jr., and Michael R. Walsh.
- 2:00 *The Pleistocene/Holocene Transition at China Lake.* D. Craig Young, Jr., and Jeffrey Rosenthal.
- 2:15 *The Surface Archaeology of Pleistocene Lake China.* Mark E. Basgall.
- 2:30 *Late Period Land Use in High and Low-Altitude Settings at China Lake.* Jerome King and William R. Hildebrandt.
- 2:45 *Bulbs, Seeds, and Climatic Variability: Evidence for Dietary Change from Thermal Features in Airport Lake Basin.* Jelmer W. Eerkens and Jeffrey Rosenthal.
- 3:00 *An Historical Perspective of Coso Rock Art.* Amy J. Gilreath and Elva Younkin.
- 3:15 Break.
- 3:30 *Obsidian Studies at China Lake.* Richard Hughes.
- 3:45 *Obsidian Production at the Coso Quarry: Implications for Regional Prehistory.* William R. Hildebrandt and Amy J. Gilreath.
- 4:00 *Itinerant Industry: 19th Century Charcoal Production in the Coso Mountains.* Allika Ruby.
- 4:15 *Life on the Edge: Soldiers and Miners on the 19th Century Coso Frontier.* Mary L. Maniery.



- 4:30 *Some Considerations Regarding the Cultural Resources Context of the South Range China Lake.* Richard Deis and James H. Cleland.
- 4:45 *“A Hole in the Ground with a Liar at the Entrance” (Twain): Mines and Mining Sites on China Lake Naval Air Weapons Station.* Rand Herbert.

Symposium 8. Beyond the Site Report: Creating Public Interpretive Programs

Organizers: Darren Modzelewski, Lee Panich, and Tsim Schneider. *Citrus Heritage Room.*

- 1:30 *Interpretive Issues and the California Missions.* Lee M. Panich.
- 1:45 *“Good Clamming” or “Protohistoric Midden”: Presenting Archaeology to the Public Through Photography at Fort Ross and at Bodega Bay, California.* Tsim D. Schneider.
- 2:00 *Issues in the Development of Archaeological Interpretive Trails: A Case Study from Fort Ross State Historic Park.* Kent G. Lightfoot, Otis Parrish, Roberta A. Jewett, and Sherry Parrish.
- 2:15 *Sifting Through the Evidence: Creating a Multivocal Past.* Darren Modzelewski.
- 2:30 Break.
- 2:45 *Multivocality and the Virtual Interpretive Environmental.* Sara Gonzales.
- 3:00 *Representations of Native Groups in the Interpretation of a Colonial Era Historical Site: Native Californians and Native Alaskans at The Ross Settlement.* Daniel F. Murley.
- 3:15 *The Evolution of an Archaeological After-School Program: Integrating the Needs of Multiple Stakeholders.* Amy E. Ramsay and John M. Matsunaga.

Symposium 9. Holocene Adaptations of the San Joaquin Hills Region, Coastal Orange County, California.

Organizer: Pamela Maxwell. *De Anza Room.*

- 1:30 *The Keith Companies’ Large-Scale Archaeology Projects in the Northern San Joaquin Hills, 1980s to Present.* Gavin Archer.
- 1:45 *CA-ORA-269: A Rockshelter Habitation in the San Joaquin Hills of Coastal Southern California.* Ivan H. Strudwick.
- 2:00 *Using Lithic Analyses to Understand Coastal Settlement in Southern California.* Scott Pletka.
- 2:15 *Comparisons of Faunal Assemblages from Diverse Archaeological Contexts within the San Joaquin Hills, Orange County, California.* Steven W. Conkling, Kevin S. Buffington, and Richard L. Reynolds.
- 2:30 Break.



- 2:45 *Muddy Canyon Archaeological District, Newport Coast, California: A Summary of Research.* William A. Sawyer.
- 3:00 *Daub: The Archaeological Value of Fired Clay at CA-ORA-269 in the San Joaquin Hills of Coastal Southern California.* Ivan H. Strudwick.
- 3:15 *An Analysis of Newport Coast Settlement Patterns: A GIS-based Approach.* Nicole Pletka.
- 3:30 *Recent Research at the Tomato Springs Site (CA-ORA-244).* Frederick W. Lange, Richard Ciolek-Torrello, Donn Grenda, Jeff Homburg, and Gavin Archer.

Workshop 2: Geophysical Survey in California. 1:30–4:30

Presenter: Lewis Somers. *Aviator’s Room.*

Poster Session, afternoon

Chair: Mark Allen. Posters will be displayed all day; authors will be present for one hour at the indicated times. *Ben H. Lewis Hall North (Exhibits/Book Room).*

- 1:30 *California Archaeological Site Stewardship Program.* Beth and Chris Padon.
- 1:30 *California Indian Heritage Center, Serving and Assisting the California Indian Spiritual Migration.* Leo Carpenter, Jr.
- 2:30 *Presenting the Past: Public Interest in Archaeology Exhibits.* Cindy Stankowski.
- 3:30 *70 Years of Aerial Photographs Reveal Chronology of Vehicular Impacts on the Blythe Geoglyphs.* Patrick Dempsey.

Saturday morning, March 20

SCA Proceedings–Authors’ Meeting. 9:00–10:00

Organizers: Amy Gilreath and Sharon Waechter. *De Anza Room.*

Presenters are encouraged to attend this meeting to make their intentions known about publishing their papers in the *SCA Proceedings*, obtain a current Style Guide, and ask questions and interact with the *Proceedings* Chair.

Jobs Fair. 9:00–12:00. *West Foyer.*

- CRM Tech
- Far Western Anthropological Research Group, Inc.
- Gallegos & Associates
- The Keith Companies
- LSA Associates, Inc.
- Statistical Research, Inc.
- SWCA, Inc.



Symposium 10, Part 1. California Archaeology and Prehistory 2004.

Organizers: Terry L. Jones, William R. Hildebrandt, Richard T. Fitzgerald, and Lynn H. Gamble. *Raincross Ballroom.*

- 8:00 *Introduction.* Terry L. Jones.
- 8:15 *Late Pleistocene and Holocene Environments and Environmental Change in California.* G. James West, Wallace Woolfenden, and contributions by others.
- 8:45 *One if by Land , Two if by Sea: Changing Perspectives on the Peopling of the Americas.* Jon M. Erlandson and Torben C. Rick.
- 9:15 *Linguistic Prehistory.* Victor Golla.
- 9:45 *The Prehistory of Northwest California: A Story of Continuity and Change.* William R. Hildebrandt.
- 10:15 Break.
- 10:30 *The Archaeology of San Francisco Bay: Twenty Years After.* Kent G. Lightfoot and Edward Luby.
- 11:00 *Culture, Complexity, and Chaos on the Central California Coast.* Terry L. Jones, Richard T. Fitzgerald, Mark G. Hylkema, Brian Wood, and Angela Barrios.
- 11:30 *The Central Valley: A View From the Catbird's Seat.* Greg White, Jeffrey Rosenthal, and Mark Q. Sutton.

Symposium 11, Part 1. He Walks, He Talks, He Reads and Writes Archaeology: A Session Honoring Jay von Werlhof's Fifty Years of Archaeological Contributions.

Organizer: Russell L. Kaldenberg. *La Sierra Room.*

- 9:00 *This is Your Life Jay von Werlhof—and it is a Good One.* Russell L. Kaldenberg.
- 9:15 *Watchamacallits, Doo-Dads, and Thingamajigs: Enigmatic Rock Features in the Mojave Desert.* Michael R. Walsh and C. William J. Clewlow, Jr.
- 9:30 *A New Look at Geoglyphs in the Panamint Valley.* Julie Burcell and Niccole Villa Cervený.
- 10:00 *Some New Geoglyphs in the Colorado Desert.* Jackson Underwood.
- 10:15 Break.
- 10:30 *A Functional Interpretation of Colorado Desert Rock Art.* Gerrit Fenenga.
- 10:45 *San Dieguito Sites in Anza Borrego Desert State Park.* G. Timothy Gross
- 11:00 *The Archeology of the Southwest Searles Lake Basin.* Judyth E. Reed.



- 11:15 *The Carrizo Collapse: Art and Politics in the Past.* David S. Whitley, Joseph M. Simon, and Johannes H. N. Loubser.
- 11:30 *Jay von Werlhof and the Archeology of Ocotillo Wells State Vehicle Recreation Area.* Phil Hines with Carmen Lucas.

Symposium 12. The Santa Rosa and San Jacinto Mountains National Monument: Preserving a Cultural Landscape.

Organizer: Wanda Raschkow. *Arlington Room.*

- 9:00 *The Agua Caliente Band of Cahuilla Indians: Partners in the Development and Management of the Santa Rosa and San Jacinto Mountains National Monument.* Barbara Gonzales Lyons.
- 9:15 *Native American Perspectives and Traditional Uses of the Santa Rosa and San Jacinto Mountains.* Donna Largo.
- 9:30 *Native American Places: Ethnographic Research in the Santa Rosa and San Jacinto Mountains.* Sylvia Brakke Vane.
- 9:45 *Curating and Interpreting a Cultural Landscape.* Ginger Ridgway.
- 10:00 *Trails and the Early Development of the Pinyon Flats Area.* Harry M. Quinn.
- 10:15 Break.
- 10:30 *Whose Cows Are These?* Dawn Wellman.
- 10:45 *U.S. Indian Service Water Projects.* Bob Tyler.
- 11:00 *Historic Mining in the Santa Rosa and San Jacinto Mountains National Monument.* Julie Harrison.
- 11:15 *An Archaeological Survey of the Santa Rosa Mountains National Monument, California.* Jerry Schaefer and Karen L. Crawford.
- 11:30 *Walking in the Footsteps of the Past: Managing Prehistoric Trails within a National Monument.* Stacy Schneyder Case and Wanda Raschkow.
- 11:45 *Power and Landscape in the Santa Rosa and San Jacinto Mountains.* Lowell J. Bean.

General Session 3: Southern California Archaeology.

Chair: Steven R. James. *Citrus Heritage Room.*

- 9:00 *Some Thoughts on Western Mojave Desert Prehistory.* Mark M. Campbell.
- 9:15 *On the Use of Weights-of-Evidence Analysis for Predicting the Incidence of Prehistoric Archaeological Sites in Unsurveyed Areas.* Harriot E. Spinney, Fred E. Budinger, Jr., and Steven Hoerber.



- 9:30 *The Calico Project at 40 Years: Questions Answered and Questions Still Unanswered.* Fred E. Budinger, Jr.
- 9:45 *A Return to Rose Spring (CA-INY-372): An Analysis of the Pottery from the 1987–1989 Excavations.* Deanna Heikkinen.
- 10:00 *Assessing the Variable Role of Bifaces in Hunter-Gatherer Toolkits of Eastern California.* Ryan T. Brady.
- 10:15 Break.
- 10:30 *Archaeological Investigations of the Proposed Wildwood Canyon State Park near Yucaipa in Southern California: A Preliminary Report.* Steven R. James, Darin S. Bowers, and Erica E. Degelmann.
- 10:45 *Cudahy Camp: Flux and Family in a Company Owned Community.* Mark R. Faull.
- 11:00 *The Western Santa Monica Mountains-Oxnard Plain Project: An Initial Report.* Colleen Delaney-Rivera.
- 11:15 *Roosters And Raptors: Cultural Continuity And Change At Big Dog Cave, San Clemente Island, California.* Candace R. Ehringer.
- 11:30 *Subsistence, Settlement, and Environmental Change at San Diego Bay.* Andrew R. Pigniolo.
- 11:45 *A Different Context: San Dieguito in the Mountains of Southern California.* Andrew R. Pigniolo.

Saturday afternoon, March 20

Symposium 10, Part 2. California Archaeology and Prehistory 2004.

Organizers: Terry L. Jones, William R. Hildebrandt, Richard T. Fitzgerald, and Lynn H. Gamble. *Raincross Ballroom.*

- 1:30 *Models Made of Glass: Holocene Culture Change in Northeastern California.* Kelly R. McGuire.
- 2:00 *The Sierra Nevada: Archaeology In the Range of Light.* Kathleen L. Hull.
- 2:30 *Prehistory of the Northern California Bight and Adjacent Transverse Ranges.* Michael A. Glassow, Lynn Gamble, Glenn Russell, and Jennifer Perry.
- 3:00 *Advances in Southern California Archaeology: Orange and San Diego Counties and the Southern Channel Islands.* Brian Byrd and L. Mark Raab.
- 3:30 Break.



- 3:45 *The Last 20 Years of Research into the Prehistory of the California Deserts.* Mark Q. Sutton, Jerry Schaefer, Mark Allen, Marie Cottrell, Jill K. Gardner, Mark Giambastiani, Alan Garfinkel, M. C. Hall, Russ Kaldenberg, Michael K. Lerch, Meg McDonald, Richard Norwood, David Rhode, Joan S. Schneider, Adella B. Schroth, and Robert M. Yohe II.
- 4:15 *Trade and Exchange.* Richard E. Hughes and Randall Milliken.
- 4:45 *Rock Art in the Golden State: Pictographs and Petroglyphs, Portable and Panorama.* Amy Gilreath.
- 5:15 Discussants: Michael J. Moratto and Joseph Chartkoff.
- 5:45 Presentation of the Martin Baumhoff Award to Michael J. Moratto and Joseph Chartkoff.

Symposium 11, Part 2. He Walks, He Talks, He Reads and Writes Archaeology: A Session Honoring Jay von Werlhof's Fifty Years of Archaeological Contributions.

Organizer: Russell L. Kaldenberg. *La Sierra Room.*

- 1:30 *Overview of the Imperial Valley College Field Archaeology Class 2003–2004.* G. Edward Collins and Karen McNitt.
- 1:45 *The Cultural Resources of the Chocolate Mountains.* Cheryl Bowden-Renna and Rebecca McCorkle Apple.
- 2:00 *Patayan I Fish Camps on the Northeast Shoreline of Lake Cahuilla.* Jerry Schaefer.
- 2:15 *Isolated Historic Debris Scatters: A Cautionary Tale.* Margaret Hangan.
- 2:30 *Fish and Cultural Traditions at Ahjumawi Lava Springs State Park: An Interpretive Video.* John Foster.
- 2:45 Break.
- 3:00 *Intensive Archeological Survey of Portions of the Coyote Mountains and Carrizo Peak, Imperial County, California.* William Eckhardt.
- 3:15 *Preservation of Quechan Sacred Sites.* Jamie Cleland.
- 3:30 *Personal Reflections on Jay von Werlhof.* Courtney Ann Coyle and Preston J. Arrow-weed.

Symposium 13. The Archaeology of Baja California: Perspectives from a Dynamic and Growing Dialogue.

Organizers: Matthew Des Lauriers, Sarah Matiussi Gutierrez, and Julia Bendimez Patterson. Travel grants for Baja California scholars sponsored by the Bureau of Land Management, Mooney & Associates, and Sannie and Daniel Osborn. Translation services for Spanish-language papers provided by Matthew and Claudia Des Lauriers. *Arlington Room.*



- 1:30 *An Update on Recent Archaeological Work in Baja California: The Role of the Baja California Norte Office of the Instituto Nacional de Antropología e Historia (National Institute of Anthropology and History, Mexico).* Julia Bendimez Patterson.
- 1:45 *La conformación de equipos coadyuvantes en la protección de sitios culturales en el estado de Baja California.* Jorge Serrano González.
- 2:05 *Recent Discoveries of the First Inhabitants of the Mexicali Valley.* Sarah Mattiussi Gutierrez.
- 2:20 *The Archaeology of Mexicali Desert.* Oswaldo Cuadra Gutiérrez.
- 2:35 *El Vallecito: Un sitio de la prehistoria tardía en Baja California.* Fernando Oviedo García.
- 3:00 Break
- 3:15 *Human-faunal Relationships in Northwestern Baja California.* Andrea Guía Ramírez.
- 3:30 *High Consumption of Marine Resources and CAM Plants among Prehistoric Humans of Southern Baja California Inferred from Carbon and Nitrogen Isotope Analysis.* Harumi Fujita and Masao Minagawa.
- 3:45 *Archaeology of Place in Northern Baja California: Environment, Ritual, and Social Memory.* Jerry Moore.
- 4:00 *Islands, Peninsulas and Regional Frameworks: Isla Cedros, Baja California and the Deconstruction of Marginality and Isolation in Baja California Prehistory.* Matthew R. Des Lauriers
- 4:20 Discussion.

General Session 4: Northern California Archaeology.

Chair: Gerald R. Gates. *Citrus Heritage Room.*

- 1:30 *Fire Use In Managing Landscapes: Challenges And Opportunities For Cultural Resource Managers.* Mike Taggart.
- 1:45 *Burned, Broken, and Buried: The Effects of Fire and Fire Management on Cultural Resources.* Richard D. Shultz.
- 2:00 *A Thematic Evaluation of the Research Potential of Small Sparse/Light Lithic Scatters on the Devil's Garden in Northeastern California.* Gerald R. Gates.
- 2:15 *Rotchev's Gamble: Recent Excavations of the New and Old Magazins, Fort Ross State Historic Park.* Mike Newland.
- 3:00 *Going Underground at Cal: On-Campus Excavation at the University of California, Berkeley.* Stacy Kozakavich.
- 3:15 *Reconstructing Context and Assessing Research Potential: Feature 20 from the San Jose Market Street Chinatown.* Elizabeth Clevenger.



Exhibitors

Ben H. Lewis Hall North

Aeoscreen
Amah Band of the Ohlone Indians
American Cultural Resources Association
Ballena Press
Cabrillo College Archaeological Technology Program
Center for Archaeological Research at Davis
Cotsen Institute of Archaeology at UCLA
Coyote Press
Dorothy Ramon Learning Center and Ushkana Press
Friends of Calico Early Man Site, Inc.
Imperial Valley College Desert Museum
J. B. Kingery
Louis Collins Rare Books
Malki Museum Press
Mesa Technical
Nex'wetem, Southern California Indian Basketweavers
Organization
Pacific Coast Archaeological Society
Palomar College Archaeology Club
Phillips' Books
Phoenix Obsidian Designs
Presidio of San Francisco Archaeology Lab
Santa Cruz Archaeological Society
San Luis Obispo County Archaeological Society
SCA Native American Programs Committee
Society for Historical Archaeology
SRI Cartography and Geospatial Technologies Department
University of Utah Press



SCA Awards

Each year at the Annual Meeting, the Society for California makes a number of awards to individuals who have distinguished themselves in various aspects of researching and preserving California's unique cultural heritage. This year the awards will be presented at several different times during our three-day meeting. The awards and their recipients are listed below under the venue and time they will be presented.

Plenary Introduction, Thursday 9:30 a.m.
Raincross Ballroom

Tom King Award: C. William Clewlow, Jr.

Silent Auction, Thursday 6:30 p.m.
Statistical Research, Inc., Office and Courtyard, Redlands

Student Paper Award: Clarus J. Backes, Jr. (General Session 2)

Annual Meeting Certificates: Planning Committee

Awards Banquet, Friday 6:30 p.m.
Raincross Ballroom

Lifetime Achievement Award: Lowell John Bean

California Indian Heritage Preservation Award: Carmen Lucas

Mark R. Harrington Award: Carolyn Shepherd

Bennyhoff Award: Deanna Grimstead and Brandon Patterson

Special Achievement Award: Carl Nolte, San Francisco Chronicle

Special Achievement Award: Glen Wilson



Plenary Abstracts

Studies of Ancient DNA: Successes, Limitations and Future Prospects

David G. Smith, Department of Anthropology, U.C. Davis

The prospects for, and limitations of, studies of ancient DNA (aDNA), presently restricted largely to mitochondrial DNA (mtDNA), to provide evidence for, or to test hypotheses about, prehistoric events, with particular reference to California, are described and the contributions that such studies have already made are reviewed. Stochastic change due to population structure, such as that due to founder effect and intergenerational genetic drift in small, isolated populations, has not sufficiently disrupted the patterns of regional and temporal continuity in Native American populations during their 15,000-year occupation of North America to preclude the identification of major population movements, replacements, and particularly close genetic relationships among some groups of tribes. However, establishing direct ancestor/descendant relationships between particular ancient and modern individuals or groups is doomed to a low rate of success; proving that any particular individual is/was or is not/was not a member of a particular tribe is, and always will be, beyond the capability of DNA analysis. For this reason, and due to the high cost in time and money required, such studies should be limited to samples and populations with the unique potential for testing well-defined hypotheses of particular anthropological importance. The views of Native Americans about human genetic research in general, about destructive studies of the remains of their ancestors in particular, and the prospects of their consent to, cooperation with, or collaboration in such studies is discussed.

Extant Y Chromosome Lineages and Geographic Ancestry

Peter A. Underhill, Department of Genetics, Stanford University School of Medicine

The field of human molecular evolution is predicated on the concept that patterns of DNA sequence variation in living populations encode aspects of human heritage. As long as a mutational change doesn't affect the individual's ability to reproduce, it may by chance be preserved and passed down to each succeeding generation, eventually becoming widespread in a population. Such mutations can serve as genetic markers. Since most of the haploid Y chromosome has the special property of not recombining, no confounding shuffling of DNA from different ancestors occurs. As a consequence, any Y chromosome accumulates all the mutations that have occurred during its lineal life span and thus preserves the paternal genetic legacy that has been transmitted over the generations. The sequential differentiation can be deciphered allowing the construction of an unequivocal genealogy reflecting the geographic relationships of various lineages (also known as haplotypes). Pronounced non-random correlations between Y chromosome haplotypes and geography often manifest as clines in frequency and/or accumulated diversity. Thus the phylogeographic pattern of Y chromosome differentiation offers stimulating clues concerning the origins of contemporary population affinities and substructure and provides an independent perspective to investigate ambiguities concerning resemblances and origins of populations based upon material culture, linguistic, and other genetic knowledge. Illustrative examples will be presented.

