

PATTERNS OF PREHISTORY ON THE McCLOUD RIVER

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ABSTRACT

The lower McCloud River is well-known in the archaeological literature for its contribution to the definition of the "Shasta Complex," the archaeological assemblage and traits of the late-prehistoric Wintu. Recent archaeological investigations on the middle and upper McCloud by the Shasta-Trinity National Forest have revealed a much more diverse picture of prehistory along the river, covering at least a 5000 year period. This paper provides an introduction to the area and summarizes recent excavations.

INTRODUCTION

The McCloud River is a major tributary to the Sacramento-Pit River system, the confluence of which is now inundated within Shasta Lake (Figure 1). Much of the McCloud River has remained relatively undeveloped as large tracts of land are owned by private fishing clubs, the Nature Conservancy, and timber companies. Consequently, until the last decade, there has been very little archaeological investigation. The major exception is the lowest portion of the river which was investigated in the early 1940s in preparation for the construction of Shasta Dam.

The Shasta-Trinity National Forest has recently acquired considerable acreage on the river and has begun a program of reconnaissance and site evaluation. Nine prehistoric sites have been tested by the Forest in conjunction with Shasta College and the Pit River Tribe. The focus of the investigations is the development of chronological and land-use patterns on the McCloud River.

The McCloud drains a large area from Mt. Shasta on the northwest to the Medicine Lake Highlands on the northeast. The upper part of the drainage geologically is part of the Cascade Range. Volcanic soils are very deep with the result that most precipitation disappears from the surface to form a huge underground aquifer. The topography is relatively gentle, generally sloping southward, and where the Cascades meet the

more impervious geologic formations of the Klamath Mountains, the underground reservoir bubbles to the surface in numerous springs to form the upper McCloud River. The very cold, constant waters produced by the springs attracted large runs of anadromous fish (Macdonald 1966; Haskins 1993).

The term "upper McCloud" will be used in the following paper to describe that portion of the river which primarily flows east to west along the contact between the Cascades and Klamath Mountains; the "middle McCloud" is that part that flows southward through the Klamath Mountains; and the "lower McCloud" describes the lowest 14 miles of the river which are now inundated by Shasta Lake.

The upper McCloud generally flows past flat lava bluffs mantled with fir and pine. The river is largely placid and well stocked with trout and other resident fish. Elevations drop from 4400 feet at the river's origin at Colby Meadows to around 3000 feet. During many winters, November's snow stays on the ground until April.

Near the point where the river turns southward to enter the Klamath Mountains, there is a series of waterfalls over lava bluffs, appropriately called Upper, Middle, and Lower Falls. Lower Falls was important because it formed a barrier over which the anadromous fish could not climb, and marked their extent in the river (Bauman 1981:44). This area also formed another ecological boundary in

which the black oaks, very common in downriver locations, became much more rare on the upriver side (Ward 1997).

The middle McCloud flows through the generally steep terrain of the Klamath Mountains geologic province. Although elevations along the river drop from 3000 to 1200 feet, adjoining slopes often rise abruptly to peaks of 5000 or 6000 feet in elevation and support a mixed conifer vegetation. The river is lined with many terraces which often feature prehistoric sites.

The lower McCloud, which prior to its 1945 inundation, emptied into the Pit River at an elevation of 700 feet, also passed through steep canyons. The anadromous fish runs were so heavy that in 1872 the U.S. government established two hatcheries on the lower McCloud which shipped salmon and trout eggs all over the world. The hatcheries are important to the study of prehistory since Livingston Stone, the first superintendent, kept a fairly extensive written record of the Indians that he encountered, and who lived and worked at the hatchery (Heizer 1973).

