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Archeological survey of the middle Clark Fork River Valley| Missoula to Superior, Montana

Jerome Michael Ryan

The University of Montana

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AN ARCHEOLOGICAL SURVEY OF THE MIDDLE CLARK FORK
RIVER VALLEY: MISSOULA TO SUPERIOR, MONTANA

By

Jerome Michael Ryan
B.A., University of Montana, 1966

Presented in partial fulfillment of
the requirements for the degree of

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Approved by:

Chairman, Board of Examiners

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ABSTRACT

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Director: Dee C. Taylor

This is a study of the archeology on the Middle Clark Fork River between Missoula and Superior, Montana. It was undertaken to answer several important questions regarding prehistoric use of the river valley. The first need was to fill a gap in our knowledge about archeological resources in the area. Also, western Montana occupied a strategic position between two relatively well known areas: the Columbia Plateau and the Northern Plains. It was hypothesized that the Clark Fork Valley was an important route of cultural diffusion between these two areas. This hypothesis was tested along the Middle Clark Fork River. Data on other problems such as local travel routes, settlement patterns and uses of available resources were also examined.

The methods employed in this research were the standard survey techniques used by archeologists. The existing literature was read. Appropriate maps of the area were collected. Local people were interviewed for any knowledge of archeological importance they might have. The entire 60-mile stretch of river was closely examined by visual inspection. This inspection was carried up large tributary streams. Finally, promising sites were sampled by putting down 5x5 foot test pits to examine below surface cultural manifestations. Recovered material was labeled and examined in the laboratory. A local cultural sequence was established by comparison of recovered artifacts with dated cultural horizons in adjoining geographic areas.

The cultural evidence (e.g., artifacts, pictographs, burial practices, local migratory routes) from this research indicated that there was contact between peoples in the Middle Clark Fork Valley and people further west on the Columbia Plateau. Evidence also indicated that travel east and west over difficult mountain passes may have been as important as travel and diffusion, north and south following the course of the Clark Fork River.
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CHAPTER I

INTRODUCTION

Definition of the Research Area

This is a study of the archeology on the Clark Fork River between Missoula and Superior, Montana. It was intended that the research would provide important data on several questions regarding the use of this area during prehistoric times. No such study can be completely definitive. Yet, this particular area presents several interesting problems to the student. The most serious deficiency has been a lack of data. Only with the last 25 years has some serious archeological work been done in western Montana. The Clark Fork River, as a whole, and the Middle Clark Fork in particular, has received virtually no attention. Malouf (n.d.) has designated the area between Missoula and Paradise, Montana as the Middle Clark Fork. The river below Paradise was called the Lower Clark Fork. Malouf's usage has been followed in this paper.

Prior to 1949 there was a noticeable gap in our knowledge of an area strategically located between two important and reasonably well known areas: the Great Plains to the east, and the Columbia Plateau Region to the west. Thus,
the Clark Fork River, including a critical portion hitherto unstudied, could have been a main route of diffusion and migration. To what extent were mountains in this area a barrier to cultural exchange between the Plains and the Plateau? What, if any, influences from the Great Basin were felt in western Montana? These were some of the questions examined by Carling Malouf (1956b) in his dissertation, "Cultural Connections Between the Prehistoric Inhabitants of the Upper Missouri and Columbia River Systems." Malouf was the first to recognize western Montana as a distinct cultural entity, which he named the "Montana Western Region." He said of this new region,

... it appears to be centered almost entirely in Montana west of the continental divide with extensions of it into northern Idaho and southeastern British Columbia. Three of its four horizons have their roots in the Columbia Plateau cultures to the west. These levels exhibit considerable distinctiveness, however, and should be recognized as a specialization of a broader Columbia river pattern (Malouf 1956b:12).

Lack of archeological data is not strictly the result of little field work. The Montana Western Region contains very little that can be called stratigraphic archeology, and in some areas sites seem to be relatively scarce. Malouf discovered three, or perhaps four, horizons of cultural material on old terraces at Flathead Lake. Lacking good stratified sites, these terraces served to indicate a chronology for all of western Montana. Apparently glacial Lake Missoula kept man from inhabiting the valleys of western Montana until its final
drainage about 6,000 years ago (Malouf 1956b:167). This is a relatively short time for cultural material to accumulate, especially in view of the fact that human bands were small. In more recent times sites remained small. The explorer David Thompson noted in his journal that the usual size of Indian camps was from three to ten dwellings (Malouf 1956b:231).

To place the broad question of cultural diffusion considered by Malouf within the scope of this research, I have concentrated in an area along the Middle Clark Fork River. A glance at any topographic map of the northwestern United States shows the importance of the Clark Fork River Valley as a potential thoroughfare. The Bitterroot Range would seem to have been an effective barrier to travel from the Plateau Region. The range extends from Pend d'Oreille Lake in the north to the Snake River Plains in the south, and isolates the intermountain valleys of northwestern Montana. Lolo Pass and Lost Trail Pass cross the southern Bitterroot Range and provide entrance into the Bitterroot and Missoula Valleys. Both of these passes required arduous climbs and were closed during the winter and early spring months. But since the Clark Fork offered an unrestricted corridor into the Missoula Valley and the heart of the intermountain region of northwestern Montana, it was an obvious choice and easy route for travel; therefore it seemed archeologically important. Such things as settlement
Figure 1. Sketch Map of the Research Area
patterns, routes of access, use of floodplain as opposed to terraces, and available resources were examined from Missoula downstream to Superior, Montana.

The main hypothesis remains thus: the Middle Clark Fork River Valley was a significant artery of cultural diffusion between the Plateau Region and the Montana Western Region.

Summary of Previous Work in the Area

J. Morton Elrod, a biology professor at the University of Montana, published photographs of pictographs on a cliff on the west shore of Flathead Lake near Rollins, Montana. His report (1908) was the first dealing with Montana archaeology west of the Continental Divide. Shiner (1950) reported eleven occupation sites in the Libby area, while conducting research in the River Basin Surveys program. Between 1949 and 1956, Malouf made a systematic study of large portions of western Montana. His work included research at Flathead Lake, in the Bitterroot Valley, the Upper Clark Fork River Valley, the Lower Clark Fork River Valley, the Blackfoot River Valley, and the Jocko River Valley. A number of sites were located in each of these areas. Griswold (1953) and Griswold and Larom (1954) carried on surveys in the Flathead River and Hellgate Canyon areas respectively. Both studies met with only limited success as few sites were found. For example, of the 31 locations surveyed in the Hellgate area, only nine were established
as occupation sites. The sites were generally on the north side of the river. This the authors explained by pointing out that the Indian trail followed the north bank, so they examined this side more closely. Material included scrapers, knives, pestles and mauls with the most abundant artifact type being chipped stone projectile points. The majority of these points were corner-notched, with unstemmed points the next most frequent type (Griswold and Larom 1954:28-9).

Sites were located "... at the mouths of side gulches or on tablelands adjacent to such gulches and as often as not were a quarter of a mile distant ... from the Clark Fork" (Griswold and Larom 1954:28). Griswold and Larom concluded that the projectile point forms and material frequencies showed affiliations with the Flathead Lake area, and "... that a simple hunting and gathering culture occupied Hellgate Canyon on a seasonal and probably intermittent basis from late prehistoric to recent historic times (Griswold and Larom 1954:29).

