LIVING ON THE EDGE: ARCHAEOLOGICAL SIGNATURES OF THE EASTERN SHASTA VALLEY FOOTHILLS, SISKIYOU COUNTY, CALIFORNIA

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ABSTRACT

Nearly thirty years has passed since the Man the Hunter Conference took place in Chicago, and since that time our view of hunter-gathers and their lifeways has changed dramatically. The vision of men, women, and children toiling from dawn to dusk in the quest for food in order to eke out a life that was "nasty, brutish, and short" no longer holds true. Or does it? Archaeological investigations of approximately 4,300 acres of land in eastern Shasta Valley, Siskiyou County, California has allowed us to examine such issues as cultural marginality and conservatism with regard to the inhabitants of this high elevation valley and adjoining uplands.

In the early 1960s and before, the general view held amongst many anthropologists was that most hunters and gatherers, or foragers if you will, lived a life of drudgery. Living on the edge of starvation, it was presumed that these early foragers searched for food from dawn to dusk just to survive. "Solitary," "poor," "nasty," "short," and "brutish" were terms that were once used to describe the lifestyles of these peoples. However, beginning in the mid-1960s, research on hunter-gatherers became focused on the complexity of these groups and by the 1980s those poor, nasty, short people became known as the only truly affluent culture. Over the last ten years, however, this view is once again being challenged. Among many issues, a number of researchers have begun to examine the role of risk and uncertainty (Smith 1994) on the original affluent societies as well as the effect of seasonality and resource stress on forager groups (Yesner 1994).

The fact that aboriginal groups that populated northern California did not develop true agriculture indicates that these people continued to be affected by both long-term and seasonal natural resource stress which was likely episodic in nature. Archaeological signatures of long-term and intermediate-level stress episodes will depend on whether the response was biological or cultural, or both (Yesner 1994:154). It will also depend on demographic situations.

While it may not be possible to determine evidence of biological stress, it may be possible to determine the amount of cultural response to episodic periods of environmental stress, especially if populations increased. We would expect that the cultural responses to episodic stress would include changes in subsistence, intensified use of marginal resources, and/or shifts in settlement patterns to include marginal resource procurement areas. We might also expect resource-related ritual and increases in inter- and intra-group interaction. It is with these propositions in mind that the Bureau of Land Management, Redding Field Office, began the process of interpreting the 51 prehistoric sites and 109 isolated aboriginal artifacts and features that were encountered within the Shasta Valley study area.

Located within Siskiyou County, California, the study area encompassed a total of 4,300 acres of land scattered in 17 different parcels (Figure 1). The parcels were located within the margin of Shasta Valley proper and along the adjacent foothills and mountain slopes. The headwaters of Willow Creek mark the approximate northernmost boundary of the study area, while the southern edge ends at the southern base of the historic landmark of Sheep Rock. The western edge of the study area lies within Shasta Valley and the eastern boundary is demarcated by the Cascade crest and such mountain peaks as Goosenest and Herd. While it is acknowledged that the subject parcels do not comprise a truly random sample, it is readily apparent that they do represent a sizable cluster of parcels, within a limited foothill zone which we feel provides a reasonable interpretive base.

Elevations vary greatly throughout the study area and range from a low of 2,600 feet within Shasta Valley to nearly 6,000 feet along the crest of the Cascades. Generally speaking, the terrain throughout the southern, northern and eastern portions of the project area is steep and rugged. However, despite the steep terrain, there were a number of benches and narrow southwesterly trending ridges that roughly followed the major drainages down to the valley floor. Some of the most important drainages in the study area included the Little Shasta River, Dewey Gulch, Walbridge Gulch and Spring Creek. In addition to these drainages, a number of springs and seeps were also encountered that would have provided some water even during the hot summer months.

The archaeological sites located within the study area represented a somewhat restricted range of past human activities. The prehistoric sites encountered included three small rock enclosures presumed to be hunting blinds, 40 light density, sparse lithic scatters, three proposed temporary/seasonal camps, two rockshelters and at least two apparent residential loci suggestive of long-term or continual use. Historic sites included the regionally ubiquitous rock walls, some of which were more than 2 miles in length (n=7), small habitation sites apparently associated with livestock management activities (n=5), as well as historic cattle trails (n=2), and portions of the Yreka Trail, also known as the Emigrant Road.

