

Prehistory of the Southern Plateau

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The Southern Plateau, as defined here, encompasses a vast region. Its northern boundary is the rugged Okanagon Highlands at the international border. On the east, the region is bounded by the Bitterroot mountain range. The crest of the Cascade Mountains in Washington and Oregon (to Crater Lake in the Oregon Cascades) forms the western boundary. In Oregon, the southern boundary runs along the uplands at the southern edge of the drainages of the Deschutes and John Day rivers. This boundary crosses the Snake River above Weiser, Idaho, at the southern end of Hells Canyon and follows the rugged mountains that form the southern rim of the Salmon River drainage east to the Bitterroot Range.

In terms of physiographic regions, the Southern Plateau corresponds to the Walla Walla Plateau, Blue Mountains section, and the northern quarter or so of the Payette section of the Columbia-Snake River Plateau (C.B. Hunt 1974). It also includes portions of the Northern Rocky Mountains in central and northern Idaho, and north-central and northeastern Washington. For the purposes of this chapter, the Southern Plateau is divided into three subregions—Southeast, South-central, and Southwest (fig. 1). This sub-division reflects the research history of the Southern Plateau as well as local and regional differences in its culture history.

Culture History

Period I, 11,500 years ago to 5000–4400 B.C.

• PERIOD IA (PALEO-INDIAN), 11,500–11,000 YEARS AGO
The Richey-Roberts Clovis Cache is the only known site containing intact deposits of this age (Mehring 1989). Other supporting evidence of these earliest occupations consists entirely of surface finds of Clovis points. Formed bone objects (spear shaft spacers and foreshafts), large bifaces and bifacial blades, fluted points, unifacial implements, and debitage are all part of the artifact assemblage recovered at Richey-Roberts. Richey-Roberts attests to the evolved ceremonial practices and socioreligious systems of these people. The context, size, and styles of artifacts recovered here are strongly suggestive of intentional burial associated with ceremonial activity, possibly a human interment.

Rare surface finds of Clovis points occur throughout the region (Galm et al. 1981; Hollenbeck 1987). The similarity of these finds to dated sites in other regions implies an early link to areas south and possibly east of the Plateau. Less evi-

dent is the nature of relationships between Clovis and succeeding phases of prehistory. There is little evidence of a cultural continuum from Clovis to later-dating cultural manifestations in this area, though Aikens (1984) describes what may be transitional artifact forms in Oregon. Thus, while a Clovis presence is documented, it is unknown whether this culture had any bearing on subsequent cultural development in the Plateau region.

• PERIOD IB, 11,000 YEARS AGO TO 5000/4400 B.C. Post-Clovis cultures of the region are characterized by: a “broad-spectrum” hunter-gatherer subsistence economy; high seasonal and annual mobility; low population densities; and a technology geared to maximum flexibility. In a broad-spectrum subsistence economy, a wide array of food resources is exploited during a year, though people may tend to focus on a narrow range of resources under particular circumstances. People appear to have moved frequently; there is no evidence of dwellings or structures of any kind during this period, as there is also no evidence of food storage. Hunter-gatherers under these conditions can be expected to have quite low population densities (Ames 1988).

Chronological placement of sites during this period depends primarily upon radiocarbon dates and temporally diagnostic artifacts. The presence of volcanic ash from Mount Mazama in the southern Oregon Cascade Mountains, whose eruption has been radiocarbon dated to 5682 B.C. (Bacon 1983), provides a major means of dating sites excavated before the development and widespread use of radiocarbon dating, or sites where datable carbon is not present.

Artifact assemblages typically contain projectile points, cobble tools, bifaces (some of which may be knives), utilized flakes, scrapers, graters and burins, grooved stones interpreted as bolas, and cores. Assemblages sometimes also will include hafted bone points (sometimes with barbs); large and small eyed-needles; bone awls (pointed bone tools with no evidence of hafting); ocher; beads; edge-ground cobbles; hammerstones; and antler wedges. Occasionally assemblages will contain fishing tackle (harpoon parts and net weights), abraders, small milling stones and anvils; antler flakers (probably used to pressure flake stone tools) (Ames 1988); and some flakes and blades removed from cores prepared using the Levallois technique (Muto 1972).

