# THE SMITH CREEK ROCKSHELTER: RESULTS OF TEST EXCAVATIONS AT A ROCKSHELTER LOCATED IN HUMBOLDT COUNTY, CALIFORNIA

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*Test excavations at a small rockshelter in Humboldt County resulted in the recovery of a rich and diverse assemblage that represents a host of domestic activities. Data indicate the site was serially used during the late prehistoric period and abandoned during the protohistoric or early historic periods. A probable human cremation was also encountered during the field efforts.*

In late September 2009, the Archaeological Research Center (ARC) at California State University, Sacramento, in cooperation with the Bear River Band of Rohnerville Rancheria, embarked on the field portion of the Smith Creek Project. The project was partially funded by a grant from the National Park Service and subsidized by the tribe, as well as the ARC, with much of the work being done on a volunteer basis. The purpose of this portion of the project was to assess the archaeological deposits, conduct limited subsurface testing, and determine the cultural and scientific significance of a large ethnographic village and an adjacent rockshelter. This paper presents the results of the efforts conducted at the rockshelter.

A large archaeological site consisting of at least 50 housepits is believed to be the village described in ethnographic notes as "Nole-Bi" (Angeloff 2009; Rohde 2009). The village is located on terraces along the confluence of Smith and Larabee creeks in Humboldt County (Figure 1). Also described in the notes is an associated rockshelter that goes by the name of "Se-nun-dus-ci-se-ye." It is uphill from the village and to the northwest about 400 m. Prehistorically, the shelter would have had a view of the village. Today, however, that view is blocked by recently introduced coniferous trees. The rock overhang is located on a steep south-facing slope and provides shelter to a small bench, one of the few flat surfaces on the slope. Ethnographically, both are believed to be part of a larger system of sites situated to exploit the surrounding landscape. The shelter is one of several large conglomerate outcrops that are present on the slope both above and below the site. These outcrops occur within a coniferous forest with a mixed deciduous understory. Significant vegetation within the project vicinity includes tanoak, hazel, true oaks, iris, and a handful of other plant species known to be utilized by native peoples.

The rockshelter was first recorded in 2008 during a cultural resource survey for the Smith Creek Timber Harvesting Plan (Angeloff 2009). Local foresters had scraped a small section of the site surface, leaving a shallow pit and disclosing midden, ash, lithic artifacts, and abundant bone remains. Of particular significance was the amount of bone preservation in an area where preservation is usually poor, at best. Other than this pit and some artifacts stacked on a rock, the site seemed to be fairly undisturbed.

## METHODS

In preparation for excavation, the area in front of the shelter was cleared of debris, such as branches and organic duff. Surface artifacts were piece-plotted and then collected. A 0.5-by-4.0-m trench was laid out and oriented at an angle to the rock face. This essentially resulted in eight 0.5-by-0.5-m units designed to skirt the edge of the previously disturbed area in front of the shelter. All matrix was removed