Mitochondrial DNA Diversity and Its Implications for Understanding California Indian Linguistic Prehistory

John R. Johnson, Santa Barbara Museum of Natural History, and Joseph G. Lorenz, Coriell Institute for Medical Research

The distribution of Native languages in California bespeaks of significant migration events in prehistory. For example, archaeologists, linguists, and physical anthropologists have all contributed to the effort to understand the population spread that created the "Shoshonean Wedge" between Chumash and Yuman peoples.



Recently compiled genetic data derived from the study of mitochondrial DNA lineages help to clarify the phylogeny of different central and southern California Indian populations.

Genetic Archaeology: The Recovery and Interpretation of DNA from Historic Sites

Julie Schablitsky, Museum of Natural History, University of Oregon

The ability to recover human DNA from artifacts rather than bone and tissue, plant remains, and visible stains, over 100 years old is a breakthrough in the forensic and archaeological fields. As in criminal cases, using physical evidence and DNA, scientists can potentially link people to an archaeological site without historical documentation. Recent work in Virginia City, Nevada revealed human DNA can survive on artifacts. Nuclear DNA was successfully recovered from a hypodermic syringe and clay smoking pipe stem. The results revealed the profile of the drug user and pipe smoker. In addition to recovering genomic nuclear DNA from inanimate objects, archaeologists continue to use mitochondrial DNA (mtDNA) to link human remains with living descendants. The recent recovery of a bone with chop marks from the Donner Party family campsite will be discussed, along with the future plans to extract mtDNA from human bone to unequivocally prove cannibalism took place among members of the Donner Party.



Symposium, Workshop, and Roundtable Abstracts

Symposium 1

Applications of Archaeological Science.

Organizer: Robert M. Yohe II, California State University, Bakersfield

In keeping with the theme of the annual meeting, this symposium expands on the topic introduced in the plenary with detailed consideration of other applications of archaeological science currently in use in California. Among these applications are immunological protein residue analysis and trace element characterization of obsidian sources using laser ablation coupled to an inductively coupled plasma mass spectrometer (ICP/MS). Other papers address efforts to date Holocene sediments using paleomagnetic secular variation, and characterization of freshwater and marine radiocarbon corrections.

Symposium 2

Reading the Refuse: Material Culture Perspectives in Historical Archaeology.

Organizer: Karen K. Swope, California Department of Transportation, San Bernardino.

The field of historical archaeology has grown beyond its infancy as a descriptive endeavor to become a contributor in focused anthropological inquiry. Although the parameters of cultural resources management (CRM) sometimes force the structure and content of archaeological investigations into a product with narrower applicability, historical archaeological artifact analyses now frequently arrive at substantive interpretations containing useful comparative data. Far from the “laundry lists” of early historical material culture studies, important research questions and intuitive analyses are increasingly included in research designs for sites of the historical past. Recent material culture studies in historical archaeology have pointed at the utility of artifacts as markers of economic groupings, consumer choice, social identities and group behaviors, and typify the potential for important studies even within the framework of CRM. The studies presented here are illustrative of the sound analysis and interpretation that are essential if we are to achieve valuable, contextual meaning from historical material culture studies.

Symposium 3

Returning to the Source: The Ethnographical Layer of Archaeological and Historical Research.

Organizers: John R. Johnson, Santa Barbara Museum of Natural History, and Shelly Davis-King, Davis-King & Associates.

This two-part symposium contains 14 papers that focus on the contributions made by ethnographic and historical research to archaeological problems and issues in cultural resource management. It features both studies based on ethnohistorical research, and project in which Native American consultation and participation formed on integral part of the research design. All of the papers demonstrate that consideration of ethnographic and historical viewpoints can enhance and expand the results of archaeological research.



Symposium 4

A View Across The Cultural Landscape Of The Lower Colorado Desert

Organizer: Rebecca Apple, EDAW, Inc.

Between 2000 and 2003, cultural resource studies were conducted in the Lower Colorado Desert in conjunction with the siting and construction of a natural gas pipeline. Native Americans and archaeologists worked with the pipeline company to avoid sites along the 80-mile route. Some of the areas where sites were not avoided did contain flaked lithics, ceramics, and trails. Because the entire region was of concern to Native peoples, in addition to data recovery excavations, treatment measures included off right-of way studies to help address these concerns. These efforts involved mapping geoglyphs, rock art, and trail segments. During the construction monitoring numerous buried charcoal features were encountered, some with associated cultural material that included ceramics. These various components of the project are addressed in a series of papers. A final paper ties these elements together in a discussion of cultural landscapes.

Symposium 5

Fortifications and Families: El Presidio de San Francisco.

Organizers: Cheryl A. Smith, University of California Berkeley; and Sannie Kenton Osborn, Presidio Trust

This symposium contains eight papers focused on historical archaeological studies at the Presidio of San Francisco. It includes the results of recent field investigations, laboratory studies, and public interpretation. The final paper reports the draft management strategy for the Presidio of San Francisco to preserve and enhance significant archaeological resources through interagency cooperation between the Presidio Trust and National Park Service and through the continuation or expansion of academic and public partnerships.

Symposium 6

Holocene Estuarine Adaptations at Goleta Slough in Santa Barbara County.

Organizer: Clayton G. Lebow, Applied EarthWorks, Inc.

The ancestral Goleta Slough, located along the Santa Barbara Channel mainland, is an estuary that encompassed approximately 19 square miles at its maximum about 6,000 years ago. Recent studies at archaeological sites in the slough vicinity have greatly expanded our knowledge of cultural adaptations during much of the Holocene. Papers in this symposium summarize these studies and examine prehistoric cultural adaptations as the slough infilled and shrank through time.

Symposium 7

China Lake Naval Air Weapons Station—Protecting America’s Heritage Resources for Fifty Years: A Symposium Honoring the Leadership of Carolyn Shepherd.

Organizers: Russell L. Kaldenberg, China Lake Naval Air Weapons Station; and Amy Gilreath, Far Western Anthropological Research Group, Inc.

This symposium traces the history of archaeological research China Lake Naval Air Weapons Station (NAWS) over fifty years. Following two introductory papers, we present two papers on the early Holocene archaeology of China Lake and two on late-period land use and adaptations. China Lake is well-known for its spectacular rock art, as well as for being an important source of obsidian in prehistory, and it has contributed information for important studies of both. Finally, China Lake NAWS also contains a wealth of cultural resources from the historical period, which is addressed in the concluding four papers.



Symposium 8

Beyond the Site Report: Creating Public Interpretive Programs.

Organizers: Darren Modzelewski, U.C. Berkeley; Lee Panich, U.C. Berkeley; and Tsim Schneider, U.C. Berkeley.

This symposium will address key issues in archaeological interpretive programs. It will take into account outdoor museums, historic sites, *in situ* archaeological resources, and virtual media. While many of the papers discuss the possibilities of broadening public interpretation at the Fort Ross State Historic Park in Sonoma County, other topics will include California Missions and archaeological outreach in Bay Area schools.

Symposium 9

Holocene Adaptations of the San Joaquin Hills Region, Coastal Orange County, California.

Organizer: Pamela Maxwell, U.S. Army Corps of Engineers, Los Angeles District.

Discussions of varying projects conducted in the San Joaquin Hills-Newport Coast region of Orange County from the 1980s through 2003 will provide insight on the regions prehistory from diverse points of view. Analyses include those of individual sites, archaeological districts, and regional investigations, as well as examinations of lithic assemblages, clay daub, and settlement patterns using GIS.

Symposium 10

California Archaeology and Prehistory 2004.

Organizers: Terry L. Jones, California Polytechnic State University, San Luis Obispo; William R. Hildebrandt, Far Western Anthropological Research Group, Inc.; Richard T. Fitzgerald, California Department of Transportation, Oakland; and Lynn H. Gamble, California State University, Chico.

In the twenty years that have passed since 1984, when Michael J. Moratto published *California Archaeology*, and Joseph and Kerry Chartkoff wrote *The Archaeology of California*, significant work has been conducted throughout the state. This all-day session, open to the public, will feature reviews of the current status of California archaeology from both thematic and regional perspectives by scholars who are active in their respective fields. The symposium will conclude with discussion from Moratto and Joseph Chartkoff.

Symposium 11

He Walks, He Talks, He Reads and Writes Archaeology: A Session Honoring Jay von Werlhof's Fifty Years of Archaeological Contributions.

Organizer: Russell L. Kaldenberg China Lake Naval Air Weapons Station.

This symposium celebrates fifty years of archaeological contributions by Jay von Werlhof. Not surprisingly, takes two full sessions and 17 papers to accomplish this, and even then barely scratches the surface of Jay's career. Two generations of archaeologists and Native Americans report on how his inspiration has influenced their work.



Symposium 12

The Santa Rosa and San Jacinto Mountains National Monument: Preserving a Cultural Landscape.

Organizer: Wanda Raschkow, Bureau of Land Management.

The Santa Rosa and San Jacinto Mountains National Monument was established by an Act of Congress on October 24, 2000. Congress noted that: “these mountains have special cultural value to the Agua Caliente Band of Cahuilla Indians, containing significant cultural sites, including village sites, trails, petroglyphs, and other evidence of their habitation.” The Monument was established, in part, to preserve these “nationally significant... cultural values.”

The Monument extends from sea level at the desert floor to elevations above 10,000 feet at the crest of the mountains. It is managed by the U.S. Forest Service and Bureau of Land Management in partnership with the Agua Caliente Band of Cahuilla Indians. This symposium will provide a rounded view of the National Monument as a significant cultural landscape. Topics will include a review of recent archaeological surveys, historic and prehistoric resources, ethnography of the Cahuilla Indians, Cahuilla perspectives on the land and its resources, as well as a summary of the role the Cahuilla play in managing the monument and preserving this cultural landscape.

Symposium 13

The Archaeology of Baja California: Perspectives from a Dynamic and Growing Dialogue.

Organizers: Matthew Des Lauriers, U.C. Riverside; Sarah Matiussi Gutierrez, Instituto Nacional de Antropología e Historia (INAH), Mexicali Branch, Mexico; and Julia Bendimez Patterson, INAH.

This symposium provides an update on recent archaeological work in Baja California conducted by archaeologists in the Baja California offices of the Instituto Nacional de Antropología e Historia, or INAH (National Institute of Anthropology and History, Mexico), as well as work by American archaeologists working in Baja California. It addresses archaeological mitigation of the effects of large international corporate development on cultural resources, and the results of field research in areas running the full length and breadth of the Peninsula. The results are often fascinating, some distinguishing Baja California from neighboring regions, while others provide definite cultural and historical links to Alta California.

Workshop No. 1

How to Consult with the California SHPO.

Presenters: John Sharp, California Department of Transportation; Michael D. McGuirt, California Office of Historic Preservation; Jennifer Darcangelo, California Department of Transportation; and Andrea Galvin, Office of Historic Preservation.

Most undertakings in California subject to Section 106 of the National Historic Preservation Act require some level of consultation with the office of the California State Historic Preservation Officer (SHPO). The actual mechanics of this consultation, however, are not always readily apparent to project advocates seeking SHPO’s comments and/or concurrence on their undertakings. This workshop has two key purposes: to explain how SHPO’s Section 106 review process actually works, and to provide practical tips on how to guide projects through SHPO review as smoothly and quickly as possible. Topics include: how submittals are processed at SHPO; how to improve formal and informal communication with SHPO staff; and what reviewers are looking for in submittals addressing the different steps of the 106 process, from §800.3 (Initiation of the Process) through §800.6 (Resolution of Adverse Effects). Workshop materials will include examples of successful submittal letters and effective supporting documentation of various types. This workshop is intended for agency and private-sector cultural resources managers and practitioners who consult with SHPO and already have a basic working knowledge of Section 106.



Workshop No. 2

Geophysical Survey In California Archaeology.

Presenter: Dr. Lewis Somers, Geoscan Research (USA), Archaeo-Physics LLC

The first half of this workshop will review basic geophysical concepts, survey methods, and case studies drawn from historic and prehistoric California and the Southwest. The second half will be an attendee's roundtable discussion where resource management and principal investigator issues as well as the practical field archaeology "tech" issues can be presented and discussed. Our goal is to develop a competent conceptual understanding of when, where, and how to integrate geophysical survey with traditional archaeological practice.

The geophysical contrast of an archaeological feature has its origin in site formation and post-occupation processes. The nature and origin of this contrast will be developed and its influence on magnetic, GPR, and resistivity survey design demonstrated with case studies. Integration into the research design, site selection, survey design, field methods, data processing, cultural interpretation of geophysical data, ground truthing results, and the overall cost-benefit of geophysical survey are representative topics. Of particular interest to the presenter is the In-House vs. Contract surveyor question.

Roundtable

Get with the Program: An introduction to the Section 106 Programmatic Agreement (PA) for the Federal Aid Highway Program in California.

Presenters: Glenn Gmoser, Archaeologist, Cultural Studies Branch, Caltrans Sacramento; Tina Biorn, Archaeologist, Native American Consultation Branch, Caltrans Sacramento; Marty Rosen, Archaeologist, Heritage Resource Coordinator/Local Assistance, Caltrans District 11, San Diego; Stephanie Stoermer, Environmental Program Coordinator, FHWA California Division.

This session is designed as a roundtable discussion to introduce the newly executed Caltrans/ FHWA Section 106 Programmatic Agreement (PA) to those consultants and others who will either be working for Caltrans directly or assisting local agencies and governments with projects requiring FHWA funding or approvals. Representatives from Caltrans and the FHWA will provide brief overviews of the major provisions and lead an open discussion/Q&A on the roles, responsibilities and requirements for work undertaken under the PA.



Paper and Poster Abstracts

Akin, Margie (Molina Healthcare/University of California, Riverside)

Coins as an Artifact Type that Changes Function: Implications for Artifact Analysis

Symposium 2

The material culture that surrounds us everyday has a profound impact on how we view and understand recovered artifacts. Although the objects we use everyday often change function during their use-life, we often fail to see that change because we are so close to them. Recognizing how objects change function is even more difficult to see in the archaeological record. This paper will use coins as an example of how artifacts can change function, our difficulty in seeing that change, and the impact of that phenomenon on our ability to understand the archaeological record.

Allen, Mark W. (California State Polytechnic University, Pomona)

see **Jones, Josine**

Allen, Mark (California State Polytechnic University, Pomona)

see **Sutton, Mark Q.**

Altschul, Jeffrey H. (Statistical Research, Inc.)

see **Douglass, John**

Alvitre, Cindi (University of California, Los Angeles)

see **Douglass, John**

Apple, Rebecca (EDAW, Inc.)

Pathways to the Past

Symposium 4

Information from Native Americans and ethnographic accounts identify the Colorado Desert as an area of extensive travel during prehistoric times. Preservation of these trails is important to the local Native Americans who maintain ties to the area and to the public agencies that own most of the land. Most of the archaeological data begin collected in the area of small block units or narrow linear corridors, which means that linear archaeological sites such as trails tend to be poorly represented in the regional database. This study integrates archaeological field investigations, archival research, and GIS modeling to address routes and associated materials of prehistoric trails.

Apple, Rebecca (EDAW, Inc.)

see **Bowden-Renna, Cheryl**

Archer, Gavin (The Keith Companies)

The Keith Companies' Large-Scale Archaeology Projects in the Northern San Joaquin Hills, 1980s to Present

Symposium 9

Since the mid-1980s, TKC has conducted several large-scale archaeology projects on the Irvine Ranch in the northern San Joaquin Hills. More than 8,000 acres were surveyed and 70 prehistoric occupation sites were excavated including large-scale data recovery at 50 habitation sites, many of them with rock shelters and substantial shell middens. A brief history of the investigations is presented, and spatial and chronological nature and scale of the archaeological sample provided by the work is assessed. Key findings and their effects on our understanding of local and regional prehistory, particularly cultural diversity and change through time, are summarized.

Archer, Gavin (The Keith Companies)

see **Lange, Frederick W.**



Arrow-weed, Preston J. (Tribal Singer, Quechan Tribe)
see **Coyle, Courtney Ann**

Backes, Clarus J., Jr. (California State University, Los Angeles)
More Than Meets the Eye: Fluorescence Photography for Enhanced Analysis of Pictographs
General Session 2

This study assesses the value of ultraviolet fluorescence (UVF) photography as a non-destructive technique for revealing otherwise invisible traces of pigment in aboriginal painted rock art and for *in situ* comparison of pigment compositions. Some pictograph pigments emit light when exposed to ultraviolet radiation, and a field procedure for recording this normally invisible component on standard photographic film is described. When applied to CA-KER-735 and CA-KER-736, two previously analyzed pictograph sites in Kern County, California, this technique discovered seven new pictograph elements, and three distinctive sets of pigment fluorescence attributes that allowed intra- and inter-site comparisons of paint types.

Baron, Dirk (California State University, Bakersfield)
see **Draucker, Anne**

Barrios, Angela (California Polytechnic State University, San Luis Obispo)
see **Jones, Terry L.**

Basgall, Mark E. (California State University, Sacramento)
The Surface Archaeology Of Pleistocene Lake China
Symposium 7

China Lake preserves a truly remarkable record of late-Pleistocene/early-Holocene human occupation. First explored through the research of Emma Lou Davis three decades ago, more recent surveys indicate that the rich artifact and fossil accumulations she examined at Stakes 1-24 and the CRBR locality barely hint at the extent and variety of archaeological remains dating to this period. This paper reviews recent efforts to re-assess the Davis collections, further evaluate the sites she investigated, and examine more systematically the larger surface record of Pleistocene Lake China. Just concluded survey of 4.0 km² between the 2340–2380-foot contour revealed more than 50 discrete site areas containing large stemmed points, fluted points, crescents, or other tool classes indicative of early occupation. Variation in the location and composition of these assemblages is examined.

Bean, Lowell J. (Cultural Systems Research, Inc./Ballena Press)
Power and Landscape in the Santa Rosa and San Jacinto Mountains
Symposium 12

The nature of power and its uses and influence on the traditional peoples of the Santa Rosa and San Jacinto Mountains National Monument will be discussed. The nature of power will be described, especially in regard to special beings of power that exist in the area. The places and ways power can be acquired will be discussed, along with the various purposes—spiritual, medical, economic, and personal— for which it may be used.

Bean, Lowell J. (Cultural Systems Research, Inc./Ballena Press)
Symposium 3 Discussant

Bendimez Patterson, Julia (Director, Baja California Norte Office, National Institute of Anthropology and History [Mexico])
An Update on Recent Archaeological Work in Baja California.
Symposium 13

This introduction serves as an orientation for archaeologists potentially interested in working in Baja California, and also highlights the role of the National Institute of Anthropology and History (INAH) in Baja California. Finally, the talk includes an explanation of the Director's position, and the offices and regional museums of Baja California.



Biorn, Tina (California Department of Transportation, Sacramento)

see **Symposium, Workshop, and Roundtable Abstracts**

Roundtable Presenter

Blackburn, Thomas C. (California State Polytechnic University, Pomona)

Symposium 3 Discussant

Blind, Eric (Presidio Trust)

If These Walls Could Speak –

Symposium 5

Uncovering layers of history is often used as a metaphor for the stratigraphic excavation of cultural depositions. Recent investigations of the venerable Officers' Club at the Presidio of San Francisco demonstrate how this metaphor also works for the stratigraphic deconstruction of cultural layers applied to the facades of an old adobe building. The applied cultural layers - literally walls upon walls, floors upon floors, roofs upon roofs - detail approximately two centuries of occupation and modification under three national flags. The layers reflect both the tangible material changes in culture as well as infer intangible aspects of culture change.

Blind, Heather (University of Glasgow, Scotland)

Real Time Feedback: Implementing the Field Laboratory at the Presidio of San Francisco, El Polín Springs Summer 2003 Excavations

St. Clair, Michelle C.

Symposium 5

During summer 2003 field excavations at El Polín Spring in the Presidio of San Francisco, a field laboratory was implemented in order to provide what was deemed "real time feedback." Initial sorts of materials recovered and analysis of unique and diagnostic artifacts helped to guide decisions made in the field. This paper discusses the methods used in the field laboratory and the outcome of how they were applied in the analysis of the recovered material. This project demonstrates the benefits of having a field laboratory for the students participating in the field school, the laboratory staff, the volunteers, the Presidio, and the public.

Bowers, Darin S. (California State University, Fullerton)

see **James, Steven R.**

Bowden-Renna, Cheryl (EDAW, Inc.)

The Cultural Resources of the Chocolate Mountains

Apple, Rebecca McCorkle

Symposium 11, Part 2

First this paper presents an overview of the archaeological surveys conducted in the Chocolate Mountains starting with Jay von Werlhof's pioneering work in the 1970s. More recent studies will then be discussed and the results of these efforts compared to von Werlhof's information. Finally, the paper takes a look at how the known sites in the Chocolate Mountains relate to cultural resources in other parts of the Colorado Desert.