The Richardson Farm Site, located near Sixmile Creek west of Huson, Montana, was recorded by George Arthur. He reported examining "fishtail" points. These points are known by several names including McKean Variant, and they indicate a Middle Period occupation site (Arthur 1963:1).

The University of Montana's Department of Anthropology has conducted archeological survey classes in the Clark Fork Valley. In the spring of 1968, Mr. Larry Loendorf's class
collected a large number of chips, blades, several scrapers, and 17 whole or fragmentary projectile points from the Alberton, Montana area. Chips of chert and obsidian, along with several side-notched projectile points suggested later influence from the Plains, or Great Basin.

Linda Ward (1973) conducted an archeological survey of the Bitterroot Valley. She found 19 sites, most of which were clustered at the southern end of the valley. Ward expressed disappointment at the apparent lack of material. Much of her material, and her interpretations, parallel those Malouf made regarding the Flathead Lake area.

Malouf (n.d.) studied an area along the Lower Clark Fork important to this research. In three separate field seasons, from 1952 to 1964, he examined the Clark Fork Valley from Thompson Falls to the Idaho state line, a distance of about 60 miles. He reported 12 sites along this entire portion of the river. The research, due to contract specifications, was confined to the valley. The tributary streams were not investigated. Malouf concluded that this portion of the valley was little used. He felt that in aboriginal times this part of the Clark Fork Valley may not have been suitable for campsites: people passed through it but did not often stop. If this is the case, then another area would seem to have been more important to diffusion than the Clark Fork Valley proper.

Dr. Dee C. Taylor (1973) also conducted a two-year
study in western Montana. He concentrated on an area in northwestern Montana threatened by the construction of Libby Dam. Twenty-eight sites were located and recorded. Almost all sites were tested. His findings were important to this research, and will be discussed in greater detail below.

It seemed clear from the data available that the Clark Fork River may have been an important prehistoric thoroughfare and deserved much additional study.

Summary of Methodology

The technique used in this survey was the standard "archeological process." This is a systematic procedure used when surveying an unknown area. It includes: a thorough search of the literature, the collection of appropriate maps, the questioning of local people who have first-hand knowledge of the area, and the physical ground search followed by testing of sites.

Promising areas were first noted on the maps, and these were the first to be investigated. An area was considered promising if it was a flat terrace adjoining the river. The mouths of tributary creeks were also considered possible site locations. They were considered promising because of their proximity to water, riverine food resources, and their suitability as campsites. Once in the field, however, it became evident that many possible sites were not
apparent on the maps. The search method was then altered. Every square yard of river terrace was visibly searched. Promising areas were then located on the map. This detailed study of river banks, and alluvial terraces, was extended up major tributary streams. Sites were established through intensive inspection of the ground, often on hands and knees. An area was designated a site if it produced a small handful (10 to 15) of chips and flakes, or one recognizable artifact. Areas that did not show the requisite number of chips and flakes were noted as tentative sites on the maps.

Visual inspection was supplemented by interviews with local people who had knowledge of the area. Chief among these informants were ranchers whose lands bordered the river or streams. Also, amateur collectors, "history buffs," and "rock hounds" were questioned.

Maps used in field work included United States Geological Survey sheets: Southwest Missoula, Primrose, Alber-ton, Tarkio, and Superior quadrangles. Smithsonian Institution site survey forms, surveyor's field notebook for scaled drawings, field journal, and photographs were also used in research. The Smithsonian Institution's trinominal numbering system has been used to designate sites.
CHAPTER II

DESCRIPTION OF THE RESEARCH AREA

Topography

The tectonic disturbances responsible for the Rocky Mountain System began during the Mesozoic's Laramide Revolution. Subsequent uplift occurred during the Eocene and late Tertiary. The Bitterroot Mountains, which form the western boundary of the Bitterroot and Missoula Valleys, is one of the largest fault scarps in North America. The face of the Bitterroots is very steep and "cut into a series of huge triangular facets by streams descending from the crest line of the divide" (Atwood 1940:291-315).

Jennings and Norbeck (1964:149) have referred to the intermountain region as a desert. The Great Basin, parts of the Columbia Plateau and parts of the Colorado Plateau fit this description more closely than northwestern Montana. In fact, the intermountain region demonstrates such abrupt changes in elevation that several biotic zones are repeated over and over as one moves from valley floor to mountain top. This situation has been described as a change from lower Sonoran to Arctic-Alpine life zones (Jennings and Norbeck 1964:149).
The soils of western Montana change with a change in elevation. Partly decomposed rock makes up the majority of mountain soil. Podzol, Brown Podzolic and Gray Wooded soils are found in the mountains, while Chernozem, Chestnut and Brown soils predominate in the intermountain valleys. Soil cover is thin at higher elevations and azonal, without the characteristic layering of mature soil (Montana Almanac 1960: 82). Western Montana is not simply a series of high mountains and steep, narrow river valleys. The Missoula Valley, and especially smaller valleys such as the Blackfoot, are typical of parkland areas frequently found on the upper Columbia River System. These mountain valleys range from 2,000 to 4,000 feet in elevation and are favored with water and game (Malouf 1956b: 15).

Climate

The climate of the intermountain region of Montana was as favorable to prehistoric peoples as it is to the present population. Presently, precipitation and irrigation from snow-fed streams provide enough water for a relatively short growing season. The mean annual frost-free period is between 80 and 120 days. Average annual precipitation for mountain valleys is between 10 and 20 inches, while higher elevations receive 60 to 80 inches annually. This is hardly the "desert" referred to by Jennings and Norbeck. Most precipitation usually falls between early November and late April. Short,
but violent, thunderstorms are common during the summer months (Espenshade 1960:52-3). Malouf (1956b:17) noted that some Indians living east of the Divide preferred to move into the intermountain valleys during the winter months. The Plains are subject to arctic cold fronts from Canada, but the mountains receive milder weather from the Pacific Coast.

**Flora and Fauna**

In considering the flora and fauna of western Montana, it is of limited usefulness simply to list some of the species found in the area. A more useful approach is to note what use historic Indians made of nature's products. It is known that hunting and gathering peoples are extremely familiar with the economic possibilities within their homeland, and exploit them to the best of their technological ability. The Indians of western Montana were no exception. To cite the flora and fauna they utilized is to name every important species in the research area.

As mentioned above, the intermountain region as a whole has been called a desert by Jennings and Norbeck (1964). Others, however, have classified this area under a number of different terms: for example, Northern Mesophytic Evergreen Forest, and Western Mountain Coniferous Pine Forest. Generally, the valleys are covered with pacific grassland type vegetation, that is, Pacific bunch grass. Coniferous forest classification indicates the presence of spruce fir, yellow
pine, douglas fir, western larch, and western white pine trees (Strohler 1967:181). Deciduous trees such as poplar, willow and cottonwood are found along the rivers and major tributary streams.

