

# A LINK BETWEEN STYLE-7 ROCK ART AND THE MARTIS COMPLEX IN THE NORTHERN SIERRA NEVADA

Daniel G. Foster  
California Department of Forestry and Fire Protection  
Sacramento, CA 94244  
dan\_foster@fire.ca.gov

John Betts  
California Department of Forestry and Fire Protection  
Sacramento, CA 94244

Linda C. Sandelin  
California Department of Forestry and Fire Protection  
Fresno, CA 93710  
linda\_sandelin@fire.ca.gov

---

*A distinctive body of prehistoric rock art sites is distributed throughout the higher elevations of the northern Sierra Nevada of California. These sites have been classified as Style 7, High Sierra Abstract-Representational petroglyphs (Payen 1966). Investigations by Willis Gortner indicated a possible association between abstract petroglyphs on the North Fork of the American River and the Martis Archaeological Complex. This association was based on the types of projectile points most frequently encountered in the vicinity of the petroglyph sites. Continuing archaeological investigations in the northern Sierra Nevada have now identified 92 Style 7 rock art sites. Detailed recording activities at these sites have provided additional evidence in support of the association with the Martis Complex.*

---

This paper was presented at the 33<sup>rd</sup> Annual SCA Meeting held in Sacramento during April 1999. Since that paper given, extensive additional findings on Sierra Nevada Rock Art have been made but these new discoveries have not been incorporated herein. A more extensive version of this paper entitled *The Association of Style 7 Rock Art and the Martis Complex in the Northern Sierra Nevada of California* which will be published in: *Archaeology Without Limits: Papers in Honor of Clement W. Meighan*, Labyrinthos Press, in 2002. In the course of editing this abbreviated paper for the *SCA Proceedings*, we removed the site descriptions for the ninety-two Style 7 sites, which provided the background data, including types of artifacts, used to support our conclusions.

This paper discusses a group of prehistoric rock art sites found in the northern Sierra Nevada. This group of remarkably similar sites is one of seven rock art styles defined for this region. Designated as Style 7, High Sierra Abstract-Representational (Payen 1966:64), this type of rock art has been tentatively linked to the Martis Archaeological Complex (Elsasser and Gortner 1991; Gortner 1984; 1986b). The senior authors have extensively surveyed and recorded Style-7 rock art sites, and this research has confirmed Payen's identification of a distinct petroglyph style. Ninety-two such sites have now been identified, more than a sixfold increase in the number of sites used initially to define the style. A detailed analysis of environmental and associated

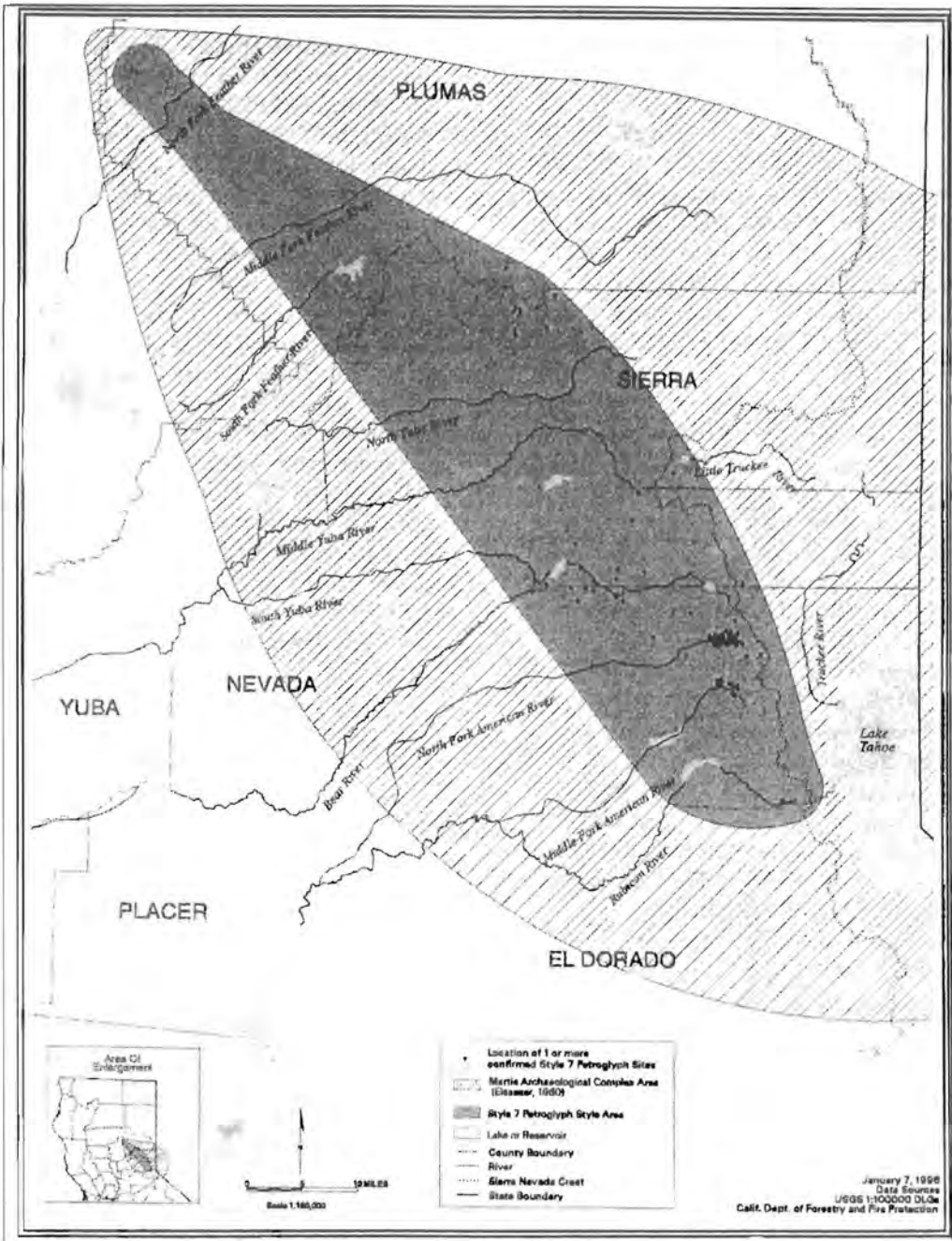


Figure 1. Distribution of known Style 7 petroglyph sites within the northern Sierra Nevada and location of the Martis Archaeological Complex Area.

archaeological attributes provides additional information that can help refine and clarify the original style definition. Previous rock art research in the study area is reviewed and a current inventory of all known Style-7 reviewed and evaluated.

sites is presented, including a discussion of associated archaeological materials and a summary of recording history. The evidence associating Style-7 rock art with the Martis Archaeological Complex is

The sites included in the current study are distributed across four California counties, Nevada, Placer, Plumas, and Sierra. These sites range in elevation from 4,620 feet (1,408 m) at Bear Valley to 7,640 feet (2,329 m) on Snow Mountain. All but two are located on the western slope of the Sierra Nevada crest. The two sites on the east slope, Donner Pass and Lacey Valley, are very close to the divide. The sites are distributed within the Feather, Yuba, Bear, American, and Truckee River drainages (Figure 1).

## HISTORY OF RESEARCH

The first published description of rock art in the northern Sierra Nevada is included in Mallery's (1893) massive compendium of information on Indian picture-writing. Two sites included in the current study, Meadow Lake and Soda Springs, are mentioned in an account provided to Mallery by R.L. Fulton of Reno, Nevada. Curiously, these descriptions are presented in the chapter on sites from the state of Nevada, not California (Mallery 1893:93-94). A lengthy and colorful description of the Soda Springs site is presented in an earlier nineteenth-century article (Avery 1873:489-493), but unfortunately no mention of the rock art is included.

In his pioneering study of rock art in California and adjoining states, Julian Steward lists and describes five petroglyph sites that are relevant to the current study. These sites are designated as 26 Pt. Blairsden, 28 Pt. Hawley Lake, 29 Pt. Meadow Lake, 30 Pt. Donner Pass, and 31 Pt. Near Donner Lake (Steward 1929:65-69). Only three separate sites are actually described. The illustration for 26 Pt. Blairsden is clearly recognizable as being from 28 Pt. Hawley Lake (Payen and Scott 1982:36-38). Recent research (Betts 1998) has also shown that the two separate designations in the Donner Pass area refer to one and the same site. Payen (1966:23) suggested this probably was the situation, as well.

The most comprehensive research on northern Sierra Nevada rock art so far is by Louis A. Payen (1966), presented as his Master's thesis. This excellent study contains information on 133 rock art sites distributed over a region extending from Plumas and Butte counties in the north to Mariposa County in the south, and from the California-Nevada border west to the Central Valley. Payen personally visited 110 of these sites and provided site descriptions, detailed analysis, and an extensive series of illustrations of the rock art. He also developed a classification system that identified two major rock art traditions, subdivided into seven distinct styles. These stylistic divisions were based on the recognition of similar site attributes including subject matter, method of execution, rock selection, archaeological associations, environmental setting, and distribution. Each of these rock art styles was named, numbered, and defined through specific groups of attributes and associations. One of these styles, High Sierra Abstract-Representational, or Style 7, is the focus of the current paper. Payen included 15 sites under his Style-7 designation (1966:66).