Brady, Ryan T. (California State University, Sacramento)

Assessing the Variable Role of Bifaces in Hunter-Gatherer Toolkits of Eastern California

General Session 3

The manner in which hunter-gatherers used tools likely varied through time and by the situation at hand. For example, biface use is often seen to differ between that of a transportable core, or a long use-life tool. Moving beyond theoretical speculation, one should be able to test assumptions by identifying variable artifact morphology. The current undertaking examines over 1,400 bifaces from 53 sites in the Owens Valley of eastern California. Attributes analyzed include biface stage, source, use-wear, and condition. Results are used to test what is generally used as a heuristic model, with the empirical record.

Braje, Todd (University of Oregon)

see **Erlandson, Jon M.**



Breschini, Gary S. (Archaeological Consulting, Salinas)

An Overview of Esselen Pictographs

Haversat, Trudy

General Session 2

The pictographs created by the Esselen Indians are among the least known in California, even though they are among the most unusual. The handprints—perhaps the most distinctive element of Esselen rock art, and the subject of Robinson Jeffers' well-known poem, "Hands," are found in a few remote rockshelters in the mountainous Big Sur country. But there are many other aspects of the Esselen pictographs as well. This presentation will explore the natural history, as well as the cultural history, of the Esselen, with particular emphasis on the pictographs.

Broadbent, Sylvia M. (University of California, Riverside)

Symposium 2 Discussant

Budinger, Fred E., Jr. (Friends of Calico Early Man Site, Inc.)

The Calico Project at 40 Years: Questions Answered and Questions Still Unanswered

General Session 3

The Calico Site, perhaps the most controversial site in the country, is a prehistoric quarry and lithic workshop dating to the latter part of the middle Pleistocene. The site has three components. Surface artifacts are believed to be contemporary with Pleistocene Lake Manix, which drained approximately 17.8 ka. Subsurface artifacts are recovered from both major and minor nested alluvial insets. Those at the Rock Wren locality are dated to 14.4 ka ± 2.2 ka by sediment thermoluminescence (TL). Those recovered from the site's major excavations represent episodic cultural activity between approximately 100 ka (soils and geomorphology) and 200 ka (uranium-thorium dating). Recent sediment TL work has yielded a date of 135 ka for sediments at a depth of 5.5 m. The Calico Archaeological Project turns 40 years old in November, 2004. This paper will present a synoptic overview of the results of four decades of investigations, primarily by a volunteer workforce.

Budinger, Fred E., Jr. (Tetra Tech, Inc.)

see **Spinney, Harriot E.**

Buffington, Kevin S. (LSA Associates, Inc.)

see **Conkling, Steven W.**

Burcell, Julie (Bureau of Land Management, Ukiah)

A New Look at Geoglyphs in the Panamint Valley

Cervený, Nicole Villa

Symposium 11, Part 1

Recent efforts to map and interpret the prehistoric cultural landscape of Panamint Valley suggest that the area may provide an unique testing ground for a number of rock art documentation and dating techniques. Abstract/geometric alignments and trails dominate the archaeological record and in some cases are the only visible evidence of a human presence in the area. Ongoing research including experimental efforts to establish minimum ages for geoglyph construction using desert varnish micro-lamination studies will be discussed.

Burns, Brooklyn (California State Polytechnic University, Pomona)

Late Prehistory Subsistence in the Northwestern Mojave Desert: Preliminary Faunal Analysis at the Red Mountain Spring Archaeological District

Poster Session, morning

Cal Poly Pomona is conducting ongoing archaeological research at the Red Mountain Spring Archaeological District near Ridgecrest, California. The district includes over 40 archaeological sites including middens, cairns, and petroglyphs. The majority of these sites date to late prehistory. This poster presents preliminary analysis of faunal remains recovered through test excavations at five different sites within the district. Faunal data are considered in relation to the distribution of lithic debitage and other archaeological data. They are also examined in relation to comparative collections from other late prehistoric archaeological sites in the Mojave Desert.



Byrd, Brian (ASM Affiliates, Inc.)

Advances in Southern California Archaeology: Orange and San Diego Counties and the Southern Channel Islands

Raab, L. Mark

Symposium 10, Part 2

This paper summarizes what archaeologists have learned during the last two decades in a portion of southern California that includes Orange and San Diego Counties, western Riverside County, and the Southern Channel Islands. Creating a coherent picture of research advances in this culturally and environmentally diverse region is a significant challenge. We begin with a brief background discussion, and discuss some trends that have transformed California archaeology in revolutionary ways during recent decades. Next, we highlight new insights into the prehistory of the study area that have been gained in recent years. Among the topics to be examined are: initial human settlement of the coastline and southern Channel Islands; Middle Holocene culture contact and interaction; the interplay between environmental conditions and human actions; technological innovation and their impact on social organization; and European contact and the ethnohistoric record.

Campbell, Mark M. (Campbell Anthropological Research)

Some Thoughts on Western Mojave Desert Prehistory

General Session 3

In this paper, I present a hypothetical reconstruction or model of Western Mojave Desert prehistory. It draws heavily on various cultural resource management documents produced at Edwards Air Force Base, especially the various overviews as well as other data from the Antelope Valley. As a model it focuses on the “big picture” rather than the minutia that frequently prevents us from seeing the forest because we are too busy arguing about bark and leaves. I present it as hypothesis to be tested to determine its utility in interpreting the archaeological record and understanding Western Mojave Desert prehistory.

Carpenter, Leo, Jr. (California Indian Heritage Center)

California Indian Heritage Center (CIHC), serving and assisting the California Indian spiritual migration

Poster Session, afternoon

The poster demonstrates the processes and phases of the new California Indian Heritage Center to be built in the greater Sacramento area. This new Center is being built by California Department of Parks and Recreation (DPR) will replace the old State Indian Museum located near Sutter’s Fort in downtown Sacramento built in the 1940s. This new Center must be diverse in its approach to educate the people of the world of the contributions and diverse cultures about the California Indians. Archaeology can be one of the disciplines that can contribute to the education process by working with the new Center and California Indians to share the strengths of collaboration. In the future, working with State Archaeologists and the BLM Site Steward Program, CIHC hopes to encourage local Miwuk Indians to participate in monitoring and protecting sites on their aboriginal territory.

Case, Stacy Schneider (Jones and Stokes)

Walking in the Footsteps of the Past: Managing Prehistoric and Historic Trails within a National Monument

Raschkow, Wanda

Symposium 12

The Santa Rosa and San Jacinto Mountains have been inhabited and traversed for thousands of years by Native Americans, early explorers, settlers, and recreational users. The remains of numerous trails, wagon roads, and associated resources are visible on the present day landscape. Today the trails provide for a variety of recreational uses including hiking, mountain biking, and horse riding. The trails also pass through habitat essential to the Peninsular Bighorn Sheep and other sensitive species. The National Monument must strike a balance between recreational use, habitat concerns, and preservation and interpretation of the trails as important archaeological and cultural features.

Cervený, Niccole Villa (Arizona State University)

see **Burcell, Julie**



Chartkoff, Joseph L. (Michigan State University)

California Prehistoric Tobacco Growers and the Problem of Explaining the Absence of Food Production
General Session 1

Explaining food production origins has been one of archaeology's persisting central questions. California presents a particularly intriguing case, a reversal of the question: explaining the absence of food production when information, access to suitable crops, workable environment and population pressure all were present. The question has long been recognized but still is not adequately explained. This paper evaluates several potentially plausible hypotheses in seeking a satisfactory explanation.

Chartkoff, Joseph L. (Michigan State University)

Symposium 10 Discussant

Chase, Paul G. (Paul G. Chase & Associates)

Symposium 2 Discussant

Ciolek-Torrello, Richard (Statistical Research, Inc.)

Seeking Site Structure in the Ballona Wetlands, Los Angeles

Grenda, Donn

General Session 1

A primary goal of our research in the Ballona over the past six years is identifying patterns in the spatial distribution of cultural features and other evidence of living areas. Traditional methods for sampling midden sites can characterize the age and function of a site, but are inadequate for examining human behavior. Instead, we must expose large areas of a site. Bigger exposures mean excavating and processing tremendous quantities of site matrix. For this purpose, we have developed an innovative approach combining hand excavation with a mechanical excavation and automated processing system. Here we describe this system and present our preliminary findings.

Ciolek-Torrello, Richard (Statistical Research, Inc.)

see **Lange, Frederick W.**

Cleland, James H. (EDAW, Inc.)

Archaeological Investigations at the North and South Stallard Localities on the Lower Colorado River, California

Symposium 4

During construction monitoring for the North Baja Pipeline project, EDAW archaeologists discovered buried Patayan period habitation sites on the California side of the Colorado River about 20 miles south of Blythe. Twenty-one radiocarbon dates bracket at least three successive occupation phases between AD 50 and 1650, based on two-sigma calibrations. Artifact and ecofact assemblages are presented briefly, and the potential for investigating cultural change within the Patayan period is discussed.

Cleland, James H. (EDAW, Inc.)

The Sacred and the Mundane – Cultural Landscape Concepts and Archaeological Interpretation in the Colorado Desert

Symposium 4

In the Quechan belief system, there is a fundamental interconnection among cultural identity, personal identity and power, cultural history, the natural landscape, and ritual practice. The latter leaves physical remains on the landscape, which are studied by archaeologists. Often times, these physical remains can be mistaken for evidence of activities associated with subsistence pursuits or other mundane activities such as stone tool procurement. Our bias toward material culture and cultural materialism leads us to inappropriate (or very incomplete) interpretations. This paper explores the implications of Quechan conceptions of the landscape for the interpretation of the archaeological record.



Cleland, James H. (EDAW, Inc.)

Preservation of Quechan Sacred Sites

Symposium 11, Part 1

Jay von Welhof has been a champion for protecting Native American values and sacred sites in the Colorado Desert. This paper reviews cultural resources issues in the Indian Pass area and the efforts of many, including Jay, to save this unique area from the development of an open pit gold mine. Other preservation topics are also touched upon.

Cleland, James H. (EDAW, Inc.)

see **Deis, Richard**

Clevenger, Elizabeth (Stanford University)

Reconstructing Context and Assessing Research Potential: Feature 20 from the San Jose Market Street Chinatown

General Session 4

As a part of the larger Market Street Chinatown Archaeological Project, this paper presents a holistic analysis of artifacts from a single pit feature from the site. Ceramic, glass, metal, bone, botanical and other materials are analyzed. The project explores the future research potential of the entire collection by undertaking a detailed study of a single feature and grappling with the technicalities of reconstructing context 20 years post-excavation. In addition, it investigates questions relating to the social dynamics of the Market Street Chinatown, looking in particular for traces of the residential and non-residential members of the Chinese community.

Clelow, C. William, Jr. (Ancient Enterprises, Inc.)

Archaeological Resources at the China Lake Naval Air Weapons Station: "It Doesn't Get Any Better Than This."

Walsh, Michael R.

Symposium 7

From Pothunter Springs, Resurrection Shelter, and Day of Freedom Cave to the obsidian quarries of Sugarloaf Mountain, the petroglyph-filled canyons, and the playa surfaces and ancient high-stand shorelines of Lake China, the archaeological resources of the China Lake Naval Air Weapons Station are present in sufficiently dramatic diversity to allow the argument that they nearly represent the entire range of research topics and possibilities for most of the western Mojave Desert and much of the Great Basin. A brief exploration and discussion of a selection of these resources makes clear their unrivaled value as heritage treasures.

Clelow, C. William, Jr. (Ancient Enterprises, Inc.)

see **Walsh, Michael R.**

Coleman, Dina (Applied EarthWorks, Inc., Lompoc)

Setting the Stage for Human Occupation: Large-scale Quaternary Climatic and Geomorphological Events at Goleta Slough.

Symposium 6

One of Southern California's many coastal lagoons, the Goleta Slough was important to early inhabitants for its favorable setting and wealth of resources. Over time, major physical changes in the morphology of the slough have been driven by climatic fluctuations, which have affected the rate and volume of sediments originating from the Santa Ynez Mountains. Powerful coastal currents have also affected the slough's morphology by variously depositing and scouring the slough's entrance. Combined, these occurrences have altered the natural biogeography over time. Soil core data obtained from both in and around the slough provide clues to the physical changes in the slough over time, and ultimately aid in understanding human adaptation.

Collins, G. Edward (Imperial Irrigation District)

Overview of the Imperial Valley College Field Archaeology Class 2003–2004

McNitt, Karen

Symposium 11, Part 2

Jay von Werlhof was instrumental in making the archaeology program at Imperial Valley College an important part of southeastern California archaeology. When Jay retired, the field classes were taught by Ed



Collins. The classes continue to add to our knowledge of the people of this area. In the past year the class has recorded clay baking areas, two arrow-shaft straighteners, possible evidence of Anza's actual trail and a camp site where horse was eaten. This paper summarizes those finds.

Coniglio, Ross (University of California, Davis)
see **Swope, Karen K.**

Conkling, Steven W. (LSA Associates, Inc.)
Comparisons of Faunal Assemblages from Diverse Archaeological Contexts within the San Joaquin Hills, Orange County, California.

Buffington, Kevin S.
Reynolds, Richard L.

Symposium 9

The osteological collections from archaeological sites provide concrete evidence of the faunal resources utilized by Native American populations at those locations. Recent excavations at a series of sites from the Muddy Canyon Archaeological District - a National Register eligible, discontinuous District defined by the Muddy Creek watershed—and the Turtle Ridge Planning Area - the northwest draining nose of the San Joaquin Hills anticline - have produced extensive collections that generate new insight on the settlement and use of these various drainages in the regional settlement system.

Cottrell, Marie (Twentynine Palms Marine Corps Air Ground Combat Center)
see **Sutton, Mark Q.**

Coyle, Courtney Ann (Attorney at Law, La Jolla)
Personal Reflections on Jay von Werlhof

Arrow-weed, Preston J.

Symposium 11, Part 1

This paper represents our personal reflections on Jay's spirit, his willingness to share his knowledge of desert archaeology with resource professionals, Indian people, youth and the public and his activities to help protect and preserve the past in Imperial and San Diego Counties.

Crawford, Karen L. (Jones and Stokes)
see **Schaefer, Jerry**

Cuadra Gutiérrez, Oswaldo (Instituto Nacional de Antropología e Historia de Baja California)
The Archeology of Mexicali Desert

Symposium 13

In October 2003, a survey was initiated for the 02-MXL-02 FIARUM Mexicali Road project with the intention of providing systematic coverage of the area. This survey focused on the search for archaeological remains. In this conference, we will present the results of new data and possible interpretations for the reconstruction of the prehistoric past and the colonial contact in the north of Baja California, in particular in the delta of the Colorado River.

Culleton, Brendan J. (Pacific Legacy, Inc.)
Characterization of Freshwater and Marine Radiocarbon Corrections at Elk Hills, Southern San Joaquin Valley

DeJoseph, Denise
Jackson, Thomas L.

Symposium 1

Archaeological excavations on the former Naval Petroleum Reserve No. 1 (NPR-1) at Elk Hills, Kern County, has produced more than 50 radiocarbon dates on charcoal, bone, and freshwater mussel (*Gonidea* sp. and *Anodonta* sp.), and *Olivella* and *Tivela* beads. Preliminary work suggested that freshwater mussels tend to date 200 to 300 years older than other materials at the same site. To identify the source of the offset, the Santa Barbara Channel local marine reservoir correction (delta-R) and old carbon inputs in the Buena Vista Lake/ Slough were investigated. Five pre-bomb museum specimens of Santa Barbara area *Olivella* were obtained and



the local reservoir correction calculated in the manner of Stuiver, Pearson, and Braziunas (1986). Radiocarbon dates on charcoal, mussel shell, and aquatic faunal bone (e.g. fish, turtle, and waterfowl) in hearth fill are used to characterize the magnitude of the freshwater old carbon input, and to track the movements of carbon through the aquatic food chain. Results indicate that (1) for Santa Barbara Channel *Olivella*, a delta-R of 225 to 250 +/- 40 is appropriate, and (2) for at least the Late Holocene, a -250 +/- 50 correction should be applied to freshwater carbonates in the Buena Vista Basin.

Daly, Heather Ponchetti (Santa Ysabel Reservation)
see **Thorne, Tanis C.**

Darcangelo, Jennifer (California Department of Transportation)
see **Symposium, Workshop, and Roundtable Abstracts**
Workshop 1 Presenter

Davis-King, Shelly (Davis-King & Associates)
The Colors of Native American Research: Red, White, and Blue
Symposium 3, Part 1

Study of long-term cultural change is the very foundation of archaeological anthropology, yet the professional practice seems to relegate information into subdisciplines—segregated prehistory, history, or ethnography. For the most part, California Native Americans have been pushed into the role of ethnographic consultants, and are not generally active participants in research designs, reports, and investigations. This methodological treatment has bruised and damaged the view of the past and at the same time has failed to mentor both the youth of the Tribe and the youth of the profession. This paper argues that analysis must involve native people for a better view of the past and presents some lessons on how multilayered data gathering can provide a richer analysis of the cultural modifications California's natives have been undergoing.

Davis-King, Shelly (Davis-King & Associates)
see **Johnson, John R.**

Degelmann, Erica E. (California State University, Fullerton)
see **James, Steven R.**

Deis, Richard (EDAW, Inc.)
Some Considerations Regarding the Cultural Resources Context of the South Range, China Lake
Cleland, James H.
Symposium 7

Recent archaeological surveys and test excavations on the South Range at China Lake are adding new perspectives on early borax freight operations. Evidence from the Lone Willow Spring and Granite Wells camps, located along the historic twenty-mule team route from Death Valley to Mojave, supports and adds new information not found in historic documentation.

DeJoseph, Denise (Pacific Legacy, Inc.)
see **Culleton, Brendan J.**

Delaney-Rivera, Colleen (California State University, Fullerton)
The Western Santa Monica Mountains-Oxnard Plain Project: An Initial Report
General Session 3

Archaeological research in the Santa Barbara Channel and Santa Monica Mountains region has been ongoing for several decades, but little systematic work has been completed on a regional level. The Western Santa Monica Mountains-Oxnard Plain (WSMOP) project has been initiated to reconstruct the ecological and cultural landscape of the region to determine how resources were used, where and when settlements were located, and what relationship exists, if any, between resource use and the eventual development of social complexity of the late prehistoric indigenous populations. This paper will address the preliminary work conducted to reconstruct the settlement patterning of the region, and will consider the project's future plans and goals.



Dempsey, Patrick (Cypress, California)

70 Years of Aerial Photographs Reveal Chronology of Vehicular Impacts on the Blythe Geoglyphs
Poster Session, afternoon

Dramatic aerial photographs depicting vehicular impacts at the Blythe geoglyphs have long been used in newspaper and magazine articles to illustrate unchecked OHV damage to fragile desert ecosystems. Our study of seventy years of famous aerial photographs of the glyphs shows that the impacts result mostly from the failure of the BLM to control parking at the heavily visited roadside attraction rather than out-of-control OHV use. We attribute some of the purposely designed vehicular “donuts” placed precisely on the glyphs themselves to a secret, purposeful American Indian act similar to the well-known “killing” of metates.

Des Lauriers, Matthew R. (University of California, Riverside)

Islands, Peninsulas and Regional Frameworks: Isla Cedros, Baja California and the Deconstruction of Marginality and Isolation in Baja California Prehistory
Symposium 13

This paper will draw on over four years of research focused on both archaeological and documentary evidence of indigenous history and lifeway on Isla Cedros, Baja California. This island is located on the Pacific Coast of the Peninsula 426 airmiles south of San Diego. The assertion made here is that the lack of archaeological attention, modern political boundaries, and somewhat deceptive geographic "isolation" of both the island and the Baja California Peninsula have the potential to mask and distort a complex and dynamic prehistory. Major points to be made include the interaction networks that were clearly in place in the Central Desert of the Peninsula at least in Late Prehistory, as well as the highly developed maritime technology and capabilities of the Cedros Islanders.

Dolan, Christy (EDAW, Inc.)

Ogilby: A Desert Station on the Southern Pacific Railroad
Symposium 4

The historic town of Ogilby began in 1877 as a small railroad siding along the Southern Pacific Railroad in the Colorado Desert. By providing support to both the railroad and the nearby mining activities, Ogilby was able to remain a viable, albeit small, desert town for more than 60 years. Recent historical and archaeological investigations, including an oral history program, have provided insight into this town, which has all but disappeared from the desert landscape. This paper will discuss the results of this work.

Douglass, John (Statistical Research, Inc./University of California, Riverside)

The Politics of Archaeology: Diverse Concerns and Interests at the West Bluffs Project, West Los Angeles
Alvitre, Cindi

Altschul, Jeffrey H.

General Session 1

Archaeology has been interlaced with diverse, and sometimes competing, interests for decades. A recent example of these competing concerns is the West Bluffs Project, located on the west side of Los Angeles, overlooking the former Ballona wetlands. Here, archaeologists, Native Americans, environmentalists, developers and regulatory agencies clashed over several Middle Period and Millingstone Horizon sites. This paper, written by an archaeologist and a Tongva/Gabrielino tribal member, considers the project, the diversity of concerns, and its outcome.

Draucker, Anne (California State University, Bakersfield)

Trace-Element Characterization of Distinct Obsidian Sources in the Coso Volcanic Field, California, by Laser Ablation ICP/MS

Baron, Dirk

Horton, Robert

Yohe, Robert M. II

Symposium 1

Laser Ablation coupled to an Inductively Couple Plasma Mass Spectrometer (LA-ICP/MS) is a relatively new analytical technique that allows for the chemical analysis of a wide range of materials of archaeological interest making it a promising tool for archaeological investigations. The technique is nondestructive and an analysis for up to 35 major, minor, and trace elements can be conducted in a few minutes. The technique's



nondestructive nature, low detection limits, and very short analysis time make it superior to other techniques such as X-Ray Fluorescence and INAA (up to several weeks analysis, requires irradiation in a nuclear reactor).