An analysis of the data obtained from this study suggests that residential bases from possibly Middle Archaic and certainly Late Archaic times were situated at the valley-foothill interface, or further out into the valley at locations of permanent water. What was of likely importance to these forager groups over at least the latter half of the Holocene was the transitional area between valley grasslands and a varying foothill mosaic of juniper and oak woodlands, grasslands, sagebrush-rabbitbrush, lithosol meadows or glades, and chaparral. Sampling strategies aside, what appears to have been of less importance to these Middle to Late Archaic foraging groups was the higher ecotone areas between this mosaic of vegetation and conifers. The study's results suggest that for at least the last two to three thousand years, Native American family groups were apparently taking economic advantage of the ecotonal aspects of eastern Shasta Valley.

Milling of foods seems to have been confined primarily to residential bases, including several sites that suggest seasonal and/or ephemeral use. Milling tools were not encountered at the upper foothill or mountain sites, although they may be present in the areas that we did not survey. Except for the base of Sheep Rock, large residential bases were not found in any of the foothill parcels that we surveyed. This is not to suggest that large residential bases do not occur within Shasta Valley or along its margins because several large residential sites do exist within the immediate vicinity on private land such as Pluto Cave and Martin Ranch.

Demographically, the size and complexity of the sites found within the study area suggest a relatively low, dispersed population utilizing a broad spectrum of resources. It is interesting to note that two of the dietary mainstays of the Shasta, salmon and acorns, were apparently not direct factors in the use of the study area. In fact, increasing use of these food resources may have occurred elsewhere in the Shasta Valley leaving different signatures outside of the study locality, such as in the milling tool kits, site size and complexity, and site clustering. Such changes may be reflected in the decline in the number of recent obsidian hydration readings that we obtained.

Gambel (1991:5) has noted that "high residential mobility by a core group rather than individuals working away from a base, can be predicted from general ecology and results in a regional signature of comparatively high resolution which forms a continuous scatter, albeit variable in terms of density, across the landscape." This is clearly not the case in the Shasta Valley study area. While it was probably not a black and white pattern, what the Shasta Valley data suggest is that individual and small task group logistically-oriented forays occurred from valley-edge base camps into the surrounding hills. This pattern is clearly reflected in the location of sites in relation to the area's topography as plotted on an elevational site model map (Figure 1).

At the present time, one can only assume that these forays by various work groups and individuals were focused on the local elk, deer and sheep herds that populated the region, especially during the fall and winter months. Other game must certainly have been available, including rabbit and quail. Although there is little substantial archaeological evidence other than site proximity, it appears that shallow lithosol exposures with an abundance of geophytes (tubers and bulbs such as *epos*) were also exploited by women, with local toolstone materials such as chalcedony, chert, and secondary deposition of basalt prospected and worked by men and women. Irrespective of hunting or foraging orientation, these task-oriented groups or individuals may have had very temporary camps near geophyte concentrations evidenced only by flaked stone remains. Milling tools would not have been a necessity in terms of geophyte gathering and processing, and digging sticks do not preserve in these open air sites.

It appears that the study area experienced several pulses of intense activity beginning around the mid-Holocene warm/dry interval, which continued into later times. Evidence of Early Holocene use is sparse, primarily coming from large hydration bands on obsidian debitage, which was attributed to hunting groups and their tool maintenance or the production of projectile points. Aside from a questionable biface that remotely resembles a stemmed point, recovered projectile points include types that range from Early Archaic times to contact (see Figure 7). As shown in Figure 3, approximately 8% (n=3) of the points recovered appear to date from 5000 B.C. to 1000 B.C. and may have been associated with the Early Archaic. The remainder, and bulk of the assemblage, contains specimens which fall between the range of 2000 B.C. to A. D. 500 (n=13; 59.3%), and from A.D. 500 to historic times (n=10; 32.7%) as based on hydration rims and cross dating.

Obsidian hydration data from Medicine Lake Highland obsidian also suggests that at least two periods of occupation/use or pulses of human activity were present along this portion of the Shasta Valley. These pulses, we feel, are a crude measure of land-use intensity. As shown in Figure 4, the first, or earliest, pulse starts at 6.5 microns and reaches a peak of activity at 5.0 microns before declining. The second, or more recent, pulse appears to have begun at 4.0 microns at which point there was a steady increase until a peak of activity was again reached at 3.0 microns. Moreover, this second, most recent peak appears to have been of lesser intensity than the earlier peak. Questions can be raised about sample representativeness, but we feel that the broad reach of our survey and collection strategy, approaching randomness, allows for an artifact collection and assessment that adequately, if only generally, reflects use history here.