These were the Wintu who inhabited the lower McCloud and portions of the middle McCloud (DuBois 1936:6). The Okwanuchu, a small group linguistically related to the Shasta, occupied parts of the middle McCloud and Squaw Valley Creek, its major tributary (Merriam 1926; DuBois 1936:8; Silver 1978), and the Achumawi, or Pit River people, also lived on and used the middle McCloud (Kniffen 1928; Guilford-Kardell and Dotta 1980). It is currently believed that the Okwanuchu were the original inhabitants of the entire McCloud with a time depth measured in thousands of years. The Wintu began expanding up the McCloud sometime between 1000 and 500 years ago, and groups of Achumawi are believed to have moved westward from their home on the middle Pit River within the last few hundred years. The dynamics among these groups provides an interesting challenge to archaeologists who attempt to study cultural interactions on the McCloud River.

ARCHAEOLOGICAL INVESTIGATIONS

Formal archaeological investigations on the McCloud started in the 1940s concurrently with the construction of Shasta Dam. Archaeologists from the University of California at Berkeley recorded 31 sites along terraces of the McCloud, nearly all of them housepit villages attributed to the Wintu (Smith and Weymouth 1952). The archaeological assemblage recovered from the surface and from excavations at CA-SHA-20, -21, and -22 on the lower McCloud (see Figure 1) were instrumental in the development of Clement Meighan's "Shasta Complex," (Meighan 1955) which is very familiar to northern California archaeologists. It consists of Gunther Series and Desert Side-Notched points, hopper basket mortars and pestles, sandstone arrow-shaft polishers, shell and bone artifacts and pinenut beads, and is dated within the past 1000 years.

Subsequent surveys by Forest Service personnel within the pool area of the McCloud Arm of Shasta Lake during drought years when the lake level was very low, have resulted in the recording of an additional 22 sites, many on slopes and higher terraces. Collections from these sites include older point types such as a series of notched points and McKee unifaces, notched-pebble netweights, and manos and millingstones (Sundahl 1986), enlarging the variety of cultural remains on the lower McCloud.

The Shasta-Trinity National Forest recently acquired considerable acreage on the north bank of the upper McCloud River, and 28 prehistoric sites are now recorded on public lands above Shasta Lake. The current project was originated by the McCloud District through Cooperative Agreements with Shasta College and the Pit River Tribal Council to evaluate sites on the middle and upper McCloud which lie within planned recreational improvement projects, primarily campgrounds and trails. Figure 1 shows the locations of the nine sites that have been tested and evaluated.

Ah-Di-Na, on the middle McCloud, contained by far the most dense deposit of cultural materials and, in contrast to most of the upper McCloud sites, produced a large component of edge-modified flakes and cobble tools of basalt in

addition to obsidian artifacts. Ah-Di-Na also provided the best evidence for an early occupation, dating perhaps 3000-5000 years ago.

By contrast, Ash Camp, located two miles farther upriver, contained good representations of middle and late occupations, but no early materials. Like Ah-Di-Na, it had lots of basalt tools, and both sites contained ground stone, manos at Ah-Di-Na and a pestle at Ash Camp.

On the upper river, only Fowlers, near Upper Falls, and Four Mile Flat on the east end, contained ground stone tools. These two sites also produced netweights, small flat pebbles with one or two bifacially flaked notches. These are upriver sites above the extent of the salmon, so if the netweights were used for fishing, presumably it was for smaller resident fish.

Some of the upriver sites are fairly small obsidian scatters, but others, such as Cattle Camp and Four Mile Flat, stretch more than one-quarter mile along the banks of the McCloud. All have an artifact inventory rich in obsidian and some are composed entirely or nearly entirely of projectile points, large bifaces, and other obsidian tools and debitage. Obsidian from the upper and middle McCloud is almost exclusively from the sources in the Medicine Lake Highlands, the vast majority from the Grasshopper Flat/Lost Iron Wells source which lies only 16 linear miles northeast of Four Mile Flat.

Chronology for the project is based primarily on 448 obsidian hydration measurements from the nine sites which suggest a three-phase cultural history. The oldest phase is represented by points of the Squaw Creek Contracting Stem (Figure 2, top row) and McKee Uniface types (Figure 2, second row) with most hydration values between 3.4 and 4.2 microns. Although most points of this type came from Ah-Di-Na, several of the upper McCloud River sites also contained examples. Other artifact associations are manos and millingstones, numerous basalt flake and cobble tools, and a few incised stone artifacts (Figure 3).

