PAPER ABSTRACTS
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Binning, Jeanne D. (California Department of Transportation) and Alan P. Garfinkel (AECOM)

Paleoindian Use of Bodie Hills Obsidian: Assessing Who was Earliest in the Southwestern Great Basin

Beck and Jones (2010, 2012) posit that, in the Intermountain West, the Western Stemmed Tradition (WST) predates the Clovis Horizon. Moreover, they suggest that people belonging to the WST arrived in the New World, from the North, via the Pacific Coast prior to the manifestation of the Clovis Horizon. The authors agree that the arrival of people of the WST in the New World predates the Clovis Horizon, particularly in the Pacific Northwest. However, Bodie Hills obsidian hydration data suggest that Clovis people were living in the Southwestern Great Basin prior to people of the WST. It is suggested that WST people did not occupy the Southwestern Great Basin until after 12,000 Cal BP.

Blythe, Ashley (Bureau of Land Management, Ridgecrest Field Office) and Greg Haverstock (Bureau of Land Management, Bishop Field Office)

The Biface Junction Site: Exploited Labor in the Exploration of Exploited Resources

The Coso obsidian quarry was one of the most significant sources of toolstone in prehistoric California. Obsidian obtained from one of the four geochemically distinct sub-sources has been identified in archaeological deposits throughout south-central California and into Baja. Recent survey and recordation efforts at a site located 10 kilometers west of the Sugarloaf sub-source provides insight into the timing and technology associated with the trans-Sierran portage of obsidian toolstone. This mid-elevation site, spatially removed from the quarry, represents a site type not often examined within the context of quarry utilization.

Brady, Ryan (Albion Environmental Inc.)

On the Utility of Insects as Food: A Case Study from Mono County

Ethnographic and historic accounts of Inyo and Mono counties highlight the seasonal collection of certain invertebrates by the region’s aboriginal inhabitants. Accounts discuss mass collection of species such as brine fly larvae and Pandora moth caterpillars. While it is likely that the role these food resources had in past subsistence and settlement patterns varied through time, little attention has been paid to how their use may have articulated within the larger settlement system, and why that may have been. This paper discusses the potential costs and benefits of these resources, and some archaeological correlates that may be used to identify exploitation of such resources.

Calloway, Angela (California Department of Transportation)

Dreaming Antelope: Fieldwork Results from the Mesa

There is a mesa within the Humboldt-Toiyabe National Forest (Bridgeport Ranger District) named Tunna’ Nosi’ Kaiva’ Gwaa meaning “Antelope Dreaming Mountain Place.” This mesa is rich with archaeological features that include rock walls and corrals, presumably built to drive antelope. In addition, a plethora of rock rings have been noted throughout the area (including several wikiup features).
I am currently finishing a management plan for Tunna’ Nosi’ Kaiva’ Gwaa and conducted fieldwork in 2009. My fieldwork, a random sample reconnaissance survey, produced diverse assemblages with activities ranging from hunting to pinyon processing. It is inferred that occupational use of the area ranges a span of at least 2000 years and several sites are representative of the protohistoric era. In this presentation, I will give an overview of my findings and discuss the importance of this area in regards to future research, especially in the domains of game drives, pinyon processing, and acculturation issues.

**Davis-King, Shelly (Davis-King & Associates)**

**Consider the Pronghorn: Ethnographic Accounts to Assist Archaeological Landscape Design**

This paper will present some background information from 19th and early 20th century Northern Paiute informants about the capture and killing of pronghorn and the camps associated with these activities. The information is meant to assist the archaeologist’s understanding of the physical context of land use in the acquisition of these mammals. Knowing the types of “knolls” used for corrals, the nature of the botanical regime seen as ideal by the hunting group, and other factors might assist the archaeologist in defining sites and site types in the western Great Basin.

**Foxworth, Robert (Inyo National Forest)**

**Topography, Temperature, Snow and Solar Radiation: A Broad Scale, Landscape Analysis of Hunting Tactics and Seasonal Adaptation**

Analysis of game drives and hunting blinds tend to focus on the placement of these facilities with respect to variability in topography, environment, diversity among prey species and animal behavior. On closer inspection, expansion of these variables may help to illuminate patterns of prehistoric seasonal subsistence adaptation. Patterns of seasonal ungulate aggregation and disaggregation, received solar radiation, and the potential for temperature variability are examined to develop a model for the placement and seasonal activation of hunting facilities.

