# A RETROSPECTIVE VIEW OF ARCHAEOLOGICAL RESEARCH ON THE MENDOCINO NATIONAL FOREST

Greg Greenway Forest Archaeologist Mendocino National Forest Willows, CA

# ABSTRACT

During the past 25 years, archaeological research on the Mendocino National Forest has provided important contributions to our understanding of the prehistory of the North Coast Ranges and northern California. This paper highlights some of the contributions this research has made in the development of settlement and subsistence models, chronology, obsidian exchange and use patterns, environmental reconstructions, and other foundations of our current understanding of the region's prehistory. New directions of recent research are also discussed.

paper reviews some important This contributions from archaeological investigations in Mendocino National Forest over the past 25 years. It not only touches on some of the findings of this research, but also the influence that this research had on the development of upland settlement and subsistence models. chronology. obsidian exchange and use patterns, and environmental reconstructions. New directions in recent research will also be discussed. But given time constraints, this discussion will be focused and brief.

Over the past 25 years, the Mendocino National Forest has recorded some 2,000 archaeological sites, intensively surveyed a little over 330,000 acres of its nearly one million acres, and excavated more than 100 archaeological and historical sites. Until recently, all of this work was in support of other projects, in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act. Although some of the early work pales by today's methodology, its incremental importance to understanding regional prehistory, especially upland prehistory, is the principal theme that will be discussed.

In contrast to many other areas within northern California, and the North Coast Ranges in particular, no archaeological research was conducted within the Mendocino National Forest until such studies were mandated by environmental and historic preservation laws passed in the latter half of the 1960s. The first research conducted for the Mendocino National Forest was at the Sam Alley Site (CA-LAK-305). Moratto's (1973) excavations near Upper Lake were initiated to mitigate the effects of a road widening project. This late prehistoric/early historic period hunting site provided only minimal information judged by today's standards. One significant contribution of the research, however, was Jackson's (1973) discussion of a distance decay model to help explain the distribution of Borax Lake vs. Mt. Konocti obsidian sources.

Moratto's (1973)cultural-temporal interpretations relied on the first postulated archaeological sequence for the North Coast Ranges by Meighan in 1955, and Fredrickson's (1973) integrative framework which built on the (1955). foundation provided by Meighan Fredrickson's broad, integrative framework was not entirely embraced by other researchers in the region (King 1974a, 1974b; Gerow 1974), and early reaction provided the impetus to test his model. King (1974a; 1974b) guestioned "...the theoretical and methodological underpinnings of some of Fredrickson's work" (King 1974a:4), while Gerow took issue with the broader applicability of Fredrickson's model of cultural change in central California based on what he considered to be "meager and inconclusive" data from the North Coast Ranges (Gerow 1974:244).

Another excavation shortly after Moratto's (1973) work at CA-LAK-305 not only stirred debate among researchers in the North Coast Ranges, but, more importantly, launched renewed interest in settlement pattern studies and the development of site typologies in the North Coast Ranges, efforts which continue today (cf. White and Fredrickson 1992). King's (1974a) report, "Manos on the Mountain: Borax Lake Pattern High-Altitude Settlement and Subsistence in the North Coast Ranges of California," described mitigative excavations at South Buck Rock and Upper Government Flat sites along the crest of the Coast Ranges in Mendocino National Forest. Prior to this time, virtually all of the archaeological research in the North Coast Ranges had been performed at lower elevations. King (1974a:6) suggested that his investigations might be useful "high-altitude in examining settlement and subsistence practices during the period represented bv the Borax Lake Pattern [Fredrickson's (1973)]." Although some of King's (1974a) findings proved to be valuable additions to our knowledge of early prehistoric adaptations in the North Coast Ranges, particularly his Borax Lake Pattern data, his explanation for the lack of significant late period use at his sites and elsewhere in the high elevations received considerable attention (Jackson 1976). Kina's (1974a:23) admittedly speculative predictions "...lack of late-period suggested that the sites...[was] a function of increased trade and sedentism" and that there was "...no longer a of need for seasonal movement whole populations to sites like South Buck Rock." He predicted that "virtually no post-Borax Lake Pattern base-camps should be found at high elevations in the North Coast Ranges" (King 1974a:24).