These data correlate well with the chronology developed to describe other regional patterns. As shown in Figures 4 and 5, a regional comparison with hydration rim data on Grasshopper Flat/Lost Iron Wells/Red Switchback (GF/LIW/RS) obsidian obtained by Gilreath et al. (1995) indicates that, while there are some similarities with chronological sequences based on hydration rim readings discussed by other researchers, there are differences nonetheless. Compared with sites in Butte Valley and Shasta Valley proper, the data from the study area correspond roughly with the hydration data from these areas (Figure 4). One major exception is the peak of activity occurring at the 6.5 micron level in Butte Valley. Another difference that is seen is that down on the Shasta Valley floor there appears to have been a greater intensity of land use starting around 2.5 microns that appears to correlate with Late Archaic times. In comparison with hydration readings from sites in the Oregon southern Cascades and the Klamath Basin, there is also a pulse of activity occurring at 5.0 microns. However, the peak we see at 3.0 microns appears somewhat later in time (2.5) in the Klamath/Oregon regions (Figure 5), if similar rates of hydration are assumed.

Perhaps the best fit of hydration data with temporal distribution occurs with data obtained by Hildebrandt and his colleagues for the PGT Pipeline Project in the Modoc Plateau (Hildebrandt and Mikkelsen 1994:3-19). Hildebrandt and Mikkelsen plotted the mean age estimate of chronologically discrete analytical units on a 500-year interval graph in order to provide a rough measure of land-use intensity over time (Hildebrandt and Mikkelsen 1994:3-19). As shown in Figure 6, the Shasta Valley hydration data fits in very well with that obtained for the Modoc Plateau when the two graphs are plotted together. The chronological distribution noted by Hildebrandt and his colleagues shows up in the Shasta Valley hydration data as a substantial increase when moving from early to mid-Holocene times, followed by two separate peak densities in the Middle Period between 4500 and 2000 B.P. Thereafter, there appears to be a decline, or less intensive use of the upland region, based on the hydration rim data.

Based on data collected as a result of this study, the actual time depth of occupation for at least the eastern portion of Shasta Valley appears to extend back to the early periods of the Middle Archaic and continuing up to the historic era. Evidence of Early Holocene use is equivocal, primarily coming from several large hydration bands obtained on obsidian debitage attributed to hunting groups and their tool maintenance or production of projectile points.

While it could be hypothesized that population increases and resource intensification in other valley zones allowed more seasonal use of the Shasta/Modoc interface area by Modoc peoples, the data generated for this study does not support this proposition. Ethnographic evidence indicates that Sheep Rock only served as a Shasta seasonal use area. This evidence also suggests that more intense late, and perhaps earlier, prehistoric settlement and use was out in the lower valley zones, and that the sample area was strictly a seasonal exploitation zone from at least the Middle Archaic times until near contact.

The issue of increased social complexity as it relates to resource abundance, intensification and interaction was determined to be beyond the scope of this study. Although there was no evidence of complex social structures, they were not really expected to occur since the survey zone was considered to be marginal with regards to reliable, high-yield resources in terms of spatial extent. To find evidence suggestive of social complexity, one would need to look to the large valley middens. For instance, a late prehistoric infant burial containing a diverse and elaborate artifact assemblage, was exposed by Nilsson during the late 1980s from CA-SIS-332 located within Shasta Valley proper (Nilsson 1988). These accompaniments suggest social stratification that may have been in place during the Late Prehistoric period. Certainly, the number of wealth items for an infant suggests an ascribed status among this group or sub-group.

The results from the present study also indicated that this apparent marginality and conservatism expressed in the prehistoric remains in this locality was equally reflected in the historical remains. The fact that the majority of these BLM lands were never homesteaded speaks for itself. These lands were relegated to a support role for livestock-raising involving both sheep and cattle. Much of the historical record relates to this industry. And although there were several early exploration and travel corridors present within the study area, these routes were of more economic importance to surrounding regions, such as Yreka and points beyond, than to Shasta Valley.