This phase was followed by one represented by a series of medium and large corner-notched and side-notched points (Figure 2, third row)

which have mean hydration values between 2.4 and 3.7 microns. Seven of the nine sites contained examples of this type which was the most numerous projectile point type found on the McCloud River. Of points assigned to a temporal phase, 42% belong to the middle phase, 30% to the early phase, and 28% to the late phase. The introduction of notched-pebble net-weights (Figure 4) during the middle phase may signal an intensification of fishing on the McCloud, and acorn technology may also have been introduced during this phase.

The late phase is represented by Gunther Series points and small stemmed points which may be reworked Gunther points (Figure 2, bottom row) and by hydration values of 1.7 microns and less. The vast majority of these points are from Ash Camp with only scattered examples, no more than one or two, from other sites. Other associated artifacts at Ash Camp are a hopper mortar pestle, the tip of a conically-shaped bone which was possibly a harpoon point, a biconically-drilled stone, possibly an ornament, and pinenut beads.

Ah-Di-Na appears to have served as a village during the early and middle phases of McCloud River cultural history, and Ash Camp during the late phase. Fowlers, near Upper Falls, may also have been a village during the middle and perhaps the late phase. All of these sites are below 3300 feet in elevation and all had access to anadromous fish and acorns. Most of the sites upriver from Fowlers appear to have been more temporary camps with archaeological evidence indicating a functional emphasis on hunting and obsidian working. However, Four Mile Flat, the farthest site upriver at 3800 feet in elevation, contained a wide variety of artifact types, suggesting its use as a village or major base camp during the middle phase.

The middle phase appears to have seen the heaviest use of the terraces on the upper McCloud, suggesting larger or more mobile populations than during the early and late phases. Late phase occupations were more intensively centered on the middle and lower McCloud with only occasional use of the upper river. These data are summarized in Table 1.

The late phase assemblage as expressed at Ash Camp has many similarities to the Shasta Complex, but also has some differences, primarily in projectile point styles. Although Gunther Series points are the most common type throughout the late phase Shasta Complex, high frequencies (50-75%) of a serrated subtype are found on the lower McCloud as well as many other areas to the south (e.g. Smith and Weymouth 1952, Table 2, Figure 2). None of the Ash Camp sample contain blade serrations. The latter group also presents the appearance of being generally longer in relation to width. The average width to length index on the upper McCloud specimens is .64 while that for a sample of 372 Gunther points from the lower McCloud is .73. In addition, no points from the lower McCloud collection resemble the small

stemmed points found at Ash Camp. These attributes may provide cultural indicators of the Okwanuchu and help distinguish their presence from that of the Wintu.

The work that has been done to date is viewed as a beginning rather than a completion of the investigations. Samples are small and many sites are left to be found and investigated. However, one firm conclusion that can be drawn from the present evidence is that the archaeological resources of the McCloud River are rich and varied and have much to tell about the past 5000 years of human activity on the River.

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TABLE 1

Tentative Cultural Framework for the McCloud River

AH-DI-NA PHASE 5000-3000 BP 4.5-3.0 microns	Villages or major base camp at Ah-Di-Na, season- use of upper river sites; hunting of medium- and large-sized mammals the major economic focus; collection of plant foods which were processed with manos and millingsstones; no evidence for fishing; expeditions to GF/LIW to obtain obsi- dian which was transported to the McCloud in the form of chunks or bifaces for further reduction, with biface technology the primary method.
CATTLE CAMP PHASE 3000-1000 BP 3.5-1.7 microns	More intensive use of upper and middle McCloud River sites than found in previous phase; village or major base camps at Four Mile Flat, Fowlers, and Ah-Di-Na with seasonal use of nearly all sites; use of notched points in hunting; introduction of fishing using notched- pebble net-weights; possible introduction of acorn technology using bedrock and dished mortars; importation of GF/LIW obsidian in the form of flake blanks, with use of both biface and uniface technology.
ASH CAMP PHASE 1000-150 BP <1.8 microns	Village at Ash Camp, comparatively light season- use of the upper river compared to earlier phases; hunting with bow and arrow tipped with Gunther Series and other small-stemmed points; fishing using bone-tipped harpoons; grinding of acorns and other foods with hopper mortars and pestles; down-river interaction with Wintu, possibly resulting in the introduction of pinenut beads.