In their overview of California rock art, Heizer and Clewlow (1973) published site descriptions and illustrations for eight rock art sites that are included in the current study. Recent research (Betts 1998) in the Donner Pass area has demonstrated that three of these sites, NEV-4, NEV-5, and NEV-6, are actually parts of one large site. Heizer and Clewlow also presented information on a petroglyph site designated NEV-85, with two illustrations that appear to have been traced from photographs (1973:108, Figure 186a-b). They are now known to have been traced from early stereographs taken by Alfred Hart during the 1860s at the Cisco Grove No. 1 site (Kibbey 1996:25). This site was largely destroyed by the construction of Interstate 80, but has now received the designation NEV-506. Heizer and Clewlow's (1973) classification system designates a Central

Sierra Petroglyph Style, under which all petroglyph sites in the northern and central Sierra Nevada region are lumped together, disregarding the stylistic divisions previously defined by Payen, and merging many dissimilar rock art sites into a single style (1973:25-29). On the other hand, Klaus Wellmann (1979:68), in his massive tome on the rock art of North America, accepted Payen's stylistic groupings for the northern Sierran region.

Michael Claytor (1973) conducted an archaeological survey over a large section of the northern Sierra Nevada, including Bear Valley and the upper watershed of the South Yuba River. This study attempted to locate and record all prehistoric archaeological sites in the area and determine the patterns of aboriginal occupation. Claytor located 43 prehistoric archaeological sites, including five previously unreported petroglyph sites. Using Payen's style designations, three additional Style-7 sites were identified. Payen's observations concerning rock selection were also confirmed (Claytor 1973:56).

Payen and Scott (1982) conducted an archaeological survey of the Hawley Lake area for the U. S. Forest Service, identifying 39 prehistoric sites. Site types included petroglyphs, seasonal camps, hunting blinds, and quarry areas. These sites provided evidence of hunting, gathering, and tool manufacturing. In addition to the major Hawley Lake petroglyph site, Payen and Scott identified six new Style-7 sites.

Research conducted by Willis A. Gortner has made a substantial contribution to the study of prehistoric rock art and the Martis Archaeological Complex in the northern Sierra Nevada. A professional biochemist, well known in the field of human nutritional research, Gortner spent more than 20 consecutive summers at "The Cedars," a resort community in the upper reaches of the North Fork of the American River. He occupied much of this time searching for petroglyphs, discovering more

than 50 previously unreported rock art sites in the North and Middle Fork drainages. Although he did not use the term "Style 7" in his writings, choosing instead to follow Heizer and Clewlow's designation of a "Central Sierra Petroglyph Style," Gortner (1984; 1986b) recognized the remarkable similarity of these petroglyph sites, and that they were associated with the Martis Archaeological Complex. With the encouragement and assistance of the senior author and the California Department of Forestry and Fire Protection (CDF), Gortner (1986a, 1988) prepared records for 56 petroglyph sites.

Peak and Associates have carried out intensive archaeological investigations at the Lakes Basin site (PLU-88) for the U. S. Forest Service. This study included intensive recording of rock art panels and test excavations of the cultural deposits throughout the site area (Neuenschwander 1994; Peak and Associates 1993). Although the occurrence of Style-7 rock art at the Lakes Basin site had been previously reported (Payen 1966:21), this study used the night-lighting technique to reveal a great many petroglyph elements that had not been previously observed; 578 elements were recorded on four panels (Peak and Associates 1993:75).

The senior author has been conducting research on Style-7 rock art since 1982. In 1988, Foster and Betts began their collaborative effort to relocate and record all known Style-7 sites. CDF and the Forest Service have supported this work, with CDF sponsoring surveys and site recording on privately owned forestlands, and the Forest Service supporting recording efforts within the Tahoe National Forest. Thirty-three sites have been recorded or re-recorded as a result of this project. The most recent recording efforts have produced complete archaeological site records prepared in accordance with the California Office of Historic Preservation guidelines (1995), and include scale drawings of all petroglyph panels, photographs, detailed site maps

showing the full extent of each site area, and site location maps plotted on USGS 7.5' quadrangles. These records have been submitted to the North Central Information Center for trinomial assignment.

### CURRENT INVENTORY AND RECORDING STATUS

Our inventory of all known Style-7 rock art sites has resulted in the identification of 92 confirmed site locations (see Figure 1). One result of our project has been to secure trinomial assignments for 68 sites which were formerly unrecorded or completely unknown within the study region. Only 10 of the currently known sites are in need of additional recording work in order to receive their trinomial designations. Site locations were plotted into a GIS database from their Universal Transverse Mercator (UTM) coordinates. Specific locations for these sites are not included, due to their exposed nature.



*Figure 2. Natural Exfoliation of rock art surface has removed a portion of the Style 7 petroglyph panel at the Long Lake site, CA-PLU-4. Photo by Craig Carter 1985.*

The harsh environmental conditions of the High Sierra have often left the rock surfaces containing the petroglyphs in an extremely fragile condition. Surface deterioration in the form of exfoliation and block fracturing has severely damaged many of the panels. Exfoliation is a natural process where the rock surface detaches from the underlying bedrock and spalls away, completely destroying the rock art (Figure 2). The location of the petroglyphs on horizontal, ground-level outcrops leaves these fragile

panels vulnerable to damage from foot traffic. Vandalism has also been encountered at these sites with alarming regularity. Damage from graffiti scraped onto rock art panels, spray paint, chalking of petroglyphs, campfires, illicit removal of artifacts, and the complete removal of rock sections containing petroglyphs are just some of the forms of defacement that have been encountered. Many of these sites are in remote areas and are completely unprotected. We believe that site location information should be kept confidential, and unsupervised casual visits by the public should be discouraged. Our intent is to disseminate the results of our research without incurring additional visitations, which could lead to detrimental impacts at these highly sensitive and significant sites.

### NORTHERN SIERRA NEVADA ROCK ART STYLES

Payen's (1966) two major rock art groups or traditions in the northern Sierra Nevada, Pit-Groove and Abstract-Representational, were further subdivided into seven separate categories, with three under the Pit-Groove tradition and four under the Abstract-Representational tradition. Each of these seven categories was designated as a style and defined by a group of attributes and associations. These stylistic divisions were based on the recognition of similar characteristics, including form, method of manufacture, rock selection, archaeological associations, and distribution (1966:56-57).

Heizer and Clewlow (1973:25-29) designated a Central Sierra Petroglyph Style that included all of the current study area. This designation lumped together all of the petroglyph sites in the northern and central Sierra Nevada region, disregarding the variations in these sites and the previously designated styles. Clewlow reiterates this designation, with no additional discussion (1978:621-622); likewise, Heizer and Nissen (1977:152) held to this same notion of a single style area. The concept of style as used in the current paper is that discussed by

Payen (1966:47). His seven rock art styles are as follows (1966:57-66):

### *Style 1 (Pitted Boulders)*

This style consists of the use of cup-shaped pits on rounded boulders. The pits are randomly placed on boulder surfaces, with most examples found in association with large occupation sites and/or bedrock mortar areas. Pitted boulders have been found over much of the northern Sierra Nevada, with notable concentrations in the Truckee Basin and along the western foothills.

### *Style 2 (Pit-and-Groove)*

This style is characterized by the nearly exclusive use of pits and grooves. The pits and grooves are found in clusters, random patterns, and linear arrangements such as rows of dots or grooves in series, or pit-and-groove combinations. Pit-and-groove art panels are found on boulders in open areas, or occasionally on boulders inside caves, usually in association with sizable village sites, and always near bedrock mortars. With one exception, pit-and-groove sites are found in the lower Sierran foothills north of the Cosumnes River.

### *Style 3 (Complex Pit-and-Groove)*

These sites also contain pits and grooves, but in more complex arrangements including pits inside circles, pits connected by grooves, and a variety of elements composed of pits and grooves which are thought to be representations of female genitalia. The pits are often conical in shape as if drilled into the surface. The panels are positioned on the walls of caves, usually adjacent to midden deposits and bedrock mortars. All sites are located in the Sierran foothills south of the Cosumnes River, with most in the Mokelumne and Stanislaus River drainages.

### *Style 4 (Simple Abstract Monochrome)*

These are pictograph panels painted in a single color. Black is the most common

color employed, although red and white pigments are also used independently of one another. Design elements are almost exclusively linear, consisting of simple grids, hatches, line series, or random lines. They are found on the walls and ceilings of caves, usually in close proximity to evidence of occupation, in the foothills south of the Cosumnes River.

### *Style 5 (Abstract Polychrome)*

These are pictograph panels painted in multiple colors. Red is the dominant color, although black and white pigments are also used. Common design elements include wavy lines, wavy lines terminated with a dot, simple circles, line series, line designs, and dots. Style-5 elements are found on cave walls and protected rock faces, usually adjacent to village sites or with evidence of occupation in the cave. These sites are distributed in two concentrations: one in the Sierran foothills along the Mokelumne, the other in the Yosemite region.

### *Style 6 (Valley-Sierran Abstract)*

These are abstract petroglyphs on boulders or rock outcroppings, with many design elements containing a variety of forms based on the circle. Elements are often large and outstanding, with the entire rock surface decorated, and occasionally carved in *bas relief*. Some Style-6 sites are located on hilltops with a commanding view of surrounding terrain. These are isolated locations with no apparent cultural features nearby. Other sites occur in close proximity or in direct association with occupation areas.

### *Style 7 (High Sierra Abstract-Representational)*

These are distinctive petroglyph panels on bedrock surfaces in the higher elevations of the northern Sierra Nevada. Style-7 rock art panels are more complex and contain a greater variety of design elements than any

other prehistoric rock art style in the northern Sierra Nevada region, and although considerable variation exists in design elements, there is also an underlying rigidity (Payen 1966:66). Common designs include concentric circles, simple circles elaborated by line elements, wavy lines of varying complexity, tracks, and anthropomorphic-zoomorphic representations.



Figure 3. Style 7 petroglyphs at Wabena, CA-PLU-591, showing complete rock art panel and actual element distribution. Illustration by John Betts 1988. Panel is approximately 5.5 meters in length.