Our model, then, taking into consideration the work of other archaeologists in the region, proposes that over the last 4 to 5 millennia prehistoric foragers as individuals and/or small groups moved up into the hills in their food and resource pursuits on a variable short term basis, perhaps even daily, and then back down to their camps on the valley edge. Resource fluctuations and other stress-related events are mirrored in changes in the intensity of this pattern, not in a change in the subsistence pursuits as near as we can determine based on the sample. Certainly these people foraged elsewhere, but a variety of important foods and materials were present in the foothills. Interactions, it would seem, were mostly local and probably long-standing until population increases, stress related to resource productivity perturbations, and increased interaction may have occurred. This may possibly have led to greater group consolidation, less use of the uplands, more reliance on acorns and other foods, increased storage, and some socio-cultural differentiation within and between ancestral Shasta groups.

Except for the fluctuations in obsidian hydration data that we interpret to be intensity of activity or use, there is little evidence to point to the supposed affluence of the foragers who occupied eastern Shasta Valley. Our study also did not produce any evidence to suggest that the foragers who occupied the eastern Shasta Valley area were nasty, brutish, or short; however, these eastern Shasta Valley edge peoples were living in a marginal zone with regards to resource predictability and availability since Middle Archaic times and managed to survive by taking advantage of the ecotonal aspects of the regions.

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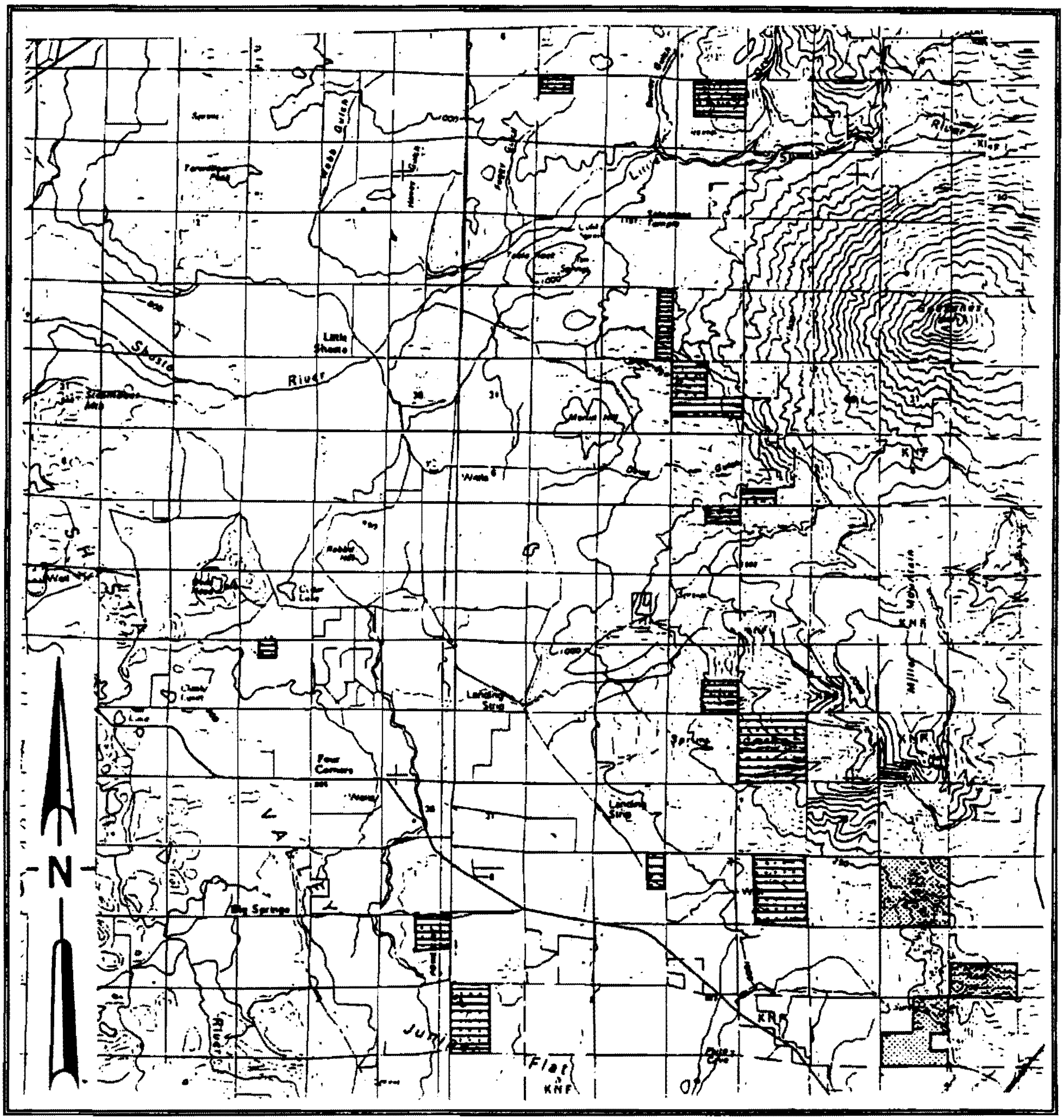