Jackson (1976) challenged King's model by providing examples from the ethnographic literature that clearly described the seasonal use of higher elevations by organized groups late in time. But King's work can be credited with stimulating discussions about the use of high elevation uplands, seasonality, and population movements. Shortly after King's work, Jackson (1975) was conducting test excavations at five archaeological sites on nearby Twin Rocks Ridge. His report, "Metates in the Sky, Rocks in the Head," was noteworthy for several reasons, not the least of which was its thought-provoking title. Between King's "Manos on the Mountain" and Jackson's "Metates in the Sky, Rocks in the Head," evidence of a new literary era in California archaeology was at hand.

As I noted perviously, a lot of archaeological survey work has also been done in the past 25 vears. One of the earlier surveys was also the largest ever performed on the Mendocino National Forest. The Middle Eel Planning Unit Archaeological Survey (MEUPAS) was conducted between 1974-1975 under the supervision of Jackson (1976). It covered about 260,000 acres, much of it in a cursory manner, but it did focus on highly sensitive areas, resulting in the recording of numerous archaeological sites. Some limited test excavations were also done. What is most significant about this survey is the information it provided early on about prehistoric site distributions in about 25% of our Forest.

In the early 1980s, the East Lake Planning Unit of the Bureau of Land Management and the Mendocino National Forest contracted two (1) synthetic overviews: ethnography and prehistory (McCarthy, H., W. R. Hildebrandt, and L. K. Swenson 1982); and (2) history (Docken et al. 1982). Each volume contained predictive site models. The volume on ethnography and prehistory was published in 1985 by the University of California, Davis (McCarthy, Hildebrandt, and Swenson 1985). What is particularly meaningful about the prehistoric volume is its continuation of the analytical debate regarding settlement pattern and site typology studies begun in the 1970s. With respect to site typologies, they address problems (King 1974; Jackson 1975, 1976; Tamez 1981) encountered in earlier attempts to effectively predict and segregate seasonal and permanent occupation sites, multicomponent sites, ethnographic versus archaic period uses, and the effects of diachronic climatic change over a period of ca. 8,000 years. Their results seem to confirm in part King's earlier hypothesis regarding a shift from a settlement/subsistence pattern early in time that focused on higher elevations, to one later in time that was oriented on lower elevation

lowlands, although higher elevations were also used. Their possible explanation for the shift in settlement/subsistence strategies includes an increasing reliance on acorns, and perhaps anadromous fish, a strategy possibly coinciding with the onset of a climatic warm period ca. 4500-2500 years ago (McCarthy, Hildebrandt, and Swenson 1985:138).

Turning from settlement patterns and site typologies, one of the more unusual finds during this period was made by Les White, the Forest's first "archaeologist," although he was called a Cultural Resource Co-ordinator in those days. In 1972. Les spotted a partially exposed biface cache in a road cut and knew he had found something significant. Excavations revealed that it contained 69 Borax Lake obsidian (BLO) bifaces (it was known early on as the Great Blades Cache, although "blades" is a misnomer). Biface caches are relatively rare in California, and CA-GLE-138 is one of the few investigated in situ. The cache has been exhaustively studied and the most recent analysis was published by UCLA in 1992 (Rick and Jackson 1992). Obsidian hydration readings date the BLO bifaces to about 2400 years ago. Rick and Jackson (1992) conclude that the cache was established as discard behavior by traders returning home, presenting the problematical argument that the bifaces were inferior or undesirable trade items.

Obsidian studies from the Mendocino National Forest also contributed to regional research. From the earliest studies (e.g., Moratto 1973), obsidian source and/or hydration data have been a component of many archaeological excavations on the Forest. Even though much of the earlier work was limited to small lithic dominated sites of limited research value, the data were of incremental importance to broader studies of upland distributions. In 1987 Fredrickson (1987) used hydration readings from the Forest in his diachronic, geographic study of the distribution of North Coast Ranges obsidian sources. Fredrickson was able to determine that BLO comprises about 90% of the obsidian throughout much of the Mendocino National Forest uplands. with declining percentages in the most northern and northeastern portions Forest.