Most of the vegetation used by Indians fell into three major classes: food, medicinal and construction. Important food plants were bitterroot, camas root, sarsaparilla root, sunflower, yellow pine, lodgepole pine, larch, and white birch. Also, black moss, wild strawberries, chokecherries and red raspberries, watercress, and wild onions. The various kinds of trees can be considered food products because the Indians used the inner bark, sap or gum and, in some cases, pinecone nuts for food. Medicinal plants included berry roots, narrow leaf willow and horsemint. The bark of the latter two were boiled into a tea. Plants used for construction included lodgepole pine, used for teepee frames; white birch, the bark of which was used to cover canoes; white cedar, the outer bark was used for sacks, nets, cork, and cloth; narrow leaf willow, used in the construction of sweat lodges and baskets; mountain mahogany bushes, used for digging sticks and fish spears. The Indian people smoked kinnikinnick mixed with other leaves and tobacco. They burned sweetgrass as incense in their fires (Stubbs 1966:33-122).

The three tribes found historically in western Montana, Flathead, Kuntenai and Pend d'Oreille, all used fish
to supplement their meat and vegetable diet. A variety of methods including hooks, nets and spears were used to take fish. All species of trout, as well as sturgeon, sucker, peamouth, and squawfish were sought. The Flathead sometimes went west to fish for salmon among their Nez Perce neighbors. Birds' eggs ranked with fish as supplemental to Indian diet. Ducks and geese, prairie chickens, and grouse were hunted for meat. Eagles were prized for their feathers (Malouf 1951:12-21).

Deer, moose, elk, bear, and mountain sheep were hunted. Smaller animals such as beaver and rabbits added to the larder. Deer were abundant and most important to Indian economy. Captain William Clark commented in his journal of 30 June 1806, "Deer are very abundant in the neighborhood of travellers rest of both Species, also some big horn and Elk" (DeVoto 1953:414). Beaver, weasel, muskrats, lynx, marmots, and squirrels provided furs for clothing and trade (Malouf 1951:24-7).
In considering the inhabitants of the research area no attempt has been made to write an exhaustive ethnography of the natives found along the Clark Fork River System. A general picture of Indian territories and lifeways, however, can be outlined from scattered articles and reports on the subject. First, I shall outline the general prehistory of areas adjoining the Clark Fork River Valley. Then the historic tribes, and early white intrusions will be sketched. Aboriginal and white campsites, and settlements, were often located in identical places. There may have been factors which ecologically dictated settlement patterns, whether the inhabitants were prehistoric Indians or whites. However, the main intent of this chapter was not to consider settlement patterns, but to put the archeological data to come later in its proper historical perspective.

Native Inhabitants

From present archeological data it appears that beginning about 20,000 years ago a lifeway called the "Desert Culture" by Jennings and Norbeck (1964) existed throughout the
area they called the "Desert West." In its "Archaic" manifesta­
tion the Desert Culture was found throughout the west­
ern third of the continent; extending from southern Canada,
across the American west, and far down into the Mexican
Plateau. Desert Culture traits, wherever found, were unsop­
phisticated and very similar. The environment was intensively
exploited for all available food materials. The spear-thrower
was the characteristic weapon used to hunt game. Social group
consisted of small nomadic bands that moved about frequently
in search of food. They used temporary open air camps, rock
shelters and caves when available. As noted, the Desert Cul­
ture was an extremely widespread phenomenon. However, it
should not be seen as a rigid, and nonvarying set of specific
traits, but rather a similar response to similar ecological
conditions. As Jennings and Norbeck (1964:152) described it,
the term implied "... not an unvarying complex of archae­
ological traits or a period of time, but a culture stage
where in wide exploitation of available species is a diagnos­
tic attribute." From the Desert Archaic there developed a
variety of cultural patterns, and regional specializations
in the Desert West. These regional variations began to
appear about 4,000 years ago. By A.D. 1, linguistic and socia
variation were well advanced. The material traits derived from
the Desert Archaic underwent little change, however. By his­
toric times Basin, Plateau, and Intermountain peoples had
diverged markedly from the Desert Archaic culture stage. But
their artifact assemblages and subsistence patterns can still be seen as emerging from a common group of Desert Archaic traits (Jennings and Norbeck 1964:152-5). The rate of change was not constant throughout the Desert West, and after A.D. 1 the Plateau and Intermountain Regions evidenced a greater divergence from the Desert Archaic culture than did the Great Basin (Jennings and Norbeck 1964:161).

In a 1974 version of the above cited work, Jennings did not substantially alter his view of the Desert Archaic. I have used his term "Archaic" and the term "Middle Period" synonymously throughout this paper.

Archeological evidence points to man's entrance into Montana about 12,000 years ago. Montana prehistory has been divided into three periods by Malouf (1956b). Approximately 10,000 to 6,000 B.C., the area was inhabited by a people whose artifact assemblage has been called "Early Hunter." Following the Early Hunter period came the Middle Period, which lasted from about 6,000 B.C. to 800 A.D. During the Middle Period parts of the Desert West were subjected to an increasingly arid climate. As a result, many groups were forced to give up the hunting of large game animals, and concentrate on the remaining small game. The drought necessitated an even more intensive exploitation of available plant food resources.

Recent archeological studies, however, indicate that this long held view of an increasingly arid climate across
western United States during the Middle Period must be modified significantly. Hoffman (1961) and Taylor (1964), in their studies of Yellowstone National Park found that projectile points, and hide working tools remained the dominant lithic material during the Middle Period. They concluded that Yellowstone Park continued to be a suitable habitat for big game animals during the Middle Period. The Park's inhabitants remained big game hunters throughout the entire prehistoric period. Arthur's (1966) research in the Upper Yellowstone Valley revealed the same situation in that area. Middle Period sites produced projectile points, scraper, knives, choppers, and flake tools. Grinding implements were notably absent. In addition, faunal remains were almost exclusively large game animals. Arthur concluded, "Present limited evidence gives no indication that a hot, arid Altithermal ever existed in the Upper Yellowstone." (Caldwell 1968:55). Similar conclusions can be drawn from Malouf's (various) work in the Montana Western Region. Those sites associated with Middle Period projectile points produced no grinding implements of comparable age. There were numerous roasting pits, however and the absence of such implements does not imply lack of plant food. Only a few stratified sites were tested in this author research. Those tests made tended to support Arthur's contention that "... there is little evidence to suggest a primary emphasis on gathering in the Intermountain Region of Montana during the Middle Prehistoric Period" (Arthur 1966:
Mauls and pestles were the only food grinding implements recovered. These tools are associated with the Late Hunter Period.

At this point it appears the Montana Western Region escaped the desiccation experienced in the Great Basin and parts of the Great Plains. It remained an area of adequate precipitation throughout prehistoric times, and probably supported a sizable big game population.

The latest period, called "Late Hunter," Malouf (1956b) divided into two phases. Phase I: Late Hunter, dated from about A.D. 800 to 1730. Subsistence patterns remained much the same as in the two earlier horizons, but during this period there was a return to big game hunting throughout the plains. The spear-thrower was replaced by the bow as the characteristic weapon. Projectile points became smaller with the advent of the bow, and they were typically corner-notched.

Phase II: Late Hunter, dates from about A.D. 1730 to 1870. This is the period that saw a greatly increased mobility due to the introduction of the horse. It was also during this phase that regional cultural variations were most pronounced. In the Great Plains area of eastern Montana, side-notched projectile points were a characteristic trait of Phase II: Late Hunter peoples. In the Montana Western Region corner-notched points remained in use throughout Late Hunter times, although side-notched forms were also present.