**Goshen, Shannon (Archaeological Research Center, California State University, Sacramento) and Jacob L. Fisher (California State University, Sacramento)**

**A New Look at an Old Site: Reanalysis of the Coldwater Faunal Assemblage**

The faunal assemblage of the Coldwater site, a high-elevation archaeological site in the White Mountains of southeastern California, has been used to elucidate the relationship between regional subsistence-settlement patterns, demography, and behavior. Data from the original analysis of the fauna suggests this site is anomalous to other alpine zone sites of the region; the Coldwater assemblage is heavily dominated by mountain sheep (*Ovis canadensis*) and little else. However, a noted problem with the faunal data is the potential analytical discrepancy arising from different levels of experience among faunal analysts. We aim at rectifying this problem through a complete reanalysis of the assemblage in an effort to increase accuracy and precision of identifications and provide a more robust review of the taphonomic conditions. Here we will discuss the preliminary results from this reanalysis project.
Griffin, S. Joe (U. S. Army Corps of Engineers)

Bodie Hills Obsidian in the Tahoe Sierra and Truckee Meadows: Brief Speculations about Trade

Archaeologists have been exploring the relationships between mobility and the organization of lithic technology for decades. Accessing such relationships requires isolation of mobility from the array of other aspects of human adaptation that can also affect technological organization. Trade is one of the most difficult of these factors to control; my thesis research examines prehistoric mobility in the Tahoe Sierra and will require that I isolate this challenging variable. I address the problem through a diachronic analysis of toolstone source frequencies at a number of sites in lowland and upland contexts along the eastern front of the Tahoe Sierra. This analysis considers both obsidian and fine-grained volcanic toolstone, including suggestive patterns reflected in the changing use of Bodie Hills obsidian through time.

Hall, M. C. (Archaeological Research Unit, UC Riverside)

Scaling Space and Time in the Truman Meadows Uplands, Rational Folly?

Pending results of additional obsidian hydration analysis, random survey-generated projectile point type and hydration data from the Truman Meadows vicinity on the Nevada-California border east of Mono Lake are organized to tease out possible site formation (cf. land-use) patterns over time across upland pinyon-juniper woodland and scrub plant communities in the area. The review is based on the co-occurrence of period-specific temporal indicators – available for 94 (26%) of 366 loci recorded (excluding “isolated” items) – and general assemblage attributes characterizing these loci, on standardized frequencies to accommodate differential period time-spans and survey sample sizes, and must be considered problematic given that nearly 40% of the subject loci feature indicators relating to multiple time periods. An initial assessment suggests diachronic distributions of assemblage groups not incompatible with prevailing notions about regional trends in upland subsistence and settlement, though subtle space-time variations may imply a more dynamic prehistory.

Haverstock, Greg (Bureau of Land Management, Bishop Field Office) and Don Christensen (Western Rock Art Research)

The Prehistoric Use of Hollywood’s Most Popular Outdoor Film Set

The dramatic landscapes of the Alabama Hills, located in the Southern Owens Valley, have been a world renowned filming location since the early 1920s. Recently, a Bureau of Land Management lead archaeological survey has provided insight into the prehistoric use of that geologically distinct locale. This presentation details the findings of that investigation, examines unique archaeological site manifestations, and compares the prehistoric record of the Alabama Hills to the surrounding region.

James II, Brian (Archaeological Research Center, California State University, Sacramento)

Establishing a Baseline: A Regional Synthesis of Early/Middle Archaic Projectile Points Using Obsidian Hydration Data

Research in the Inyo-Mono region has a well-established tradition of using projectile points as time markers. While this practice has been fairly successful for certain parts of the cultural sequence and has been integral for building the regional chronology, some parts of the record are better represented than others and this is particularly true of materials associated with certain projectile point types. Over the last
40 years or so, obsidian hydration dating (OHD) has become an increasingly important and useful tool in determining the age of archaeological materials. Particularly, understanding the direct dating of projectile points themselves has become important when using point styles as time markers. Here, I have amassed OHD data on over 500 Early/Middle Archaic projectile point specimens from numerous reports spanning an area reaching from the Mono Basin southward to Rose Valley. I have synthesized these data here in order to establish the regional obsidian hydration chronology for important time maker specimens prior to 2000 BP.