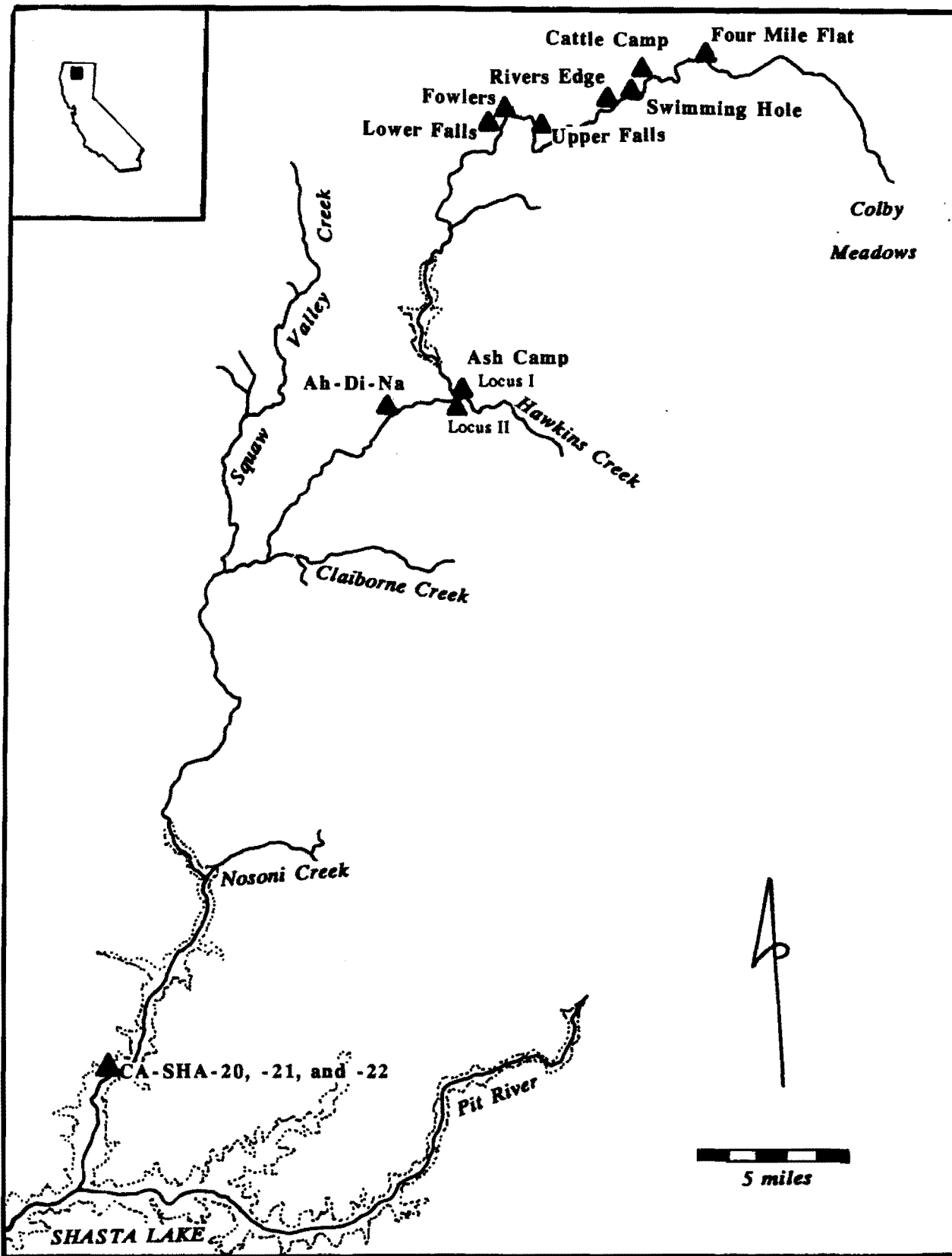


Figure 1. Locations of excavated sites on the McCloud River.