Figure 1: Federal Land Parcels Included in Survey

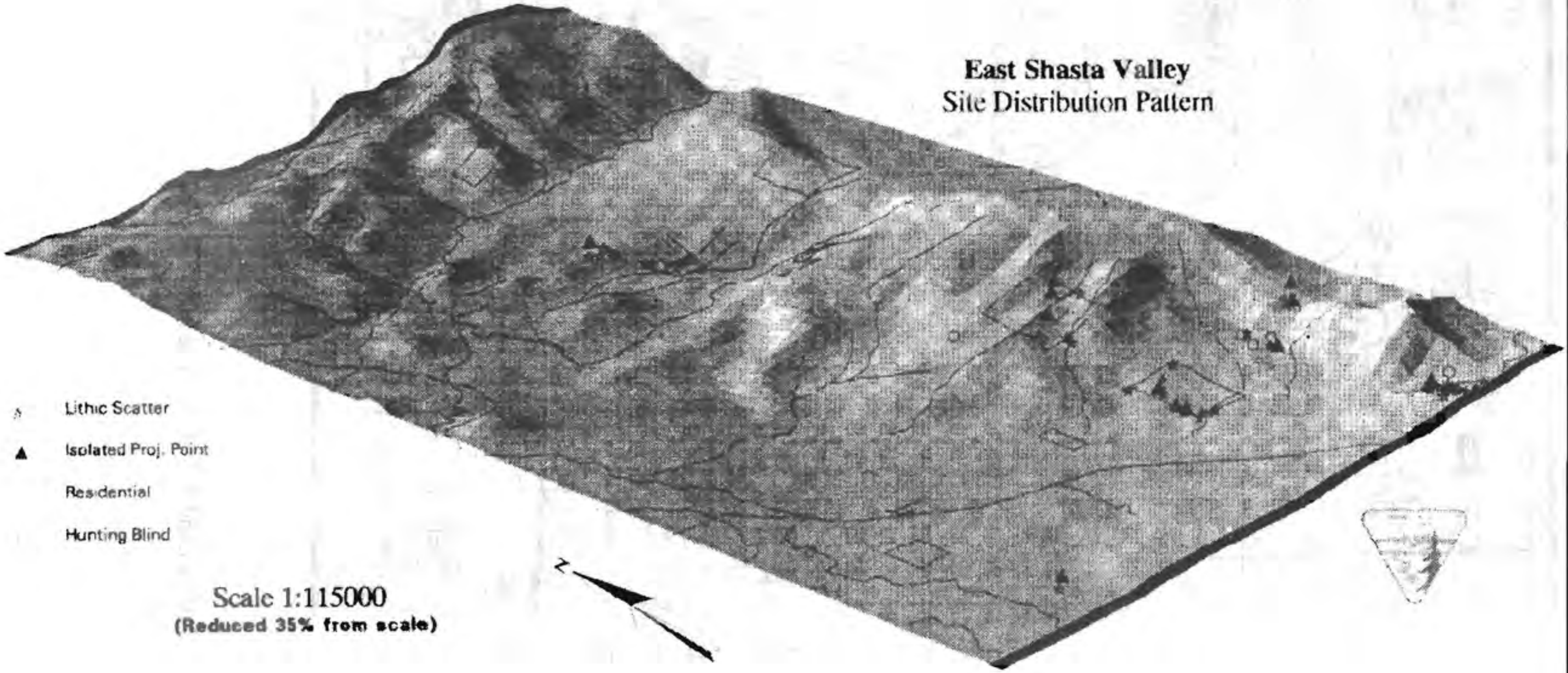

Figure 2: East Shasta Valley Site Distribution and Elevational Model