In this study, we analyzed obsidian samples from different flows in the Coso Volcanic Field (CVF) in California. The area has been a major source of toolstone for prehistoric populations for the past 12,000 years. Hundreds of small prehistoric quarries exist within the CVF, the most notable being the “Colossal Quarry” first described by Harrington (1951) on the south-facing side of Sugarloaf Mountain, a large Tertiary rhyolite dome. Geochemical sourcing of CVF obsidian for archaeological studies has been an important tool in assessing prehistoric trading patterns in eastern California, and the CVF source was first characterized using X-ray fluorescence in the late 1970s. Subsequent work by Hughes (1988) demonstrated the occurrence of four distinct geochemical subsources of obsidian within the CVF (Joshua Ridge, West Sugarloaf, Sugarloaf Mountain, West Cactus Peak).

We analyzed obsidian from Joshua Ridge, West Sugarloaf, Sugarloaf Mountain, and West Cactus Peak for a suite of 25 trace elements including rare earth elements. The samples exhibited a generally similar trace element composition but difference in Rb, Ba, Zr, Sr, Ce, Dy, Eu, and Sm were large enough to allow distinction of the different source areas by discriminant analysis. An attempt was also made to distinguish obsidian from four different quarries on Sugarloaf Mountain. However, the composition of the obsidian from these quarries was too similar to allow unequivocal identification.

Earle, David D. (Earle & Associates)

The Chemehuevi and Foreign Penetration of the Mojave Desert in the 19th Century: Population Movements and New Subsistence Adaptations

Symposium 3, Part 2

Cultural interaction with the Mojave and California groups distinguished Chemehuevi foragers from other Southern Paiute peoples. Foreign penetration of the Mojave Desert brought major innovations in Chemehuevi settlement and subsistence adaptations during the 19th century, including Colorado River horticultural settlement. Chemehuevis also moved into the western Mojave Desert and the San Gabriel Mountains. This westerly expansion, initially involving stock raiding, reflected a persistence of foraging rather than a shift to horticulture or wage labor. Historic Chemehuevi population movements, responses to new subsistence opportunities and changed regional political relations, are discussed in the context of Chemehuevi social organization and cultural attitudes.

Eckhardt, William T. (Mooney & Associates)

Intensive Archeological Survey of Portions of the Coyote Mountains and Carrizo Peak, Imperial County, California

Symposium 11, Part 1

This paper revisits a 1979 archaeological survey conducted by Jay von Werlhof and me for a proposed mining development plan in Imperial County. The administrative record for this project reveals a detail to work scope, research design, Native heritage values, and community participation that were not entirely common 25 years ago. Results of the fieldwork and research revealed an unexpectedly intensive, but well-recognized pattern of Late Prehistoric Kumeyaay lands use of this rugged mountain region.

Eerkens, Jelmer W. (University of California, Davis)

Bulbs, Seeds, and Climatic Variability: Evidence for Dietary Change from Thermal Features in Airport Lake Basin

Rosenthal, Jeffrey

Symposium 7

Thermal features containing charcoal, ash, fire-cracked rock, and/or charred seeds and bone are a common component of Late Prehistoric hunter-gatherer sites in the northern Mojave Desert. Although these features have done much to inform site-specific interpretations about diet, an intersite comparison has not been undertaken. Our analyses of shape, size, context, and contents suggest these features can be divided into at least three different functional categories. Temporal patterns suggest a shift in subsistence pursuits from root, tuber, and bulb (i.e., geophyte) harvesting between 1000-300 BP, to intensive seed processing after 300 BP in the area. While intensification on seeds late in prehistory appears to be a pan-Great Basin phenomenon, a focus on geophytes earlier in time appears to be more local in the Mojave Desert. We examine climate change, population increase, and technological innovations as possible explanations for this dietary shift.



Ehringer, Candace R. (California State University, Northridge)

Roosters And Raptors: Cultural Continuity And Change At Big Dog Cave, San Clemente Island, California
General Session 3

Big Dog Cave (CA-SCLI-119), located on the southern coast of San Clemente Island, California, was first excavated by Arthur Woodward in 1939 as part of the second Los Angeles County Museum-Channel Islands Biological Survey Expedition. The collection, housed at the Los Angeles County Natural History Museum, contains both ceremonial and subsistence components, and includes artifacts indicative of both prehistoric and historic period Gabrielino occupations. The following analysis describes the artifacts of each component while attempting to place Big Dog Cave into archaeological context with reference to other ceremonial sites on San Clemente Island and the California Indian *Chingichngish* religion.

Eidsness, Janet P. (Consultant)

Places and People: California's Native American Heritage Resources
Symposium 3, Part 1

As professionals working in the historic preservation compliance industry, our charge is to consider the full range of potentially significant cultural resources that may be affected by an undertaking. Heritage resources highly valued by contemporary California Indians include burial grounds, ceremonial sites, sacred places, and collecting areas for plants used to maintain traditions involving subsistence, healing, and making of baskets, regalia, and other items. Identifying such places, evaluating their significance, assessing project effects, and developing appropriate management strategies can only be accomplished by consulting with the culturally affiliated tribal people. Published ethnographies and ethnohistoric accounts offer critical background information to CRM practitioners, providing historic contexts that help shape our archaeological expectations and more importantly, a culturally sensitive framework for interacting with Native Americans. Eidsness will offer a retrospective of her 25 years working with Indian people across California.

Eidsness, Janet (SCA Native American Programs Committee)

Chair: Native American Programs Committee Open Meeting, Thursday, 4:30 p.m.

Eklund, Karis A. (Stanford University)

Public Interpretation at the Presidio of San Francisco
Symposium 5

This paper presents preliminary research on the public interpretive program at the Tennessee Hollow Watershed Archeology Project at El Presidio de San Francisco. This program used archaeologists as ethnographers to record the public's experiences through visitor interaction forms and guest book entries, with the purpose of documenting visitor demographics, interests and responses to the excavation. My goal in analyzing these responses is to understand how archaeologists can better serve the public. The results of this study will be used to rework future public interpretive programs at El Presidio de San Francisco.

Erlandson, Jon M. (University of Oregon)

The Archaeology of CA-SBA-56: A Milling Stone and Canalino Site on the Goleta Estuary
Braje, Todd

Symposium 6

Since the 1920s, there have been numerous archaeological investigations of SBA-56, a Milling Stone and Canalino site located on the northern margin of the Goleta Estuary. In this paper, I summarize what is known about the archaeology of SBA-56, especially a relatively well documented Milling Stone occupation dated between about 7000 and 6500 years ago. After extensive excavations by D. B. Rogers in the 1920s—for which only a general synopsis was published—SBA-56 was largely left to looters and agricultural impacts until the 1980s. In the last 20 years a series of small, disjointed, and unpublished CRM studies were conducted as the site and its surroundings were gradually lost to development. Reviewing the history of investigations at SBA-56, I explore the changing nature of archaeology itself and some of the problems created by the current practice of CRM in California. Despite multiple episodes of study and the effective loss of the site for future study, for instance, there has been little or no synthesis of the recovered data in a form that is useful or interesting outside of a small circle of professional archaeologists.



Erlandson, Jon M. (University of Oregon)

One If By Land, Two If By Sea: Changing Perspectives On The Peopling Of The Americas

Rick, Torben C.

Symposium 10, Part 1

The last twenty years has seen a veritable sea change in anthropological perspectives on the Pleistocene colonization of North and South America. In 1984, most American archaeologists considered the idea of a coastal migration around the North Pacific by maritime peoples to be highly unlikely. Few openly questioned the traditional view that the New World was first colonized via the mythical Ice-Free Corridor, through which big-game hunters hiked into the American heartland, spreading from sea to shining sea only thousands of years later. In this paper, we examine some of the theoretical, methodological, and evidential changes that have taken place during the past two decades and how these changes have affected our notions of when and how the Americas were first settled.

Farris, Glenn (California State Parks)

Ethnohistoric Accounts of the Interaction of the Bodega Miwok and Kashaya Pomo with the Russian American Company

Symposium 3, Part 1

Ethnohistoric references and accounts of the interaction of the Bodega Miwok and the Russian American Company began as early as 1807 and involve the reports of local Indians, a Russian hunter, sea captains from Russia, France, England and the United States, as well as Spanish and Mexican priests and officials over the course of the next 34 years. Of particular interest were a set of five paintings done in 1818 that are the only known portrayals of Bodega Miwok people from that early period and the accounts of Russian officers from the same ship.

Faull, Mark (Red Rock Canyon State Park)

Snap Shot in Time: Life at the Dove Springs Aqueduct Construction Camp

Hangan, Margaret

General Session 1

First recorded in 1995 by Red Rock Canyon State Park Ranger Mark Faull, the Dove Springs Camp is one of many construction camps occupied between 1906 and 1913 dedicated to the installation of the Los Angeles Department of Water and Power Aqueduct (LADWP). Located within the Bureau of Land Management Dove Springs Off Highway Open Area, the Dove Springs camp was the only LADWP camp to be located at the end of a railroad spur. The camp also both supported the construction of the Red Rock Tunnel and supplied goods to the camps in the Freeman Division of construction. A study of the camp was conducted between 2000 and 2003 to fulfill the requirements for a master's degree and expand on the work first started by Faull. Then the data that were recorded at the Dove Springs camp were compared and contrasted with the data from the Dove Springs the Alabama Gated Camp, which was studied by Caltrans archaeologists in 1999 and a few other previous recorded aqueduct construction camps. The study concluded that there were some discernable differences between the camps regarding how the camps were socially structured, their layout and the ethnic make up of the work force.

Faull, Mark R. (Red Rock Canyon State Park)

Cudahy Camp: Flux and Family in a Company Owned Community

General Session 3

A compact company-owned community called Cudahy Camp provided residence for the workers and their families who operated the nearby Cudahy Mines of eastern Kern County, California. The Cudahy Mines, located in Last Chance Canyon of the El Paso Mountains, quarried volcanic pumicite from 1923 through 1947 to form the abrasive "seisnotite" of a popular national product known as Old Dutch Cleanser. Down canyon the residential community reflected the changing patterns of economics and mechanization that affected both the mines and the nation. Recent interviews with youths who resided at the camp have reinvigorated investigations into this long abandoned community and its contributions to both local and national life.

Fenenga, Gerrit (California Department of Forestry and Fire Protection, Sacramento)

A Functional Interpretation of Colorado Desert Rock Art

Symposium 11, Part 1



Fitzgerald, Richard T. (California Department of Transportation, Oakland)
see **Jones, Terry L.**

Foster, John W. (California State Parks, Sacramento)
Fish and Cultural Traditions at Ahjumawi Lava Springs State Park: An Interpretive Video
Symposium 11, Part 1

For the last decade, Jay Von Werlhof has been the leading proponent of preserving stone fish traps around the shoreline of ancient Lake Cahuilla. In partnership with local Native American interests, he has energized The Archaeological Conservancy, California State Parks and the Trust for Public Land to acquire and protect these vanishing remnants of fishing technology. Other fish traps are in use today. This presentation will introduce a brief video on Ahjumawi harvest of the Sacramento sucker (*Catostomus occidentalis*) using stone traps along the shore of Big Lake in Shasta county. Recent analysis of the traps and fishing traditions demonstrates that the Ahjumawi use the traps to manage the fishery, not simply to catch fish. The video outlines recent studies of the traps and the Ahjumawi cultural traditions they reflect.

Freers, Steven M. (Riverside, California)
Pictograph Hand Print Analysis—Stature and Inference
General Session 2

An earlier pilot study (Freers, 2001) at CA-RIV-114 demonstrated the feasibility of using criteria selected impression hand prints to infer the stature and gender of pictograph participants in southern California. Anthropometric data gathered by Franz Boas (1895, 1899) on local Native American groups was compared against hand print measurement data. The findings tended to validate ethnographic descriptions of neadolescent female involvement in making pictographs, and suggested activity by adults and/or older adolescents—possibly male. This study has been expanded to examine hand print participation patterns regionally and includes paintings designated as “San Luis Rey” and “Rancho Bernardo” in concept. Hand print data acquisition and analysis needs to be further refined and incorporated into the discussion of rock art participation and function when applicable.

Freers, Steven M. (Riverside, California)
A Race Against Time: An Intractable Rock Art Legacy
General Session 2

“A Race Against Time” is a video documentary that portrays the conflict between development and rock art study in southern California. A brief historical perspective is given, followed by examples of contemporary efforts to examine rock art with an emphasis on following up on John Peabody Harrington's field notes and photographs. Additionally, many heretofore “unseen” images are brought to life using digital technology. In closing, various strategies utilized by citizens and local governments to “cope” with these intractable circumstances are interlaced together for thought-provoking impact. A final version of the film is slated for non-profit distribution to interested groups.

Fujita, Harumi (Instituto Nacional de Antropología e Historia, Baja California Sur, Mexico)
High Consumption Of Marine Resources And CAM Plants Among Prehistoric Humans Of Southern Baja California Inferred From Carbon And Nitrogen Isotope Analysis
Minagawa, Masao
Symposium 13

The recent systematic survey and excavations done in the southern Baja California have revealed the importance of the littoral economy based principally on the exploitation of diverse marine resources complemented by terrestrial resources, although local particularities have been observed in each site. To estimate the paleodiet of this population, C and N isotopic composition of human bone collagen samples from Baja California archaeological sites were analyzed. Isotope ratios of these samples vary from 9.2 to 15.4 percent in $\delta^{13}\text{C}$ and from 13 to 24.7 percent in $\delta^{15}\text{N}$ (n=28), indicating high consumption of marine resources and CAM plants.

Galvin, Andrea (Office of Historic Preservation)
see **Symposium, Workshop, and Roundtable Abstracts**
Workshop 1 Presenter



Gamble, Lynn (San Diego State University)

Mescalitan Island (CA-SBA-46): Anatomy of a Chumash Center
Symposium 6

The Chumash lived on Mescalitan Island continuously for thousands of years before the Spanish interrupted their world. Situated in the middle of the Goleta Slough, the midden deposits on the island were some of the largest in the Santa Barbara Channel region. Archaeological investigations of these deposits first occurred over 125 years ago and continued throughout the twentieth century. The significance of this settlement in the development of sociopolitical complexity among the Chumash is revealed through the analysis of mortuary data, ethnohistoric documents, and household archaeology.

Gamble, Lynn (San Diego State University)

see **Glassow, Michael A.**

Gardner, Jill K. (California State University, Bakersfield)

see **Sutton, Mark Q.**

Garfinkel, Alan (California Department of Transportation, Fresno)

see **Sutton, Mark Q.**

Gates, Gerald R. (Modoc National Forest)

A Thematic Evaluation of the Research Potential of Small Sparse/Light Lithic Scatters on the Devil's Garden in Northeastern California

General Session 4

The Heritage Resources staff on the Modoc National Forest undertook a 5-year research project aimed at evaluating the archaeological information and research potential contained in prehistoric sites that have surface manifestations representative of “small sparse/light lithic scatters.” These sites appear to represent primarily “single event” or “short duration” uses. Ten sites were examined within the study area and no two appear to be exactly alike – there is much more variation in the nature of the data content within the sites than their surface manifestations would imply. This paper will present the results of the research excavations and implications for “landscape archaeology” studies in northeastern California.

Giambastiani, Mark (University of California, Davis)

see **Sutton, Mark Q.**

Gillette, Donna (University of California, Berkeley)

Excavation Results from Canyon Trail Park—A Rock Art Site in the Bay Area

O'Brien, Kathy

General Session 2

Excavation in a rock art context has received little consideration. A boulder in a sandy playground in Canyon Trail Park in El Cerrito, Contra Costa County, containing abstract elements including PCNs, cupules, and grooves, provided an opportunity for such a study. The city has accepted a proposal to renovate the site from a sandy playground to a Native American Interpretive Park. In preparation for the implementation, Cal State University, Hayward, Anthropology Department, and the Bay Area Rock Art Research Association (BARARA) collaborated on an excavation/recording Field School to further investigate and document the cultural prehistory of the site.

Gilreath, Amy J. (Far Western Anthropological Research Group, Inc.)

An Historical Perspective of Coso Rock Art

Younkin, Elva

Symposium 7

Modern images and depictions of Coso rock art have been in circulation for over 75 years. In this paper, we consider artists and others who have rendered Coso rock art in various media, and the characterizations and interpretations that various researchers have offered in different forums. The degree to which these portrayals track modern artistic and research trends is considered. What this suggests about today's biases and subjective portrayals is considered.



Gilreath, Amy G. (Far Western Anthropological Research Group, Inc.)

Rock Art in the Golden State: Pictographs and Petroglyphs, Portable and Panorama Symposium 10, Part 2

Rock was an all-pervading element in pre-modern Native Californians' existence. Its mundane uses are ignored here, in favor of giving consideration to other significant uses. Chief among these, rock was used as a surface for painting, pecking, and scratching rock art designs; it was fashioned into portable art (palettes and pendants); and rocks were arrayed on the ground in geoglyphs. At times rocky landmarks are associated with myth and traditional legends. Geographical regions serve as the basic organizing principle for this overview of rock art, rock design, and traditional significance of rock formations throughout our state.

Gilreath, Amy J. (Far Western Anthropological Research Group, Inc.)

see **Hildebrandt, William R.**

Glassow, Michael A. (University of California, Santa Barbara)

Chronology and Technology at the West Campus Entrance Site, CA-SBA-51

McKenzie, Dustin

Symposium 6

The West Campus Entry site, CA-SBA-51, was the subject of an extensive testing program over the course of several UCSB spring field classes in the early 1970s. As a result, the collection of artifacts from the site is among the largest coming from an Early Period site in the vicinity of the Goleta Slough. Included are milling implements, a variety of other abraded and pecked stone artifacts, hammerstones, and flaked stone tools for cutting and scraping. The differences in vertical distribution of artifact classes through the 1.5 m depth of deposits appear to relate to both chronological differences in site use and the impact of bioturbation.

Glassow, Michael A. (University of California, Santa Barbara)

Goleta Slough Subsistence Activities at 5,500 Years Ago

Symposium 6

Due to the emergency salvage context of Harrison's fieldwork at the Aerophysics Site (CA-SBA-53), he was able to make only cursory, unsystematic collections of faunal remains. A UCSB field class returned to the site in 1985 and excavated three 1 by 1-m test units in one of the small intact vestiges of this once extensive site. Rick and Glassow reported on the fish remains in this collection, and the remainder of the faunal remains are the topic of this paper. Occupants of the site emphasized collection of estuarine shellfish and supplemented their diet with estuarine fish, sea mammals, and land mammals.

Glassow, Michael A. (University of California, Santa Barbara)

Prehistory of the Northern California Bight and Adjacent Transverse Ranges

Gamble, Lynn

Russell, Glenn

Perry, Jennifer

Symposium 10, Part 2

Archaeology in the northern California Bight and the adjacent Transverse Ranges has documented a prehistory spanning more than 10,000 years and a cultural development ending with the most complex economic and political systems in California. The earliest well-documented societies were simply organized, and they depended on littoral resources and a variety of terrestrial plants and animals. Among coast and island populations, the first signs of social complexity appeared about 6500 BP, as did an increased emphasis on maritime resources. After 2500 BP, social status differentiation is more obvious, and sea mammal hunting and fishing (now with a shell fishhook) became more important. Occupation of the mainland interior also is more apparent after this date. The plank canoe came into use around 1500 BP, and with it harpoon hunting of large fishes and sea mammals as well as increased commerce between the Channel Islands and the coastal mainland. Between about 1000 and 1200 BP, the economic system in the Santa Barbara Channel region became increasingly more complex, with the development of new shell bead types that served as currency, and fishing continued to expand in importance. By 700 BP, a number of new villages in the mainland interior were founded, and the regional sociopolitical systems characteristic of the Chumash and Tongva peoples at the time of European colonization are apparent.



Gmoser, Glenn (California Department of Transportation, Sacramento)
 see **Symposium, Workshop, and Roundtable Abstracts**
Roundtable Presenter

Golla, Victor (Humboldt State University/University of California, Davis)
Linguistic Prehistory
Symposium 10, Part 1

The linguistic prehistory of California must be viewed in the broader context of the known or probable historical relationships among the languages of North America. The Athabaskan family has a time depth of little more than two millennia, and Athabaskan speaking groups spread rapidly from a homeland in northern BC and the southern Yukon. The California and Oregon subfamilies appear to have separated about 1300 BP, not long after southward-migrating Athabaskans first entered southwestern Oregon and northwestern California.

The two branches of Algic, Algonquian and Yurok-Wiyot (Ritwan), separated about 3500 BP, very likely in the interior Northwest. The two surviving Ritwan languages separated only slightly later, probably not in California. The most likely scenario would see Wiyot established in northwestern California as early as 2000 BP, while ancestral Yurok was spoken by a group settled some distance to the north that moved to its present location after 1300 BP.

Uto-Aztecan has a time depth in excess of 4500 years, the deepest division being between Northern and Southern branches. By 3500 BP, Northern UA was a dialect continuum in the southern Basin between the Colorado and the Sierra Nevada, with an early division between a western group (leading to Tubatulabal and Takic) and an eastern group (leading to Numic and Hopi). There was a subsequent expansion of Takic speakers to the southern California coast after 2500 BP and of Numic speakers into the central and northern Basin after 1200 BP.