It should be reemphasized that the valleys of the
Montana Western Region were probably inhabited at a later date than were the plains areas of Montana. There have been isolated finds of Agate Basin type points in western Montana (Malouf n.d.; Hobler n.d.). Early Hunter peoples may have traveled around the shores of glacial Lake Missoula, but any occupation of the intermountain valleys of western Montana came after Lake Missoula's final drainage, perhaps as recently as 6,000 years ago. It is therefore possible that the first permanent inhabitants of the Montana Western Region were people of the Middle Period (Malouf 1960:106-7).

Prior to A.D. 1700 the tribes that inhabited the Montana Western Region extended their territories east of the Continental Divide, and out into the Northwestern Plains. The Flathead were located at the headwaters of the Missouri, some of the Kutenai were located around Havre, Montana, and the Upper Pend d'Oreille were in the Sun River area near Great Falls, Montana. They were, at this time, pursuing a Phase I: Late Hunter lifeway (Malouf 1956b:163-5). Shortly before A.D. 1700 the Shoshoni pressed into the intermountain country, and extended their wanderings into the plains area east of the Divide. They continued to push northward, until they were finally checked by the Blackfeet in southern Canada (Malouf 1969:1-19). The Shoshoni woman, Sacajawea, who lead Lewis and Clark into Montana in 1805, expected to meet her people in the Three Forks Region. During the 10 to 15 year interval of Sacajawea's absence, the Blackfeet
had pushed the Shoshoni 150 miles up river into the mountains west of the Divide (DeVoto 1953:190-4). The southward drive of the Blackfeet also pushed the Flathead, Kutenai, and Upper Pend d'Oreille off the plains. The migration of the Siouan-speaking Crow, and the Algonquian-speaking Cheyenne, into eastern Montana at about this time helped force the earlier inhabitants from the Plains for good.

Even though their domination of Montana was short-lived, the Shoshoni left a legacy of great importance to the prehistory of the Montana Western Region. The introduction of the horse into Montana had several far-reaching effects, and is generally accepted as the point of separation between Phase I and Phase II of the Late Hunter Period. The horse brought the people of the Montana Western Region increased mobility, and with this mobility came increased prosperity. Mobility also lead to increased contact between people, and a resultant increase in warfare (Malouf 1969:1-19). While commenting on the poverty of the Shoshoni, Lewis noted in his journal that Sacajawea's band of approximately 400 people owned a horse herd of nearly 700 animals (DeVoto 1953:190).

By the mid-eighteenth century the people of the Montana Western Region were settled in the territories they would occupy until the intervention of the white man. There were shifts in tribal centers within each territory, but boundaries in relation to other tribal territories remained fairly constant. Like most primitive hunters, the Indians
of the Montana Western Region were nomadic within the confines of their territories. They did not wander aimlessly, but followed a seasonal cycle within a definite "Zone of Exploitation" known to the leaders (Malouf 1962:9). Tribal boundaries were not absolute lines arbitrarily drawn through an area. Settlement tended to be concentrated along waterways in the valleys. The upland areas were claimed and hunted by various tribes, but never used for prolonged residence. Boundaries tended to be easily distinguished geographical features, such as mountain passes, divides, or large streams (Krober 1939:216-7). The Montana Western Region is a relatively small area, and Malouf (1951) argued for a more developed territorial concept than may have been usual in the Intermountain Region:

Tribal territories were fairly well defined along river courses, and incursions by members of unfriendly tribes were resisted. The Blackfoot, and to a lesser degree the Shoshoni, were resisted with armed action (Malouf 1951:57).

Strictly speaking, the Shoshoni were not inhabitants of the Montana Western Region. They were on the southern perimeter of the area. Nevertheless, they not only passed through Flathead territory, but sometimes traded and hunted with them. The mountain spur, called by the Shoshoni the "Beavers Head," was one of the northern boundaries of Shoshoni territory. Their summer camp on the Lemhi River, a short way west of this landmark, was occupied from early spring to late fall. In September, bands of Shoshoni united,
and moved over Lemhi Pass to hunt buffalo on the Plains. This annual trek to obtain a winter store of dried meat was undertaken at considerable risk. The Blackfeet were a constant threat, and bands of Shoshoni sometimes joined forces with the Flathead for safety. They hunted at least as far as the Three Forks area, but retired into the mountains as soon as a good store of meat was obtained (DeVoto 1953:181-209).

The hunting and gathering territory of the Salish-speaking Flathead was described by Malouf (1951:46) as follows: northward on a line "... from the headwaters of the South Fork of the Flathead River, and the White River, past Holland Lake westward through the Jocko Valley and thence almost to Plains, Mont." Southward the boundary ran to the "... crest of the mountains forming the headwaters of the Bitterroot River." Eastward it extended to the "... continental divide, and the Big Hole Valley beyond," and west to the "crest of the Bitterroot Range." Around A.D. 1730, the Flathead were concentrated in the Bitterroot Valley (Malouf 1956b:164). From this social center they continued to travel widely--south into Shoshoni country, westward into Nez Perce country, and north to Flathead Lake. As noted above, when in sufficient strength the Flathead ventured east as far as Yellowstone Park. In most cases, Blackfeet and Crow excepted, the Flathead were friendly with their neighbors (Malouf 1951:5).
The Upper Pend d'Oreille, or Kalispel, were found immediately north of the Flathead. Like the Flathead, the Upper Pend d'Oreille were Salish speakers. Their culture was very similar to that of the Flathead. The Upper Pend d'Oreille were an eastward extension of the Pend d'Oreille, who were centered in northern Idaho around Lake Pend Oreille. The southern boundary between Flathead and Upper Pend d'Oreille territory was around Alberton, on the Clark Fork River (Malouf 1951:47-8). However, Swanton (Davis 1960:5) believed that Upper Pend d'Oreille territory extended as far south as Missoula. The Continental Divide formed their eastern boundary, and Kalispell, on Flathead Lake, their northern boundary (Malouf 1951:48).

The Kutenai were the northern-most inhabitants of the Montana Western Region. They extended northwestward several hundred miles into Alberta, and British Columbia. After A.D. 1855 they occupied an area around the northern tip of Flathead Lake. Their eastern boundary was easily defined as the Continental Divide. Their western boundary was somewhat vague. It ran through northern Idaho and northeastern Washington. The Kutenai were centered in the Tobacco Plains area, along the Kootenai River where it crosses the Canadian border (Malouf 1951:48-50). Although the Kutenai parallel the other groups in the Montana Western Region culturally, they are related to none of them linguistically. The antecedents of the Kutenai language remain a
problem. It appears to be unrelated to any language in North America (Malouf 1951:6).

Although there were three distinct Indian groups in the Montana Western Region during Phases I and II of the Late Hunter Period, population estimates for the area are very low. Mooney, Kroeber and Kidder (1939:165) estimated that about A.D. 1650 the entire native population of the North American continent was only 1,002,000 people. Krober's "Columbia-Fraser Culture Area," which encompassed the American northwest was estimated at 47,650, or 7.1 people per 100 kilometers. The Montana Western Region falls under what Kroeber termed the "Upper Columbia Culture Area," which was a sub-area of the "Columbia-Fraser Culture Area." Within the "Upper Columbia Culture Area," Kroeber included the Flathead, Pend d'Oreille, Upper Pend d'Oreille and the Cour d'Alene. He estimated only 2,800 inhabitants for the area, or 1.5 people per 100 kilometers. The Kutenai he listed separately and he judged them to number about 1,200, or 2.1 people per 100 kilometers (Krober 1939:142). By A.D. 1855 the native population of the Montana Western Region had risen somewhat, but was still only about one person per six miles. Malouf quoted Governor Isaac Stevens, who put western Montana's Indian population at 2,750 in 1855 (Malouf 1962:10).