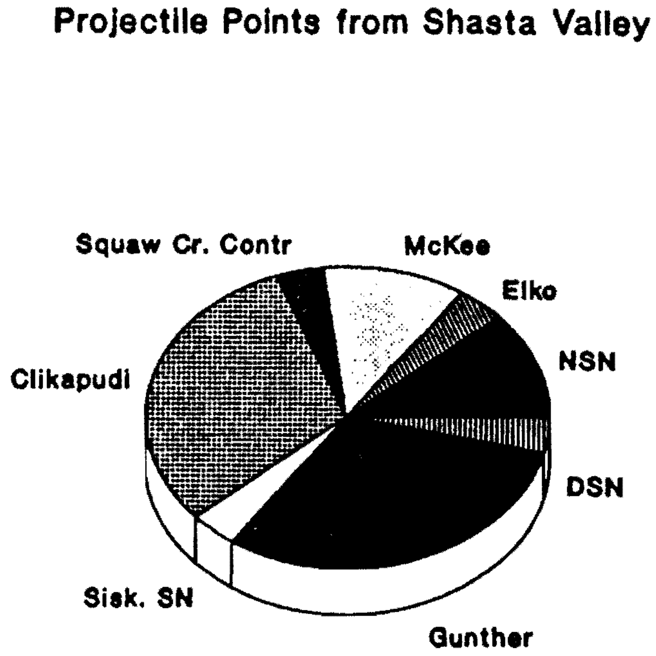

Figure 3: Projectile Points from Shasta Valley

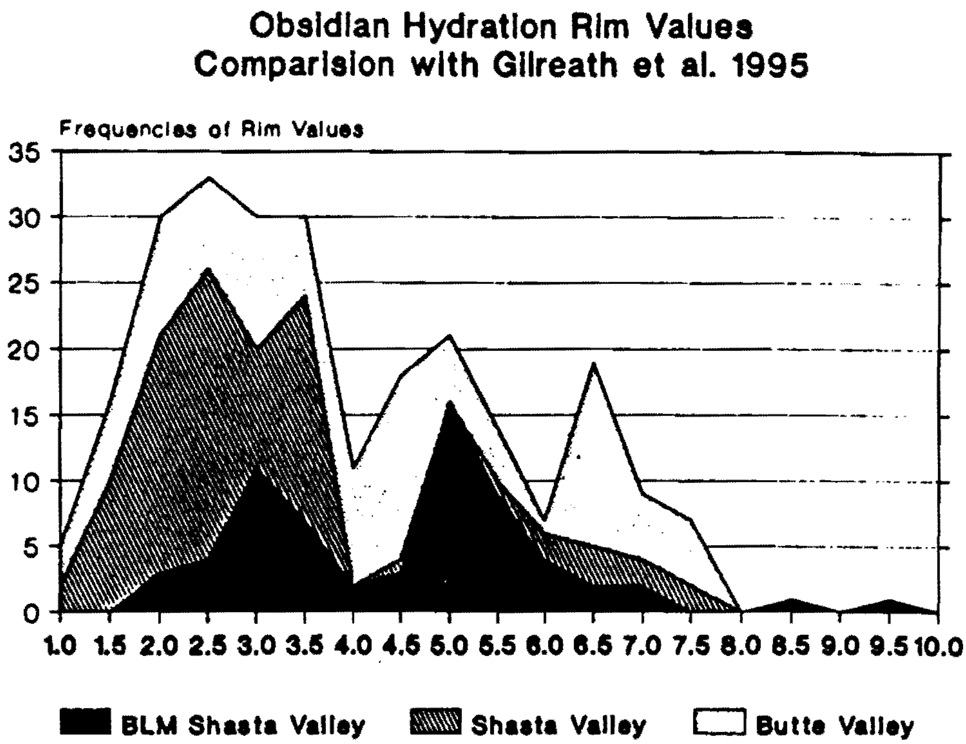

Figure 4: Obsidian Hydration Rim Values Comparison