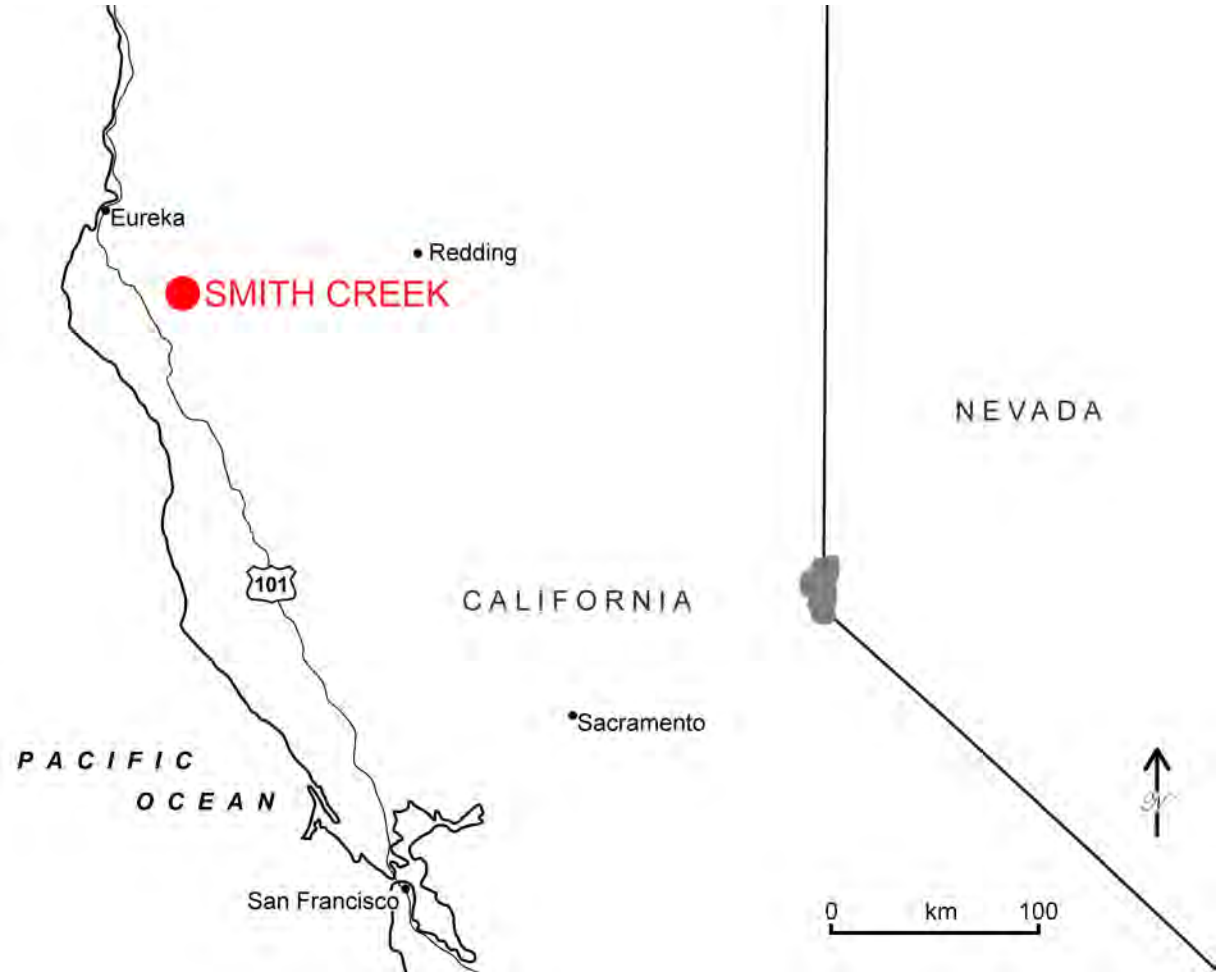


*Figure 1. Project location.*

in arbitrary 10-cm levels and screened through 3-mm (1/8-in.) mesh. All units were taken to the base of the cultural deposit, which rested on what is believed to be a conglomerate bedrock surface. It is possible that what was encountered was an earlier roof/wall-fall event, but the fact that it extended continuously throughout all 4 m makes that unlikely. Unit depths ranged from 23 to 32 cm, and in all, approximately 0.6 $m^3$ of matrix was removed and screened.

## CULTURAL ASSEMBLAGE

The field efforts at the rockshelter led to the recovery of a rich and diverse cultural assemblage and the apparent discovery of a human cremation (Table 1). In all, the assemblage includes seven projectile points, 19 flaked stone tools, 24 ground and battered stone tools, 574 pieces of debitage, four glass beads, one modified stone, 1,841 pieces of faunal bone, 29 pieces of modified bone, and 31 fragments of human bone. A relatively large ash feature was also recorded.

*Table 1. Smith Creek Rockshelter cultural assemblage.*

| ARTIFACT | COUNT | ARTIFACT | COUNT |
|---|---|---|---|
| Projectile Point | 7 | Handstone | 2 |
| Biface | 8 | Misc. Ground Stone | 2 |
| Flake Tool | 3 | Cobble Tool | 1 |
| Core | 7 | Modified Stone | 1 |
| Core Tool | 1 | Bead | 4 |
| Debitage | 574 | Modified Bone | 29 |
| Pestle | 13 | Faunal Bone | 1,841 |
| Milling Slab | 6 | Human Bone | 31 |

## FLAKED STONE

The projectile points consist of one dart and six Gunther or "Toluwat barbed" arrow fragments**.** The large dart point was manufactured from cryptocrystalline silica (CCR) and was found on the surface just off the bench on the slope outside of the midden. This point does not seem to be representative of the age of the deposit based on the diagnostic characteristics of the overall assemblage. More than likely, the deposit is better represented by the six Gunther fragments, which date to the late period and continue into the historic era (Justice 2002; Treganza 1958). All of these points were manufactured from CCR materials that were available locally.

Eight CCR bifaces were recovered from the project. Two refit, leaving a total number of seven, only one of which is whole. The majority of the bifaces are late-stage specimens, and only three have signs of use-wear. One of the early-stage bifaces exhibits use along the margin, suggesting that perhaps this tool was in a more finished form and not necessarily meant for further reduction.

The seven cores were all manufactured from CCR as well; they are generally unidirectional and were originally manufactured from globular cobbles. Also present was one CCR core tool that has signs of battering along one margin.

There were only three flake tools recovered, all CCR and all but one made from interior percussion flakes.

Ninety-nine percent of the debitage is CCR, of which 83 percent is less than 2 cm in diameter (Table 2). A total of 320 pieces are diagnostic as to flake type, with the majority (56 percent) being pressure flakes. Overall, flake data suggest that tool maintenance and resharpening activities were taking place at the site, with minimal amounts of tool manufacturing.