The fundamental social and economic group found among the Indians of the Montana Western Region was the nuclear family. This group sometimes worked alone, but most often
cooperated with members of its own, and other extended families. The produce of a single family's effort belonged to that family. Anything gathered by the extended family working together was shared by all within the group. Regardless of their productive capabilities the old and infirm were cared for as a matter of course. The size of hunting and gathering bands varied, but historic evidence suggests that 10 to 20 tipis was about average. Prehistoric bands were smaller than late prehistoric and historic peoples. This was especially true during the Middle Period. Campsites were usually located on a stream, or along a river near a tributary stream. By Phase II: Late Hunter times, Indian camps had grown much larger, and they were localized in a few favorite areas. Operating from these base camps hunting and gathering expeditions roamed throughout the tribal domain. The division of labor was such that the women did most of the camp chores and the gathering, leaving the men to hunt and fight (Malouf 1951:39-56).

The Indians of the Montana Western Region were not as dependent on the buffalo as were the natives living east of the Divide: it was still an important food source, especially for the Flathead. About half of their diet seems to have been buffalo meat. The buffalo hunt served more than a strictly economic function. It provided an opportunity for social as well as economic intercourse between the people of the Montana Western Region, and their neighbors. Even the
hostile encounters between mountain and plains Indians promoted some diffusion of culture traits. After the bison disappeared from the mountains the Flathead, Upper Pend d'Oreille, Kutenai, and at times the Shoshoni and Nez Perce, joined forces for hunting expeditions to the Plains. The Flathead made this trip twice a year, in late summer and late winter. These frequent trips to the Plains, and subsequent contact with the Crow, Dakota and Blackfeet caused the Flathead to adopt more of the Plains Indian's horse culture than other intermountain peoples (Turney-High 1937).

Religiously, the Indians in the Montana Western Region were animistic. They believed the world was populated by spirits who controlled power and dispensed this power to men. The possession of power, and a spirit helper, was an essential element in Indian life. An individual acquired one or more spiritual helpers through unsolicited, or more commonly, solicited dreams. A spirit might appear to a man while he was alone and bestow an unasked-for power. However, the usual course was to go on a "Dream" or "Vision Quest." The first Vision Quest took place when an adolescent boy sought adult status. He usually went to a particular hilltop, or rock shelter, where spirits were thought to dwell. After several days of fasting a spirit appeared to the neophyte and granted certain powers. This spirit also acted as the boy's guardian and helper throughout his lifetime. The powers sought, and given, were as various as man's anxieties. Commonly they
included power for success in hunting, war, love, and gambling. Guardian Spirits took many different forms. They could appear as animals, insects, humans, or even inanimate objects. Throughout eastern Montana a man could sell or give his powers to another, if the Spirit consented. In the Montana Western Region the practice of selling power was unknown, and powers once acquired were seldom transferred (Malouf 1951:55-9). Men who had more powers than their contemporaries and who manipulated this power successfully for the common good were de jure religious leaders. Religious ritualism was more elaborate in those tribes located east of the Divide, but some community-wide ceremonies occurred in the Montana Western Region also. In some cases the acquisition of religious power was not limited to men. Among the Flathead, for example, women could take part in group rituals if they had shamanistic powers (Malouf Personnal Communication).

**Early White Contacts: Explorers, Trappers and Traders**

The first white men to enter the Montana Western Region were probably two fur traders, Le Blanc and La Gasse. They were sent by David Thompson to winter with the Kutenai in 1800. They stayed among the Kutenai several years, making periodic trips back to Rocky Mountain House to replenish their supply of trade goods (Schaeffer 1966:6-7).

The first official U. S. government representatives
to arrive in western Montana were members of the Lewis and Clark Expedition. On 20 July 1805, Lewis noted in his journal that the Indians (Shoshoni) set a prairie fire to warn of the party's approach and then fled into the mountains. He guessed that the Expedition's hunting party had frightened the Shoshoni with their gunfire. Lewis and Clark were following a trail normally used by the Blackfeet on their raids west. On 11 August 1805, Lewis and three others saw a lone Shoshoni who fled before they could convey their peaceful intentions. They followed this Indian; two days later Lewis and his small vanguard entered the Shoshoni camp. Lewis recorded that they were the first white men most of the Indians had seen. After a short stay among the Shoshoni, Lewis and Clark continued north with fresh supplies and newly acquired horses. They crossed the Continental Divide by way of Lemhi Pass and entered the Montana Western Region. The party traveled north down the Bitterroot Valley, and several days later they met a group of Flathead Indians (DeVoto 1953). On 4 September 1805, Lewis wrote "... 33 Lodges about 80 men 400 Total and at least 500 horses..." (DeVoto 1953:233). He observed that they were the first white men any of these people had seen. By early September, 1805, the Expedition reached Lolo Creek and made a camp which they called "Traveller's Rest." The Flathead mentioned another large river that entered the Bitterroot at a point some miles north. Lewis ordered two men north to find it. They returned after
following the Bitterroot to its junction with the Clark Fork River. The conflux of these two rivers marked the northernmost point of the Expedition's travel into the Missoula Valley. The explorers continued up Lolo Creek under Flathead guidance. They left Montana by way of the "buffalo road:" the Nez Perce trail to the Plains. On their return trip the following year Lewis and Clark again made use of "Traveller's Rest" camp. At "Traveller's Rest" the Expedition divided into two groups. Clark retraced the previous year's path up the Bitterroot Valley. The Lewis party followed the Bitterroot down to the Clark Fork River. They turned up the Clark Fork and entered Hellgate Canyon in early July, 1806. Following the Blackfoot River they crossed the Divide through Lewis and Clark Pass, and left the Montana Western Region by way of the Sun River to Great Falls (DeVoto 1953:161-414).

One of the earliest white men to follow Lewis and Clark into the Montana Western Region was David Thompson. Thompson was a trapper who represented the Northwest Company. He followed the Kootenay River into Montana in 1808, and in 1809 he established a trading post at Thompson Falls called "Saleesh House." A few years later he visited the Missoula area for a short time, but established no permanent settlement. For 50 years after Thompson's first effort the Northwest Company, and the Hudson Bay Company, controlled most of the fur traffic in western Montana. However, by 1850 the monopoly was broken (Malouf 1960:118-125).
In 1850 John Owen established an Indian trading post at the site of the first St. Mary's Mission in the Bitterroot Valley (Malouf 1960:125). Another post was established at Flint Creek, east of Hellgate Canyon, by VanEtten in 1858. The same year William Hamilton erected a third post on Rattlesnake Creek in the Missoula Valley (Griswold and Larom 1954:6).