Languages belonging to the Penutian phylum are spoken as far north as Alaska (Tsimshianic). The majority are in Oregon, both west and east of the Cascades, and the Penutian languages in California are the southernmost whose relationship is clearly established. The time depth of the relationship is comparable to Indo-European (ca. 6500 BP). The Penutian languages historically spoken in California appear to represent at least two separate branches of the phylum. Maiduan probably belongs in the Plateau Penutian branch (Klamath, Molala, and Sahaptian). Wintuan has connections to Plateau Penutian, but also to the Western Oregon Penutian languages. The languages of the Yok-Utian group (Miwok, Costanoan, and Yokuts) form their own branch of Penutian. One possible scenario would have early Yok-Utian speakers established in the western Basin before 4000 BP, crossing into central California as the bearers of Windmill culture. Subsequent expansions would have brought Utian (Miwok-Costanoan) to the coast around 3500 BP, and Yokuts into the southern Central Valley at a later date. Both Maiduan and Wintuan would reflect population shifts around 1500 BP, Maiduan from the northwestern Basin and Wintuan from western Oregon, connected with Numic intrusion in the former case and Athabaskan intrusion in the latter.

The Hokan phylum is the oldest linguistic relationship that can be established among western North American languages, possibly dating back as far as 8000 BP. There are no agreed upon subgroups, and the languages are scattered as isolates or in clusters from the California-Oregon border to southern Mexico. The restricted territories of several California Hokan languages (Chimariko, Karuk, Yana, Esselen) suggest that they are the remnants of formerly much more widespread language groups. Some Athabaskan, Algic, Uto-Aztecan, and Penutian languages show evidence of substratal influence from one or more Hokan languages.

The Yukian languages (Yuki and Wappo) and the Chumash languages belong to none of the above groups, and have no clear relationship to each other. Chumash was formerly thought to be a candidate for inclusion in the Hokan phylum, but this hypothesis has been abandoned. The wider connections of Yukian appear to lie in the Southeast, in particular with the Siouan languages and some of the language isolates of the Gulf coast. It might be suggested as a working hypothesis that both Yukian and Chumash are remnants of the languages introduced to California by early coastal settlers whose origins were different from that of the Hokan-speaking populations in the interior.

Gonzalez, Sara (University of California, Berkeley)
Multivocality and the Virtual Interpretive Environment
Symposium 8

The proliferation of dialogue in recent decades concerning museum representations has resulted in a widespread awareness throughout anthropology and archaeology regarding the power of representations. This



awareness has been followed by the desire to make the interpretive process and its results more flexible and inclusive of multiple audiences. Specifically, Internet and web-authoring tools have been touted for their ability to create dynamic and multivocal interpretive environments which highlight the processes of interpretation. The Fort Ross Interpretive Trail project presents a unique opportunity to explore the benefits and difficulties involved in the incorporation of a web-based interpretive component to the proposed interpretive program.

Goodman, John D. II (The Keith Companies, Palm Desert)

Subtle Ethnic Signatures And Socioeconomic Indicators Of A Historic Cahuilla Village: The Spring Rancheria Example

Symposium 2

The village of Spring Rancheria was located on the outskirts of Riverside from about 1870 to 1893. Many Cahuilla of the period opted to work as wage laborers in towns such as Riverside rather than living on unproductive reservations. Drawing meager wages, they purchased Derby hats and overalls and joined the burgeoning ethnic labor pools. About 100 years later the site was excavated, and the material culture of the villagers appeared to be essentially "Euroamerican," with its tea-cup shards and harmonica reeds. On closer inspection it became evident that the assemblage was very different from common Euroamerican deposits of the period.

Gregory, Carrie (EDAW, Inc.)

Introduction

Symposium 4

Cultural resource studies were conducted in the Lower Colorado Desert as part of a natural gas pipeline project. Native Americans and archaeologists worked with the pipeline company to avoid as many sites as possible along the route. Since the local Native peoples had concerns for the entire region, to help address these concerns, treatment measures included off right-of way studies, along with more traditional data recovery excavations within the construction corridor. The studies outside of the construction right-of-way involved mapping geoglyphs, rock art, and trail segments. In addition to the known historic properties, numerous buried charcoal features were discovered during construction monitoring. Excavations revealed a number of cultural deposits. The following papers address these various components of the project.

Grenda, Donn (Statistical Research, Inc.)

see **Ciolek-Torrello, Richard**

Grenda, Donn (Statistical Research, Inc.)

see **Lange, Frederick W.**

Gross, G. Timothy (Affinis, San Diego)

San Dieguito Sites in Anza Borrego Desert State Park

Symposium 11, Part 1

Malcolm J. Rogers defined the San Dieguito Complex based upon his field work in the first half of the twentieth century and recorded the first San Dieguito sites in what is now Anza Borrego State Park. Ranging widely over southern California as well as Baja California, Arizona and Nevada, Rogers searched for evidence that would allow him to understand the prehistory of the area. He recorded five San Dieguito sites in the Park that yielded as well as numerous sites associated with the later inhabitants of the area. This paper examines the San Dieguito Complex as it is expressed in the Park, especially the degree to which the sites recorded in recent years actually fit Rogers' San Dieguito pattern. Many of the artifacts collected from recently recorded sites appear to be quarry waste and the byproducts of test knapping rather than a coherent archaeological complex. A quick examination of Rogers' San Dieguito I material from the Colorado Desert suggests a similar conclusion, leaving San Dieguito II and San Dieguito III in the deserts. Since these two phases are very similar and the distinction between the two has been questioned, Warren's suggestion that we call the pattern simply San Dieguito without phase designations is supported.



Guía Ramírez, Andrea (Sección Arqueozoología-Paleontología, Centro INAH Baja California)

Human-Faunal Relationships in Northwestern Baja California

Symposium 13

In the last few years, there has been realized an interdisciplinary archaeozoological study, as part of the Archaeological Project El Vallecito. The results offer a vision to the past subsistence patterns of the Kumiai groups that occupied the northwest portion of Baja California. Among the faunal remains are found sea urchins, marine mollusks, fishes, small mammals such as hares, rabbits, squirrels and field mice, as well as large mammals such as black tailed deer. Some of the remains demonstrated cultural alterations that clearly indicate use by the human groups that lived together with these species. This paper focuses on the fire alteration of these faunal remains and on the butchery marks from stone tools.

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

Rethinking Ethnic Markers in Material Cultural Analysis

Nettles, Wendy M.

Warren, Keith

Symposium 2

Inherent in studies of ethnicity is the assumption that ethnicity is somehow visible in the material world and can be read from the archaeological record. While beliefs, cultural attitudes, and value are not directly exhibited in material culture, outward expression of ethnicity, in an effort to maintain self-identification, may be. Artifacts then, theoretically, can reflect cultural identity. Such “ethnic markers” can be used to isolate and interpret ethnicity, cultural identity, and acculturation. Recent *AE* investigations have revealed ambiguities in isolating “ethnic markers.” This paper explores the strengths and weaknesses of relying on such markers to reveal the ethnicity of site occupants.

Hangan, Margaret (Bureau of Land Management, El Centro)

Isolated Historic Debris Scatters: A Cautionary Tale

Symposium 11, Part 2

When applying the criteria for listing in the National Register of Historic Places, isolated historic debris scatters generally do not qualify. Thus they are often recorded then simply dismissed. This paper will discuss a study of an historic debris scatter that, although not eligible, the site still contains values and information that could have some significance on a regional scale.

Hangan, Margaret (Bureau of Land Management, El Centro)

see **Faull, Mark**

Harrison, Julie (Coachella Valley Archaeological Society/California Baptist University/volunteer in cultural resources research, Bureau of Land Management, Palm Springs)

Historic Mining in the Santa Rosa and San Jacinto Mountains National Monument

Symposium 12

Mining in the Santa Rosa and San Jacinto Mountains National Monument played an important part in shaping the community. Its impact may be seen in specific mining towns and in outlying areas. The reason for this study is to discover the role of mining in the historical context of the monument. The methodology used for this study was archival research. This topic is one of several that Julie Harrison is examining to develop a historical context for the Monument.

Harvey, Victoria (California State University Bakersfield)

see **Jones, Josine**

Haversat, Trudy (Archaeological Consulting, Salinas)

see **Breschini, Gary S.**



Hedges, Ken (Consultant)

Petroglyphs at Palo Verde Point

Symposium 4

The unique assemblage of petroglyphs on limestone at Palo Verde Point in Imperial County stands out in a greater region marked by glyphs pecked into the patinated surfaces of basalt outcrops and boulders. While the general inventory of design elements shows affinity with other sites in a Late Archaic to Late Prehistoric continuum in the far Southwest, the unique landforms at Palo Verde with vertical cliffs, large talus boulders, and exposed horizontal surfaces combine to produce rock art associations with other site features that are unique to this location. Of particular interest are petroglyphs carved directly into the surfaces of trails over exposed limestone, and combined assemblages of rock art, bedrock mortars, and cupules. This descriptive presentation illustrates these and other outstanding features of the Palo Verde rock art sites.

Heikkinen, Deanna (California State University, Bakersfield)

A Return to Rose Spring (CA-INY-372): An Analysis of the Pottery from the 1987–1989 Excavations

General Session 3

The Rose Spring site (CA-INY-372) was excavated in 1987–1989 and resulted in the recovery of numerous pottery shards. This paper presents an analysis regarding the technology and materials used to create the wares. The analysis of the shards shows a variety of methods involved in creating the vessels. The research reported here also presents several research questions to promote further chemical and protein residue analyses.

Herbert, Rand

“A Hole in the Ground with a Liar at the Entrance” (Twain): Mines and Mining Sites on China Lake Naval Air Weapons Station

Symposium 7

Hildebrand, John (Scripps Institute of Oceanography, San Diego)

Ceramics in Context

Symposium 4

This paper presents analysis of Lower Colorado Buffware recovered from locations in the Colorado Desert. New data are presented on the time frame and sequence of ceramic types produced. Lower Colorado Buffware ceramics were discovered in association with charcoal-rich features during construction of the North Baja Pipeline Project. Dates obtained from these charcoal layers suggest that the Lower Colorado Buffware chronology of Rogers (1945) and Waters (1982) should be modified. In some cases ceramic types are shown to persist for longer than predicted by the Rogers/Waters chronology. As yet unidentified ceramic types are present in the oldest layers.

Hildebrandt, William R. (Far Western Anthropological Research Group, Inc.)

Obsidian Production at the Coso Quarry: Implications for Regional Prehistory

Gilreath, Amy J.

Symposium 7

Previous survey and excavation during the 1990s has generated obsidian hydration and flaked stone technological data from hundreds of sites and loci within the Coso Volcanic Field. These data show that there was a major peak in the production and exchange of Coso obsidian between 4000 and 1000 B.P., but a major decline in this activity thereafter. This paper attempts to explain the Late-period demise of the Coso production system with new data and theoretical perspectives derived from work at China Lake and beyond.

Hildebrandt, William (Far Western Anthropological Research Group, Inc.)

The Prehistory Of Northwest California: A Story of Continuity and Change

Symposium 10, Part 1

This paper begins with a generalized culture history of northwest California based on archaeological records from north of San Francisco Bay and west of the Sacramento Valley. It then provides a more detailed treatment of several research themes, including the evolution of socio-political complexity in the Clear Lake region, and the rise of marine-focused economies along the north coast. The paper concludes with a review of the high level of adaptive variability that ultimately emerged in this region, and attempts explain this unique development using a new theoretical perspective.



Hildebrandt, William R. (Far Western Anthropological Research Group, Inc.)
see **King, Jerome**

Hildebrandt, William (Far Western Anthropological Research Group, Inc.)
see **Levulett, Valerie**

Hines, Phil (California State Parks, Sacramento)

Jay von Werlhof and the Archeology of Ocotillo Wells State Vehicle Recreation Area

Lucas, Carmen

Symposium 11, Part 1

Two of Jay von Werlhof's passions are studying rock art and preserving cultural features in the Colorado Desert. To date we haven't identified any rock art in Ocotillo Wells State Vehicle Recreation Area but Jay keeps coming back to help monitor and record archeological sites. During this time, Jay has shared a number of stories and experiences about the archeology of the Colorado Desert and his interaction with the Indians. His efforts have resulted in the preservation of the largest remaining tract of stone fish traps in the Colorado Desert. He has been instrumental in preserving other significant archeological features and building a museum for others to learn about the prehistory and history of the Colorado Desert.

Hoerber, Steven (Tetra Tech, Inc.)

see **Spinney, Harriot E.**

Hollimon, Sandra (Sonoma State University)

Bear Shamanism and Social Control in Native California Societies

General Session 1

In many Native California societies, the position of the bear "doctor" or shaman was/is an important agent of social control. The bear doctor could reinforce social norms because the threat of attack made them greatly feared and admired. Among foraging groups, ritual specialists are sometimes the only recognized occupationally specialized roles. Shamans had a key role in determining what were approved and disapproved modes of behavior, and often worked in concert with political leaders in transmitting these norms and the cultural framework on which they were based. This discussion concerns the function of bear doctors and similar agents of social control, and the implications for our understanding of organizational complexity in Native California societies.

Homburg, Jeff (Statistical Research, Inc.)

see **Lange, Frederick W.**

Horton, Robert (California State University, Bakersfield)

see **Draucker, Anne**

Hudec, Heather Lynn (California State Polytechnic University, Pomona)

Historic Activity within the Red Mountain Archaeological District

Poster Session, morning

The Randsburg District was the scene of intense mining activity in the early twentieth century. One component of this was the development of a deep well at the former Squaw Spring on the eastern slopes of Red Mountain. This well intruded directly on a late prehistoric campsite at what is now the Red Mountain Spring Archaeological District. This poster details recent research on the historic component within the district. With the help of GIS and GPS technologies, this research identifies historic activity areas and addresses the extent to which this activity impacted the prehistoric archaeological integrity of the district.

Hughes, Richard E. (Geochemical Research Laboratory)

Trade and Exchange

Milliken, Randall

Symposium 10, Part 2

A truly enormous amount of literature relating to the procurement and conveyance of different kinds of artifacts in California prehistory has accumulated since the publication of Moratto's *California Archaeology*



and Chartkoff and Chartkoff's *The Archaeology of California*. A number of important post-1984 syntheses have appeared relating to trade and exchange within California and between California and the Great Basin. In this paper we will provide a brief review and overview of the post-1984 literature, focusing principally on what has been learned from obsidian studies and from research on shell bead and ornaments since publication of Moratto and Chartkoff and Chartkoff's books. We also discuss changing perspectives in contemporary trade and exchange studies which promise to provide new insights into past social and economic life.

Hull, Kathleen L. (San Jose State University)

A Black Sickness in Yosemite: Ethnohistoric and Archaeological Evidence of Catastrophic Depopulation
Symposium 3, Part 1

Anthropological and historical studies of the events and processes of contact that occurred between native and non-native peoples in North America circa A.D. 1500 and 1850 often specifically acknowledge the potentially profound effect of disease-induced population loss on Native American cultures. This paper considers an ethnohistoric account of this event in Yosemite, and presents archaeological evidence that further documents this process and provides a broader context for understanding the decisions made by native people during this time.

Hull, Kathleen L. (San Jose State University)

Archaeology in the Range of Light
Symposium 10, Part 2

Straddling the often-rugged terrain between the rich wetlands and plains of California's Great Valley and the high desert of the Great Basin, the Sierra Nevada was one of the last regions in the state to witness systematic archaeological research. After more than 50 years of archaeological investigations, many questions still remain regarding basic issues such as cultural chronology and subsistence strategies. The last 20 years of research, however, have also witnessed significant synthetic studies and development of regional research designs that have provided focus for ongoing research. Such guidance and innovative thinking have resulted in exemplary studies of technology, exchange, gender relations, and population movements, with the promise of future contributions to the understanding of the past in this region and the role of Sierra people in shaping California's cultural landscape.

Hylkema, Mark G. (California Department of Parks and Recreation, Felton)

see **Jones, Terry L.**

Jackson, Thomas L. (Pacific Legacy, Inc.)

see **Culleton, Brendan J.**

James, Steven R. (California State University, Fullerton)

Archaeological Investigations of Wildwood Canyon State Park near Yucaipa in Southern California:
A Preliminary Report

Bowers, Darin S.

Degelmann, Erica E.

General Session 3

During Fall 2003, a field class from the Department of Anthropology, California State University, Fullerton, conducted an archaeological survey of a portion of Wildwood Canyon State Park, which has recently been acquired by California State Parks. Preliminary results of the investigations are presented in this paper. Several historical archaeological sites were identified and recorded during the survey. The sites relate to the ranching and dairy industry, tourism, and real estate development near Yucaipa in western San Bernardino County during the early twentieth century.

Jewett, Roberta A. (Archaeological Research Facility, University of California, Berkeley)

see **Lightfoot, Kent G.**



Johnson, John R. (Santa Barbara Museum of Natural History)

Introduction

Davis-King, Shelly

Symposium 3, Part 1

Introductory remarks.

Johnson, John R. (Santa Barbara Museum of Natural History)

The Varieties of Mission Experience: Continuities and Coalescences of Southern California Indian Tribal Groups

Symposium 3, Part 2

During the late eighteenth and early nineteenth centuries, California Indians who had once belonged to independent sociopolitical groups and spoke different languages were brought together in mission communities. Inter-marriage and population decline at times resulted in a coalescence of groups, for example at San Fernando Mission and in missions established among Chumash peoples. In contrast, certain clan-village associations continued to persist long after the Mission Period among Luiseño Indians once affiliated with Mission San Luis Rey. The varieties of indigenous group experiences, while partly due to different forms of social organization, also derive from differing missionization strategies and effects of these on local populations.

Johnson, John R. (Santa Barbara Museum of Natural History)

see **Milliken, Randall**

Johnson, John R. (Santa Barbara Museum of Natural History)

see **Plenary Abstracts**

Jones, Terry L. (California Polytechnic State University, San Luis Obispo)

Introduction

Symposium 10, Part 1

Jones, Terry L. (California Polytechnic State University, San Luis Obispo)

Colonization, Culture, and Chaos on the Central California Coast

Hylkema, Mark G.

Wood, Brian

Barrios, Angela

Symposium 10, Part 1

In the last 20 years archaeological findings from the central California coast have increased ten fold, so that well-sampled and well-dated components are now available for most time periods and areas. Tool and faunal assemblages from these components suggest a prehistory that is no longer easily accommodated by singular theoretical models or exclusive reliance on ecological or demographic principles. The prehistory of California in general, and the central coast in particular, is better envisioned as a reflection of microeconomic behavior regularly punctuated by historical contingencies. Historic events so overwhelm the prehistoric record of California that rare periods of incremental progress or economic intensification should themselves be viewed as historic occurrences. The past, present, and future of central coastal archaeology will be framed as a chaotic intersection of ecology, demography, and historic contingency.

Jones, Deborah (Far Western Anthropological Research Group, Inc.)

see **Levulett, Valerie**



Jones, Josine (California State Polytechnic University, Pomona)

Three-Dimensional Analysis of Late Prehistoric Hunting Tactics at Red Mountain

Walker, Jamie

Allen, Mark W.

Switalski, Hubert

Harvey, Victoria

Poster Session, morning

GIS is proving to be a key analytical tool in Cal Poly Pomona's Red Mountain Archaeological Project focused on late prehistory in the northwestern Mojave Desert. This poster presents a three-dimensional analysis of several likely hunting blinds near the former Red Mountain Spring which apparently date to late prehistory or the early contact period. The software program ARCMAP provides 3D "viewsheds" of several possible hunter target observation points. The different possible hunter placements are compared to likely prey travel routes. Different scenarios are displayed for visualizing different possible hunting tactics.

Joslin, Terry L. (University of California, Santa Barbara)

Prehistoric Settlement Patterns and Resource Use Along the San Simeon Reef: New Insights on Maritime Adaptations from the Cambria Coastline

General Session 1

The Cambria coastline in northern San Luis Obispo County provides a diverse ecological setting for the study of settlement and subsistence pursuits spanning 9,000 years. Initial results from recent surveys and excavations at four sites on the UC Kenneth Norris Rancho Marino Reserve provide new perspectives on prehistoric adaptations along this stretch of coastline. This research focuses on the choices and timing of human resource use and how these decisions affected settlement patterns. Using spatial information and rich artifact assemblages recovered from the current study and existing site data, this paper reviews shifting settlement locations and dietary preferences during the Middle and Late Holocene.

Kaldenberg, Russell (China Lake Naval Air Weapons Station)

A Review of the History of Archaeological Inquiry at China Lake Naval Air Weapons Station between 1910 and 1950

Symposium 7

This paper reviews the undocumented archaeological research which was conducted within the boundaries of the China Lake Naval Air Weapons Station (NAWS) about the time the Base was founded. It also touches on some of the more significant research on the borders of NAWS. Much of the early work is significant but remains unpublished. Significant amounts of the early data might be lost and unrecoverable.

Kaldenberg, Russell (China Lake Naval Air Weapons Station)

This is Your Life Jay von Werlhof—and it is a Good One

Symposium 11, Part 1

At the age of 80 Jay's energy is still boundless. He has been "doing" California archaeology for over fifty years. His pursuits of knowledge have taken him to every county in California. He has inspired two generations of archaeologists and Native Americans in his quest to save California's heritage. This paper summarizes Jays continuing contributions to the archaeology of the far Southwest.