with Gilreath et al. 1995

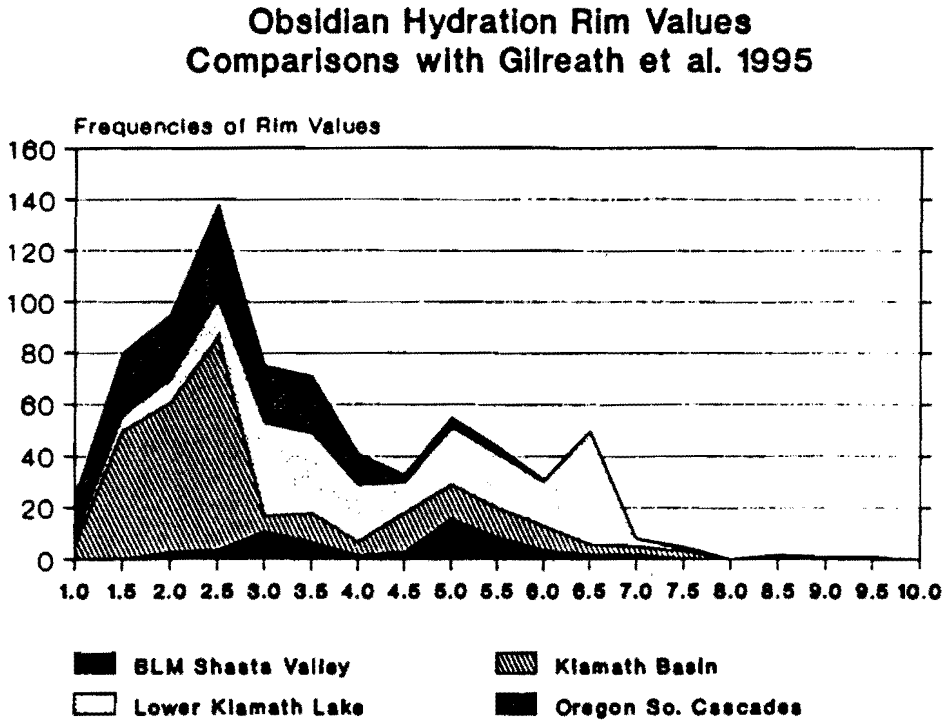

Figure 5: Obsidian Hydration Rim Values Comparisons with Gilreath et al. 1995

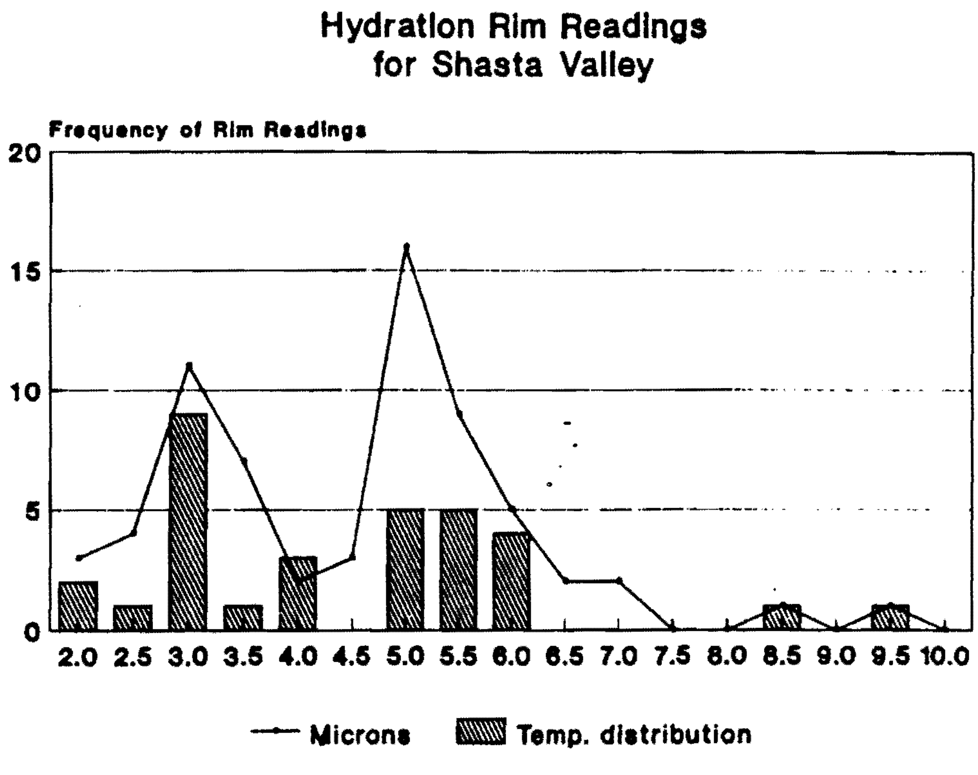