Catholic missionaries were among the earliest white men in the Montana Western Region. The Indians learned of Christ from trappers and Christianized Iroquois who worked for the Hudson Bay Company. The Flathead had repeatedly asked for a missionary, and in 1841 Father Pierre-Jean DeSmet arrived in the Bitterroot Valley. Here he established St. Mary's Mission. The first mission site was abandoned and sold to John Owen in 1850. Father Anthony Ravalli reestablished St. Mary's at Stevensville in 1866. A second mission, called St. Ignatius, was founded by Father Adrian Hoecker in the Mission Valley in 1854 (Malouf 1960:118).

White Settlement of Western Montana

The earliest white settlers in western Montana were trappers and traders who were almost the only white men present for about 10 years. Then, in 1858, construction on the Mullan Military Road began at Walla Walla, Washington. This project did much to open the entire northwest for settlement. Early in 1850 Governor Isaac Stevens surveyed a route for Montana's first railroad: the western terminus to be on
Puget Sound. The enterprise was postponed for a number of reasons. Nevertheless, this survey provided the inspiration for Captain John Mullan's road. The road followed the Snake and Pelouse Rivers through Washington and Idaho. It crossed the Bitterroot Mountains and followed the Clark Fork River east through Hellgate Canyon. East of the canyon Captain Mullan traced Lewis's route up the Blackfoot River. He crossed the Divide, followed the Sun River to the Missouri, and went on to Fort Union in North Dakota. The road was finally completed in 1862 (Mullan 1951:13). It linked the Montana Western Region with Ft. Union, one of the most important trading posts in the west.

The discovery of gold and silver between 1852 and 1864 brought the first great influx of people into Montana. Most of the newcomers settled on the edges of the Montana Western Region. Bannock, Virginia City, Helena and parts of the Deer Lodge Valley attracted the prospectors. But a rich strike in the Bitterroot Valley did bring more white settlers into the heart of the Montana Western Region. Exploitation of the vast timber resources in western Montana brought another, and more significant, increase in population. Census statistics for the territorial period showed a brisk increase in population for each census taken: occasioned by the increasing development of the region's natural resources. At the time Montana became a territory in 1864 the entire white population numbered about 100. In 1870 there were about
20,000; 40,000 by 1880; and 143,000 in 1890. The development of copper mines in Butte and the completion of two railroads through Montana between 1880 and 1893 brought an enormous increase in white settlement. Between 1890 and 1900, the white population doubled. These newcomers were, for the most part, homesteaders. They completed a trend which began with the large mining, lumber, and cattle companies. This trend saw the Indians of the Montana Western Region pushed into ever smaller territories until they were finally confined to various reservations. Despite the overwhelming pressure of the white expansion, the Montana Western Region did not suffer anything like the major Indian wars that swept through most of the American west. Chief Joseph's running retreat from General Miles, through western Montana, was the nearest thing to a large scale Indian fight the Montana Western Region ever experienced (Malouf 1960:118-120).
CHAPTER IV

SITE REPORTS

This chapter is mainly a description of the sites located during research. However, I have tried to include specific kinds of information in each description. First, the location of the site is noted. A general description of the site and its surroundings follow. A description of the material found and its surrounding matrix, when appropriate, is given. These material descriptions are not detailed. Artifacts are noted here only to indicate why a particular area was designated a site. The artifacts themselves are fully discussed in the next chapter; each artifact is referred to in the illustrations. Where possible, a site's history is outlined: the discovery, work completed and present condition. Comments are made on the possible prehistoric uses for the site, and what role it may have played in prehistoric lifeways.

Sites were numbered as they were located. No attempt was made to number sites sequentially up or down the river.

Missoula County

24M0501: Rock Creek East Point Site. Occupation Site. This site was located on a terrace approximately 100
feet above Rock Creek, an intermittent stream that flows into the Clark Fork River 10 miles northwest of Missoula. The site was in an open park-like area covered with bunch grass. A few large Ponderosa pines grew randomly over the site. Cultural material was concentrated near the edge of the terrace bordering the river. All material was found on the surface. It included 53 basalt chips and flakes, 2 chips of green obsidian, the tip of a basalt lanceolate-shaped point and 1 triangular-shaped basalt point with wide corner-notches and convex base (SCb3). One small basalt side scraper, and one basalt perforator were also recovered. The site was rechecked many times for surface material. No area seemed worth testing, however. This site appeared to be a short-term occupation area that was probably reused from time to time.

24M0502: Albert Creek East Point Site. Occupation Site. Albert Creek was a perennial stream that flowed into the Clark Fork about one-quarter mile downstream (west) from Rock Creek. The site was located on the east side of Albert Creek, approximately 75 feet above the river. It was covered with pine trees, bushes, bunch grass, and a layer of forest debris. Cultural material was scattered over the entire terrace, but appeared to be concentrated in the area immediately adjacent to the river bank. Sixty-seven pieces of worked basalt were recovered, and they ranged from cores and large flakes to very small chips and flakes. Siltstone and
green obsidian accounted for five small chips. Basalt artifacts included two flakes retouched to form perforators and three small roughly flaked plano-convex scrapers. One chalcedony thumbnail scraper was recovered. All artifacts were found on the surface.

24M0503: Albert Creek West Point Site. Occupation Site. The second of the Albert Creek sites occupied the terrace that was directly opposite 24M0502. It was 30 to 40 feet higher than 24M0502, perfectly flat, and covered with thick stands of scrub pine. Two basalt cores and 110 basalt chips and flakes were collected. A single jasper chip appeared. Artifacts included several roughly worked basalt scrapers, retouched flakes of basalt, a small triangular flake perforator, a basalt keeled scraper two and one-quarter inches long, one broken ovoid knife of basalt, and one small obsidian point. The point was one inch long, triangular in shape, with narrow side-notches and a concave base (NBbl).

The above three sites shared a number of things in common. They were all established as sites after repeated inspection of areas selected as promising from an initial map reconnaissance. Work done on the sites was limited to surface survey, photographs and necessary records. The three sites suffered from seasonal erosion by their respective creeks and constant erosion by the Clark Fork. In the case of 24M0501, the river has cut away about ten feet during the five years since field research was undertaken. At all three
sites branches of the road which runs along the south side of the river had disturbed the surface in some areas. These roads provide easy access for fishermen and picnickers who leave an abundance of litter on the sites. Finally, all three sites look less desirable than one would expect for even temporary occupation sites. Water from the river could be obtained only by a long climb down a very steep bank, and the adjacent creeks are normally dry, or very low, by early June. Griswold and Larom noted a similar situation in some of their sites. They concluded that winters may have been more severe 70 or more years ago. A higher rate of snowfall would have meant more runoff and a higher water table than at present. Springs were higher, and creeks ran with more water. They concluded, "... certain localities which today appear unsuitable as habitation sites may have been very favorable for occupation in prehistoric times" (Griswold and Larom 1954:2). If this was true for their Hellgate survey area, it was also certainly true for the Missoula Valley in general and perhaps all of western Montana.

The abundance of manufactural waste associated with tool making suggested that these sites were used repeatedly over a long period. A projectile point with wide corner-notches found at 24M0501 suggested some antiquity for the area (SCa2). The presence of jasper chips suggested use in recent times. The question was why so much use? Why not stay on the valley floor across the river? It was interesting
to note that Malouf located an important ford across the Clark Fork a few miles upstream from these sites. He mentioned Lewis used it in 1806, and the Flathead continued to use it into very recent times (Malouf 1956b:220). The use made of various sites will be fully covered in the final chapter. A few suggestions about these seemingly unfavorable and oddly located sites will be made here, however.