Kaldenberg, Russell (China Lake Naval Air Weapons Station)

see **Sutton, Mark Q.**

Kelly, Michael S. (URS Corporation)

Water And Power: Construction Of The First Los Angeles Aqueduct, 1908-1913

General Session 1

Completion of the Los Angeles Aqueduct in 1913 was viewed as a significant engineering and technological accomplishment often compared to construction of the nearly contemporaneous Panama and Erie canals. The aqueduct, and the water it delivered to Los Angeles, forever changed the history and development of southern California. Expansion of the system continued into the early 1970s, leading to construction of the Second Los Angeles Aqueduct. For much of their lengths, the First and Second Los Angeles aqueducts cross public lands administered by the BLM. To better manage the significant prehistoric and historic resources



present along the aqueduct corridors, the Los Angeles Department of Water and Power (LADWP), under agreement with the BLM, contracted with URS to complete a comprehensive inventory. Conducted between January and September 2002, this effort resulted in the identification and recordation of 191 archaeological sites, including 56 prehistoric sites, 31 multiple component sites, and 104 historic sites. This paper focuses on the documentation of the historic sites, which include labor camps, construction camps, and division headquarters utilized during construction of the First Los Angeles Aqueduct.

King, Chester (Topanga Anthropological Consultants)

Ethnohistoric Baseline Data for Interpretation of Archaeological Sites

Symposium 3, Part 1

Historical data concerning the size and distribution of sites used at the time of the Spanish conquest corresponds with archaeological data concerning the distribution and size of settlements from the same time period. James Bennyhoff first recognized correspondence for the Plains and Bay Miwok. A majority of Central and Island Chumash conquest period sites have been identified. The proportion of conquest period settlements that have been identified in an area is a measure of the completeness of archaeological data concerning the distribution of settlement sites. In areas where most conquest period sites have been identified, it is possible to compare the distribution of sites occupied during earlier periods and observe changes in population distribution over time.

King, Jerome (Far Western Anthropological Research Group, Inc.)

Late Period Land-use in High and Low-Altitude Settings at China Lake

Hildebrandt, William R.

Symposium 7

Late prehistoric occupations on NAWA China Lake show major shifts in land use and subsistence focus consistent with those observed elsewhere in the Great Basin. Marginal lowland contexts such as Burro Canyon saw their first meaningful occupations during this time. These sites are small, brief encampments dominated by milling gear and containing high quantities of charred seeds of annual grasses and herbs. In contrast, while the upland areas of the Coso pinyon zone have a long record of prehistoric use, there is a marked late-period shift from an emphasis on hunting to intensive use of green cone pinyon. This adaptive shift is also reflected by the frequent defacement of earlier hunting-related rock art elements.

Kozakavich, Stacy (University of California, Berkeley)

Going Underground at Cal: On-Campus Excavation at the University of California, Berkeley

Wilkie, Laurie

General Session 4

In June, 2003 thirty-five field-school students excavated the underground remains of the late 19th-century Students' Observatory and Botanical Conservatory on the University of California, Berkeley, campus. Our ongoing investigations into the archaeological and archival materials pose questions about social and academic communities of past scholars, and the University's changing educational and architectural priorities.

Lange, Frederick W. (Statistical Research, Inc.)

Recent Research at the Tomato Springs Site (CA-ORA-244)

Ciolek-Torrello, Richard

Grenda, Donn

Homburg, Jeff

Archer, Gavin

Symposium 9

Under contract from the Irvine Community Development Company, SRI and TKC Cultural Resources Division collaborated on an updated evaluation of the spatial extent and physical integrity of the Tomato Springs site (CA-ORA-244) from 9 June-24 October 2003. There has been continuing consultation with the California Cultural Resources Alliance. A previous recommendation to integrate several small sites with ORA-244 was confirmed. A greater than anticipated degree of integrity was found beneath the agriculturally terraced sections of the site. For the first time in Orange County, a geoarchaeological approach was utilized to evaluate a site and to present recommendations for treatment.



Largo, Donna (Cahuilla, Santa Rosa Band of Mission Indians)

Native American Perspectives and Traditional Uses of the Santa Rosa and San Jacinto Mountains Symposium 12

Native American uses of the Santa Rosa and San Jacinto Mountains are discussed by a practitioner and teacher of traditional Cahuilla basket making.

Largo, Donna (Cahuilla, Santa Rosa Band of Mission Indians)

see **Lerch, Michael K.**

Laylander, Don (ASM Affiliates, Inc.)

Myths about Myths: Clues to the Time Depth of California's Ethnographic Record Symposium 3, Part 2

Ethnography has contributed many invaluable insights into California prehistory. But how far back into the past can its perspectives legitimately be projected? The unique characteristics of the myths and other traditional oral narratives that were recorded primarily during the early twentieth century make them useful for evaluating the time depths reached by native memories and by cultural continuities. The evidence suggests that substantial information was often conserved across several centuries, but that attempts to extend ethnographic testimony farther back than that are probably illusory.

Lebow, Clayton (Applied EarthWorks, Inc., Lompoc)

Middle Holocene Rock Features and Subsistence Remains at CA-SBA-59 Symposium 6

Data recovery at CA-SBA-59 in conjunction with infrastructure improvements for the City of Santa Barbara included archaeological excavation of 9.73 cubic meters. Two occupations were identified. The initial occupation, at 3860–3200 cal B.P., was associated with seven rock features and a substantial and diverse cultural assemblage, reflecting a residential occupation. Constituents include flaked and ground stone tools, vertebrate faunal specimens, culturally modified bones, marine shell, and fire-altered rocks. The second occupation, between 1030 and 460 cal B.P., is much less substantial and diverse and appears to reflect a short-term campsite. This paper examines the results of investigations at the site.

Lerch, Michael K. (Statistical Research, Inc.)

People and Plants in Bautista Canyon, Riverside County

Largo, Donna

Pink, William

McCarthy, Daniel F.

Symposium 3, Part 2

Archaeological and ethnobotanical studies conducted in 2001–2003 to evaluate the effects of a proposal by Riverside County Department of Transportation and the Federal Highway Administration to realign and pave a 13-km segment of Bautista Canyon Road through San Bernardino National Forest resulted in the identification of 18 prehistoric and protohistoric archaeological sites, collection areas for basketry plants, and a historic landscape important in traditional and contemporary Cahuilla culture—the Bautista Canyon Archaeological and Ethnobotanical National Register District. This paper describes the Native American consultation involving numerous field trips and interviews, as well as the archaeological sites and collecting areas.

Lerch, Michael K. (Statistical Research, Inc.)

see **Sutton, Mark Q.**

Levulett, Valerie (California Department of Transportation, San Luis Obispo)

Middle Holocene Adaptations on Goleta Slough: A View from the Corona Del Mar Site (CA-SBA-54) Hildebrandt, William

Jones, Deborah

Symposium 6

Excavations at the Corona Del Mar site (CA-SBA-54) by Harrison in the 1960s and Levulett in 1995 reveal a series of prehistoric occupations dating between ca. 5900 and 4400 RYBP. Analysis of data from CA-SBA-54 and other nearby sites is used to reconstruct the ecological history of Goleta Slough, and determine how



changes in the structure and composition of the estuary influenced local human adaptations. Some of the most important changes observed in the archaeological record include shifts in the location of settlements along the Slough, the rise of acorn-intensive economies in the local area, and expansion of the local fishery from a dependency on estuary environments to a wider range of pelagic settings.

Lightfoot, Kent G. (University of California, Berkeley)

Issues in the Development of Archaeological Interpretive Trails: A Case Study from Fort Ross State Historic Park

Parrish, Otis

Jewett, Roberta A.

Parrish, Sherry

Symposium 8

This paper examines several issues involving the development of the Kashaya Pomo Interpretive Trail in the Fort Ross State Historic Park. Drawing upon the recent literature on archaeological interpretive trails and parks, we consider the successes and failures of interpretive programs developed mostly outside of California. While programs in the American Southwest, American Southeast, and Europe vary greatly in the archaeologies presented, many of the successful programs are characterized by close collaboration with stakeholders (i.e., Native Americans, local communities), the implementation of some form of “experimental archaeology,” and innovative ways of presenting the past to the public. The paper explores some of these ideas and considers how they may be integrated into interpretive programs in California.

Lightfoot, Kent G. (University of California, Berkeley)

The Archaeology of San Francisco Bay: Twenty Years After

Luby, Edward

Symposium 10, Part 1

This paper considers three significant developments in the archaeology of San Francisco Bay twenty years after the first appearance of the seminal books on California prehistory by Chartkoff and Chartkoff and Moratto. The first development is the detection of buried archaeological remains from the Early Holocene that provide new insights on the hunter-gatherer peoples who occupied the region prior to the full expansion of San Francisco Bay. The second development concerns research on the creation of an anthropogenic landscape that corresponds to the final expansion of the bay. New models are being proposed and evaluated that consider the imposing shell mounds created by hunter-gatherers as crucial components of a built environment. The paper examines these models, considers the complex interactions between native peoples and San Francisco Bay environs, and compares and contrasts the findings with other mounded landscapes (both shell and earthen mounds) constructed by hunter-gatherers in the American Southeast. The third development is a concerted effort to examine the transition from prehistory to history in the greater Bay Area using archaeological materials in combination with archival records and native narratives. Specific studies consider native entanglements with diverse colonial programs (Spanish, Mexican, Russian, American) and the implications that these encounters have for understanding the perpetuation of native communities today.

Loubser, Johannes H. N. (New South Associates)

see **Whitley, David S.**

Luby, Edward (San Francisco State University)

see **Lightfoot, Kent G.**

Lucas, Carmen (Kwaaymii, Laguna Band Mission Indians)

see **Hines, Phil**

Ludwig, Brian (EDAW, Inc.)

Flaked Stone Studies

Symposium 4

Based on a consideration of the North Baja assemblage character and context, it is clear that a number of diverse research issues can be addressed through a detailed analysis of the lithic materials. The analysis of these assemblages constitutes an opportunity, to conduct a study of stone tool technology from the region. The North



Baja lithic assemblages vary considerably in terms of size, context, density, integrity, and temporal and cultural association. The majority of these assemblages have been collected from alluvial terraces or desert pavement surfaces, although subsurface components were recovered from a number of locations. While some assemblages occurred in sparse scatters with few or no readily identifiable focused reduction stations, other sites were more extensive with the distribution of lithic materials being more patterned with clear knapping stations being readily apparent. Three discovery sites and 13 previously known sites were subject to detailed examination.

Lyons, Barbara Gonzales (Vice Chair, Agua Caliente Band of Cahuilla Indians)

The Agua Caliente Band of Cahuilla Indians: Partners in the Development and Management of the Santa Rosa and San Jacinto Mountains National Monument

Symposium 12

When the Agua Caliente Band of Cahuilla Indians first asked to be included as partners in the management of the National Monument, they met with resistance because nothing like that had been done before. The tribe persisted and the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 acknowledges that “these mountains have special cultural value to the Agua Caliente Band of Cahuilla Indians.” The legislation further called for the Departments of Agriculture and Interior to “make a special effort” to consult with and involve the Agua Caliente in the preparation and implementation of the National Monument Management Plan. As a result, the BLM and the Agua Caliente have developed a Memorandum of Agreement that provides for collaborative management of lands within the Monument and the tribe has become an active and integral partner in planning and management. The Agua Caliente manage 23,000 acres of land within the boundaries of the National Monument.

Mack, Joanne M. (University of Notre Dame)

A Search for Shasta Presence on the Upper Klamath River

Symposium 3, Part 1

Archaeological investigations beginning in the late 1950s within the Upper Klamath River drainage, immediately noted the artifact assemblages recovered seemed as similar to northern California assemblages as to those in the adjacent Klamath Basin. Continued research in the 1960s did nothing to change this impression. When archaeological research resumed along the Oregon stretch of the river in the late 1970s, the results pointed to Shasta villages on the Upper Klamath River beyond the boundary recorded by Dixon and Holt in California. Continued investigations focused upon the area from the western edge of the Klamath Basin near Keno, Oregon downstream to the confluence of the Shasta and Klamath Rivers, leading to an hypothesis for Shasta territory. This hypothesis uses ethnographic information collected by Merriam, Curtis, Sapir, and DuBois, as well as information from historical documents, local personal histories, and interviews with members of the Shasta people.

Maniery, Mary L. (PAR Environmental Services, Inc.)

Life on the Edge: Soldiers and Miners on the 19th Century Coso Frontier

Symposium 7

The tentacles of the Civil War were far reaching, creeping even into the remote high desert are of the Coso Ranges. The discovery of copper in the region in the early 1860s (metal needed by the United States military in its war efforts) brought an influx of Spanish speaking miners and some settlers into the Coso region. Uprisings by Native Americans against these intruders resulted in the establishment of Camp Independence and related outposts by 1863, allowing mining to eventually resume. Within 10 years massive smelters in nearby Darwin were in operation processing the copper ore, resulting in a full-blown charcoal production industry high up in the Coso Range. This paper discusses the archaeological expressions of this early historical land use in the Coso Range of China Lake.

Manuel, Don W. (Bureau of Land Management)

There Once Was a Road: Protecting the Belfast Petroglyphs

General Session 2

For thousands of years people have visited the Belfast Petroglyphs—some to seek guidance, some to shelter and food and some to just visit and enjoy. During the last 30 years, however, others have sought not to enjoy but to destroy the Belfast site. In order to both protect the site and still allow the public to enjoy the area,



the BLM developed a new plan—a plan that included building a new road and hiking trail and a ambitious plan to restore the native ecosystem.

Mattiusi Gtz., Sarah (Mexicali branch office, INAH)

Recent Discoveries of the First Inhabitants of the Mexicali Valley

Symposium 13

The recent discoveries of new evidence in the Mexicali Valley reveal the important social and economical development of the human groups who inhabited this area and learned to exploit the environment of the desert, sometimes combining it with coastal, lake, and mountain range resources. The archaeological evidence left behind by this human activity is represented by the use of raw materials such as obsidian, different types and colors of flint, bone and ceramics.

May, Ron (Legacy 106, Inc.)

Historical Archaeological Collections As Evidentiary Proof To Substantiate Scientific Findings

Symposium 2

Recent point-counterpoint positions in the Society for California Archaeology *Newsletter* debated the need for preserving or dumping historic artifacts recovered from archaeological investigations. This paper will review the underlying reasons collections have been recovered and propose that archaeological collections are “evidentiary proof” regarding published research that cannot be destroyed by museum dumping. The paper will also examine legal obligations when entire sites are destroyed under federal and state law. Finally, the paper will examine a pilot program that preserved the historical archaeology collections for CA-SDI-12000, an 18th century Spanish cannon battery covered with an American whaling station and U.S. Army post in San Diego, California.

McDonald, Meg (Twentynine Palms Marine Corps Air Ground Combat Center)

see **Sutton, Mark Q.**

McGuire, Kelly R. (Far Western Anthropological Research Group, Davis)

Models Made Of Glass: Holocene Culture Change In Northeastern California

Symposium 10, Part 2

Northeastern California is obsidian country writ large, and the nearly 12,000-year span of prehistoric occupation of this region is indelibly stamped on the glassy tools and flakes left by these ancient peoples. In this paper, I trace the dynamic Holocene prehistory of this region—including changing mobility patterns, settlement-subsistence strategies, technology, and work organization—through a variety of data sets, and show how this storyline has been consolidated through obsidian source and hydration research conducted on a massive regional scale.

McGuirt, Michael D. (California Office of Historic Preservation)

see **Symposium, Workshop, and Roundtable Abstracts**

Workshop 1 Presenter

McKale, George (LSA Associates, Inc.)

Archaeological Investigation of Redeposited Shell Midden at San Mateo High School, San Mateo, California

General Session 1

Redeposited shell midden was identified during archaeological monitoring at San Mateo High School, San Mateo, California. Four prehistoric sites are located near the redeposited midden, with CA-SMA-04 the most likely candidate as the source of the midden. Due to a lack of stratigraphic integrity, the redeposited shell midden was considered to be of little or no significance and could not provide information important in prehistory. The archaeological monitor identified highly fragmented human remains and the Most Likely Descendant requested that the redeposited shell midden be screened for human remains. As a result, numerous artifacts were recovered and subsequently, upon realizing that there may be information potential, analyzed. It is argued that: (1) this redeposited shell midden provided information important in local prehistory; and (2) such deposits should be evaluated for potential significance regardless of an apparent lack of stratigraphic integrity.



McKenzie, Dustin (University of California, Santa Barbara)
see **Glassow, Michael A.**

McNitt, Karen (Imperial Valley Desert Museum)
see **Collins, G. Edward**

Milliken, Randall (Consultant in Prehistory and Ethnohistory)
The Early Mission Period Chumash-Salinan Boundary on California's South Central Coast
Johnson, John R.

Symposium 3, Part 1

We report on the social and linguistic geography of coastal Salinan and Northern Chumash communities, from Point Lopez south to San Luis Obispo Bay, as they existed during the Early Mission Period from 1771 to 1805. We have a general understanding of the locations of the largest coastal rancherías (local communities), from multi-village *Quiguilit* and *Lamaca* on the north to independent *Chaal*, *Stjahuayo*, *Tsetacol*, *Chmimu*, *Chotcagua*, *Chano*, *Sepjato*, and *Pismu* farther south. The language boundary along that coast, however, is a separate and more difficult problem. Few clues are available regarding the language once spoken in the Piedras Blancas and Cambria vicinities, called Playano by early missionaries. We conclude that it is impossible to be sure which of two divergent published boundaries is correct, the Cayucos boundary suggested by A.L. Kroeber (1925) or the Ragged Point boundary proposed by Robert Gibson (1983). We offer the possibility that Playano may have been a relict language, distinct from either Northern Chumash or Salinan.

Milliken, Randall (Consultant in Prehistory and Ethnohistory)
see **Hughes, Richard E.**

Minagawa, Masao (Graduate School of Environmental Earth Science, University of Hokkaido, Japan)
see **Fujita, Harumi**

Moore, Jerry (California State University, Dominguez Hills)
Archaeology of Place in Northern Baja California: Environment, Ritual, and Social Memory
Symposium 13

Munns, Ann M. (Applied EarthWorks, Inc., Lompoc)
Late Holocene Adaptations at S'axpilil (CA-SBA-60)
Symposium 6

Situated on the northeastern edge of the Goleta Slough, CA-SBA-60 corresponds to the village of *S'axpilil*, occupied during late Middle Period through historic times. This paper presents results of recent investigations undertaken by Applied EarthWorks, Inc. in conjunction with a highway bridge improvement project. Limited excavations and reanalysis of the 1960s-era McKusick collection from the site revealed temporal shifts in dietary emphasis and animal procurement patterns. On-site manufacture of chert bead drills is associated with the postcontact era and is represented by microblade cores, microblades, and microdrills. Both chert- and needle-drilled shell beads are present in contemporaneous deposits.

Matsunaga, John M. (University of California, Berkeley)
see **Ramsay, Amy E.**

McCarthy, Daniel F. (San Bernardino National Forest)
see **Lerch, Michael K.**

Modzelewski, Darren (University of California, Berkeley)
Sifting Through the Evidence: Creating a Multivocal Past
Symposium 8

This paper explores multiple ways of viewing the past. Consequently it will take into account historic, archaeological, ethnohistoric, and oral traditions. The result will be a layered presentation of a single archaeological site at the Fort Ross State Historic Park. The paper will also present some of the issues surrounding the incorporation of and presentation of a complicated past.



Moratto, Michael J. (California State University, Fresno)
Symposium 10 Discussant

Murley, Daniel F. (San Francisco State University)
Representations of Native Groups in the Interpretation of a Colonial Era Historical Site: Native Californians and Native Alaskans at The Ross Settlement
Symposium 8

The short history of the Russian settlement of Ross in Northern California has been represented in many interpretive displays, programs and publications since the site became a park in 1906. This paper will examine the early emphasis on representations of only the Russian presence. Later with increased sensitivity, research and more accurate information, Native people who were the most populous group at Ross and who accomplished the most meaningful contributions to the settlement's existence, began to be acknowledged. The growth in this awareness finally began to emerge in the public interpretation of these noteworthy and indispensable Native groups. Proposals for new interpretive programs will also be discussed.

Meyer, Michael D. (Anthropological Studies Center, Sonoma State University)
 see **Newland, Michael D.**

Negrini, Robert (California State University, Bakersfield)
Initial Efforts to Date Holocene Sediments of Tulare Lake using Paleomagnetic Secular Variation
Samano, Lorelea
Symposium 1

Paleomagnetic secular variation (PSV) dating is under way to test and extend age control of a sequence of Tulare Lake sediments previously constrained by limited ^{14}C dating. The sediments under study were sampled from trenches dug 2.5 km ESE of Kettleman City, Kings County, CA. The sampled interval was from 1.4 m below ground surface (bgs) to the bottom of the trench at 2.4 mbgs. The top of the sampled interval coincided with a unit rich in organic matter that was radiocarbon dated at $2,930 \pm 106$ yr B.P.

Both discrete 2cm X 2cm by 1.8cm box samples and a 2 cm by 2 cm cross section u-channel sample were taken. Here we report on initial results from the u-channel sample. Natural remanent magnetization (NRM), anhysteretic RM (ARM), and isothermal RM (IRM) were measured after stepwise alternating field demagnetization (AFD) to 60 mT in the cryogenic magnetometer at U.C. Davis. IRM was also measured up to a peak applied field of 1.0 T. NRM intensities were typically $3\text{-}4 \times 10^{-4}$ A/m after demagnetization with a median destructive field of ~ 20 mT. NRM directions were stable during demagnetization after removal of a VRM by AFD at 20 mT.