These assemblages are characterized by a variety of projectile point forms; variation is both spatial and temporal. Assemblages before 7000 B.C. typically contain shouldered and stemmed, and unstemmed lanceolate points (some with

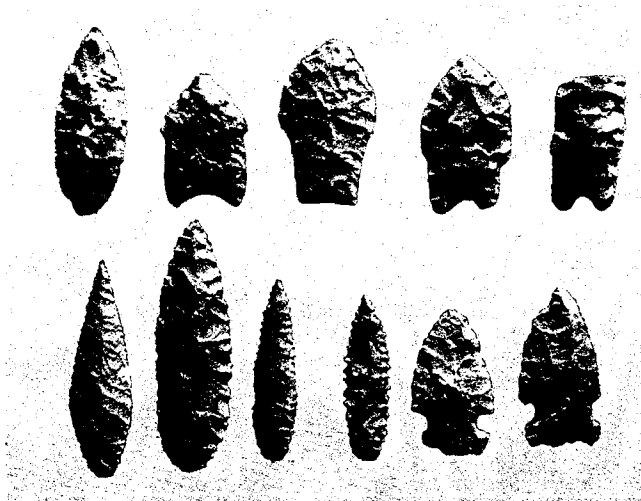


Fig. 1. Southern Plateau archeological sites and regions.

indented bases or with rather weakly differentiated stems, many of which may have an indented base) (fig. 2 top) (Rice 1972). While some of the formal variability displayed by these points can be attributed to resharpening and reworking during the useful life of the point, not all of it can be. After 7000 B.C. projectile point variability is more limited. Between 7000 and 5800 B.C. projectile points are commonly, though not exclusively, the laurel-leaf shaped form known regionally as Cascade points (fig. 2 bottom). These points are stemless, either bipointed or having one pointed end and one rounded end. This rounded end is thinner than the rest of the tool, often has ground edges, and probably was the haft. This description actually obscures a great deal of poorly understood (or described) variation. Most of these Period IB points are probably armed darts thrown from a throwing board or atlatl. After 5800 B.C., large side- and corner-notched (Northern Side Notched, Bitterroot) points are added to the repertoire.

Sites with faunal remains dating to this period are rare, and include Marmes Rockshelter, Lind Coulee, Bernard Creek Rockshelter, Kirkwood Bar, Deep Gully, and Granite Point in

the southeast Plateau, sites in the Wells Reservoir area in the south-central plateau, and the Fivemile Rapids (or Roadcut), Bobs Point, and Umatilla sites in the southwest plateau. Marmes Rockshelter and Lind Coulee are dominated by large terrestrial herbivores, including bison (*Bison bison*), elk or wapiti (*Cervus elaphus*), deer (*Odocoileus* spp.) and pronghorn (*Antilocapra americana*). Seals were taken at Fivemile Rapids. Birds and smaller mammals such as rabbits and large rodents occur at many sites (Atwell 1989). Fish remains are common. At Wells Reservoir sites and Bobs Point, salmon dominate, but minnows, sturgeon, and suckers are present. At Bernard Creek Rockshelter and Kirkwood Bar, both in Hells Canyon, suckers and minnows dominate, but salmon are present. At Fivemile Rapids, at least 150,000 salmon vertebrae were recovered. This collection is one of the largest faunal assemblages ever recovered from a single site on the southern Plateau. Some researchers (Schalk and Cleveland 1983) have suggested that the association of salmon bones and human artifacts at Fivemile Rapids was the coincidental result of natural processes, but V.L. Butler (1993) has shown that the bones were the result of human butchering of salmon. The



after Leonhardy and Rice 1970:figs. 2, 4.