One reason these sites were located in the foothills might have been defense. They were only a few miles west of the Hellgate Canyon, a notorious route favored by Blackfeet raiders. Of course, other sites have been found at the mouth of the Hellgate and within the canyon itself. These may date from a time before the Plains war complex was fully developed or from a time when white influence stifled intertribal warfare. Turney-High (1937), in his work The Flathead Indians of Montana, mentioned that the Flathead lived in fear of Blackfeet raids even in their Bitterroot Valley territory. It is also possible that these sites indicated local migratory routes from the Missoula Valley to the Lolo Trail. Both creeks have their sources in the Graves Creek Range. It would have been possible to follow this range to the Graves Creek Divide and from there down Graves Creek to the Trail (figure 2). At any rate, the abundance and types of material recovered indicated this area was formerly more important than it might now appear.

24M0504: Demin Farm Site. Occupation Site. The farm of Mrs. Margherita Demin was located on the banks of
Butler Creek, a small stream that entered Ninemile Creek about six miles up the Ninemile Valley. Her farm proved to be one of the most prolific and significant sites in the research area. The exact area of occupation was impossible to define. Material was found on a low terrace bordered by Ninemile and Butler Creeks. Mrs. Demin collected material from her garden and the yard in front of her house. She also had artifacts which came from a garden at her old home 100 yards farther up Butler Creek.

Mrs. Demin's collection numbered over 100 pieces (figures 3 through 8). It included many retouched flakes; ovoid, triangular, and tanged blades; side, end, keeled, and thumbnail scrapers; fully grooved mauls; conical pestles; and a wide variety of projectile points. In shape the points ranged from McKean (NAb3), Duncan and Hanna, through corner-notched varieties, to recent side-notched forms. The stone used exhibited a variety uncommon to most sites in western Montana. Basalt material was most common, but a significant number of jasper, chert and even obsidian artifacts appeared. All of the material came from the surface, or from the stream terrace which had been plowed to a depth of six inches. The site appeared to be an occupation area given prolonged and repeated use from the earliest times. The oldest points dated from the Middle Period. The role of 24M0504 in prehistoric life patterns can best be discussed in connection with several other significant sites in the Ninemile and
Figure 3. Projectile Points: Demin Collection
Figure 4. Knives: Demin Collection
Figure 5. Knives and Chipped Stone Disk: Demin Collection
Figure 6. Scrapers: Demin Collection
Figure 7. Fully Grooved Maul: Demin Collection
Figure 8. Conical Pestle: Demin Collection
Sixmile Creek areas. It is sufficient to note here that its importance increased when the site was examined in light of other sites similar in age and apparent intensity of use.

24M0505: Alberton Pictograph Panel. Rock Art. The panel near Alberton, Montana, was one of the few sites in the research area that included recognizable features: the pictographs. The drawings were located on a large outcrop of highly warped sedimentary rock (figure 9). The pillar which contained the pictographs was approximately 80 feet high. There were three decorated faces: from west to east they were A (12 by 15 feet), B (20 by 50 feet), and C (6 by 20 feet). Most of the painting was done on Face B immediately adjacent to old Highway 10, and easily seen from Interstate Highway 90. There was no superimposition of pictographs.

This site was first visited by the author as a member of Mr. Philip Hobler's archeological survey class in the spring of 1967. No work was done on the site at that time, but a small rock shelter about 30 feet up the west side of the cliff was observed. The fill appeared disturbed, but Hobler felt screening might prove worthwhile. On one of several trips back to the site in the course of research, the author did excavate the rock shelter and screened the fill. A trench 2.5 feet wide and 7 feet long was laid out. The trench was excavated by 6-inch levels to a depth of 24 inches (figures 10, 11). As expected, the fill was unstratified and appeared to have been disturbed. No lithic material
Figure 9. 24M0505 (Alberton Pictograph Panel), Showing Parts of Face B and Face C; Looking West.
Figure 10. 24M0505 (Alberton Pictograph Panel), Excavated Rock Shelter Above Face A. Note Day Counts Above Shelter.

Figure 11. 24M0505 (Alberton Pictograph Panel), Excavated Rock Shelter Above Face A.
occurred. The only material found came from Level 3. Several fire blackened twigs, a few pieces of charcoal not associated with a hearth, a small piece of bivalve shellfish and the vertebra and long bones of a deer were uncovered. The bones seemed to show the marks of a sharp cutting implement. It is probable that none of the excavated material was associated with use of the site by prehistoric Indians. The roof and walls of the overhang showed some smoke blackening. This, and the charcoal in Level 3, were probably due to a forest fire that burned the area around 1910. There were numerous "day counts" on the rock just above the shelter.

Subsequent work at the site included tracing the pictograph forms on acetate with a red marking pen. This technique was reasonably successful in recording some of the stylistic forms. Others were so inaccessible that measurement and sketches in a field journal were necessary. The day counts (figures 10, 21) were the most often painted form. They varied in length and width. Some were only a few inches high and drawn with one finger. Others were as much as 12 inches long, and drawn with two or all four fingers. Some groups of day counts were shown extending into a solid horizontal line which formed a base connecting the single lines of the group (figure 25). A few circles were noted. One was six inches in diameter and solidly painted (figure 22). Most circles were much smaller and drawn in outline, like a donut. A bear claw print two by four inches appeared on Face B
(figure 22). Near it on Face B a very blurred lefthand print occurred (figure 22). Animal figures were crudely drawn. In most cases it was impossible to tell exactly what species was represented. Small, four-legged figures that could be wolves or coyotes appeared (figure 22). Two wavy lines, 9.5 inches and 12.5 inches, may represent some kind of serpent with jaws, or perhaps ears, coming out of a round head (figures 12, 23). One fairly clear representation of an elk occurred on Face B (figures 12, 23). It was shown with its head down as if grazing; with long, symmetrical antlers curving above the head. One human effigy was noted. It was headless. The arms and legs were solidly colored, the trunk was painted in out-line (figure 24). Some areas of rock were completely covered with paint. They varied from one by two feet, to two by two feet, and two by three foot rectangles. This seemed beyond what could be considered fading or blurring of large pictographs.

The role this site played in prehistoric life patterns can be understood in terms of the Vision Quest discussed in an earlier section of this paper. It seems likely that the Indians felt this particular rock column was a place of power. It can be assumed that after several men were successful on their quests, the site's popularity grew and more men sought their power at a place known to be frequented by spirits.

Malouf (1961) has described four types of pictographs found in the Montana Western Region. Those at 24M0505
Figure 12. 24M0505 (Alberton Pictograph Panel). Closeup of Pictographs on Face B.
constitute his Type 1. This type was always done with red pigment and in solid form with no outline pictures appearing. Animals were most commonly depicted. They included mountain sheep, elk, deer, bear, and wolf. Other stylistic features include wavy lines, hand prints and rudimentary human figures. The latter were infrequent. Circles and vertical lines were thought to represent the number of days an individual spent at the Vision Quest site. After a successful Vision Quest a man painted his name or that of his guardian on the rock. He then added the number of days spent before receiving his power.