In sum, the flaked stone assemblage suggests that people were bringing already-finished tools manufactured from local CCR materials to the shelter. There was some raw material being brought to the site in the form of cores; however, they were not being reduced on-site. Regarding flaked stone, the main activity that took place at the rockshelter was the maintenance and resharpening of the already-whole tools.

## GROUND AND BATTERED STONE

Pestles (n = 13) were the most common ground or battered stone artifact represented in the collection. These artifacts were manufactured mainly from sandstone or metasandstone, as well as other metasedimentary materials. All the pestles are broken, the majority into small fragments. When determinable, all the artifacts exhibited intentional shaping. Some are very stylized, including a flanged pestle and one resembling a bottle top. These shaped pestles were not uncommon during the late period

*Table 2. CCR debitage attributes.*

| SIZE | COUNT | TYPE | COUNT |
|---|---|---|---|
| 1 (<1.0 cm) | 204 | Decortication | 60 |
| 2 (1.0-2.0 cm) | 260 | Interior Percussion | 44 |
| 3 (2.0-3.0 cm) | 54 | Biface Thinning | 36 |
| 4 (3.0-5.0 cm) | 44 | Pressure | 176 |
| 5 (>5.0 cm) | 1 | Indeterminate/Fragments | 247 |

(Barrett 1952). An interesting artifact that was counted and analyzed as a pestle but is more specifically some type of maul was collected from the surface by one of the foresters.

Six milling slabs were recovered from the rockshelter. All of these slabs were manufactured from metasedimentary materials, with the majority having smooth, flat to slightly concave ground surfaces that exhibit lots of pecking, possibly to resurface and extend the use-life of the artifact. Two of these artifacts actually appear to be a type of hopper-mortar, with extensive battering or pecking on the ground surface, more from use than from rejuvenation. The rest of the milling slabs are broken pieces of larger artifacts, all of which are burned, indicating they may have been recycled as hearth stones after they broke.

Only two hand stones were found at the site, one manufactured from sandstone and the other from a metasedimentary rock. They both have smooth, flat to slightly convex ground surfaces that have been pecked to rejuvenate and extend the use-life of the tools.

Also, one quartzite cobble tool was recovered. It is battered on the end and appears to have been used as a pestle-like tool to crush or pulverize foodstuffs.

In all, ground and battered stone data reflect a host of domestic activities. Although no actual mortars were recovered from the rockshelter, there were a handful of pestles, and the pounding and crushing of resources such as nuts or roots appears to have been the main activity, along with some grinding of smaller seeds.

## PALEOBOTANICAL REMAINS

Paleobotanical data from three flotation samples revealed a variety of floral remains, including seeds, nuts, beans, and roots (Table 3). Acorn, followed by bay nut, is the most abundant remains. Bed straw (*Galium* sp.) was also comparatively abundant. In all, most of the paleobotanical remains appear to be cultural and subsistence-related. Most were recovered from sample flot-1, which was up against the rockshelter wall. Curiously, the least amount of remains was from flot-2, taken from within the feature. Furthest from the shelter wall towards the edge of the midden, flot-3 recovered a moderate amount of material. Seasonality estimates of the botanical remains suggest a fall occupation, roughly between August and November.

## FAUNAL REMAINS

The field efforts resulted in the recovery of 1,841 pieces of faunal bone (Table 4). Although bone preservation was relatively good at this site, the pieces were highly fragmentary and hard to identify beyond very basic identifications. Most of the bone was identified as mammal, and of that, much of it could be segregated to large mammal. There is a small variety of other creatures represented, including 22 fish bones, of which 14 are burned. Ninety-six percent of all the faunal bone was burned or calcined, and this, along with the fragmentary nature of the specimens, gives a good indication that they are cultural in origin and may relate to subsistence activities.

*Table 3. Seasonality estimates for Smith Creek Rockshelter.*

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Umbellularia californica* | | | | | | | | | X | X | X | |
| *Heteromeles arbutifolia* | | | | | | | | | X | X | X | X |
| *Arbutus mensiezii* | | | | | | | | X | X | X | X | X |
| *Oenothera* sp. | | | | | | | | X | X | X | X | |
| *Quercus* sp. | | | | | | | | X | X | X | | |
| *Ceanothus* sp. | | | | | | | | X | X | X | | |
| *Rubus* sp. | | | | | | X | X | X | | | | |
| *Galium* sp. | | | | X | X | X | X | X | X | | | |

*Table 4. Faunal assemblage.*

| TYPE | COUNT | TYPE | COUNT |
|---|---|---|---|
| Fish | 22 | Small Mammal | 8 |
| Raptor | 1 | Medium Mammal | 1 |
| Rodent | 10 | Large Mammal | 283 |
| Squirrel | 1 | Unknown Mammal | 851 |
| Squirrel/Chipmunk | 7 | Vertebrate | 657 |

## CREMATION

During excavation, several small fragments of burned and calcined bone that resembled human remains were recovered, including what appeared to be skull fragments and two phalanges. Positive identification in the field was difficult because the bones were so badly burned, the skull fragments were warped and distorted, and the phalanges seemed too gracile to be human. Upon further examination, the bones were indeed identified as human, and in all, 31 pieces of human bone were identified, all of which were highly burned or calcined as would be consistent with a cremation.