#### DETAILED DESCRIPTION OF STYLE-7 ROCK ART

Payen (1966:64-67) has defined Style-7 rock art by the following characteristics:

##### *Form*

Style 7 is the most complex of the northern Sierra Nevada styles, with the most variety of elements and the greatest complexity of designs. The most abundant elements include simple circles, concentric circles, lines, wavy lines, and tracks. Dots, spirals, "U" shapes, and naturalistic forms such as anthropomorphs and zoofoms were used to a lesser extent. Vulvaforms and the incorporation of natural rock features were noted at a few sites. The track element has been singled out as a possible diagnostic trait, appearing at all but two sites. Style 7 has many complex and unique figures and an overall greater abundance of elements than the other northern Sierra Nevada styles.

##### *Manufacture*

The petroglyphs were formed by pecking, and this process was well controlled,

although not as highly finished as in Style-6 petroglyphs. Designs pecked through reddish or dark-colored rock surfaces into a lighter subsurface show an apparent awareness of color. Natural rock features such as dark inclusions were sometimes embellished, and glacial scratches were sometimes incorporated into designs. Superimposition of elements was noted at only two sites.

##### *Rock Selection*

Typically, large bedrock expanses were used, and in all but three cases these outcrops have glaciated surfaces. Rock surfaces were selected for their smoothness and reddish surface oxidation. Granite was the most common material, but metamorphic outcrops were also used.

##### *Association*

A pattern of association is not readily apparent; the sites have no clear association with other archaeological features such as bedrock mortars or occupation sites. An intentional placement in relation to the surrounding landscape is suggested, however. Some sites are located along possible game trails and near passes; most occur above 5,000 feet (1,525 m) in the rugged terrain of the glaciated Sierran crest.

##### *Distribution*

Style-7 sites are distributed from Plumas County on the north to the Stanislaus River on the south, but concentrated along the Sierran crest north and west of Lake Tahoe (see Figure 1).



Figure 4. Multiple zigzag lines in series and simple crosses at the Spaulding Ridge site, CA NEV\_426. Photo by Dan Foster 1982.

### ANALYSIS OF STYLE-7 SITE ATTRIBUTES

Our current study includes a detailed analysis of selected environmental attributes, archaeological associations, and petroglyph attributes of Style-7 sites, in order to evaluate some of the original characteristics used to define the style. Environmental attributes include elevation, watershed, and association with ponds and waterfalls. Archaeological associations include bedrock mortars, milling slicks, and lithic scatters. Petroglyph attributes include the total number of elements present, the occurrence of bear track and anthropomorphic elements, and the incorporation of natural rock features into petroglyph designs. This information is presented in Table 1 and discussed below. The authors have not had the opportunity to examine all of the sites included in this analysis; some of the information presented in Table 1 has been extracted from existing site records.

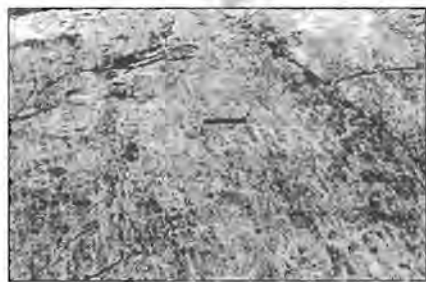


Figure 5. Wavy line elements, concentric circles, and bear tracks at the Soda Springs site, CA-PLA-26. Photo by Dan Foster 1986.

#### Form

As we have noted, the majority of Style-7 petroglyph elements are abstract, consisting of circles, wavy lines, zigzags, and arrangements of these elements into complex designs (figures 4-6). We have chosen two of the more naturalistic and readily recognizable petroglyph elements to include in our analysis -- the bear track and the anthropomorph (figures 7-8). Payen (1966:64) mentions the track element as a possible diagnostic trait for defining Style-7 rock art; our analysis is focused on a particularly distinctive track element, the bear track (Figure 8). Gortner (1984:40-41) has presented a discussion of the considerable variability in this form and the difficulties of distinguishing some "paws" from other similar element types. Many bear tracks, however, are unmistakable examples of an element type found widely throughout North America (Grant 1967:55-57). Cloven-hoof elements, most typically deer tracks, can also be identified at some Style-7 sites. As a result of our analysis, bear tracks have been identified at 51 sites with approximately 381 total elements; at 41 other sites, no bear-track elements can be identified. While the bear track has proven to be a common, distinctive, and widespread element, it can not be considered a diagnostic trait for Style 7, because of its absence from so many Style-7 sites.



Figure 6. Style 7 petroglyphs at Hawley Lake, CA-SIE-1 with linked circles, wavy lines, bear tracks, and abstract curvilinear designs. Photo by Mike Hooper 1984.

Payen (1966:64) also noted the occasional occurrence of the anthropomorphic form.





Figure 7. Style 7 petroglyphs at Lakes Basin, CA-PLU-88, with a stick figure anthropomorph, bear track, circles, linked circles, and wavy lines. Individual deep peck marks are visible. Photo by Dan Foster 1986.

Our analysis has also shown this form to be uncommon, with only 42 examples present at 23 sites. Eighteen of these 23 sites contain only a single example. One particularly distinctive example occurs at the Spaulding Ridge site (Figure 9). This small stick figure is associated with a variety of other elements and appears to be wielding an atlatl. This is the only example recognized, so far, of a petroglyph element at a Style-7 site with possible temporal implications. A portion of this interesting panel has been removed since it was originally recorded.

TABLE 1. ATTRIBUTES OF STYLE-7 SITES SELECTED FOR ANALYSIS

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES				ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES				
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
Meadow Lake	CA-NEV-3	7280	SY	W	+	-	-	-	-	500	5	?	-
Donner Pass	CA-NEV-4	6860	T	E	+	-	-	-	+	205	1	0	+
Grouse Ridge	CA-NEV-84	6180	SY	W	-	+	-	-	+	228	8	1	+
Spaulding Ridge	CA-NEV-426	5140	SY	W	+	-	+	-	+	45	7	1	-
Rattlesnake #1	CA-NEV-504	6280	SY	W	-	-	-	-	-	3	2	0	-
Rattlesnake #2	CA-NEV-505	6220	SY	W	-	-	-	+	-	50	9	0	-
Cisco Grove #1	CA-NEV-506	5560	SY	W	-	+	-	-	-	175	35	1	?
Cisco Grove #2	CA-NEV-507	5560	SY	W	-	+	-	+	-	45	7	1	-
Canyon Creek	CA-NEV-582	5440	SY	W	-	-	-	-	-	60	0	0	+
Gregory Pex	CA-NEV-585	6560	M Y	W	-	+	-	-	-	20	0	0	-

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES					ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES			
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
Lots-O-Granite	CA-NEV-610	6820	SY	W	+	-	-	-	+	14	5	0	-
Soda Springs	CA-PLA-26	6060	NA	W	-	+	-	-	+	750	80	0	+
Bear Valley	CA-PLA-504	4620	B	W	-	-	+	-	+	100	2	0	-
Skaters Pond	CA-PLA-517	5760	NA	W	+	-	-	+	+	8	1	0	-
Lake Valley Res.	CA-PLA-546	5840	NA	W	-	-	-	-	-	10	1	1	-
Walter Freeman	CA-PLA-550	6260	MA	W	-	-	-	-	-	43	10	0	-
Willis Gortner	CA-PLA-551	6140	MA	W	-	+	-	-	+	260	0	0	+
Creek View	CA-PLA-552	6080	NA	W	-	-	-	-	-	10	0	0	-
Cedar Camp Overlook	CA-PLA-553	6000	NA	W	-	-	-	-	-	5	3	1	-
Big Pine	CA-PLA-554	5840	NA	W	-	-	-	+	-	30	3	1	-
Log Cabin Creek	CA-PLA-555	5840	NA	W	-	-	+	-	+	187	24	2	+
Balancing Rock	CA-PLA-556	5840	NA	W	-	-	-	-	-	15	0	0	+
Swimming Hole	CA-PLA-557	5820	NA	W	-	-	-	-	+	104	4	1	+
Steel Bridge	CA-PLA-558	5840	NA	W	-	-	-	-	+	7	1	0	-
Rocky Hill	CA-PLA-559	5920	NA	W	-	-	-	-	+	15	1	1	-
Rocky Ridge S	CA-PLA-560	6080	NA	W	-	-	-	-	-	5	0	0	-

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES					ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES			
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
Boundary Mark	CA-PLA-561	6160	N A	W	-	-	-	-	-	4	1	0	-
Rocky Ridge A	CA-PLA-562	6080	N A	W	-	-	-	-	-	25	0	1	+
Rocky Ridge B	CA-PLA-563	6160	N A	W	-	-	-	-	-	26	0	0	-
CM Trail	CA-PLA-564	6520	N A	W	-	-	-	-	-	2	1	0	-
Inspiration Point	CA-PLA-565	6400	N A	W	-	-	-	-	-	25	0	0	-
Foulks Water Tank	CA-PLA-566	6120	N A	W	-	-	-	-	+	8	2	0	-
AG-N	CA-PLA-567	5900	N A	W	-	-	-	-	+	5	0	0	-
Lyon Creek Flat	CA-PLA-568	5960	N A	W	-	-	-	-	+	5	2	0	-
AG-S	CA-PLA-569	5980	N A	W	-	-	-	-	+	2	0	0	-
Lyon Valley Overlook	CA-PLA-570	6080	N A	W	-	-	-	-	+	3	0	0	-
Pinehurst	CA-PLA-571	6040	N A	W	-	-	-	+	-	125	1	0	-
Foulks-E	CA-PLA-572	6100	N A	W	-	-	-	-	-	24	0	0	-
Cedar Meadow	CA-PLA-573	7280	N A	W	+	-	-	-	+	2	0	0	-
Valley View	CA-PLA-574	6600	N A	W	-	-	-	-	-	2	0	0	-
Foulks Pipeline	CA-PLA-575	6220	N A	W	-	-	-	-	-	4	0	1	-
Chickering	CA-PLA-576	6080	N A	W	-	-	-	-	+	3	0	0	+