Fig. 2. Early projectile point forms. top, Windust phase unstemmed (left) and indented base points; bottom, Cascade phase lanceolate and side-notched (right) points. Length of top left, 5 cm; others to same scale.

role of a salmon fishery at Fivemile Rapids in the subsistence economy of this period remains a matter of debate.

Southeast Plateau

The great majority of Period IB sites, particularly before 7000 B.C., are concentrated in the central and eastern por-

tions of the region. Only one major site, Lind Coulee, is located in the Columbia Basin. Meyers Cave, a little-known site in the basin, may contain materials from this period (Bryan and Tuohy 1960). The major sites are along the Snake River and its tributaries. Sites are also documented in the surrounding plateaus and mountainous uplands, indicating that all regional environments were used (Butler 1962; Keeler 1973; Brauner 1985; McPherson et al. 1981).

Marmes Rockshelter (fig. 3) (Bense 1972; Fryxell and Daugherty 1962; Gustafson 1972; Rice 1969, 1972) is the major site for this period in the southeast plateau. Its large, diverse artifact assemblages, reported faunal assemblage, and lengthy series of radiocarbon dates (Rice 1972; Shepard et al. 1987) have made it the basis for much of the published discussions of this period in the southeast Plateau. However, the site is unusual: it is one of the few excavated rockshelters dating to this period; its artifact assemblages are unusually diverse (containing artifacts such as very small bone needles, which seldom occur elsewhere); and it was used for burials throughout this period, which makes it unique.

Materials from this period are more commonly recovered from open sites with poor faunal preservation and few features. Early materials have also been recovered from the surfaces of deeply buried gravel bars at Hatwai (Ames, Green, and Pfoertner 1981), Granite Point (Leonhardy 1970), Lenore (Toups 1969), and Cooper's Ferry (Butler



Fig. 3. Excavations at Marmes Rockshelter on the Lower Snake River in southeast Wash. Photograph by Roy M. Chatters, 1964.

1966) along the Snake and its tributaries. Lind Coulee (Daugherty 1956a; Irwin and Moody 1978) is an important exception to this. It is an open site located north of the Snake River in the Columbia Basin. The site contains a significant faunal assemblage dominated by bison.

A number of upland sites have been excavated in the tributary basins of the Clearwater and Salmon rivers in Idaho, and in the Blue Mountains of northeast Oregon (Butler 1962; Keeler 1973; Corliss and Gallagher 1972; Hackenberger 1988; Hackenberger, Sisson, and Womack 1989; Wildesen 1982; Womack 1977; Reid 1988, 1991, 1991a; Reid, Draper, and Wigand 1989). Of these, Pilcher Creek (Brauner 1985) is particularly interesting. Quarrying soapstone and carving beads out of it were among the activities pursued at the site.

Leonhardy and Rice (1970) organized these materials into two cultural phases: Windust, 11,000 years ago–7000 B.C., and Cascade, 7000–5000 B.C. The Cascade phase was further subdivided into Early (7000–5800 B.C.) and Late (5800–5000 B.C.). The differences among these phases and subphases were originally based on projectile points: Windust is marked by the stemmed and unstemmed lanceolate points (Windust points), Early Cascade by laurel-leaf shaped points (Cascade points), and late Cascade by the presence of Northern Side Notched and Cold Springs points with Cascade points (Bense 1972). While some researchers have suggested no other differences exist among these periods (Bense 1972; Rice 1972) it seems evident that there were some shifts in settlement patterns (Ames 1988) and tool technologies around 7000 B.C., including the disappearance of bola stones.