Jayko, A. S. (U. S. Geological Survey)

Rock Alignments, Rock Mounds, and Rock Rings near the Terminal Pleistocene Shoreline, Southern Owens Dry Lake, Inyo County, California

Late Pleistocene shorelines offset by the southern rupture segment of the Owen Valley fault (and probably late historic or 1872 rupture) have been mapped in detail using lidar and NAIP imagery data. One of the berms in the recessional sequence yielded 10,710 ± 40 14C (~12,790 ka calibrated) radiocarbon age. Nearshore deposits include colonial tufa and robust mollusk assemblages in fine-grained deposits overlain by beach gravels. Rock mounds, rock rings and rock alignments overlie the beach deposits a few meters to 10’s of meters upslope direction from the radiocarbon dated berm deposit. The site lies about 1.5 km south of present day active springs that occur along the historic shoreline of Owens Lake.

Johnson, Lynn (Eastern California Museum), Mark Basgall (Archaeological Research Center, California State University, Sacramento), and Michael Delacorte (Archaeological Research Center, California State University, Sacramento)

Observations on Late Prehistoric Obsidian Provisioning in the Southwestern Great Basin

Initial studies of archaeological geochemistry in the Eastern Sierra suggested that the greatest obsidian source diversity occurred during the early Holocene interval, when Paleoindian populations with high residential mobility traversed large swaths of the Great Basin. Patterns become more constricted during the Middle Archaic era, hunter-gatherer groups still covering large territories on a seasonal basis but evidently exploiting a north-south grain along major valley systems. It appeared, by contrast, that late prehistoric peoples had more tethered procurement areas, depending on material from the nearest quarry localities, and acquired more distant toolstone only rarely via socioeconomic means rather than relocation. Recent data from Owens Valley, Death Valley, the northern Mojave Desert, and places in between show that late period source diversity was in fact higher than presumed in at least some sectors of the southwestern Great Basin; we explore the implications of these data in the present paper.

Kerwin, William (Bureau of Land Management, Bishop Field Office) and David Lee (Western Rock Art Research)

After the Smoke Clears: Post-Fire Collaborative Archaeological Investigations of the Crater Mountain ACEC

On September 13, 2011, the Johns Fire ignited on the eastern flank of Crater Mountain which is designated as an Area of Critical Environmental Concern (ACEC). Bureau of Land Management-Emergency Stabilization protocol requires assessment of fire effects to known cultural resources within a wildland fire perimeter. Legacy site records indicated the presence of numerous previously recorded sites within the Johns Fire perimeter. Through partnering with Western Rock Art Research, a non-profit
organization, this collaboration enabled the efficient use of agency resources while adding to the archaeological record and clarifying the ethnographic data of the Crater Mountain area.

Larson, William E. (*Archaeological Research Center, California State University, Sacramento*)

**When a Bad Food is Good: Freshwater Mussel and Its Role in the Prehistoric Diet of the Owens Valley Paiute**

This paper takes an in-depth look at freshwater mussel (*Anodonta californiensis*) and its use as a food resource within Owens Valley. It looks at nutritional value (ranking) compared to other riverine resources, overall distribution of exploited shell, and seasonality issues. This data is used to formulate hypotheses on when, where, and why mussel was or was not used as a food resource.

Neal, Leticia A. (*NAWS, China Lake*)

**Building a Legacy: the Civilian Conservation Corps at NAWS, China Lake**

The Civilian Conservation Corps (CCC) was a New Deal public work relief program that ran from 1933 to 1942, which targeted unemployed, unmarried men. The CCC conducted extensive water development for livestock, rodent eradication, construction of drift fences and access roads, noxious weed eradication, and erosion control. By providing water and access roads, the CCC opened a vast expanse of rangeland. In the China Lake area (southern California), these improvements included access roads, protecting and improving springs, constructing pipelines, water storage tanks, and troughs. The water tanks are solidly constructed of rock rubble and cement and are particularly striking in the quality of construction and their long-lasting legacy on the landscape. The presence of the CCC can also be found in local narratives. These accounts are interwoven with examples of CCC water development sites and the original CCC work records (FORM WP-7a Work Projects).