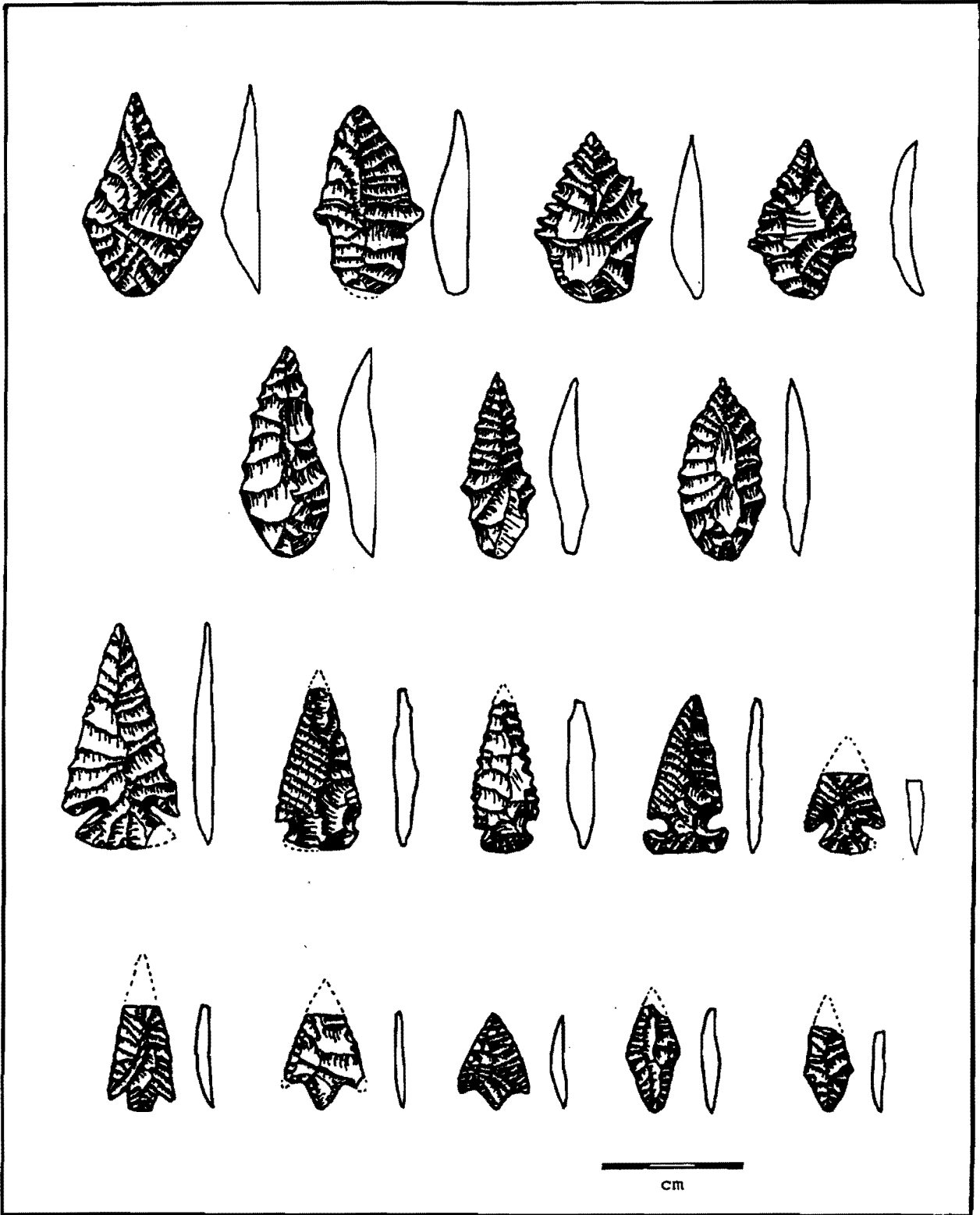


Figure 2. Projectile points from the McCloud River.