South-central Plateau

While Period 1a assemblages have not been identified in the south-central Plateau, considerably more is known of the latest cultural occurrences of Period IB. Original definition of the Vantage phase in the middle-Columbia area (Swanson 1962; Nelson 1969; Galm et al. 1981) incorporates many of the characteristics of the Cascade phase defined for the Lower Snake River region (Leonhardy and Rice 1970; Bense 1972). The hallmark artifact of these phases, the lanceolate bipointed projectile, is ubiquitous throughout the region. Strong similarities in general artifact assemblage content also exist as edge ground cobbles, large bifacial knives, formed scrapers, and a wide variety of expedient flake and spall tools have been reported from throughout the area. Comparable assemblages in the Okanogan (Chatters 1986) and Kartar (Campbell 1985) phases defined for Wells and Chief Joseph reservoirs may include a slightly higher proportion of cobble and spall tool forms than found in the southern components. The presence of the Levallois-like Cascade Technique lithic technology (Muto 1976) is better represented in southern assemblages but is known to occur as far north as site 45CH309 in Rocky Island Reservoir (Stevens and Galm 1991). The relatively high percentage

use of fine-grained basalt recognized in southern assemblages is less well represented in the north. However, silicified mudstone and related metamorphic rocks are reported from Kartar phase assemblages at Chief Joseph Reservoir (Campbell 1985), although an association with this technology is uncertain. The presence of microblades in assemblages of this age is best represented at sites along Chief Joseph Reservoir (45DO282 and 45DO273; Campbell 1985) and Wells Reservoir (45OK49; Chatters 1986), and Ryegrass Coulee near Vantage (Munsell 1968). Despite descriptions of a microblade industry from southwestern Washington (Kelly 1982), microblades do not appear to be part of the assemblage documented for the Lower Snake River region (Bense 1972; Leonhardy and Rice 1970). Edge ground or "edged" cobbles are well represented in assemblages reported from Wells Reservoir (Chatters 1986) to Kettle Falls (Campbell 1985; Chance and Chance 1982, 1985). Large side-notched points, considered a hallmark of a late subphase of the Cascade phase (Leonhardy and Rice 1970) are very poorly represented on the Columbia River upstream of Rocky Island Reservoir (Galm and Masten 1988) north to Kettle Falls (Chance and Chance 1985).

Chatters (1986) reports two, possibly three, Period IB (Okanogan phase) dwellings from Wells Reservoir (fig. 4). Two Period IB dwellings from Wells are extremely small examples (<11 square meters) constructed on the natural ground surface. They consist of circles of stones with a trampled interior. Associated hearths are outside the structures, indicating their use as sleeping quarters only. At Kettle Falls, Washington, in the Northern Plateau, is a similar surface dwelling with an area less than 15 square meters dating to the Slawntehus period.

Southwest Plateau

In the southwest Plateau, the occupation sequence can confidently be extended back to about 8500 B.C. Evidence of occupation during this period was first encountered in Hat Creek and Cold Springs, both in McNary Reservoir (Shimer 1961). Other important sites include Indian Well (Butler 1959) and Goldendale (Warren, Bryan, and Tuohy 1963). Apparently the remains of a short-term camp, Goldendale was located on a camas flat. Without features, there were nevertheless numerous edge-ground cobbles; basalt slab milling stones with small handstones; ovoid knives; drills and gravers; two projectile points with weakly contracting stems and concave bases; and a small leaf-shaped point with serrated edges. The Goldendale site has an unusually high frequency of milling stones for this period, and so it is one of the best possibilities of a plant-processing locality dating to this period on the southern Plateau.

Fivemile Rapids, at the upstream end of the Columbia River Gorge, like Marmes Rockshelter, defined and shaped archeologists' understanding and research questions of this early period for many years. It was one of the first major