## MODIFIED BONE

Interestingly, 29 pieces of modified bone were recovered from the units. Because of their fragmentary nature, the number of actual artifacts is inflated. However, there are at least 10 awls or pins, one tube, and a unique piece of carved bone. The carved piece of bone appears to be the proximal end of a hairpin or other ornamental object. These bone artifacts are primarily carved from large mammal bones and are either burned or calcined.

## BEADS

Four white glass beads were recovered from the shelter. The beads are burned and were almost certainly deposited during the protohistoric or historic times. These, along with many of the bone artifacts, were likely associated with the cremation.

## FEATURE

A moderate-sized ash feature was also encountered while excavating in units E1.5 and E2. The feature was fairly close to the surface, dish shaped, and measured approximately 1 m across. Discussed

*Table 5. Subsurface artifact distribution.*

| Unit | Projectile Point | Flaked Stone Tool | Debitage | Ground Stone | Bead | Modern Bone | Bone | Human Remains |
|---|---|---|---|---|---|---|---|---|
| E-0 | - | 1 | 58 | - | - | 2 | 137 | 2 |
| E-0.5 | - | - | 57 | - | - | 3 | 598 | 17 |
| E-1 | 1 | - | 43 | 1 | - | 3 | 292 | 7 |
| E-1.5 | 1 | 1 | 35 | 2 | 2 | 8 | 242 | 2 |
| E-2 | 1 | 2 | 118 | 2 | 2 | 8 | 240 | - |
| E2.5 | 2 | 2 | 100 | - | - | 3 | 132 | 3 |
| E-3 | 1 | 3 | 69 | 1 | - | 2 | 70 | - |
| E-3.5 | - | 3 | 79 | 1 | - | - | 66 | - |

earlier, a flotation sample (flot-2) was taken from within the feature, resulting in negligible amounts of botanical remains. Within these two units, some faunal bone and only two pieces of human bone were recovered. It is likely, however, that the feature does relate to the cremation somehow.

## ARTIFACT DISTRIBUTION

Subsurface distribution of artifacts lends some interesting insight into site function (Table 5). All four of the glass beads and the majority of the modified bones were recovered within the feature units. These nonutilitarian artifacts were likely associated with the cremation, based on their extensively burned and/or calcined condition. Much of the human bone is restricted to the first four units of the trench, nearest the actual rockshelter. Only three pieces are from other contexts. Of note, the highest concentration of faunal bone is from the same unit that yielded the most human bone, suggesting that some of the small fragments of unidentifiable bone may also relate to the cremation. By contrast, the more utilitarian artifacts, flaked and ground stone in particular, tend to increase as the trench moves away from the rock wall and again decrease as it moves further east, towards the edge of the midden. This would suggest that these artifacts are associated with more residential use of the site and not the cremation event.

## SUMMARY

In sum, the Smith Creek rockshelter appears to have been occupied one or more times during the late prehistoric period as a short-term residential camp where basic domestic activities took place. These activities included the processing of plant materials, the cooking of meat, and the finishing or resharpening of flaked stone tools. Occupation of the shelter took place during the fall months. Whether this site was contemporaneous with the village site is unknown at this time, and may be better assessed when the analysis of the data from the village site excavation is complete. Finally, based on the shallow feature, glass beads, and human remains, the rockshelter was last used as a cremation site during the protohistoric or early historic period.

## REFERENCES CITED

Angeloff, Nick

2009 *Final Cultural Resource Inventory for the Smith Creek Timber Harvest/Rehab Plan.* Report submitted to Ric Kunes, Humboldt Redwood Company, LLC.

Barrett, Samuel A.

1952 Material Aspects of Pomo Culture. *Bulletin of the Public Museum, City of Milwaukee* 20:1-260.

Justice, Noel D.
2002 *Stone Age Spear and Arrow Points of California and the Great Basin.* Indiana University Press, Indianapolis.

Rohde, Jerry
2009 *The Ne-tcin-dun-kut kai-ya: A Rediscovered Tribe.* Report on file at Rohnerville Rancheria.

Treganza, Adan E.
1958 Salvage Archaeology in the Trinity Reservoir Area, Northern California. *University of California Archaeological Survey Report* 43:1-38. Berkeley.