PRELIMINARY INVESTIGATIONS INTO ROCK ART SITES ALONG THE MIDDLE FORK OF THE AMERICAN RIVER AND PICAYUNE VALLEY, PLACER COUNTY, CALIFORNIA

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Early investigations by Willis Gortner (1988) disclosed numerous Northern Sierra Style-7 petroglyph sites along the Middle Fork of the American River and in Picayune Valley, southern Placer County. Recently, systematic inventories conducted by Tahoe National Forest archaeologists and the Friends of Sierra Rock Art have discovered many new petroglyph sites. In this paper, an overview is presented of the data collected during the past four years.

To begin, petroglyphs are rock carvings, distinctive from pictographs, which are rock paintings. Contributions by Steward (1929), Payen (1966; 1976), Heizer and Clewlow (1973), Clewlow (1978) and Whitley (2000) have further described prehistoric petroglyph sites and attempted to classify these resources by the style of elements present. Recently, Foster, Betts and Sandelin (n.d.) have considered Style-7 petroglyphs in association with Martis-style sites.

Elements are individual symbols, characters, shapes, etc. such as a wavy line, a bear paw, a circle. Panels are basically a collection of elements, and are often based on the physical features of the rock itself. For example, many rock outcrops contain fissures, which separate the outcrop into discrete workspaces or panels.

Northern Sierra Rock Art styles are currently divided into seven types, including the pit, the pit and groove, the complex pit and groove, two types of pictographs, the Valley-Sierran abstract, and finally the category of our focus, the Style-7 High Sierran abstract-representational. Standard descriptions of these styles can be found in Foster et al.'s CDF publication (n.d.); Style 7 is defined as follows:

> 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 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 no 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 (ibid).

GEOPHYSICAL SETTING

The study area is located approximately 45 miles east of Foresthill, and is situated in a glacially carved valley near the headwaters of the Middle Fork American River. The

project area extends from below 6,000 feet at the northern valley floor to 7,680 feet at the south head of Picayune Valley. The vegetation is generally mixed conifer interspersed with meadows and rocky outcrops of sparse vegetation. An unnamed tributary, sometimes referred to as Picayune Creek, extends along the valley floor, fed by snowpack and small mountain lakes located on the surrounding ridges.

We had the fortune of geologic contributions to this project by former Eldorado National Forest Geologist Anne Boyd, who aided us immensely in understanding the nature of the formations in the Picayune Valley, which have long been known to be mis-classified on the Chico Geological Sheet (Saucedo and Wagner 1962). Anne explained that "Picayune Valley contains evidence of nearly every major geologic event that helped shape the north central Sierran mountain range of today." In her report (1999), she states that the oldest rocks in the valley are the meta-sediments of the Sailor Canyon Formation, which characterizes the western side of the valley. The eastern valley is intrusive granite and granodiorite, the "building blocks of the Sierra," and there are locations visible where the meta-sediments meet the granitics and fold together. Again quoting Anne, "Most metamorphic rocks in the Sierra occur in unglaciated lower elevations and are obscured by a thick layer of soil and vegetation. Picayune Valley is unique because of the colorful striped flat-laying [sic] beds of rock wonderfully exposed by the massive glaciers that once swept through the valley."

Petroglyphs are found on both the granitic and metamorphosed surfaces. The meta-sediments, by nature layered and oxidizing by layer, were taken advantage of by the Native American artists. By pecking at an oxidized layer, a distinctive contrast in color is achieved that is not available from the granitics. However, the exfoliation of these continually oxidizing layers has also been a drawback for preservation of these panels.

PREHISTORY AND HISTORY

Prehistoric activity is represented in Picayune Valley and the adjacent Middle Fork by primarily Martis-style assemblages – and petroglyphs – and more rarely, chert and obsidian tools and debitage, groundstone, and bedrock mortars. Ethnographic data suggests that the valley is within both the Nisenan and Washoe territories, implying that either group may have utilized the bedrock outcrops for their art, and suggesting the possibility of cultural diffusion in this area between the two groups.

Picayune Valley, like many high-elevation valleys, was spared from the highly destructive exploitations of the Gold Rush. In 1864 a mining district was established that apparently failed to yield much gold; the miners called it picayune after the smallest coin (five cents) of the mid-nineteenth century, which came to mean paltry or insignificant (Gudde 1949:244).

The late nineteenth- and early twentieth-century European/Euro-American history of Picayune Valley can be tied into grazing by Basque sheepherders who ran their herds through what is today the Granite Chief Wilderness. Campsites have been reported, and many of the distinctive tree carvings of these men have been recorded.