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES				ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES				
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
Painted Rock	CA-PLA-577	6150	N A	W	-	-	-	-	-	10	1	0	+
Chickering E	CA-PLA-578	6180	N A	W	-	-	-	-	-	17	0	0	-
Coyotes Looking Glass	CA-PLA-579	6280	N A	W	-	-	-	-	-	1	0	0	-
Sheep Valley	CA-PLA-580	6920	N A	W	-	-	-	-	+	2	0	0	+
Mt. Meadow Lake	CA-PLA-581	7320	N A	W	-	-	-	-	-	24	0	0	-
IP Dome	CA-PLA-582	6560	N A	W	-	-	-	-	+	3	0	0	-
Indian Trail	CA-PLA-583	5920	N A	W	-	-	-	-	-	5	0	0	+
LCCO-H/N	CA-PLA-584	6160	N A	W	-	-	-	-	+	2	0	0	-
Court View	CA-PLA-586	5920	N A	W	-	-	-	-	-	3	1	0	-
Wickert Cabin	CA-PLA-587	6000	N A	W	-	-	-	-	+	13	0	1	-
Wabena	CA-PLA-591	6560	N A	W	-	+	-	-	+	40	11	0	-
MF-B,P,Q	CA-PLA-790	5880	M A	W	-	-	-	+	+	43	3	0	+
MF-A	CA-PLA-791	5920	M A	W	+	-	-	-	-	8	1	0	-
MF-G	CA-PLA-792	5860	M A	W	-	-	-	-	-	3	0	0	-
MF-H	CA-PLA-793	6080	M A	W	-	-	-	-	-	24	4	0	-
MF-J	CA-PLA-794	6260	M A	W	-	-	-	-	+	17	3	0	-

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES					ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES			
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
MF-K	CA-PLA-795	5960	M A	W	-	-	-	-	-	39	9	0	-
MF-L	CA-PLA-796	6220	M A	W	-	-	-	-	-	10	1	0	-
MF-M	CA-PLA-797	6000	M A	W	-	-	-	-	-	5	1	0	-
MF-N,O	CA-PLA-798	5980	M A	W	-	-	-	-	-	14	0	0	-
Patrick Boles	CA-PLA-799	6180	M A	W	-	-	-	-	-	4	0	0	-
LCCO-FG	CA-PLA-819	6060	N A	W	-	-	-	-	+	1	1	0	-
Pearl Creek	CA-PLA-820	6440	N A	W	-	+	-	-	+	1	1	0	-
Old Baldy Crest	CA-PLA-821	6220	N A	W	-	-	-	-	+	8	0	1	-
Devils Peak	CA-PLA-822	6480	N A	W	-	-	-	-	+	50	8	0	+
Palisade Creek	CA-PLA-823	6520	N A	W	-	-	+	+	+	130	16	1	+
LCCO-BCDE	CA-PLA-824	5920	N A	W	-	-	-	-	+	8	1	1	-
Snow Mountain	CA-PLA-825	7640	N A	W	+	-	-	+	+	50	4	1	-
Miller Meadows	CA-PLA-826	6920	R	W	+	-	-	-	+	3	0	0	-
Tennis Court	CA-PLA-827	5840	N A	W	-	-	-	-	-	3	0	0	-
Rhoades Holler	CA-PLA-828	5920	N A	W	+	-	+	+	+	31	12	0	-
French Meadows	CA-PLA-926	5920	M A	W	-	-	-	-	-	2	0	0	-

SITE DESIGNATIONS		ENVIRONMENTAL ATTRIBUTES					ARCH ASSOCIATIONS			PETROGLYPH ATTRIBUTES			
Name	Trinomial	Elevation	Watershed River/Crest		Pond	WF	BRM	MS	LS	E	BT	A	RF
Big Bend	CA-PLA-954	5840	SY	W	-	-	-	-	?	?	?	?	?
Pexodox	CA-PLA-955	5800	SY	W	-	-	-	-	-	1+	0	0	-
Bear Track Gap	CA-PLA-956	6080	NA	W	-	-	-	-	-	7	2	0	-
Long Lake	CA-PLU-4	5960	NF	W	-	-	-	-	-	200+	14	1+	+
Lakes Basin	CA-PLU-88	6300	SF	W	+	-	-	-	+	578+	4	3	-
Jamison Creek	CA-PLU-*	5640	SF	W	-	-	-	-	-	1	0	0	-
Bear Paw Falls	CA-PLU-*	5940	NF	W	-	+	-	-	+	30	5	2	-
Hawley Lake	CA-SIE-1	6460	NY	W	-	+	+	-	+	547+	56	15	?
Lacey Valley	CA-SIE-166	6840	T	E	+	-	+	-	+	25	0	0	-
Spencer Lakes	CA-SIE-524	6320	NY	W	-	-	-	-	-	30	2	2	-
Hawley Lake No. 29	CA-SIE-543	6400	NY	W	-	-	-	-	-	35	1	0	-
Hawley Lake No. 30	CA-SIE-544	6400	NY	W	-	-	-	-	-	+	0	0	-
Hawley Meadow	CA-SIE-548	6640	NY	W	-	-	-	-	+	3	2?	0	-
Gold Valley	CA-SIE-558	5840	NY	W	-	-	-	-	-	25	1	0	-
Prehistoric Empire	CA-SIE-560	5840	NY	W	-	-	-	-	+	6	0	0	-
Frazier Creek	CA-SIE-*	6200	SF	W	-	+	-	-	+	22	0	1	-
Sunnyside Meadow	CA-SIE-*	6280	NY	W	-	-	+	+	+	6	0	0	-
Salmon Lake	CA-SIE-*	6600	NY	W	+	?	?	?	?	4	0	0	?

KEY:

\* No trinomial assigned

Environmental Attributes

B	Bear River	NY	North Yuba River	E	East Side of Sierra Nevada Crest
M	Middle Fork	R	Rubicon River	W	West Side of Sierra Nevada Crest
A	American River				
M	Middle Yuba River	SF	South Fork Feather River	WF	Associated with Waterfall
Y					
N	North Fork	SY	South Yuba River	?	Unknown, Information Unavailable
A	American River				
N	North Fork	T	Truckee River		
F	Feather River				

Archaeological Associations

BRM	Associated with Bedrock Mortars	+	Attribute Present
MS	Associated with Milling Slicks	-	Attribute Absent
LS	Associated with Lithic Scatter	?	Unknown, Information Unavailable

Petroglyph Attributes

E	Number of Elements	A	Anthropomorphs	+	Attribute Present	?	Unknown, Information Unavailable
BT	Bear Tracks	RF	Rock Features	-	Attribute Absent		



Figure 8. Paired bear track elements at the Spaulding Ridge site, CA-NEV-426, probably depicting bear's hind paw print. Right track is 24 cm in length. Photo by Dan Foster 1982.

The quantity of petroglyph elements at each site is variable, but three major categories can be recognized. The four largest sites, Meadow Lake, Soda Springs, Lakes Basin, and Hawley Lake, each have more than 500 elements. A second group of six sites, Donner Pass, Grouse Ridge, Cisco Grove No. 1, Willis Gortner, Log Cabin Creek, and Long Lake, each have approximately 200 elements. Most of the remaining sites have fewer than 100 elements each, with some sites containing only one. The significance of these groupings has yet to be determined. A total of 5,253 elements has

been tabulated as a result of this analysis, but this does not represent a complete accounting of Style-7 petroglyphs, for several of the most extensive sites have not been fully documented.

*Manufacture*

All of the petroglyphs observed during this research project appear to have been

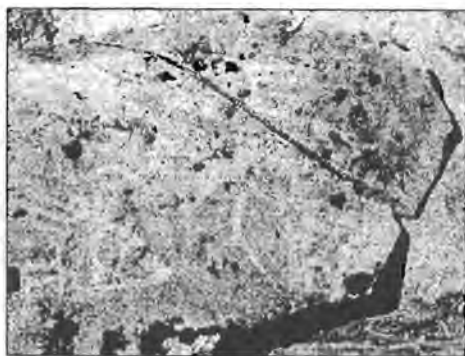


Figure 9. Style 7 petroglyphs at the Spaulding Ridge site, CA-NEV-426, with a stick figure anthropomorph, possibly using an atlatl. Photo by Dan Foster 1982.

manufactured by pecking, with both direct and indirect percussion methods utilized in different instances. Peck marks are clearly visible on some rock surfaces, particularly metamorphic and metasedimentary outcrops. On outcrops of granite, the coarse-grained structure of the rock makes individual peck marks more difficult to recognize. No clear indication of scratching, abrading, or other manufacturing techniques has been observed so far. Nor have additional examples of the superimposition of petroglyph elements been found as a result of the current research.