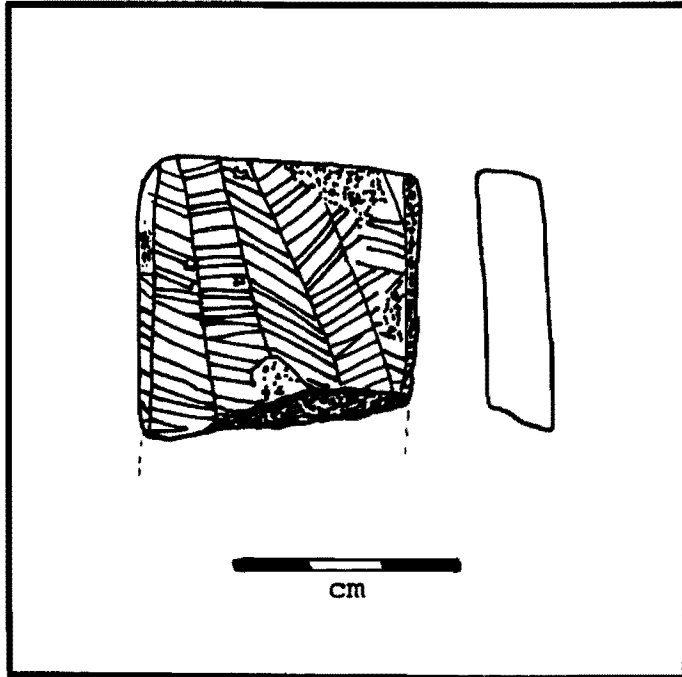


Figure 3. Incised stone from Ah-Di-Na.

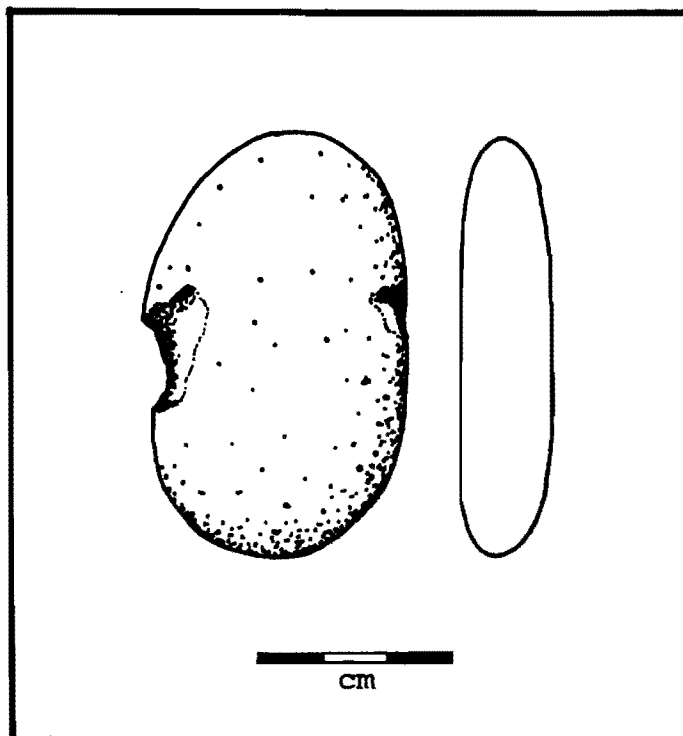


Figure 4. Notched-pebble netweight from Four Mile Flat.