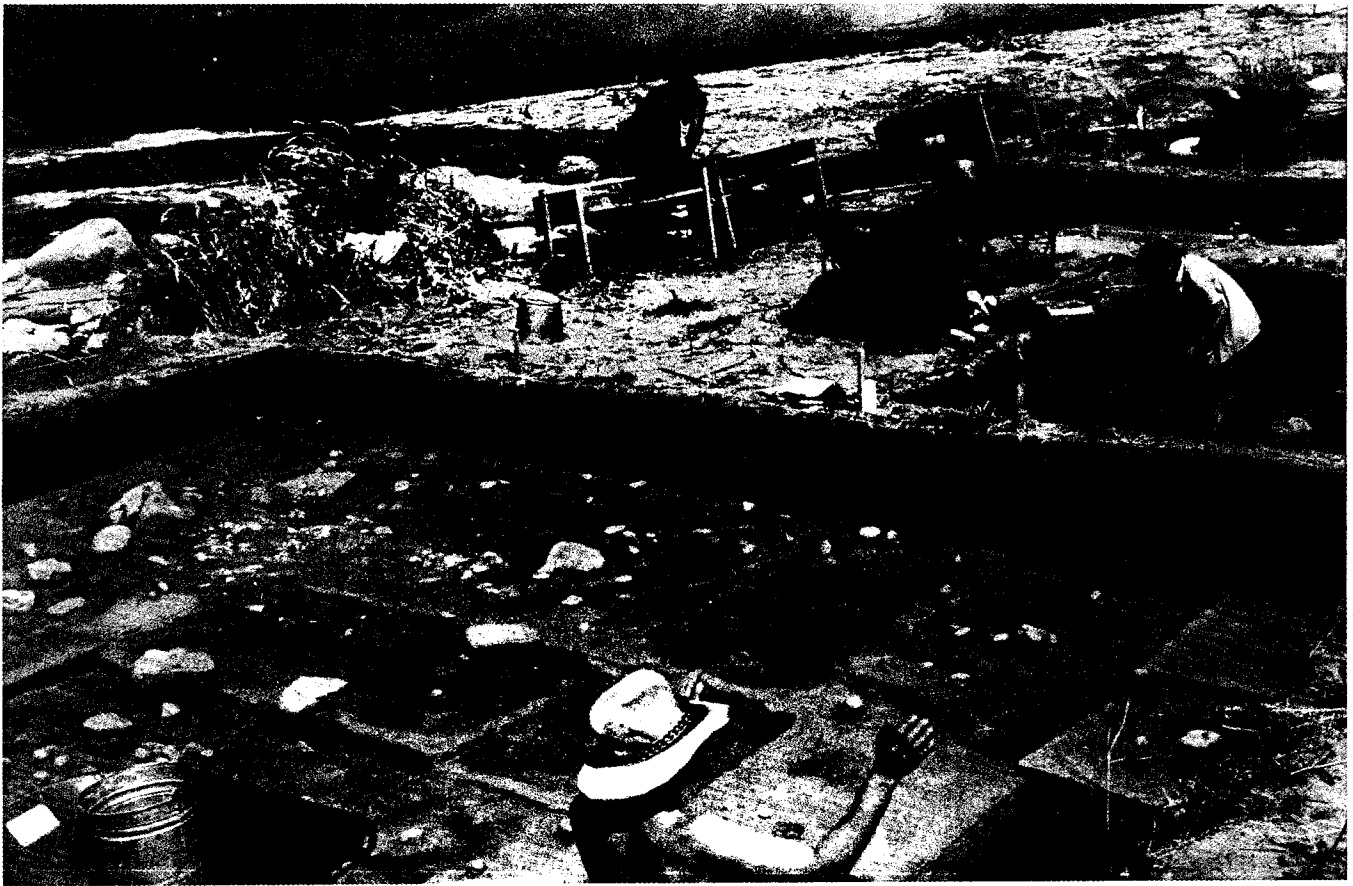


Fig. 4. Excavations at the Plew site (45DO387) on the Columbia River near Pateros, Wash. The circle of large stones in the left portion of the excavation marks the floor of a small structure. The site dates to about 5500 B.C. Photograph by James Chatters, 1984.

sites on the southern Plateau to have been dated using radiocarbon dates, an honor it shares with Lind Coulee. The presence of large numbers of salmon bones at Fivemile Rapids lead Cressman to conclude that intensive salmon fishing existed on the Plateau by 9,800 years ago.