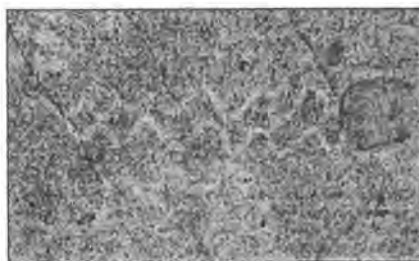
*Figure 10. Incorporation of natural dark inclusion into design element at Soda Springs, CA-PLA-26. The dark inclusion has been encircled and bisected with several lines to form an abstract design element, probably a stylized bear track. Photo by Dan Foster 1986.*

One petroglyph attribute we have chosen to analyze is the incorporation of natural rock features into the designs. This practice has been observed at 17 separate sites and includes several different phenomena. At sites such as Soda Springs and Donner Pass, dark, natural, mafic inclusions in the granite matrix have been decorated, encircled, or incorporated into design elements (figures 10-11). At other sites such as Canyon Creek and Devils Peak, similar dark inclusions have been selected as the background on which groups of elements have been placed. Other forms of natural rock features such as white siliceous veins have also been incorporated into petroglyph designs on some occasions (Figure 12). Payen (1966:65) describes the incorporation of glacial striae into petroglyph designs. This practice has been observed, but it is often difficult to determine if this was

the deliberate intent of the artist. A particularly distinctive practice has been recorded at sites along the Middle Fork of the American River, such as Willis Gortner and MF-B,P,Q. The metasedimentary rock formations in this region display pronounced geologic stratification, and these natural rock layers have been used as borders for elaborate series of parallel lines and enclosures for other complex designs.

### **Rock Selection**

All of the petroglyphs included in the current study are situated on horizontal or sloping glaciated bedrock (Figure 13). No Style-7 petroglyphs have been located on cliff faces or boulders, even though these types of rock surfaces are common in the study area. A variety of rock types were utilized, including granite, granodiorite, magnetite, trondhjemite, and graywacke, as well as other forms of metamorphic, metasedimentary, and metavolcanic rock. Payen (1966:65) noted the selection of reddish or other dark-colored rock surfaces for the placement of elements (Figure 14). Gortner observed that many elements were on a pinkish-colored rock surface (1984:32). While this remains a typical selection pattern, it was not employed exclusively; light-colored rock surfaces were occasionally used, as well. In some cases,



*Figure 11. Incorporation of natural inclusion into design element at Donner Pass site, CA-NEV-4. Photo by Dan Foster 1987.*

the color differentiation between the rock surface and the pecked areas is completely negligible, making the rock art particularly difficult to recognize. This may have resulted from the repatination of the rock



surface in some instances. The overall common denominator in rock-surface selection appears to be the use of glacially polished bedrock outcrops.



*Figure 12. Linked diamonds, circles, and other abstract elements at the Donner Pass site, CA-NEV-4. Note how a white siliceous vein has been incorporated into design elements. Photo by Dan Foster 1988.*

### *Association*

Payen was unable to recognize any clear pattern of archaeological association from his original group of Style-7 sites. Of the sites included in the current analysis, 47 (51%) are associated with archaeological features or artifacts (refer to Table 1). Forty-five sites (49%) have no associated archaeological evidence. Of the sites containing archaeological associations, eight contain bedrock mortars and ten contain bedrock milling slicks. Three sites contain both mortars and slicks. Of the eight sites with bedrock mortars, four have only a single, shallow mortar pit. Only two sites, Bear Valley and Sunnyside Meadow, contain examples of multiple, deep mortar holes. Bear Valley contains 40 mortars clustered in an area several meters away from the petroglyph panels. These mortars may represent a Late Prehistoric reoccupation of this site. At Sunnyside Meadow, 12 bedrock mortars are located on the same outcrop as the petroglyphs.

An interesting example of an association with bedrock milling slicks was observed at the Snow Mountain site. Two separate milling surfaces were identified; one appears to have been formed over preexisting

petroglyphs, erasing the petroglyph elements in the course of its manufacture.

No clear pattern of archaeological association has emerged from our study. Although roughly one-half of the sites contain associated archaeological evidence, this is typically in the form of sparse lithic scatters. Archaeological surface evidence indicative of substantial occupation, such as midden or housepits, is not typically found at the level of elevation for the sites in this study. Only the Lakes Basin site contains a recognizable midden deposit. Of the 92 sites included in this study, 43 sites (47%) have associated lithic materials.

Payen noted an apparently intentional placement of sites in relation to the general terrain. The topographic settings for sites the current study are variable, with sites located along streams; in canyons; on midslope benches, ridge tops, domes and rocky promontories; and occasionally near mountain passes and at the bases of peaks. An environmental attribute observed during the current research to have potential implications for the placement of Style-7 sites is the association with small glacial ponds. Thirteen sites were found to be in close proximity to one or more small lakes, ponds, or glacial tarns. This represents only 14% of the total number of sites, and many small bodies of water are scattered throughout this region. Certain characteristics of individual sites, however, suggest that this association may have more importance than can be demonstrated statistically. At the Spaulding Ridge site, for example, glaciated outcrops eminently suitable for petroglyphs extend for a considerable distance along a prominent ridge. Yet the petroglyphs occur at only one spot, directly adjacent to two small ponds. Other sites with similar provocative settings include Meadow Lake, Lots-O-Granite, Skaters Pond, Snow Mountain, Miller Meadows, Rhoades Holler, and Lacey Valley.

Another attribute that may have similar implications is an association with waterfalls. Eleven sites (12%) were observed to have some locational relationship with falling water. In several cases this association is direct and unambiguous. At sites such as Soda Springs, Cisco Grove No. 1, and Willis Gortner, waterfalls are in close proximity to the rock art panels. In other situations this relationship may be more tenuous and difficult to identify. In the case of Gregory Pex for example, a 100-foot-high waterfall is located approximately three-quarters of a mile from the site, but the rock art is placed on the first exposure of glaciated bedrock that is encountered proceeding upstream from the waterfall. The Frazier Creek site is also located upstream from a cataract on that watercourse. From Wabena, a waterfall can be seen on the North Fork of the American River, but it is nearly one mile away and more than 2,500 feet below the petroglyph site.

Our analysis also demonstrates that these two characteristics are mutually exclusive, with no site in proximity to both waterfalls and ponds. When taken together, these two attributes account for 24 sites, or 26% of the total number of Style-7 sites.

Another environmental attribute, thought by Gortner (1984:32-33) to have considerable importance, is the situation of petroglyph sites with prominent views of surrounding mountain peaks. While this attribute was not subjected to the same level of analysis as others in our study, some general observations can be made. This pattern was first recognized in the North Fork of the American River drainage where, in fact, many of the sites do have spectacular views of the surrounding peaks. At Wabena, perhaps the most dramatic of all of these locations, the major peaks of the region are visible in a 360° panorama. This pattern of major peaks in view from Style-7 sites appears to hold true for sites on the Middle Fork of the American River and on

the South Yuba River drainages. The relationship is less clear for the sites in the North Yuba River and South Fork of the Feather River drainages, although Mt. Elwell is quite prominent from the Lakes Basin site. As for the two Style-7 sites in the North Fork of the Feather River area, these sites are very near the crest of the range at this point, and no prominent peaks are located in the vicinity.



*Figure 13. Typical setting of Style 7 petroglyph sites. Panels are placed on glaciated bedrock outcrops. Spaulding Ridge site, CA-NEV-426. Photo by Dan Foster 1982.*

### *Distribution*

We have elected to exclude three of Payen's original 15 Style-7 sites. These three sites, Horseshoe Bend (CAL-5), Volcano (AMA-14), and Bidwell (BUT-543), all are located in the lower foothills of the Sierra Nevada. They constitute the only exceptions to two of the most characteristic traits used to define Style 7: placement on glaciated bedrock, and location at high elevation near the Sierran crest. Additional rock art sites have come to light in the lower foothill regions of the Sierra Nevada that have similarities to Style 7. Examples include Foreman Creek, Table Mountain, and Mountain Springs School (Ritter and Parkman 1992:90-95), and Church Rock near Redding (Van Tilburg et al. 1987). We believe, however, that when these sites are subjected to a detailed analysis, a separate stylistic designation will be possible. There is a pronounced discontinuity in the distribution of abstract-style rock art from the Sierra Nevada foothills to the higher

elevations of the range, and a nearly complete absence of sites in the middle-slope elevation range, from 2,500 to 4,500 feet (760-1370 m). Payen suggests that this lack may be a result of environmental and cultural factors, or of the absence of surveys in the area. After more than 30 years of archaeological investigations, this discontinuity remains, which indicates that the survey coverage is not the explanation. Rock outcrops are plentiful throughout this zone, leaving cultural factors as the most likely possibility. The environmental attributes that have been discussed in the current analysis -- elevation range, associations with glacial ponds and waterfalls, and views of mountain peaks -- suggest that Style-7 rock art was created with relationship to cultural activities that were specific to these restricted, high-elevation environments.



*Figure 14. Style 7 petroglyphs pecked through dark patina at the Hawley Lake site, CA-SIE-1. The two large defacement scars on the left are remnants of previous vandalism, an attempt to cut out and remove petroglyphs. Photo by Mike Hooper 1984.*

### THE MARTIS ARCHAEOLOGICAL COMPLEX

The Martis Complex has been defined as an archaeological culture in the northern Sierra Nevada dating from about 4000 to 1500 B.P. (Elston 1986:141; Moratto 1984:295). First defined by Heizer and Elsasser (1953:19) and expanded by Elsasser (1960)

as exhibiting an economic orientation towards hunting and seed gathering, the Martis Complex was initially characterized as having a basalt chipped-stone industry of large, heavy, and roughly chipped projectile points, expanded-base drills, and flake scrapers with pressure-retouched edges. Other elements of the assemblage included manos and metates as grinding implements, atlatl weights, and a general lack of obsidian and chert as raw materials. It is not clear whether the Martis Complex included the use of bedrock mortars. Elsasser and Gortner (1991:368) state that bedrock mortars likely were used, because several campsites containing bedrock mortars have been found within Martis territory with an apparent association with Martis tool kits. In describing the Martis Complex along the east slope of the Sierra Nevada, Elston (1986:143) discusses seed processing but does not specifically include bedrock mortars. Of the 47 Style-7 petroglyphs sites with associated archaeological features and artifacts, only eight contain bedrock mortars.