Picayune Valley was spared from a proposed nineteenth-century reservoir project. According to the Placer County Water Rights Book (1903), "Iowa Hill Canal Company claims water in Middle Fork of American River that runs through Picayune Valley - and located a site in Picayune Valley for a reservoir and intend to construct a Dam and Reservoir, also Iowa Hill Canal still under construction, Township No. 8." This ambitious plan of the Iowa Hill Canal Company never came to pass, due to litigation over water -rights issues.

Although no logging has occurred within Picayune Valley, both cattle and sheep grazing have occurred within the entire Granite Chief Wilderness. In 1984 the federal government established the Granite

Chief Wilderness, which includes Picayune Valley and now protects it from commercial exploitation. Additionally, camping and hiking are limited and wilderness rangers patrol the area during accessible seasons to assure that hikers keep to the trail and do not damage the valley's resources. As mentioned, the exfoliation of many of the glyphs makes them extraordinarily fragile, and they are easily damaged by walking on them. Intentional vandalism has included chalking for better photos, pecking designs into the rock, and removal of the panels for souvenirs.

PICAYUNE "PIT" BACKGROUND

In the summer of 1996, the senior author met with members of both the Bay Area Rock Art Research Association (BARARA) and the Friends of Sierra Rock Art (FSRA) during a joint visit to petroglyph sites at the Middle Fork of the American River and in Picayune Valley. During the meeting, a number of ideas were discussed at length: protection of the petroglyphs, site monitoring, a review of Gortner's work, and the need for a systematic inventory of the area.

A major part of the discussions centered on Willis Gortner's 1986 and 1988 research in "the Cedars" on the North Fork and along the Middle Fork of the American River. No detailed survey coverage or inventory maps existed, as confirmed by FSRA members Bill Drake and Sunny Green. In 1994, archaeologist John Betts re-recorded and consolidated all of Gortner's (1988) sites with rock art sites recorded by Forest Service archaeologists along the Middle Fork. In the spring of 1997, Betts confirmed that any sites not identified by his efforts were new discoveries.

Addressed next was the need to systematically inventory the Middle Fork and Picayune Valley. Nolan proposed a Passport in Time (PIT) project to the members of FSRA, a project that would entail a Forest Service-sponsored, week-long trip to inventory Picayune Valley, beginning the following summer. FSRA was a logical partnership choice because the organization's members had years of experience in identifying and monitoring petroglyph sites. The PIT project would in turn provide FSRA members with skills in observing other archaeological resource types and training in site recordation.

During the next four field seasons, these annual outings with FSRA accomplished:

- inventory on 1090 acres
- monitoring and re-monitoring at over 50 sites
- discovering of 18 new sites
- comprehensive donation of over 1,200 hours of volunteer labor

SITE DISCUSSION AND REVIEW

The following is a discussion of all of the site locations in relation to the river and the trail from Talbot Campground into Picayune Valley, discovered by the PIT crew.

FS Site 05-17-54-401 (Harman) is located on the current trail within 15 meters of a large waterfall. It consists of one panel and three elements. Common elements include a wavy line and circle with spokes.

FS Site 05-17-54-402 (Drake) is located approximately 50 meters from a large waterfall. It consists of one panel and two elements.

FS Site 05-17-54-404 (Harm's Way) straddles the trail and is approximately 50 meters from Picayune Creek. This is the most complex site located, in that is consists of two panels with bear paw, wavy line, and circle elements; and a large scatter of basalt, obsidian, and jasper lithics, Martis-style points, and milling implements.

FS Site 05-17-54-405 (Sunny Side Up) is located approximately 300 meters from a large waterfall on a large outcrop. There are six panels with wavy lines, circles with spokes, concentric circles, and other designs.

FS Site 05-17-54-406 (Van Fleet) is located on a large, high bench near the confluence of the Middle Fork and Picayune Creek.

Three panels were observed with a faint bear paw, circles, and wavy lines.

FS Site 05-17-54-411 (Dee Smith) is located approximately 80 meters from a large waterfall on a large, flat outcrop. A small basalt lithic scatter was observed, three possible mortars, end-battered cobble, basalt biface, and edge-modified flake. Six panels show a bear paw, concentric circles, and wavy lines.

FS Site 05-17-54-414 (Sunny Pond) is located at the edge of a glacially carved pond and approximately 40 meters from the trail. One basalt flake was observed, along with two panels of concentric circles and wavy lines; some elements utilize natural rock features.

FS Site 05-17-54-415 (Erwin/Van Fleet) is located approximately 100 meters from Picayune Creek, near the trail. One basalt biface was collected, two panels with faint wavy-line and circle elements were found. Some vandalism was noted.