The paleomagnetic vector components were compared to PSV reference curves for western North America during the Holocene. The best fit is obtained for the reference curves between 5,200 and 3,200 ^{14}C yr. B.P. This is consistent with the available ^{14}C dates for the unit above the interval sampled for PSV (see above). In addition, the sedimentation rate inferred from the PSV correlation is ~ 30 cm/kyr, consistent with the rate (34 cm/kyr) of previous studies on the Holocene sediments of Tulare Lake (e.g., Davis et al., 1999).

Nettles, Wendy M. (Applied EarthWorks, Inc.)
 see **Hamilton, M. Colleen**

Newland, Michael D. (Anthropological Studies Center, Sonoma State University)
Rotchev's Gamble: Recent Excavations of the New and Old Magazines, Fort Ross State Historic Park
Meyer, Michael D.
General Session 4

Recent excavations of the New and Old "Magazines", or warehouses, within the Fort Ross Stockade suggest increased construction and changing construction techniques during the last days of Russian-American Company (RAC) occupation of the fort. Using excavation and documentary evidence, the authors argue that Aleksander Rotchev, the fort's last manager, may have been undertaking economic enterprises without the approval of, and perhaps against the wishes of, the RAC. The authors frame their argument within the context of individual agency and the expansion of the west.



O'Brien, Kathy (California State University, Hayward)
see **Gillette, Donna**

Osborn, Sannie Kenton (Presidio Trust)

Plan to Plan - An Archaeology Management Strategy for the Future

Symposium 5

The draft management strategy for the Presidio of San Francisco looks at opportunities for preserving and enhancing significant archaeological resources through interagency cooperation between the Presidio Trust and National Park Service and through the continuation or expansion of academic and public partnerships. The strategy considers landscape alternatives to commemorate El Presidio de San Francisco, opportunities for a new Archaeology and Education Center on the Main Post of this National Historic Landmark District and pilot projects at the Officers' Club and 18th-century Spanish Colonial chapel.

Oviedo García, Fernando (Sección de Arqueología, Centro INAH Baja California)

El Vallecito: Un sitio de la prehistoria tardía en Baja California

Symposium 13

A partir del año 2001 se retoma la investigación arqueológica en el sitio El Vallecito. El objetivo es obtener información del modo de vida y costumbres de sus antiguos pobladores, los Kumiai. La estrategia es a través de recorridos de superficie, excavaciones y el análisis de los materiales obtenidos. Hasta la fecha se han determinado las áreas de mayor ocupación, materiales culturales empleados, así mismo se evidenció la práctica de cremación y las zonas donde esta se realizaba. Además, se ha logrado identificar las especies animales que utilizaban los habitantes del lugar y se tienen resultados de fechamientos, que ubican al sitio en lo que se conoce como prehistoria tardía.

El Vallecito: A Late Prehistoric site in Baja California

In 2001, archaeological investigations were reinitiated at the site of El Vallecito. The aim is to obtain information of the way of life and customs of their former settlers, the Kumiai. The strategy is ranges from surface survey, excavations and the analysis of the obtained materials. Up to the date, the areas of major occupation have been defined, and raw materials utilized have been identified, likewise there was demonstrated the practice of cremation and the zones where this practice was performed. In addition, the animal species that the local inhabitants were using have been identified and results of chronometric dating, that are located to the site in what it is known as late prehistory.

Oxendine, Joan (Bureau of Land Management, Riverside)

Commentary of a Federal Archaeologist

Symposium 4

A commentary on the successful execution of legal responsibilities by federal agencies and private sector planners.

Padon, Beth and Chris (California Archaeological Site Stewardship Program)

California Archaeological Site Stewardship Program

Poster Session, afternoon

Many volunteers, archaeologists, and public agencies are involved with CASSP: California Archaeological Site Stewardship Program. The CASSP poster presents how public involvement reduces site vandalism and other damage. These partnerships have brought benefits that were not anticipated when the program started.

Panich, Lee M. (University of California, Berkeley)

Interpretive Issues and the California Missions

Symposium 8

This paper explores the ways in which the history of the mission period is presented to the general public at mission sites in California. Discussion centers around two case studies, Mission San Francisco de Asis and the Santa Cruz Mission State Historic Park. These sites are used to examine issues such as audience and resources that affect public presentations at mission sites, as well as the potentials of archaeology to add to a more nuanced and pluralistic public interpretation of the mission period.



Parr, Robert E. (California State University, Bakersfield)
see **Yohe, Robert M. II**

Parrish, Otis (Phoebe Hearst Museum of Anthropology, University of California, Berkeley/Kashaya Pomo Tribal Council)
see **Lightfoot, Kent G.**

Parrish, Sherry (Archaeological Research Facility, University of California, Berkeley)
see **Lightfoot, Kent G.**

Perry, Jennifer E. (Pomona College)
Sacred Island Landscapes: Identifying Possible Ritual Features on Santa Cruz Island
Symposium 3, Part 2

In contrast to the abundance of Chumash rock art on the mainland, for various reasons its limited presence on the northern Channel Islands has left ritual aspects of island prehistory poorly understood. Using ethnographic data and preliminary archaeological evidence, this paper explores features (i.e., rock platforms) and artifacts (i.e., portable incised stones) that potentially relate to ritual activities on Santa Cruz Island. Although certain aspects of Chumash beliefs and conceptions of sacred landscape undoubtedly were shared between mainland and island populations, it is argued that there were notable variations due to differences in the respective landscapes and raw materials available.

Perry, Jennifer E. (Pomona College)
see **Glassow, Michael A.**

Phillips, George H. (University of Colorado)
see **Schneider, Joan S.**

Pigniolo, Andrew R. (Laguna Mountain Environmental, Inc.)
Subsistence, Settlement, and Environmental Change at San Diego Bay
General Session 3

San Diego Bay archaeology has long been a testing ground for ideas of coastal resource use. It has been assumed to serve as a contrast to models of environmental decline built on smaller bays along the central San Diego County coast. In the 1980s, a significant model of bay evolution was built. A collection of almost 15 years of additional data has served to flesh out the earlier model of bay development. The data indicate that similar processes were occurring at San Diego Bay and northern lagoons and a presumed refugium did not exist. The data from San Diego Bay also provide a means to reexamine and reassess earlier models of coastal decline.

Pigniolo, Andrew R. (Laguna Mountain Environmental, Inc.)
A Different Context: San Dieguito in the Mountains of southern California
General Session 3

Late Paleoindian or San Dieguito sites have not been well documented in the mountains of southern California. A site in the Mount Laguna area of San Diego County provided an example of a single-component San Dieguito temporary camp at an elevation over 5,000 feet. Focus is on the use of local quartzite for producing bifaces and the tool kit includes ground stone. This resource serves to broaden our understanding of the range and variability of San Dieguito-complex assemblages in southern California.

Pink, William (Cupeño/Luiseño, Pala)
see **Lerch, Michael K.**

Pletka, Nicole (California State University, Long Beach/LSA Associates, Inc.)
An Analysis of Newport Coast Settlement Patterns: A GIS-based Approach
Symposium 9

A Nearest Neighbor analysis of Late Period archaeological sites in the Newport Coast area has shown that settlements are more clustered than would be expected statistically. Current research will further explore this



clustering using Geographic Information Systems. Research will examine whether sites are clustered around specific resources or if clusters are located on least-costly travel routes. This study will attempt to 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.

Pletka, Scott (LSA Associates, Inc.)

Using Lithic Analyses to Understand Coastal Settlement in Southern California

Symposium 9

This paper uses lithic assemblages from coastal Orange County sites to evaluate how groups utilized the landscape. Settlement studies in southern California have often described the archaeological record as a product of forager and collector systems. These studies have recognized important variation in the archaeological record, but many aspects of this record remain to be explained. Analysis of stone raw material use and tool production allows inferences to be made regarding the nature and intensity of on-site and off-site activities. Through these analyses, some of the processes responsible for the formation of the archaeological record can be identified.

Puckett, Heather R. (Tetra Tech, Inc.)

A Well Studied Artifact: Irrigation-Related Artifacts and Their Implications to the Study of Homesites in Desert Environments

Symposium 2

Perhaps the most essential component to any homesite in the desert is its water well. The well is one of the principal elements for making a successful land claim in the desert environment. The placement of the well most often determined the location of the reservoir, any pumping equipment, field delineations or conveyance systems, and ultimately, the primary dwelling and its related outbuildings. While valuable information pertaining to wells and irrigation-related equipment has been overlooked by archaeologists, such historical artifacts and features may yield important information with regard to themes such as chronology, subsistence, technology, settlement patterns, and economic activities.

Quinn, Harry (CRM Tech/College of the Desert/California State Univ., San Bernardino/Chapman Univ.)

Trails and the Early Development of the Pinyon Flats Area

Symposium 12

Many Cahuilla trails found their way into the Pinyon Flats area from both the desert and higher mountain regions. According to Bean et al. (1991:75) the Pinyon Flats area did not belong to any one Cahuilla group, but was available for harvesting pinyon crops by whoever was able to get there first. At least two trails came into the area from near the mouth of Deep Canyon, or Palm Desert area. One trail from the Palm Desert area came up Carrizo Creek and served as a cattle route in later years. It apparently served as the route for the last large cattle drive from the desert to the Anza Valley by Mr. Jim Wellman in 1927. Portions of the Cahuilla trails running from the Pinyon Flats area over to the Vanderventer Flats, or the Santa Rosa Indian Reservation, were also used to move cattle from the summer pastures in the Hemet Valley, now called Garner Valley, over to the winter pastures at Pinyon Flats (Contreras, personal communication). Portions of some trails were developed into a wagon road to haul asbestos out of the Pinyon Flats mines (Robinson and Risher 1993:84). Parts of this wagon road and other portions of Cahuilla trails were later developed into what is now Highway 74, which officially opened July 4, 1932 (ibid.).

Raab, L. Mark (California State University, Northridge)

see **Byrd, Brian**

Ramsay, Amy E. (University of California, Berkeley)

Layers of History and Telling the Story

Symposium 5

People and place have interacted at what we now call the Presidio of San Francisco for thousands of years. Native Californians, Spanish colonists, the Mexican government, U.S. Army service people, and contemporary public agencies have left their traces in an archaeological record under constant creation and modification.



Excavations at the Presidio both reveal and add to that record. In presenting our archaeological findings to the interested public, how do we highlight this fluidity and interconnectedness, while not reifying the heuristic distinctions between periods and people that we necessarily use to frame our investigations? And how do we incorporate our current activities (excavation, interpretation, etc.) into our discussion of the local archaeological record?

Ramsay, Amy E. (University of California, Berkeley)

The Evolution of an Archaeological After-School Program: Integrating the Needs of Multiple Stakeholders

Matsunaga, John M.

Symposium 8

Expedition!, an after-school program at Roosevelt Middle School in Oakland created by the Archaeological Research Facility at Berkeley, was designed to develop literacy skills in children through the use of archaeological information, computer technologies, and anthropologically themed activities. This program has undergone continuous development and change since its inception in 1998. Multiple stakeholders participate in the ongoing success of Expedition – middle school students, teachers, and administrators, local community advocacy groups, university undergraduates and faculty, research center staff, funding sources, and the University of California's outreach personnel. How have the continually changing needs of each group helped to shape the design of the program? And how can archaeology be made even more intrinsic to the ongoing efforts?

Raschkow, Wanda (Bureau of Land Management, Palm Springs)

see **Case, Stacy Schneider**

Reed, Judyth E. (Bureau of Land Management, Ridgecrest, California)

The Archeology of the Southwest Searles Lake Basin

Symposium 11, Part 1

In 2001, BLM archaeologists learned that an organized competitive Off-Highway Vehicle event had traversed an existing route inside the Christmas Canyon Area of Critical Environmental Concern (ACEC) in the southwest portion of the Searles (dry) Lake Basin. Inventory of the route resulted in location of 16 prehistoric sites that had been impacted by the event and ultimately led to inventory of over 2000 acres in and adjacent to the ACEC. More than 40 prehistoric archaeological sites were recorded including lithic quarry workshops, rock-shelters, rock alignments, stacked stone features, and milling features, many of which are located on Searles Lake gravel beaches. Dating of some features and limited testing have been carried out. Implicit is that many of these sites date from the Pleistocene/Holocene boundary when the lake contained water. Results of the study are summarized.

Reynolds, Richard L. (George C. Page Museum of La Brea Discoveries)

see **Conkling, Steven W.**

Rhode, David (University of Nevada, Reno)

see **Sutton, Mark Q.**

Rick, Torben C. (University of Oregon)

see **Erlandson, Jon M.**

Ridgway, Ginger (Agua Caliente Cultural Museum)

Curating and Interpreting a Cultural Landscape

Symposium 12

The new Agua Caliente Cultural Museum will be a centerpiece in preserving the cultural legacy of the Santa Rosa and San Jacinto Mountains National Monument. Its location adjacent to the monument places it strategically for curating artifacts, providing ethnographic information, and interpreting the cultural history of the Monument and the Cahuilla people through exhibitions, research, and educational programs. The Museum will continue to cooperate with the Bureau of Land Management, the U.S. Forest Service, and the other Monument partners to preserve, protect and interpret cultural resources.



Rosen, Marty (California Department of Transportation, San Diego)
see **Symposium, Workshop, and Roundtable Abstracts**
Roundtable Presenter

Rosenthal, Jeffrey (Far Western Anthropological Research Group, Inc.)
see **Eerkens, Jelmer W.**

Rosenthal, Jeffrey (Far Western Anthropological Research Group, Inc.)
see **White, Greg**

Rosenthal, Jeffrey (Far Western Anthropological Research Group, Inc.)
see **Young, D. Craig, Jr.**

Ruby, Allika (Far Western Anthropological Research Group, Inc.)
Itinerant Industry: 19th Century Charcoal Production in the Coso Mountains
Symposium 7

A remarkable 1870s landscape is preserved high in the pinyon forests of the Coso Mountains. This landscape was shaped by charcoal producers, who chopped their way across the wooded slopes, leaving behind scores of cut trees, spent earthen charcoal ovens, mule trails and wagon roads, as well as temporary shelters. The charcoal was destined for the silver and gold ore smelters of burgeoning mining towns across southeastern California, and the remains as well as contemporary accounts evoke a way of life that was strenuous and nomadic. Ongoing survey conducted by Far Western Anthropological Research Group, Inc. for NAWS China Lake has identified abundant features of this industry, including over 150 of these ovens across approximately 3500 acres. The charcoal workers' landscape is remarkably intact, and is likely the best preserved of its kind in California.

Russell, Glenn (Cotsen Institute of Archaeology, Fowler Museum, University of California, Los Angeles)
see **Glassow, Michael A.**

Samano, Lorelea (California State University, Bakersfield)
see **Negrini, Robert**

Sawyer, William A. (LSA Associates, Inc.)
Muddy Canyon Archaeological District, Newport Coast, California: A Summary of Research
Symposium 9

The Muddy Canyon Archaeological District of 24 sites spans the time from the earliest human occupation of the Orange County coast, ca. 8000 B.C., into very Late Prehistoric or Ethnohistoric times. Archaeological research of the project is expected to provide significant contributions to our understanding of the prehistoric lifeways of the region. Specific focus is placed on the adaptations of Milling Stone and subsequent Intermediate period cultures in locations apart from the ecologically enriched Newport Bay ecosystem.

Schablitsky, Julie (Museum of Natural History, University of Oregon)
see **Plenary Abstracts**

Schneider, Joan S. (University of California, Riverside)
Enhancing the Historical Record with Material Culture Analysis
Phillips, George H.
Symposium 2

The culmination of the Garra Uprising in southern California was the 1851 U.S. Army military tribunal, sentencing, and execution by firing squad of four Native Americans. These events are well documented by historical archival research. Limited archaeological excavation at the possible site of these events has produced stratigraphic and material culture evidence, not only confirming the events, but suggesting that a traditional mourning ceremony was later conducted at the same location, thus increasing our understanding of mid-19th century cultural history.



Schneider, Joan S. (University of California, Riverside)
see **Sutton, Mark Q.**

Schneider, Tsim D. (University of California, Berkeley)
“Good Clamming” or “Protohistoric Midden”: Presenting Archaeology to the Public Through Photography at Fort Ross and at Bodega Bay, California
Symposium 8

This paper explores photography as a method for presenting archaeology to visitors to sites in the north San Francisco Bay area. Photographs of archaeological excavations at Bodega Bay and at Fort Ross are archaeologically telling, ethnographically vital, and means to present archaeology to often excluded publics. Stories generated by members of descendent communities when viewing photographs reattach cultural meaning to objectively framed archaeological sites. This active engagement with photographs is (1) multiscalar, (2) enzymic to barriers common between archaeologists and “publics,” and (3) a pedagogic technique to meaningfully present archaeology to the public.

Schroth, Adella B. (San Bernardino County Museum)
see **Sutton, Mark Q.**

Schwartz, Steve (U.S. Navy)
Ethnohistoric Observations on the Material Culture of the Nicoleño
Symposium 3, Part 2

The plight of Juana Maria, the “Lone Woman of San Nicolas Island,” is well known to the academic community and to the general public. Little attention, however, has been paid to the descriptions of Nicoleño material culture which appear in the accounts of George Nidever and Charles Dittman during their searches of San Nicolas Island to locate the Lone Woman. During their searches they noted a number of standing structures, located a basket filled with artifacts, and noted several artifacts and how they were made. When they found the lone woman they described her campsite and the articles that she choose to bring with her. There are also a few disparate notes on her material culture located in various sources which provide the only ethnohistoric observations of Nicoleño material culture.

Schaefer, Jerry (ASM Affiliates, Inc.)
Patayan I Fish Camps on the Northeast Shoreline of Lake Cahuilla
Symposium 11, Part 2

Two Patayan I phase fish camp sites were recently tested on the Lake Cahuilla shoreline, located north of Dos Palmas and west of the ancient Salt Creek Pass to the Colorado River (later, the Bradshaw Trail). Both sites contain well-preserved house pits, some with internal slab features. Radiocarbon-dated fish bone give a preliminary date of ca A.D. 870–1010 (2 sigma). This unusually early date appears to be corroborated by direct-rimmed Patayan I ceramic types, including types associated with both Colorado River and Lake Cahuilla manufacture. Data recovery is pending (and hopefully imminent) to examine questions of Lake Cahuilla’s role in effecting cultural interaction between the Colorado River and Coachella Valley.

Schaefer, Jerry (ASM Affiliates, Inc.)
An Archaeological Survey of the Santa Rosa Mountains National Monument, California
Crawford, Karen L.

Symposium 12

A Class II inventory was conducted within the Santa Rosa Mountains National Monument in 2002–2003. This talk will present the findings and conclusions of the study with particular attention paid to the research design and predictive model developed for the study, and conclusions and implications for future research in the Santa Rosa National Monument.

Schaefer, Jerry (ASM Affiliates, Inc.)
Symposium 4 Discussant



Schaefer, Jerry (ASM Affiliates, Inc.)
see **Sutton, Mark Q.**

Serrano González, Jorge (Senior Archaeologist at the Ensenada branch office of INAH)
La conformación de equipos coadyuvantes en la protección de sitios culturales en el estado de Baja California
Symposium 13

El programa que aquí presentamos está tomado y adaptado del “California Archaeological Site Stewardship Program” (CASSP), propuesto y vigente desde 1999 por el arqueólogo Russ Kaldenberg de la Agencia para el Manejo de la Tierra (BLM), en un intento para preservar los sitios arqueológicos del estado de California, involucrando a la comunidad civil con acciones inmediatas a corto plazo a través del monitoreo constante de los mismos. Dadas las condiciones similares de deterioro, degradación y vandalismo que presentan los sitios arqueológicos en Baja California se conforma el “Programa Estatal De Enlace Social Para La Preservación De Los Sitios Arqueológicos,” con los objetivos anteriormente citados formando equipos de voluntarios denominados Vigilantes Voluntarios, como apoyo al INAH.

The program that is presented here is taken and adapted of the “California Archaeological Site Stewardship Program” (CASSP), proposed and in force since 1999 by archaeologist Russ Kaldenberg of the Bureau of Land Management (BLM), in an intent to preserve the archaeological places of the state of California, involving to the civil community with short-term immediate actions through the constant monitoring of the same. Given the similar conditions of deterioration, degradation, and vandalism that face the archaeological sites in Baja California, they make up the “State Program of Social Links For the Preservation of the Archaeological Sites,” with the objectives previously cited forming teams of volunteers called Vigilant Volunteers, as supporting INAH.

Sharp, John (California Department of Transportation)
see **Symposium, Workshop, and Roundtable Abstracts**
Workshop 1 Presenter

Shultz, Richard D. (Sonoma State University/Anthropological Studies Center)
Burned, Broken, and Buried: The Effects of Fire and Fire Management on Cultural Resources
General Session 4

Following the extreme fire behavior on federal lands during the late 1980s and 1990s, the National Park Service issued Director’s Order #18 instructing each National Park “with vegetation capable of burning” to develop a Fire Management Plan. Point Reyes National Seashore is in the process of developing such a plan, for which the presenter has written a report detailing the effects of fire and fire management on cultural resources. This presentation outlines the direct, operational, and indirect effects associated with fuel reduction strategies, prescribed and wildland fires, and offers recommendations for minimization or avoidance of adverse effects.

Smith, Cheryl A. (University of California, Berkeley)
What Do All These Bones Really Mean?: Zooarchaeological Method at the Presidio of San Francisco
Symposium 5

Faunal remains on historic sites do not always represent diet alone, and it is important that we consider the possibilities of non-food uses of animals. Much of this information can be gleaned from the documentary record, as well as the bones themselves. Even if archaeological fauna point towards the remains of a meal, we can do more than offer laundry lists of species and instead focus on what is called culinary processing to better understand the processes and peoples involved. Preliminary faunal analysis from excavations at the Presidio of San Francisco will be discussed.