Due to variability in artifact manufacture, differences noted between artifacts on opposite sides of the Sierra Nevada, and similarities with Great Basin cultures, the validity of a "Martis Complex" has been questioned by numerous researchers (Farber 1982:80; Rondeau 1982:180; Clewlow 1984:219). Much of this criticism was focused on the use of basalt as the primary criterion in identifying the Martis Complex (e.g. Rondeau 1982:15, Payen 1989:36-37), without reference to the other known archeological elements. Recent work has reaffirmed the validity of the Martis Complex as a legitimate archaeological concept (Elsasser and Gortner 1991). Archaeological evidence has reinforced seven of the original nine traits proposed for definition of the Complex. Additional diagnostic traits have been identified: Spokeshave-notched scrapers and an abundance of large biface blades and cores have been consistently recovered during excavations (Heizer and Elsasser 1953;

Elsasser 1960; Clewlow 1984). A third diagnostic trait is the presence of abstract petroglyphs (Elsasser and Gortner 1991), which we believe to represent Style-7 petroglyphs.

The Martis Complex occupied an area of about 10,000 square miles in mid-to-high elevations of the Transition Zone on both sides of the northern Sierra Nevada crest (see Figure 1). Its boundaries incorporate the present ethnographic areas of both the Maidu and Washo. Martis Complex sites are always in optimal locations with several resources available. Permanent winter encampments such as NEV-15 and PLA-689 are usually found below 4,000 feet in elevation. These permanent campsites have been discovered near streams or lakes providing for their water supply and fishing, near groves of oak for acorn gathering or pine trees supplying pine nuts, and near open areas suitable for hunting. Artifacts identified at winter camps include stemmed, notched, and leaf-shaped projectile points, knives, scrapers, drills, boiling stones, and waste flakes. Bedrock outcrops provided milling slicks for food processing.

Martis summer encampments are much more numerous, with many hundreds of sites found at higher elevations throughout the Martis Complex Area. These usually incorporate surface or shallow deposits located near streams or springs, usually on flat or moderately level benches, and often near the margins of natural forest openings. Bedrock outcroppings at Martis summer camps occasionally contain milling slicks attesting to food-processing activities; however, many of these seasonal camps consist only of surface scatters of lithic artifacts dominated by basalt but also including slate, obsidian, and other materials. These assemblages contain high quantities of basalt debitage as well as completed projectile points and bifaces. Another attribute recently reported is that high-elevation, seasonal Martis campsites are sometimes found in close proximity to

abstract-style petroglyphs (Elsasser and Gortner 1991:370).

### EVIDENCE SUGGESTING AN ASSOCIATION BETWEEN STYLE-7 ROCK ART AND THE MARTIS ARCHAEOLOGICAL COMPLEX

Three principal lines of evidence indicate an association between Style-7 rock art and the Martis Complex. These include Martis artifact assemblages at or near the Style-7 petroglyph sites, a near-complete absence of Late Prehistoric artifacts at or near these rock art sites, and the overall distribution of the Style-7 sites themselves.

#### *Previous Evidence*

Payen first noted the possible association of Style-7 rock art and Martis Complex artifacts. Martis artifacts were found at or near four of his Style-7 sites: Lakes Basin, Hawley Lake, Meadow Lake, and Cisco Grove. Both Martis and Kings Beach materials were found associated with the Soda Springs site (1966:71).

In a survey of Bear Valley and the upper watershed of the South Yuba River, Claytor reported on three Style-7 rock art sites; at least 14 such sites are now known to exist within his survey area. An overall emphasis on Martis-period occupation of this region can be detected in Claytor's findings. Of 201 typeable projectile points, only 16 could be assigned to late prehistoric types such as Rose Springs, Desert Side-notched, and Cottonwood Triangular. The remaining artifacts were classified as types more closely related to the Martis and Elko series. Claytor also collected a variety of artifacts from the Skaters Pond Site, including 35 projectile points, at least four of which were large, basalt, Martis-series points (Claytor 1973:40, Table 3).

An archaeological survey of the Hawley Lake region resulted in the documentation of six Style-7 sites, in addition to the major Hawley Lake site itself. An overall

preponderance of basalt debitage and artifacts observed during this survey suggested a Martis Complex affiliation for the sites in the area. Only a hint of later Kings Beach materials was encountered (Payen and Scott 1982:74).

As part of his investigations in the North Fork area, Gortner (1984:16-26) presented the hypothesis of a direct correlation between abstract-style petroglyphs and the Martis Archaeological Complex. The collections from several families summering in the North Fork of the American River area were examined, and seven different point types were identified. Gortner analyzed three large private collections containing 234 projectile points. He found very similar percentages of the seven different types between the three collections. Nearly all of the points were manufactured from basalt, with only a few made from chert or obsidian. Although six projectile points in one collection appeared to belong to the late period, Gortner concluded that many of the projectile points examined closely resemble points of the Martis Complex (1984:20).

A recent review of reports on 19 archaeological sites in the Lakes Basin and Mohawk Valley area revealed that of 119 projectile points, only one Desert Side-notched point could be attributed to the Kings Beach or late prehistoric period (Neuenschwander 1994:185). This seems to be an indication of a much less intensive utilization of this region during the late prehistoric period.

Recent investigations at PLU-88, Lakes Basin Campground, also provide dramatic evidence in support of the association of Style-7 rock art and the Martis Complex. This is the first major excavation reported for a Style-7 rock art site. The extensive excavations consisted of 54 units and the processing of 54.25 cubic meters of soil. The cultural deposit appeared to have sustained minimal disturbance and to have retained stratigraphic integrity. Evidence

from this deposit suggested that human activity may have occurred at this site for nearly 10,000 years. The most intensive period of utilization, however, is concentrated from 4000 to 1500 years B.P., during the Middle Archaic time period, which is equated with the Martis Complex. Of the 38 classifiable projectile points recovered, 35 have been assigned to the Martis and Elko series, which are considered diagnostic of the Middle Archaic period (Neuenschwander 1994).

#### *Additional Evidence*

Several sites have been discovered in recent years with artifact assemblages that provide additional evidence of potential archaeological affiliations. At Lots-O-Granite (PLA-610), 20 basalt projectile points have been found, including several Martis-series types. One obsidian projectile point, a basalt spokeshave, and a quartzite scraper have also been found at this site. An assemblage of artifacts recently documented from the Snow Mountain site includes eight basalt projectile point fragments, a basalt drill, and a basalt scraper (Figure 15a-d, l-q). Three basalt projectile point fragments were mentioned on the site record for Rhoades Holler (PLA-828), with one corner-notched specimen documented. Artifacts found at the Lacey Valley site included four basalt projectile points, two basalt bifaces, a basalt scraper, and a basalt drill.

During the course of recent, detailed recording at Style-7 sites, artifacts have been documented that contribute additional evidence of archaeological affiliations. Twenty-six projectile points or point fragments have been reported from MF-B,P,Q (PLA-790) including two small chalcedony points, one obsidian point, 13 points of basalt or slate, three basalt point fragments, and seven point fragments of unspecified material. Three basalt projectile point fragments were recently documented from Old Baldy Crest (PLA-821), including a corner-notched base fragment, a nearly

complete contracting-stem point, and a non-diagnostic point midsection (Figure 15i-k). A large basalt flake with possible edge-wear was also observed. A variety of artifacts have been collected from the Palisade Creek site (PLA-823), including basalt flakes, formed tool fragments, and two basalt contracting stem projectile points (Figure 15f-g). The base of a basalt side-notched point was also found at the Miller Meadows site (PLA-826; see Figure 15e), and a complete Martis projectile point was found at Wabena (PLA-591; see Figure 15h).

As noted earlier, 43 (47%) of the 92 Style-7 sites included in this study have associated lithic materials. At least 21 of these sites (23% of all sites or 49% of sites with associated lithic material) have produced large basalt projectile points. The information available on these points is not always adequate to make a definite determination of typology, but these points are generally characteristic of Martis-series types. Only three sites (3.26% of all sites or 7% of sites with associated lithic material) included in this study provided evidence of a late-prehistoric occupation; Bear Valley, MF-B,P,Q, and Soda Springs. In the case of Bear Valley (PLA-504), this evidence consists of a single obsidian Desert Side-notched projectile point. The group of 40 bedrock mortars could also be an indication of late-period occupation (Elsasser 1960:13). This is the most extensive group of bedrock mortars found at any Style-7 site. Bear Valley has other unique attributes: it is the lowest site in elevation included in this study, it is the only site on the Bear River drainage, and it is located on a valley floor adjacent to a large grassy, meadow which is an unusual setting for a Style-7 site.

Several other sites in Bear Valley contain evidence of late-prehistoric occupation. At MF-B,P,Q, two small, chalcedony projectile points, one obsidian projectile point, and the variety of lithic debitage suggest that a late-prehistoric temporary camp was located in one portion of this extensive site area. The lithic materials in other portions of the

site, however, are more characteristic of a Martis affiliation, including numerous basalt projectile points and biface fragments. As for the Soda Springs site, a detailed description of lithic artifacts and material types observed at this site during the nineteenth century gives a strong impression of abundant late-period artifacts (Avery 1873). Payen singled out this site as the only Style-7 site with both Martis and Kings Beach materials (1966:71). Gortner describes a private collection from the Soda Springs vicinity with 40 Desert Side-notched projectile points, and discusses the possible late-prehistoric or Kings Beach occupation at this site (1984:20). Our data continues to support the observation that Soda Springs is the primary Style-7 site with abundant evidence of a late-period occupation.