There are many other investigations, too many to review here, that included significant obsidian sourcing and hydration studies (e.g., Eidsness 1986; Huberland 1988; Holson 1986; Jackson 1976; Origer and Waechter 1990). I want to briefly mention a couple which have been very effective at clarifying the distribution, age, or use behavior of BLO source material in the uplands of the Mendocino National Forest. The work by Eidsness (1986) and Holson (1986) at CA-MEN-320/643, a site at the confluence of the Middle Eel and Black Butte Rivers, was important because of their diachronic comparisons of BLO and Medicine Lake Highlands (MLH) obsidians. Origer and Waechter's (1990) work at CA-COL-160, a site on Little Stony Creek in the foothills west of the Sacramento Valley, was also important because it established a clear pattern of scavenging and reusing obsidian, presumably from older sites. And our recent work in the Grindstone and Thomes Creeks watersheds is helping us clarify the intersection of exchange networks in the northeastern section of the Forest involving obsidian from the Borax Lake and Medicine Lake Highlands sources. These data may also signal socio-political alignments between two dialectical subdivisions of the Hill Nomlaki late in time (Greenway 1996).

The Forest has also been instrumental in supporting archaeological and other studies designed to extract information about past environments. West's (1980, 1981, 1991) studies of pollen profiles extracted from cores from three lakes on the Forest have provided significant data regarding vegetation changes and concomitant climatic variation since the late Pleistocene. These climatic change models have had a corresponding influence on explanations for hypothesized shifts in settlement/subsistence patterns inferred from the archaeological record (cf. Eidsness 1986).

I also want to touch on recent research, historic preservation activities, and future trends in our program. Recently, we have been involved with historic building stabilization and restoration, and Nye Cabin (ca. 1866) has been one of our noteworthy successes. Nye Cabin is probably the oldest historic structure on the Forest and was associated with the sheep grazing industry in the latter half of the 19th century. We are also more increasingly involved in archaeological and historical interpretation. One of our more important and influential interpretive projects involved developing a brochure and interpretive signs along the Nome Cult Trail, the route used in 1863 to move northern Sacramento Valley Indians from Chico to the Round Valley Reservation. In 1996, along with five tribes whose descendants were forced to move, we sponsored a three week commemoration of the trail's history, highlighted by descendants retracing their ancestors' steps on the 100 mile trek from Chico to Round Valley.

i noted that most of the earlier excavation projects were associated with NHPA Section 106 actions which tended to focus on lithic dominated sites of limited research potential. That earlier orientation has changed to one with a greater emphasis on heritage resource program goals and objectives along with other project support services. About five years ago the Forest started getting involved in the USDA-Forest Service's Passport in Time (PIT) program, which involves the public in heritage resource activities. Our Passport in Time program has primarily involved excavations at prehistoric sites, which were selected based on research issues. This has been an incredibly successful program for us, and public demand exceeds our ability to provide these opportunities.

This summer, in partnership with the Bureau of Land Management and the Round Valley Reservation, we are planning another PIT project, this one not too far from where Tom King worked in 1973 (King 1974a). We will be working at a large midden site just west of the crest of the North Coast Ranges. Our work here should add considerable information regarding settlement patterns in higher elevations, continuing the research started nearly 25 years ago.

And lastly, soon we will be able to vigorously examine settlement/subsistence models and site typologies by integrating our site record and survey databases with our Forest's GIS system, bringing archaeological, environmental, and physiographic data together under one powerful, analytical system. We have come a long way from the hole punch cards used by McCarthy, Hildebrandt and Swenson in 1982 to develop their settlement pattern model.

Looking back at the past 25 years, it is enlightening to see how far we have come.

## REFERENCES CITED

Docken, et al.

1982 A Cultural Resource Overview for the Mendocino National Forest and the East Lake Planning Unit, BLM, California. Volume II: History. Unpublished Report on file Mendocino National Forest. Willows.

Eidsness, Janet

1986 Archaeological Data Recovery at CA-MEN-320/643 for the Proposed Black Butte Bridge, Mendocino National Forest. Unpublished report on file Mendocino National Forest. Willows.

#### Fredrickson, David

1973 Early Cultures of the North Coast Ranges, California. Unpublished PhD dissertation, U.C. Davis, Department of Anthropology. Davis.

1987 The Use of Borax Lake Obsidian Through Time and Space. Paper presented at the 21st Annual Meeting, Society for California Archaeology, Fresno.

Gerow, Bert A.

1974 Comments on Fredrickson's "Cultural Diversity". *The Journal of California Anthropology*, Vol. 1(2):239-245.

#### Greenway, Greg

1996 Christo Landscapes on the Mendocino National Forest: Preliminary Results from Two Recent Excavations. Paper presented at the Northern Data Sharing Meetings of the Society for California Archaeology. On file Mendocino National Forest. Willows.