Cressman (Cressman et al. 1960) assigned water-lain deposits below a volcanic ash to the Early stage of culture at that site. (The ash, although not identified at the time, appears almost certainly to have been from Mt. Mazama.) The Early stage was in turn divided into three substages (Cressman et al. 1960). Initial entry, from the lowest meter of the Fivemile excavation, comprised a limited inventory of stone-cutting implements. A composite date on this entire stratum of 9300 B.C. is the earliest from this site. Given the river-borne origin of the matrix, however, it seems possible that the composite date applies to elements of the redeposited fill other than the limited cultural material.

The Paulina Lake site, in Newberry Crater in central Oregon, contains one of the Plateau's major early occupations (Connolly 1995). One feature produced a radiocarbon date of 11,000 B.C., which while quite early, is contemporary with the earliest radiocarbon dates from the Hatwai site in the Southeast Plateau (Ames, Green, and Pfoertner 1981). The site also produced a well-defined structure, either a wickiup or windbreak, with a series of radiocarbon dates

averaging to 9500 B.C. This is the earliest structure anywhere in the Plateau culture area. Artifacts associated with these features include the stemmed, lanceolate Windust points typical of the earliest assemblages on the Southern Plateau, as well as the somewhat younger Cascade points. The assemblage is distinctive for its large number of cobble and ground stone tools, including what may be abraders or grinding slabs.

The Full and Final Early stages saw the development of a rich bone and antler industry, and stone implements including burins and bolas stones. Composite charcoal from throughout 1.2 meters of the lower of two strata assigned to this substage yielded a radiocarbon age of 6524 B.C., while a sample from a more restricted layer some 40 centimeters higher produced a date 200 years earlier. Although the deposit yielding the date of 6524 B.C. was not so obviously water-borne as the lowest cultural stratum, the numerous raptor birds in the faunal sample seem a strange component of the human diet and of a culturally constructed deposit. Fortunately, the date obtained is confirmed by that immediately above it, so that the cultural material must date before 5000 B.C.

Projectile points of the Early stages were largely unstemmed or with constricted stems, although illustrated points are not identified as to precise provenience (Cress-

man et al. 1960: fig. 41a). Milling stones are said to have been found from the beginning, although no distribution is given (Cressman et al. 1960:59, 62). With the end of the Early stages the bone and antler tools and faunal remains disappear, perhaps as the result of local preservational rather than cultural factors.

Bobs Point (Minor and Toepel 1986), located just upstream from Miller Island, has produced nondiagnostic flake tools, cobble tools including an edge-ground cobble, and thousands of pieces of debitage below Mazama pumice. Charcoal from a fire hearth exposed below the ash yielded a radiocarbon date of 6469 B.C. Use of the site resumed after the Mazama ash fall, with the later assemblage including one leaf-shaped and two side-notched points. Bobs Point is situated just upstream from Hells Gate Rapids, a highly productive fishery now inundated by the reservoir pool. A preponderance of fish remains in the pre-Mazama component at Bobs Point suggests that fishing was an important activity at sites other than Fivemile Rapids during the early portion of the cultural sequence.

At the Wildcat Canyon site in the John Day Reservoir, the Philippi phase is estimated to date from about 7000 to 5500 B.C. on the basis of one radiocarbon determination and the position of the materials beneath a primary deposit of tephra from the eruption of Mount Mazama. Materials from what were apparently open, ephemeral campsites included projectile points of lanceolate form, a large proportion of which contain indentations at the base, some with weakly set-off stems; broad, chipped knives; scrapers; graters; some burins; and occasional milling stones. Fauna included the remains of artiodactyl, not further identified (Dumond and Minor 1983).