Pohl, Anthony (*Archaeological Research Center, California State University, Sacramento*)

**An Examination of Obsidian Expedient Flake Tools from the Ed Powers Data Recovery Project**

Ascertaining artifact function is an important part of flaked stone analysis and is often the basis for hypotheses regarding site function and technological organization. Given the importance of flaked stone technology to our interpretations of the archaeological record, and given the difference between the morphology and use-lives of tools, inferences about artifact function are often best explained by examining use-related attributes. Expedient flake tools, which are defined solely by use-related wear, are a tool category that can be interpreted with reference to known wear patterns. This is an area in which an experimental study might help clarify the archaeological record. Although obsidian was neither the exclusive nor primary raw material type at all times nor all places, it was an abundant raw material type that prehistoric people could not ignore. The relative abundance of obsidian sources in western North America makes this an ideal place to study prehistoric use of a high-quality toolstone type that is rare in many other places. This study examines the simple flake tools from the Ed Powers data recovery project. Tools are examined macroscopically and under low-power magnification. They are then compared to an experimentally produced reference sample of utilized flakes. Links between edge angle, worked material type, and activity are discussed. The need for further research is indicated.
Polson, Nikki (U. S. Army Corps of Engineers)

Late Holocene Use of Water Sources in Owens Valley

This paper will explore the varying use of water sources in Owens Valley in the Late Holocene, encompassing the Newberry, Haiwee, and Marana Periods. The project has divided the available freshwater resources into four categories. The comparative distance between sites and water sources is then used to infer patterns of use through the Late Holocene.

Rogers, Alexander K. (Maturango Museum)

Were the Coso Petroglyphs Known Prior to Land Withdrawal for the NAWS, China Lake, in 1943 and did this Knowledge (or lack of it) Affect the Withdrawal Decision?

The Coso petroglyph complex of southern Inyo County is an extensive region of rock art, largely within the boundaries of the Naval Air Weapons Station, China Lake, which was established in 1943. Questions often arise whether the archaeological and rock art resources were known at the time, and did it make a difference in the land withdrawal decision. In this paper I review evidence for pre-war knowledge of the petroglyphs, from both published accounts and private sources. Published accounts include Desert Magazine, Travel Topics, and academic publications. Private sources are items in the collection of the Maturango Museum, and include the earliest extant academic report on the Coso petroglyphs (1946); related correspondence; photographs and a typewritten narrative from a visit to Lower Renegade Canyon in 1923 by an avocationalist; and a photograph by a local resident from 1943/44. I assess the overall state of knowledge as of 1943, and conclude the rock art was fairly well known, and that it probably had no effect on the land withdrawal decision (which has been very beneficial in the long run).

Wall, Bridget R. and Michelle D. Noble (Archaeological Research Center, California State University, Sacramento)

From Coffee Cans to Kodachrome: A Look at the Donald B. Constans Collection, 1950-1997

The Eastern California Museum recently acquired the collection of Donald B. Constans, an amateur archaeologist who worked at numerous places in California and Nevada. This paper presents our initial impressions of the Constans collection, focusing on his extensive work in Eureka Valley between 1965 and 1978. The collection includes his notes, maps, and paper catalog, resulting in a substantial assemblage of artifacts that can be tied to specific locations.

West, Crystal (Southern California Edison)

“1938 Howod Hughes huella al Mundo en 91 hors (Howard Hughes flew around the world in 91 hours)”: A Glimpse into the Thoughts and Lives of Basque Sheepherders through Their Tree Carvings, Glass Mountains, California

Over a period of three days, 20 Passport in Time Volunteers assisted Forest Service archaeologists document a large grove of aspen trees containing a variety of unique historic tree carvings dating from 1917 to the 1950s. Most of the carvings documented date between 1930 to the late 1940s and dramatically illustrate the life and thoughts of the Basque male sheepherders who tended flocks in the area. One of the memorable herders who documented his political beliefs on the trees was Joaquin Gandara. Known for his elegant cursive style, he made numerous statements about the Spanish Civil War which occurred in Spain from 1936 to 1939 and involved a political conflict between the Nationalist
military forces and the established Republican government. The conflict divided the country. Gandara expressed his support for the Republican faction when he carved “Viva La Republica Mueran Los Facistas JG 1937,” translated “Long live the Republic, Death to the Fascists.” Other carvings of a completely different tone are also found within the grove. One carving dated 1938 makes a statement about the famous aviator and film producer Howard Hughes, “Howod Hoghes buelta al Mundo en 91 hors,” translated “Howard Hughes flew around the world in 91 hours.” This paper will present the findings of this project, discuss techniques used to document this rapidly fading historic resource and suggest preservation strategies for significant arborglyphs.