#### Holson, John

1985 Data Recovery Excavations at CA-MEN-268, CA-MEN-320/643 and CA-MEN-321, Mendocino County, California. Unpublished report, US Department of Transportation, Federal Highway Administration. Denver.

#### Huberland, Amy

1988 The Prehistory of Etsel Ridge. Unpublished M.A. thesis, Department of Anthropology, Sonoma State University, Rohnert Park.

# Jackson, Thomas

1973 Appendix 2: Obsidian Sources. In Sam Alley: Archaeological Excavations at 4-LAK-305 Near Upper Lake, California. Michael Moratto. Treganza Anthropology Museum Papers, No. 11. California State University, San Francisco.

1975 Metates in the Sky, Rocks in the Head. Unpublished report on file Mendocino National Forest. Willows.

1976 Middle Eel Planning Unit Archaeological Survey. Unpublished report on file Mendocino National Forest. Willows.

#### King, Thomas F.

1974A Manos on the Mountain: Borax Lake Pattern High Altitude Settlement and Subsistence in the North Coast Ranges of California. Unpublished report on file Mendocino National Forest. Willows.

1974B Flight to New Pigeonholes: Comments on Fredrickson. The Journal of California Anthropology, Vol. 1(2):233-239.

### Meighan, Clement W.

1955 Archaeology of the North Coast Ranges, California. University of California Archaeological Survey Report No. 30. Berkeley.

#### McCarthy, H., W.R. Hildebrandt, and L.K. Swenson

1982 A Cultural Resource Overview for the Mendocino National Forest and East Lake Planning Unit, BLM, California. Volume I: Ethnography and Prehistory. On file, Mendocino National Forest. Willows.

1985 *Ethnography and Prehistory of the North Coast Range, California.* Center for Archaeological Research at Davis, Publication No. 8. Davis.

### Moratto, Michael J.

1973 Sam Alley: Excavations at 4-LAK-305 Near Upper Lake, California. Treganza Anthropology Museum Papers No. 11, California State University, San Francisco.

#### Origer, Thomas and Sharon Waechter

1990 Test Excavations at CA-COL-160 Colusa County, California. Unpublished Report on File Mendocino National Forest. Willows.

## Rick, John W. and Thomas L. Jackson

1992 A Funny Thing Happened on the Way from the Quarry..., Analysis of the Great Blades Cache of Northern California. In *Stone Tool Procurement, Production, and Distribution in California Prehistory.* Jeanne E. Arnold (ed.). Perspectives in California Archaeology, Volume 2. Institute of Archaeology, University of California, Los Angeles.

## Tamez, Sonia

1981 An Archaeological Overview of the north Coast Range and Northwestern California. Unpublished M.A. thesis, San Francisco State University.

## Waechter, Sharon and Thomas Origer

1993 A Discussion of Multiple Hydration Bands and Obsidian Scavenging at CA-COL-160, Mendocino National Forest. In *There Grows a Green Tree: Papers in Honor of David A. Fredrickson.* White, G., Mikkelsen, P., Hildebrandt, W.R., Basgall, M.E., (editors). Center for Archaeological Studies at Davis, Publication Number 11.

## West, G. James

1980 Pollen Analysis of Tule Lake, Mendocino National Forest, California. In, "Archaeological Investigations at Three Sites on Sanhedrin Mountain (CA-LAK-1112, 1113, CA-MEN-1612), Mendocino National Forest, California," by Roger H. Werner. Unpublished Report on file Mendocino National Forest. Willows.

1981 Pollen Analysis of Sediments from Barley Lake, Mendocino National Forest, California. Report on File Mendocino National Forest. Willows.

1991 Pollen Analysis of A-M Lake, Mendocino National Forest, California. Unpublished Report on File Mendocino National Forest. Willows.

# White, Greg and David A. Fredrickson

1992 A Research Design for the Anderson Flat Project, Archaeological Data Recovery Investigations at Sites CA-LAK-72, 509, 510, 536, 538, 542, and 1375, Lake County, California. Submitted to State of California Department of Transportation, Eureka, California. Unpublished Report on File at Anthropological Studies Center, Sonoma State University. Rohnert Park.