At Umatilla, evidence of early occupation was limited, consisting of three artifacts and 27 flakes from Stratigraphic Zone 7 assigned to Component D. Faunal remains were also scant but among the animals represented were salmonid and nonsalmonid fish, rabbits, hares, bison, sheep, and freshwater mussel (Schalk 1980). No radiocarbon dates are available, but the position of Zone 7 stratigraphically below a deposit of Mazama ash suggests that Component D relates to the Philippi phase downstream at Wildcat Canyon. This idea is supported by the recovery along the shoreline of the river of two lanceolate points of the type characteristic of this phase (Minor and Toepel 1986a).

What seems clear is that all the assemblages mentioned above bear considerable similarity of one another in stylistic terms and, where dated by absolute means, in temporal terms as well. They also appear to represent some differing facets of a broadly oriented hunting-gathering economic adaptation, an adaptation that included fishing, the hunting of fairly large land animals, the taking of birds and, to judge from the milling apparatus, the grinding of something that must include vegetal materials. What is not so clear is the relationship of stylistic variants within the universe of the finished projectile points.

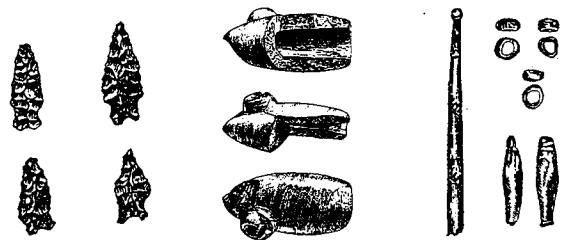
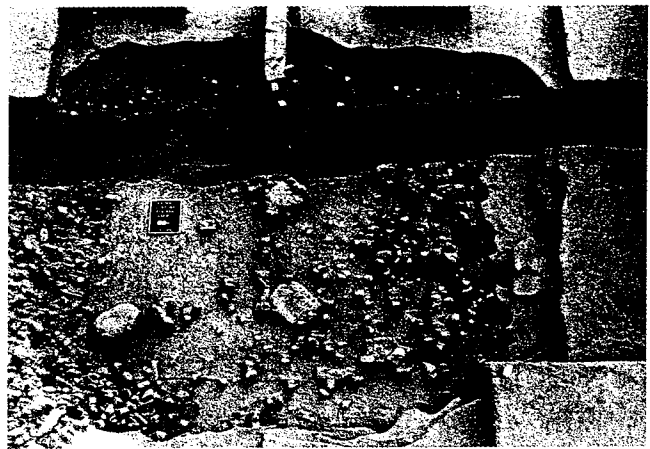


Fig. 5. House I and associated artifacts at Hatwai on the Clearwater River, near Lewiston, Idaho. top, House floor dating 3500 B.C. with hopper mortar bases and a scatter of artifacts and fire-cracked rock within the central 4 by 4 m pit of the house. The 2 m wide bench around the pit has been removed. The pit house was 8 m square. Photograph by James P. Green, 1978. bottom, Selected artifacts from House I and other Hatwai localities: left, 4 Hatwai-eared projectile points; center, 3 views of a carved stone pipe; right, bone ornaments including one elongated grooved and incised pin, a smaller grooved pendant, and 3 bone beads (2 views of each) recovered from deposits postdating A.D. 1500 in another part of the site. Drawings by Joy Stickney. Length of pipe, 9 cm; others to same scale.

Period II, 5000/4400–1900 B.C.

This period is difficult to characterize in some ways. In some parts of the southern Plateau, the evidence differs little from Period I. However, Period II is marked by important changes in settlement and subsistence patterns in some areas, and the disappearance of certain artifact types and technological traits characteristic of Period I. Semisubterranean pit houses appear in the region's archeological record for the first time; there is evidence for increased levels of exploitation of certain nutritious roots and of salmon; projectile points decline in frequency among artifact assemblages across the region relative to Period I; milling stones, which in Period I were small, are large, substantial stone slabs, sometimes associated with stone pestles; less investment was made in working chipped stone tools, which appears in some areas as a decline in quality. Edge ground cobbles and prepared cores are among the artifact types that become rare or disappear during this period.

Projectile point styles present at the end of Period I continue, including Cascade, Bitterroot, Northern Side Notched