The final line of evidence that suggests an association between Style-7 rock art and the Martis Complex is the overall distribution pattern of the rock art sites throughout the region (refer to Figure 1). All of the Style-7 sites included in the current study are located within the nuclear territory of the Martis Complex area as defined by Elsasser (1960). The rock art sites are concentrated in the upper watersheds of the Yuba and American River drainages, with five sites extending north into the Feather River drainage. The absence of known Style-7 rock art sites beyond the area containing Martis sites suggests an association between the two. The northern and southern boundaries of both Martis and Style 7 are remarkably consistent. The Style-7 sites included in the current study extend only as far south as the Rubicon River. Moving south from this area, archaeological assemblages are known to change, exhibiting fewer of the characteristics typically associated with the Martis Complex. A similar change occurs at the North Fork of the Feather River. Glaciated rock outcroppings are abundant along the Sierran crest south of the proposed Style-7 boundary depicted on Figure 1, which suggests the absence of Style-7 sites is

influenced by cultural, not environmental, factors. The east-west boundaries of Style 7 and Martis exhibit less of a correspondence. Martis sites are found in lower elevations to the west and extending into Nevada on the east, with no Style-7 petroglyphs in association. This site distribution pattern suggests that the petroglyphs were associated with activities conducted in the higher elevations of the range.

## CONCLUSIONS

The growing body of data on northern Sierra Nevada rock art supports Payen's designation of a unique style of rock art in this region. Evidence found during the recording of these sites continues to support the hypothesis of an association between these sites and the Martis Archaeological Complex. This evidence is fairly pervasive and argues for the placement of this style of rock art firmly within the Middle Archaic period, from 4000 to 1500 B.P. (Elston 1986:141), which has been equated with the Martis Complex. This paper is not intended as a complete discussion of all aspects of Style-7 rock art research, for many additional avenues of investigation remain to be explored. In the future, we hope to expand our analysis to include additional environmental attributes and a more detailed petroglyph-element inventory. A region once thought to be sparsely endowed with rock art (Kroeber 1925:937), even a "barrier to the westward spread of petroglyphs" (Steward 1929:219), has instead proven to be remarkably rich in this form of cultural expression. Additional discoveries are undoubtedly waiting to be made, and as our research continues, we hope to be able to contribute more findings on this extraordinary corpus of prehistoric art.

## ACKNOWLEDGMENTS

The authors are grateful to everyone who offered their assistance and support during the course of our fieldwork and in the preparation of this paper. Susan Gortner

allowed access to Will Gortner's original field notes, which helped to resolve certain questions regarding his research. Ted Beedy, Jim Jensen, and the residents of "The Cedars" have been most gracious in granting permission to revisit and record sites on North Fork Association property. Jerry Johnson provided access to the Gortner collections now at California State University, Sacramento. Marianne Russo at the North Central Information Center has been extremely cooperative and supportive in reviewing our records and providing trinomial assignments. Donna Gillette helped to obtain negatives of the Hart photos from the Library of Congress. Dick Markley, Donna Day, Carmel Meisenbach, Carrie Smith, Nolan Smith, Bill Slater, Jennifer Padgett, and Mark Rhoades of the Tahoe National Forest provided information and facilitated the recording of rock art sites on the Forest. Several archaeologists and foresters on staff at the California Department of Forestry and Fire Protection assisted in recording sites on privately owned timberlands, including Rich Jenkins, Mark Gary, Dan Scatena, Eric Carr, Ken Nielson, Dick Schoenheide, Kelley Keenan, Jim Mower, and Craig Carter. Consulting foresters Bob Ingram, Paul Maben, Lucky Gillett, Walt Saunders, George Felix, Tim Feller, Dan Tomascheski, Dave Early, and Doug Ferrier helped locate sites on privately owned timberlands and secured permission from landowners for subsequent archaeological survey and detailed recording. Craig Carter and Mike Hooper provided some of the photographs used in this paper. Lisa Ohara and Robin Marose at the CDF GIS laboratory in Sacramento produced the site location map. Tom Spittler of the Division of Mines and Geology provided correct terminology for geological formations that were incorporated into petroglyph designs. Brian Dillon and Louis Payen carefully reviewed and edited the manuscript and made numerous constructive suggestions. David Whitley and Michael Rondeau also read the manuscript and submitted helpful comments. Finally, we are grateful for the

support and encouragement received from the late Clem Meighan during the course of this study. He was very interested in this project, and we are honored to dedicate our paper to his memory.

#### REFERENCES CITED

- Avery, B. P.  
1873 Chips from an Indian Workshop. *Overland Monthly* 11(6):489-493. (Reprinted UCAS-R, No. 21:33-36)
- Betts, John  
1998 The Donner Pass Petroglyphs: CA-NEV-4. Report for the Tahoe National Forest, in preparation.
- Clayton, Michael P.  
1973 An Archeological Survey of the Bear Valley Locality, Placer and Nevada Counties, California. Unpublished Master's thesis, California State University, Sacramento.
- Clewlow, C. William, Jr.  
1978 Prehistoric Rock Art. In *California*, edited by R.F. Heizer, pp. 619-625. HNAI, Vol.8, Smithsonian Institution, Washington, D.C.  
1984 Archaeological Data Recovery Program, Ancient Enterprises, Inc., submitted to CALTRANS, Marysville, California.
- Elsasser, Albert B.  
1960 The Archaeology of The Sierra Nevada in California and Nevada. UCAS-R, No. 51:1-93. Berkeley.
- Elsasser, Albert B. and Willis A. Gortner  
1991 The Martis Complex Revisited. *North American Archaeologist* 12(4):361-376.
- Elston, Robert G.  
1986 Prehistory of the Western Area. In *Great Basin*, edited by Warren L. d'Azevedo pp. 135-148. HNAI, Vol. 11, Smithsonian Institution, Washington, D.C.
- Farber, Alfred  
1982 Archaeological Excavations at the Chalk Bluff Ridge, Nevada County, California, with a New Interpretation of the Martis and Mesilla Complexes. *Anthropological Papers of University Foundation*, No. 3. California State University, Chico.
- Foster, Daniel G., and John Betts  
1990 Rock Art Conservation at Wabena Point. *Society for California Archaeology Newsletter* 24(2):1, 12-13.
- Gortner, Willis A.  
1984 Ancient Rock Carvings of the Central Sierra: The North Fork Indian Petroglyphs. Portola Press, Woodside, California.  
1986a The Willis Gortner Site Records: Petroglyph Sites Near "The Cedars", Placer County, California. California Department of Forestry and Fire Protection Archeology Office, Sacramento.  
1986b The Martis Indians: Ancient Tribe of the Sierra Nevada. Portola Press, Woodside, California.  
1988 The Willis Gortner Site Records, Volume Two: 19 Petroglyph Sites Along The Middle Fork of the American River, Placer County, California. California Department of Forestry and Fire Protection Archeology Office, Sacramento.
- Grant, Campbell  
1967 Rock Art of the American Indian. Thomas Y. Crowell, New York.
- Heizer, Robert F., and C.W. Clewlow, Jr.  
1973 Prehistoric Rock Art of California. Ballena Press, Ramona, California.
- Heizer, Robert F., and Albert B. Elsasser  
1953 Some Archaeological Sites and Cultures of the Central Sierra Nevada. UCAS-R, No. 21:1-47. Berkeley.
- Heizer, Robert F., and Karen M. Nissen  
1977 Prehistoric Rock Art of Nevada and California. *Jahrbuch fur Prahistorische und Ethnographische Kust*, band 245, 1974-1979:148-156.
- Kibbey, Mead B.  
1996 The Railroad Photographs of Alfred A. Hart, Artist. The California State Library Foundation, Sacramento.
- Kroeber, Alfred L.  
1925 Handbook of the Indians of California. BAE Bulletin 78, Washington D.C.



- Mallery, Garrick**  
1893 Picture-Writing of the American Indians. Tenth Annual Report of the Bureau of Ethnology, Smithsonian Institution, Washington, D.C.
- Moratto, Michael J.**  
1994 California Archaeology. Academic Press, Orlando, Florida.
- Neuenschwander, Neal**  
1994 Archeological Excavation at CA-PLU-88, Lakes Basin Campground, Plumas County, California. Peak & Associates. Prepared for U.S. Forest Service, Plumas National Forest, Quincy, California.
- Office of Historic Preservation**  
1995 Instructions For Recording Historical Resources. Office of Historic Preservation, Sacramento, California.
- Payen, Louis A.**  
1966 Prehistoric Rock Art in the Northern Sierra Nevada, California. Unpublished Master's thesis, Sacramento State College, Sacramento.  
1976 An Archaeological Reconnaissance of Potential Land Exchanges in the Sierra Valley, Lacey Valley and Independence Lake Areas. Tahoe National Forest Cultural Resources Report No. 2.  
1986 "Whether Pliocene or Miocene, They Unquestionably were Obscene," History of Investigations at the Hawley Lake Petroglyph Site. Paper read at the Annual Meeting of the society for California Archaeology, Santa Rosa.  
1986 Archaeological Excavations at Shoot Hill, Malakoff Diggins State Historic Park, Nevada County, California. Submitted to California Department of Parks and Recreation, Sacramento.
- Payen, Louis A., and Lyle R. Scott**  
1982 An Archaeological Sample Survey of the Hawley Lake Area, Sierra County, California. Tahoe National Forest, Cultural Resources Report No. 11. Peak & Associates, Inc.
- 1993 Report on the Recordation of Four Rock Art Stations at CA-PLU-88, Lakes Basin Campground, Plumas National Forest. Prepared for U.S. Forest Service, Plumas National Forest, Quincy, California.
- Rhode, Pete**  
1996 The Lakes Basin Field Trip Report. Bay Area Rock Art News 14(2):1, 8-10.
- Ritter, Eric W., and E. Breck Parkman**  
1992 Rock Art of the Foothills of the Northern Sierra Nevada-Southern Cascade Range Interface. In American Indian Rock Art, vol. 18, edited by Frank G. Bock, pp. 81-104, American Rock Art Research Association, San Miguel, California.
- Rondeau, Michael F.**  
1982 The Archaeology of the Truckee Site, Nevada County, California. Submitted to California Department of Food and Agriculture, Sacramento.
- Smith, Clarence E.**  
1946 A Supplement to Petroglyphs and Pictographs of California and Adjoining States. UCARF-C, Ms. 61, Berkeley, California.  
1948 Additional Notes on the Petroglyphs of California. UCARF-C, Ms. 27, Berkeley, California.
- Smith, Jack E.**  
1957 Petroglyphs from Site PLA-26, University of California Archaeological Survey Manuscript No. 242, Berkeley.
- Steward, Julian H.**  
1929 Petroglyphs of California and Adjoining States. UCFAAE 24(2). Berkeley, California.
- Van Tilburg, Jo Anne, Frank Bock, and A.J. Bock**  
1987 The Church Rock Petroglyph Site: Field Documentation and Preliminary Analysis. Occasional Papers of the Redding Museum (4).
- Wellmann, Klaus F.**  
1979 A Survey of North American Indian Rock Art. Akademische Druck- u. Verlagsanstalt. Graz, Austria.