Figure 6: Hydration Rim Readings for Shasta Valley

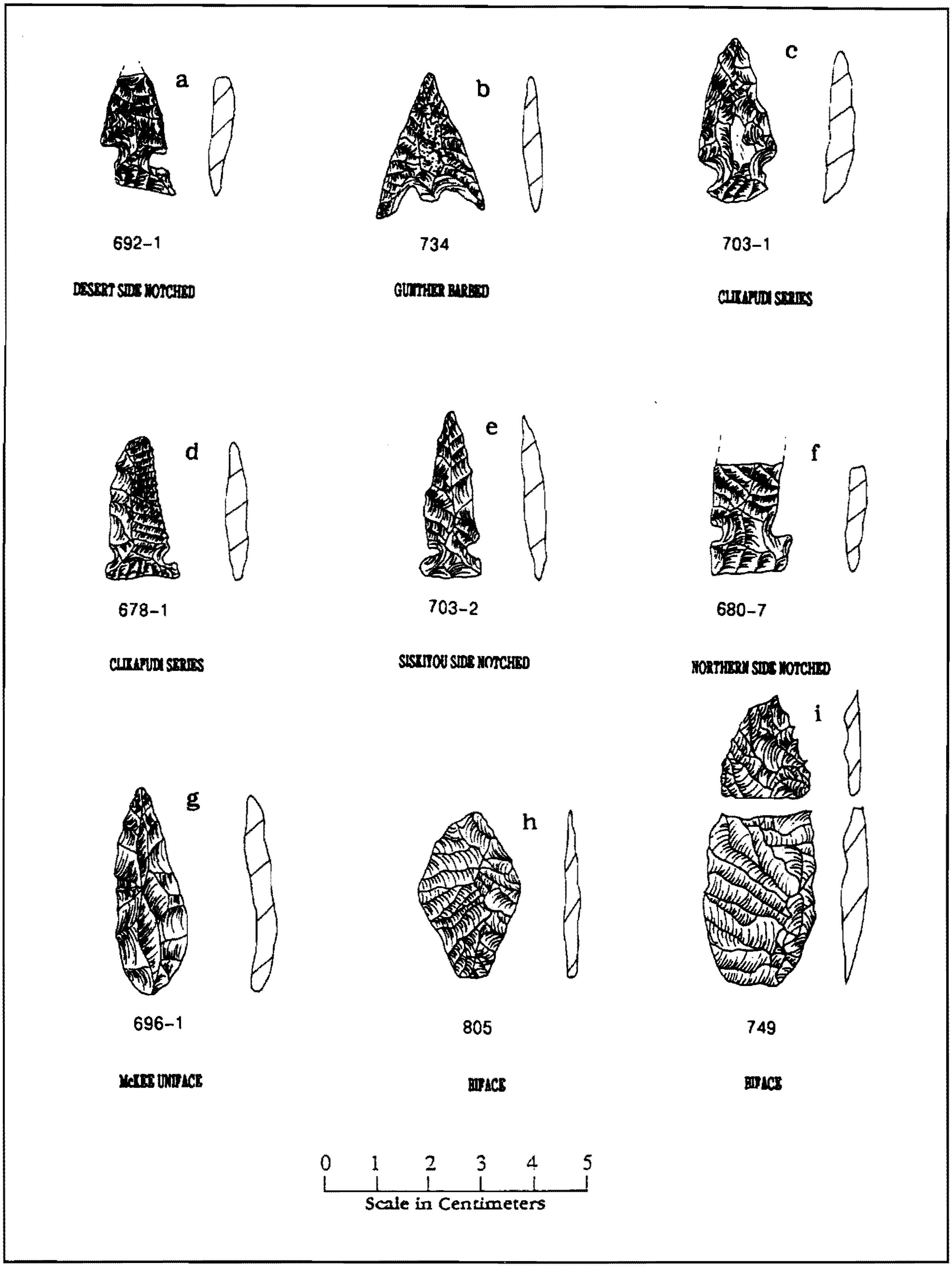

Figure 7: Select Projectile Points from Eastern Shasta Valley