Simon, Joseph M. (W&S Consultants)
see **Whitley, David S.**

Smith, David G. (University of California, Davis)
see **Plenary Abstracts**



Somers, Lewis (Geoscan Research (USA), Archaeo-Physics LLC)
see **Symposium, Workshop, and Roundtable Abstracts**
Workshop 2 Presenter

Spinney, Harriot E. (Tetra Tech, Inc.)
On the Use of Weights-of-Evidence Analysis for Predicting the Incidence of Prehistoric Archaeological Sites in Unsurveyed Areas

Budinger, Fred E., Jr.

Hoerber, Steven

General Session 3

It is often desirable to predict the incidence of prehistoric archaeological sites in unsurveyed areas based on data derived from limited systematic surveys. A quantitative method for combining lines of evidence in support of various hypotheses was used to prepare “predictive models” of relative prehistoric site incidence in the Antelope Valley. This quantitative method is known as Weights-of-Evidence Analysis. The Weights-of-Evidence method is a probability-based technique for mapping site incidence potential using the spatial distribution of known location, in this case, of prehistoric evidence. A location-potential map predicting the relative incidence of sites at high, medium, and low sensitivities can be generated from geological, soils, botanical, and hydrological data.

Weights-of-Evidence Analysis is based upon Bayes’ Rules of Probability. Bayesian theory assigns equal probability to any number of outcomes conditional upon the actual outcome over a period of time. That is to say, Bayesian theory assumes an element of learning or teaching by the subject. In this case, the subject is a software program (ArcView GIS ARC-SDM), which has a series of training points integrated within it. More particularly, Bayesian theory integrates new evidence with existing knowledge.

Stankowski, Cindy (San Diego Archaeological Center)

Presenting the Past: Public Interest in Archaeology

Poster Session, afternoon

Very few people get to see the results of field work—reports are not generally written for the public and the artifacts usually remain in a box. The San Diego Archaeological Center has found that exhibits and education programs that allow the public to see, touch and learn about artifacts have resulted in increased interest in archaeology and history, and an appreciation for the work that archaeologists do. The Center’s successful exhibit program includes offsite venues in schools, libraries and offices, thus expanding the community’s awareness of cultural resource protection and the need for archaeological excavation.

St. Clair, Michelle C. (College of William & Mary and Pacific Legacy)

see **Blind, Heather**

Stoermer, Stephanie (FHWA California)

see **Symposium, Workshop, and Roundtable Abstracts**

Roundtable Presenter

Strudwick, Ivan H. (LSA Associates, Inc.)

CA-ORA-269: A Rockshelter Habitation in the San Joaquin Hills of Coastal Southern California

Symposium 9

One of the largest rockshelter-associated middens in the San Joaquin Hills was excavated in 2002 and 2003 per Section 106 for the U.S. Army Corps. The site, located near Newport Bay, was tested over a period of 10 weeks by 80 archaeologists who excavated 200 1x1 m units to depths of 10-380 cm. Specialized studies include bead, bone, geomorphology, obsidian sourcing and hydration, otolith, paleoethnobotany, radiocarbon, remote sensing, and rock-art analyses. Radiocarbon results indicate the site was occupied from ca. 800 BC to ca. AD 1800. Clustered dates suggest the site was occupied intermittently for nearly 3,000 years.



Strudwick, Ivan H. (LSA Associates, Inc.)

Daub: The Archaeological Value of Fired Clay at CA-ORA-269 in the San Joaquin Hills of Coastal Southern California

Symposium 9

Daub, the fired clay residual created when clay-packed wattle structures burn, is rarely found on archaeological sites. This is due in large part because daub is similar in color and texture to local sediment. Water screening and laboratory sorting of all screened material from a site substantially increases the identification of daub. Daub often contains impressions such as vegetation and human fingerprints. Stick or pole impressions in daub will sometimes exhibit a measurable curvature that can be used to reconstruct pole diameter and can thus aid the identification of prehistoric construction techniques.

Sutton, Mark Q. (California State University, Bakersfield)

The Last 20 Years of Research into the Prehistory in the California Deserts

- Schaefer, Jerry**
- Allen, Mark**
- Cottrell, Marie**
- Gardner, Jill K.**
- Giambastiani, Mark**
- Garfinkel, Alan**
- Kaldenberg, Russ**
- Lerch, Michael K.**
- McDonald, Meg**
- Rhode, David**
- Schneider, Joan S.**
- Schroth, Adella B.**
- Yohe, Robert M. II**

Symposium 10, Part 2

In the 20 years since the publication of Chertkoff and Chertkoff's "The Archaeology of California" and Moratto's "California Archaeology," considerable new work has been done in the California deserts and much has been learned. In addition to purely academic research, a great deal of other research has been conducted by CRM firms and the federal and state governments, all of which has contributed to a greater understanding of the past. These developments are outlined herein.

Sutton, Mark Q. (California State University, Bakersfield)

see **White, Greg**

Switalski, Hubert (California State University Bakersfield)

see **Jones, Josine**

Swope, Karen K. (California Department of Transportation, San Bernardino)

Introduction

Symposium 2

Recent material culture studies in historical archaeology have pointed at the utility of artifacts as markers of economic groupings, consumer choice, social identities and group behaviors, and typify the potential for important studies even within the framework of CRM. The studies presented here are illustrative of the sound analysis and interpretation that are essential if we are to achieve valuable, contextual meaning from historical material culture studies.

Swope, Karen K. (California Department of Transportation, San Bernardino)

Glass and Ceramic Poultry Gastroliths, or Grits, in Historical Archaeological Deposits

Coniglio, Ross

Symposium 2

The keeping of home flocks was commonplace prior to the turn of the twentieth century. Evidence of this practice is found in the form of bits of glass or ceramic, termed gastroliths, or grits, that have been ingested and processed in the digestive tracts of domestic birds. The avian gastrointestinal system is discussed, and the



characteristics of grits are described. These artifacts exhibit wear patterns that make them readily identifiable in the archaeological record. Although not uncommon at historical archaeological sites, grits are typically overlooked and numbered with non-diagnostic sherds. Their presence and context can yield important information about the presence of home flocks and practice of animal husbandry.

Taggart, Michael W. (Eldorado National Forest/ECORP Consulting)

Fire Use In Managing Landscapes: Challenges And Opportunities For Cultural Resource Managers
General Session 4

A growing body of work has begun to describe the historic role of both natural and anthropogenic fire in shaping and maintaining landscapes. As the practice of using wildland fire as a management strategy continues to grow, cultural resource managers are faced with a number of new challenges and opportunities. This paper will detail the growth of fire use modules and outline strategies for successful integration of archaeological and historic resource protection.

Thorne, Tanis C. (University of California, Irvine)

The Relocation of the Capitan Grande Bands to Barona and Viejas in the 1930s

Daly, Heather Ponchetti

Symposium 3, Part 2

In 1919 Congress passed the El Capitan Act, giving federal approval to the City of San Diego's plan to build a reservoir, which would flood part of the Capitan Grande reservation in San Diego and displace two bands of Indians there. The city paid \$35 dollars an acre for 1000 acres. A majority of the Indians lobbied to use these funds to buy collectively-owned ranches. With Department of the Interior approval, fifty-five individuals from the Capitan Grande band, purchased the 6000-acre Barona Ranch for \$75,000. The government began moving Indians there in 1934, but not without resistance from a small group who refused to leave. Another property, the Baron Long ranch of 1609 acres, was purchased in 1934 for 90 members, primarily from the Los Conejos band. These two relocated groups, Barona and Viejas, ranch among the wealthiest gaming tribes today.

Tushingham, Shannon (University of California, Davis)

Obsidian Trade and Cultural Tradition in Northwestern California

General Session 1

Kroeber and other early ethnographers wrote extensively about northwestern California's unique place in aboriginal California and its relationship to the Pacific Northwest. To address this issue and understand the importance of the Pacific salmon fishery in the regional settlement system, fieldwork was initiated in Tolowa ancestral territory in 2003. Excavations at TcuncuLtn (CA-DNO-26), a prehistoric and contact period village site on the Smith River, confirmed the presence of several semi-subterranean structures, provided evidence of coastal contact, and revealed very high obsidian counts. Results of analysis are described and compared with other regional sites with respect to existing frameworks that model change in the prehistoric record of northwestern California.

Tyler, Bob (Coachella Valley Archaeological Society)

U.S. Indian Service Water Projects

Symposium 12

Return with us now to those thrilling days of yesteryear! The days of the Smiley Commission, the Daws Act, and reservations without water! Bob Tyler has compiled a series of historical photographs taken between 1912 and 1915 showing crews of men constructing canals and dams as part of U.S. Indian Service water projects to provide reservations with water for farming and ranching. These projects, mandated by the Smiley Commission and the Daws Act, had as their goals the creation of self sustaining reservation economies, the allotment of tribal land and the eventual end of the federal reservation system.

Underhill, Peter A. (Department of Genetics, Stanford University School of Medicine)

see **Plenary Abstracts**



Underwood, Jackson (EDAW, Inc.)

Ethnohistoric and Ethnographic Context for the North Baja Pipeline

Symposium 4

This paper reviews the published ethnohistoric and ethnographic literature of the area traversed by the North Baja Pipeline. This area is on the west side of the Colorado River south of the community of Blythe, Riverside County, California. The Blythe area, or Palo Verde Valley, was in the traditional territory of the Matxalycadom or Halchidhoma from about A.D. 1700 to 1829. Prior to 1700, some other Yuman tribe occupied the area, but their identity is unknown. Between 1827 and 1829 the Halchidhoma pulled out of the Palo Verde Valley area under military pressure from the Quechan and Mojave. The Palo Verde Valley then became Quechan territory and is considered so today. This review focuses on the traditional lifeways of the Halchidhoma and Quechan as they relate to the archaeology of the region.

Underwood, Jackson (EDAW, Inc.)

Some New Geoglyphs in the Colorado Desert

Symposium 11, Part 1

Jay von Werlhof has been dedicated to the discovery, recordation, and preservation of geoglyphs in the Colorado Desert for over 30 years. In this paper, I document two geoglyphs that I discovered in the Colorado Desert as part of the North Baja Pipeline Project.

Van Bueren, Thad M. (California Department of Transportation, Oakland)

In with the New and Out with the Old: Interpreting Household Transitions

Symposium 2

Transitional events have an abiding interest for historical archaeologists. Those events are often marked by distinct stratigraphic breaks (interfaces) associated with changes in occupancy, land use, or catastrophes such as fires and floods. While family occupations spanning several generations may be characterized by conservative change, pivotal transitions such as changes in the female household head can also lead to distinct construction and disposal events with high interpretive value. This presentation considers the implications of a deposit created when the matriarch of a San Mateo County farm died and her daughter-in-law became the household head.

Vane, Sylvia Brakke (Cultural Systems Research, Inc./Ballena Press)

Native American Places: ethnographic research in the Santa Rosa and San Jacinto Mountains

Symposium 12

The significance of many of the Native American places that can be mapped in the Santa Rosa and San Jacinto Mountains is known because of the willingness of Alejo Patencio to share traditional Cahuilla oral literature with William Duncan Strong, and his brother Francisco Patencio's telling his version of them to two women who taped, transcribed, and left for publication what he said. These are but two of the numerous Native Americans who have helped preserve knowledge of the Cahuilla culture for the Cahuillas of the present and future by sharing what they knew with outsiders. This paper will show how the Creation-Time stories of the Patencios fit the landscape of the Santa Rosa and San Jacinto Mountains National Monument and summarize the history of Cahuilla ethnography—a collaboration between Cahuilla and ethnographers.

Van Wormer, Steve (Walter Enterprises, Chula Vista)

At Home On Gold Mountain: An Historical And Archaeological Study Of Chinese Americans In San Diego California

Symposium 2

Analysis of cultural materials recovered from archaeological investigations in San Diego's Chinatown revealed two distinct patterns reflecting the different strategies of Chinese-American merchants as opposed to transient "overseas sojourners." Living without their families and not making an effort to interact with the host Euro American society, sojourner refuse shows little acculturation. A spending pattern focused on consumer items consisting chiefly of Chinese food products and liquor suggests most of their earnings were sent back to China. The merchant class refuse shows greater acculturation, higher economic status, and the existence of a family unit with a more diverse spending pattern than their migrant labor countrymen.



von Werlhof, Jay (Imperial Valley Desert Museum)

Yuman Creation Story: A Pictorial Synthesis

General Session 2

Thirty years ago I gave my first presentation to SCA. This current one will be my last. This paper focuses on geoglyphs, a division of prehistoric art that attracts few researchers in contrast to the numerous rock art enthusiasts. But there have been a few diligent scholars, as Boma Johnson, Jeffrey Altschul, and Joseph Ezzo. While they developed meaningful hypotheses about earthen art, they did not have the complete data base now available that Harry Casey acquired through 700 hours and 5,000 aerial photographs that assuredly represent 99% of southwest desert earthen art. This was supported through ten years of surveys by IVC field classes. Those data aligned behind a few categories relating to episodes in the Yuman Creation story. Those relationships form the theme of my current presentation.

von Werlhof, Jay (Imperial Valley Desert Museum)

Symposium 4 Discussant

Voss, Barbara L. (Stanford University)

Beyond the Walls: Investigating Culture Contact at El Presidio de San Francisco – The Tennessee Hollow Watershed Archaeology Project

Symposium 5

Frontier settlements like El Presidio de San Francisco were pluralistic communities, composed of diverse populations of colonial and Native Californian residents and laborers. Understanding the dynamics and outcomes of culture contact at these settlements requires archaeologists to look “beyond the walls” of the formal settlement compounds. The Tennessee Hollow Watershed Archaeology Project is the first systematic investigation of the extramural residential neighborhoods at any presidio settlement in western North America. Test excavations conducted in 2003 at one residential site, El Polín Spring, resulted in the discovery of an early civilian settlement in colonial San Francisco. This presentation discusses the findings of the test excavation program and outlines plans for further research at the site in 2004-2006.

Waechter, Sharon A. (Far Western Anthropological Research Group, Inc.)

Late-Period Resource Intensification in Sierra Valley, Eastern Plumas County:

A Response to the Medieval Climatic Anomaly

General Session 1

Far Western’s recent excavations at CA-PLU-1485 in northern Sierra Valley uncovered more than 50 features of a type rarely seen in northern California or western Nevada (and never in such large numbers): well-constructed, rock-lined cooking basins ranging from 36 centimeters to 3.3 meters in diameter. Other features – house floor, midden/charcoal-filled pits, clusters of unburnt stones – lay in close proximity to the cooking basins, and the larger site included a midden more than a meter deep. Most intriguing are the radiocarbon dates from these features. Eighteen radiocarbon dates from 16 of the features cluster tightly between 970 and 490 Cal BP; 15 of these fall within the period of the Medieval Climatic Anomaly (1050-600 Cal BP). Comparisons with similar features on the Columbia Plateau, and reading of the ethnographic data on the Washoe, suggest that these rock-lined basins were used to process camas. If so, this would be the most southerly example of large-scale camas processing found to date. Given the dates from these features, it is likely that they also represent resource intensification brought on by major climate changes over the last 1,000 years.

Walker, Jamie (California State Polytechnic University, Pomona)

see **Jones, Josine**

Walsh, Michael R. (Ancient Enterprises, Inc.)

Watchamacallits, Doo-Dads, and Thingamajigs: Enigmatic Rock Features in the Mojave Desert

Clewlow, C. William, Jr.

Symposium 11, Part 1

If we have learned anything from the career of Jay von Werlhof, it is that some times the darnedest things turn into truly exciting and important elements of the prehistoric landscape. We just have to look at enough of them, long enough and in the right light. How else to bring about the discovery of fish weirs in the middle of the



desert, or of geoglyphs discernable only from the air? This lesson is applied to a number of enigmatic rock features recently discovered near Searles Dry Lake in the northwest Mojave Desert, including piled stone cairns, stone alignments, stacked rocks and some unfathomable arrangements. We have no idea what these features represent, and at present simply detail our successful attempts to rule out historic origins for the rock features.

Walsh, Michael R. (Ancient Enterprises, Inc.)
see **Clewlou, C. William, Jr.**

Warren, Keith (Applied EarthWorks, Inc.)
see **Hamilton, M. Colleen**

Wellman, Dawn (Fifth-generation member of the Wellman Family Cattle Allotment)
Whose Cows are These?

Symposium 12

Among the topics presented in this symposium is a discussion of how the Cahuilla peoples and pioneer ranchers have used cattle throughout history as a tool to sustain a healthy environment, such as reducing fire fuels, and promoting new plant growth. This overview of the history of longhorn cattle and ranching within the SR/SJ Monument presents an alternative perspective in regard to ever-increasing concerns over public land management issues.

West, G. James (University of California, Davis)

Late Pleistocene and Holocene Environments and Environmental Change in California

Woolfenden, Wallace

and contributions by others

Symposium 10, Part 1

The climatic changes of the Late Pleistocene and Holocene have had a major effect on California's environment. Our goal is to examine the environmental record of California from the Late Pleistocene (ca. 13,000 years ago) to the protohistoric period by adding a temporal dimension to Baumhoff's Culture Areas for California. Various data sets of proxy records will be examined with the major emphasis on the reconstruction of past vegetation as vegetation is the most significant terrestrial variable for prehistoric gatherers and hunters.

White, Greg (California State University, Chico)

The Central Valley: A View From the Catbird's Seat

Rosenthal, Jeffrey

Sutton, Mark Q.

Symposium 10, Part 1

In the past 20 years, Central Valley archaeology has seen theory advance at a faster pace than empirical data. This paper reviews development of these theories and identifies the problems and prospects associated with demonstration. Major Central Valley projects and synthetic studies of the last 20 years are summarized, and problem areas for further study are considered, including geoarchaeology and archaeological visibility, subsistence economy and social organization, material culture studies, human osteology and paleogenetics, and the need for synthetic culture history.

Whitley, David S. (W&S Consultants)

The Carrizo Collapse: Art and Politics in the Past

Simon, Joseph M.

Loubser, Johannes H. N.

Symposium 11, Part 1

Carrizo Plain National Monument is renowned for its pictographs. It also has numerous villages, and the combination of the two has implications for two debates: the medieval climatic anomaly and the rise of the Chumash chiefdom. A three-phase pictograph chronology (based on superpositioning) charts development of a distinctive Carrizo tradition, illustrating the increasing prominence of Middle Period shaman-headmen, and their disappearance, with final-phase art consisting of occasional "intrusive" Yokuts-style motifs. Villages cover



10 percent of the ground surface in the Caliente Range foothills: 98 percent are Middle Period; 2 percent are Late Horizon. This suggests a tenfold population decrease: from about 300 people to 30 people.

Wilkie, Laurie (University of California, Berkeley)
see **Kozakavich, Stacy**

Wilkinson, Megan (Presidio Trust)
Global Influences in New Spain's Remote Outpost
Symposium 5

The Presidio San Francisco, New Spain's northernmost frontier in Alta California was considered an isolated outpost. Its military and civilian settlers crafted some items locally, but relied on shipments from San Blas, Mexico some 1,500 miles away for the bulk of their supplies. Despite this remoteness, ceramic artifacts uncovered during excavation projects reflect the global influences this military post was able to witness. Porcelain and Majolica remains are used in a discussion of how household materials were this community's link to the world abroad.

Wood, Brian (California Polytechnic State University, San Luis Obispo)
see **Jones, Terry L.**

Woolfenden, Wallace (U.S. Forest Service)
see **West, G. James**

Yohe, Robert M. II (California State University, Bakersfield)
Immunological Protein Residue Analysis: An Update on Archaeological Applications
Parr, Robert E.
Symposium 1

The application of immunological protein residue analysis to archaeological materials has been the source of some controversy over the past 15 years. Debates over the durability of identifiable protein molecules (particularly immunoglobulins) have raged on in the professional literature and at conferences during this time, but the bulk of the evidence to date suggests that complex proteins can be isolated and recognized through counter immunoelectrophoresis (CIEP) under certain conditions. Such analyses have been used in recent years by various scholars to assist in dietary reconstruction as well as improve our understanding of flaked stone and ground stone artifact function. Success with the isolation of ancient DNA (aDNA) from artifact surfaces and fossil bone in recent years has given further credence to durability of complex organic molecules, and serves as another avenue for the study of prehistoric diet and artifact function. This paper will review the most recent applications of this fascinating melding of physical science and archaeology.

Yohe, Robert M. II (California State University, Bakersfield)
see **Draucker, Anne**
see **Sutton, Mark Q.**

Young, D. Craig, Jr. (Far Western Anthropological Research Group, Inc.)
The Pleistocene-Holocene Transition at China Lake
Rosenthal, Jeffrey

Symposium 7

Like most places in the west, the Pleistocene-Holocene transition at China Lake was a time of tremendous change. Lake China fluctuated between high stands and complete desiccation, aeolian and alluvial processes reshaped the landscape, and more than half of the continent's large mammals went extinct. These transformations left an enduring imprint on the local landscape and likewise had significant effect on the nature and structure of the archaeological record at China Lake. In this paper we explore aspects of the paleoenvironmental record and consider how evolution of the biotic and geomorphic landscape at the Pleistocene-Holocene transition influenced human land-use and preservation of the archaeological record.

Younkin, Elva (Maturango Museum)
see **Gilreath, Amy J.**