Wilson, Norman

1956 Petroglyph Site: Donner Summit.  
State of California, Department of  
Natural Resources, Division of  
Beaches and Parks, Drawing No.  
6043.

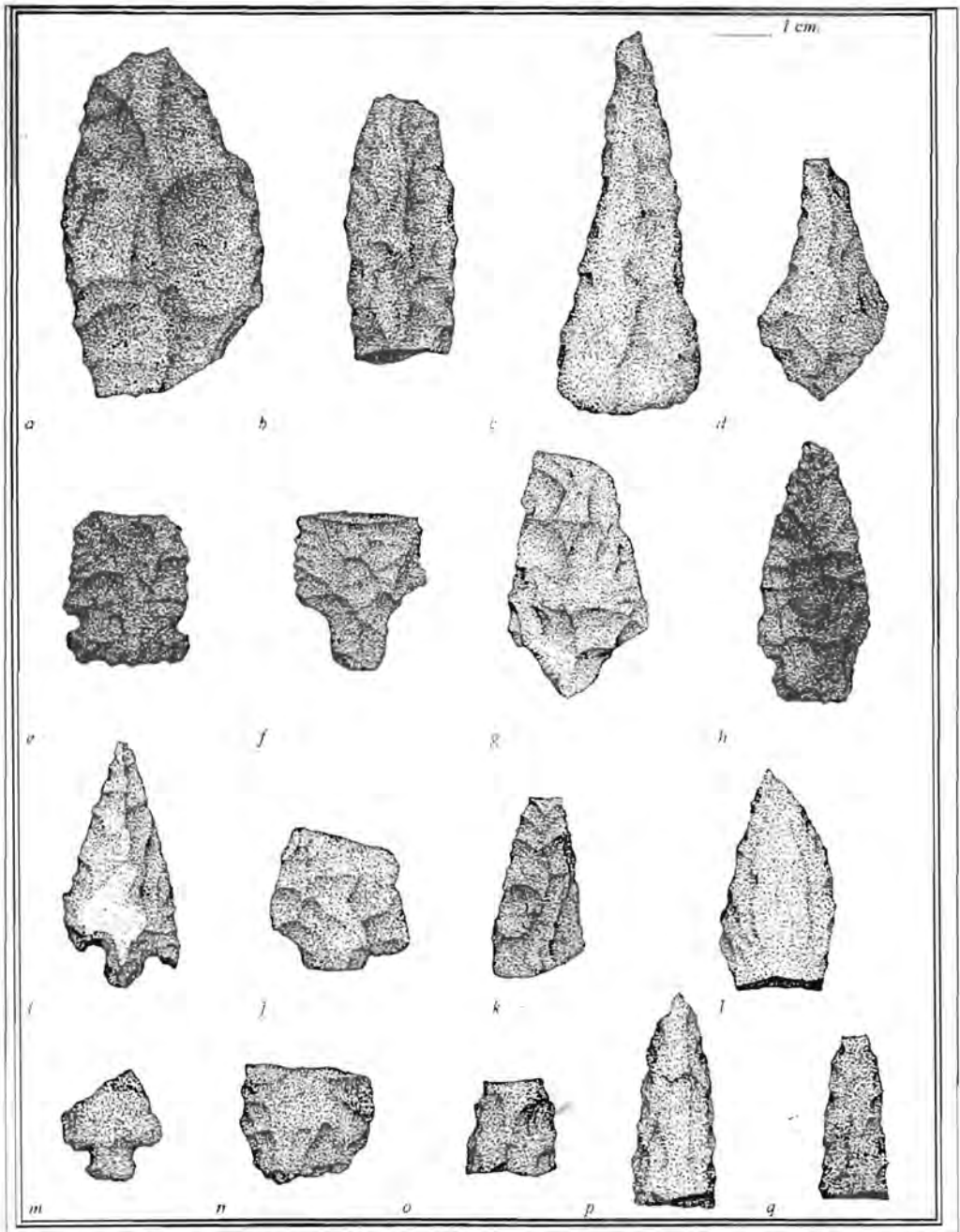


Figure 15. Recently discovered basalt artifacts from Style 7 petroglyph sites, consistent with known Martis-period assemblages. (a-d, l-q) Snow Mountain, (e) Miller Meadows, (f-g) Palisade Creek, (h) Wabena, (i-k) Old Baldy Crest. Illustrations by John Berts 1900-1977.

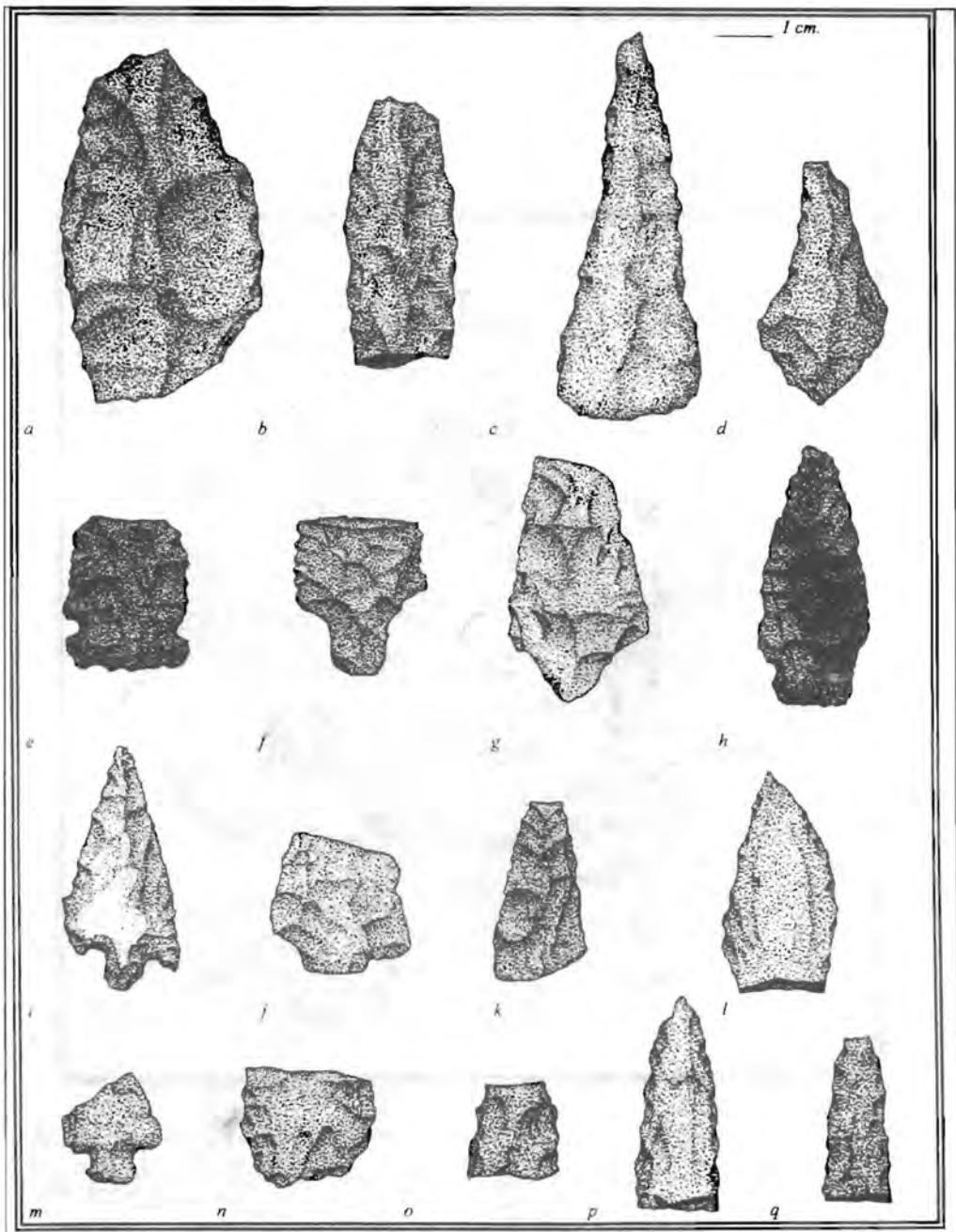


Figure 15. Recently discovered basalt artifacts from Style 7 petroglyph sites, consistent with known Martis-period assemblages. (a-d, l-q) Snow Mountain, (e) Miller Meadows, (f-g) Palisade Creek, (h) Wabena, (i-k) Old Baldy Crest. Illustrations by John Betts 1900-1977.