FS Site 05-17-54-416 (Erwin) is located on a mid-slope bench approximately 50 meters from the trail. There are three panels with bear paw, spiral, and circle elements.

FS Site 05-17-54-419 (Three Bear Paws) is located on a diagonally oriented outcrop approximately 100 meters from Picayune Creek. It has one panel with three bear paws.

FS Site 05-17-54-420 (Walker) is located on a low bench approximately 60 vertical feet above the Middle Fork of the American River. Eleven panels contain the most intricately pecked designs recorded during this inventory. The site contains several sun/star-type representations and, fittingly, was found by an astronomer, Dr. Merle Walker. Elements include numerous circles, wavy lines, lines, and rock features.

FS Site 05-17-54-428 (Sunny Vista) is located on a mid-slope bench almost 200 vertical feet above the trail. Two panels with a stacked pattern of wavy and interconnected straight lines and other abstract elements occur here. This site provides a spectacular view of the valley.

FS Site 05-17-54-429 (Harm's Vista) is located on a high, mid-slope bench almost 360 vertical feet above the Middle Fork of the American River. When considering vertical height above the valley floor or the river, this site is the highest known to date. It offers a spectacular view both up- and down-river. There are two panels with circles and radiating lines.

FS Site 05-17-54-430 (Little Spring) is also located on a mid-slope bench approximately 160 vertical feet above the trail. There is one panel with circle, half circle, and wavy lines.

FS Site 05-17-54-431 (Lone Snake) is located between two sites earlier recorded by Gortner and updated by Betts. It has one panel with an isolated, wavy-line, snake-type element.

ANALYSIS

The sites located by Gortner (1988) provided us with an understanding of the rock palate used in petroglyph manufacture. A review of the site distribution pointed towards sites associated with water sources (e.g., streams), and sites that provide views of the surrounding terrain from within the valley floor context. Three of Gortner's view sites are located on high points or benches between the river and the trail. In no instance did Gortner find any site located on mid-slope benches. A mid-slope bench for the purpose of this paper is defined as a site located over 40 vertical feet above the valley floor. Our inventory identified five new mid-slope bench site that provide spectacular views of the valley and surrounding terrain.

Element Distribution

No anthropomorphic elements have been observed within the study area. One possible zoomorphic element vaguely representing "a possible mountain sheep" was noted by Betts (1994). Tracks are limited to bear paws; no bird-, sheep-, or

deer-track elements were observed. The closest bird-track elements are located approximately four miles north in "the Cedars" area of the North Fork of the American River. No superimposition of elements was observed.

As noted by Foster et al. (n.d.), all petroglyphs we observed were manufactured by pecking. In many instances peck marks were clearly visible on the rock surface. No evidence of scratching (other than by vandals) or abrading was observed. In only one instance did we observe petroglyph elements being incorporated into natural rock features. In numerous cases it appeared that natural rock panels were used much like an artist uses a piece of canvas.

FUTURE STUDIES

Gortner described various dating techniques applicable to petroglyph sites. Weathering and patination studies (aka desert varnish studies), association with tribal histories and legends, superposition of elements, appearance of historical figures in glyphs, radiocarbon dating of associated archaeological deposits, geologic deposits, and seriation of elements all are addressed by Gortner (1984:10-13), and are still of interest to the study of petroglyphs.

However, it is unlikely that we will obtain precise dates for the creation of the glyphs that we are discussing. Therefore, the recent and ongoing research by CDF (1999) presents the most relevant framework for our studies. By investigating the association of petroglyph sites with other prehistoric site types, in this case Martis-type sites, it may be possible to contextualize the glyphs in terms of cultural patterns.

With this in mind, the next step for this project should involve artifact analysis and site research, including XRF studies of recovered basalt and obsidian, and of course hydration, for the Picayune Valley and Middle Fork headwaters. The Gortner collection, housed at CSUS, has been researched by CDF, but the artifacts curated by the Tahoe National Forest still require analysis.

In addition to research and continuation of transect surveying, other interesting possibilities for future studies exist. The east end of Picayune Valley over to Mildred Lakes is laced with low cave-like rock overhangs, which may contain evidence of prehistoric use. A handful of these caves have been visited so far, and have turned up only recent debris, but many more remain to be visited. Also, artificial lighting was employed at one site, and improved panel visibility, revealing additional elements. Further use of this technique will improve site documentation.

CONCLUSIONS

In conclusion, the Picayune Valley and adjacent Middle Fork study is contributing to the body of knowledge regarding Style-7 High Sierran abstract-representational petroglyphs. The Forest Service and FSRA will continue their field inventory and further tie the recovered data into the framework presented by Foster, Betts and Sandelin (n.d.).

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