Keyser and Knight (1976) studied 29 pictograph sites in western Montana. They found two distinctive art styles; each occurred in separate geographic areas. The "southern zone" centered around the headwaters of the Bitterroot River. They attributed these sites to the Shoshoni Indians. Those pictographs north of the Bitterroot headwaters fell within the "northern zone."

Rock art was grouped by Keyser and Knight into four classes: anthropomorphic figures, zoomorphic figures, tally marks, and geometric figures. Tally marks were the most prevalent motif in western Montana. They felt that the vertical lines standing on a horizontal line, described above, might represent men in canoes. This interpretation has been given to similar motifs in the Great Lakes Region (Keyser and Knight 1976:1-11). This is possible, however, some of these
forms have 10 or more vertical lines (figure 25). This would require a canoe much larger than normally used by western Montana Indians (Curtis 1970; Malouf Personal Communication).

Like Malouf, Keyser and Knight felt pictograph panels were connected with Vision Quest rituals. They also hypothesized a use related to hunting magic for some of the art (Keyser and Knight 1976:11).

Malouf (1961) noted that the Flathead were not prolific painters, while the Pend d'Oreille made great use of pictographs. Considering 24M0505's proximity to Alberton, which Malouf believed to be Pend d'Oreille territory, and the scarcity of pictographs in Flathead country, a very tenuous argument attributing 24M0505 to the former people might be made. I was not able to assign a date to the panel.

24M0506: Eddy Overpass Site. Occupation Site. This site was on a river terrace three miles east of Alberton. It has been repeatedly cultivated. It was located on a level area bounded on the west by hills and on the east by a tree-lined gully. The Clark Fork ran along the south edge of the site. The terrace was approximately 30 feet above the river. In both quantity and variety of material, 24M0506 could be considered a productive site. Over 100 basalt chips and flakes were collected, while green obsidian, chert, chalcedony siltstone, and jasper were also present. Basalt artifacts included a "willow leaf" ovoid knife, side scrapers and numerous retouched flakes. Other finds included a siltstone
perforator, a side scraper, a green obsidian end scraper, a white chalcedony flake blade, a brown chalcedony thumbnail scraper, and a broken conical-shaped pestle that was eight inches long. Two whole, and three fragmentary, points were recovered. One undamaged point was a triangular-shaped basalt specimen with wide corner-notches and convex base (SCb3). The other was a basalt lanceolate-shaped point one and seven-eights inches long, and one inch wide across the base. It had no stem; the base was indented (NAb3). The midsection of an obsidian point, the base of a triangular-shaped basalt point with wide side-notches, and the base of a triangular-shaped chalcedony point with narrow side-notches, were the fragmentary specimens. All material was collected from the surface. Repeated plowing has removed all stratigraphy to a depth of eight inches, but material indicated an occupation site that was used frequently, at least from late prehistoric times. The form of the two unbroken basalt points suggested a greater age for the site than late prehistoric.

24M0507: Petty Creek Bridge Site. Occupation Site. The Petty Creek Bridge Site was a section of cultivated river terrace adjoining the north end of the river bridge at Petty Creek. The terrace was about 20 feet above the river; it sloped gently toward the west or downstream. A small strand of pine trees were the only natural protection remaining on
the site. The area of cultivation was approximately 50 by 150 yards east and west. As one would expect, the material recovered had been disturbed and greatly mixed. The site was unique in that it presented the reverse of normal material frequencies. Only 11 basalt chips appeared, while 16 flint, 5 chalcedony, and 80 jasper chips were found. It proved interesting for the presence of two small pieces of red ocher also. Fire blackened bone fragments and pieces of freshwater clam shell were collected. Three basalt projectile points were collected from the site (SAa; lanceolate, stemmed, straight base). Six nonbasalt points were found. One was lanceolate-shaped, the other points were triangular in shape (NAb3; NBal; NBbl; SAa; Type 3). Typologically, some of these points were Late Hunter forms. A small, fully grooved maul from the collection of Mr. and Mrs. Leo Kinney (Alberton) also came from 24M0507. This maul was the elongated type that predates the oblate maul, found historically among the Salish, in the Montana Western Region. It probably dated from Late Hunter times (Malouf 1962:11-12). A spoke-shave, two perforators and two ovoid knives of chalcedony completed the artifact assemblage from 24M0507.

Basalt point types suggested a fairly early utilization of this occupation site. The unusually abundant deposits of siliceous point types suggested repeated use well into Phase II: Late Hunter times. Such long and intensive use might be expected from a site that lies at the end of one
branch of the Lolo Trail. Informants in the Alberton area reported that there was a shallow gravel bar across the river at Petty Creek, and they remembered seeing Indians still using it in the early part of this century.

24M0508: Ponderosa Acres Site. Type of Site Unknown. Four miles east of Alberton, the Clark Fork made a giant meander in its course. There, a very large sandbar lay only a few feet above the river. Some years ago this area was subdivided for home sites. While contractors excavated one basement they found basalt chips and three projectile points. Two of the points were basalt. They were both triangular-shaped, one was corner-notched while the other was side-notched (Sc; NB). The third point was triangular-shaped and corner-notched, but made of a quartzite material. All of the points were in the collection of Mr. Bill LaComb, Missoula. Due to the circumstances of excavation no information concerning depth, surrounding matrix, or associations was available. Like most of the river terrace in the Alberton vicinity, the Ponderosa Acres area was undoubtedly used as a temporary camping site often. There still remained the possibility, however, that the points were carried from some other place by the river and deposited where found.

24M0509: Ten Degree Site. Type of Site Unknown. This site was a roughly triangular area between two ridges, with the base of the triangle formed by the Clark Fork River. The site sloped gradually toward the river, where the bank
was 10 feet above the water. The site may have been a temporary occupation site. The occupation was not localized, but most material came from an area which ran northwest by southeast (200 by 150 feet) near the northwest corner of the site. Half of 24M0509 was thickly covered with pine trees; nearer the river the ground became open and grass-covered.

Only three basalt chips were collected from this site, but a sample of artifacts was recovered. They included two basalt end-scrapers; a plano-convex jasper scraper; three basalt side-scrapers; five retouched flakes; one bone awl; a broken quartzite conical pestle, seven inches long; and three projectile points. Two of the points were basalt. One was a Middle Period "fishtail" point; the other was a corner-notched triangular form that looked like another "fishtail" type. The third point was a late prehistoric side-notched specimen, made of flint (NBal). All material collected came from the surface, or from along a railroad fire-brake that paralleled the river.

24M0510: Pine Creek Site. Occupation Site. Pine Creek is a small tributary stream that empties into Ninemile Creek about 15 miles upstream from the confluence of Ninemile Creek with the Clark Fork River. The site was located in a very large, open meadow. Towards the east, up Pine Creek, the bunch grass gave way to thick stands of timber. No single concentration of occupation could be determined. Material was collected in an area 250 feet along either side of the creek, and 600 feet up Pine Creek. Lithic material
was extremely abundant at Pine Creek. Manufactural waste included 200 pieces of basalt, ranging in size from small chips to very large flakes and cores. Thirty flakes of siltstone were collected, and we found a few pieces of chert and chalcedony. Cutting and scraping tools were very much in evidence at 24M0510. Numerous retouched flakes appeared. Scrapers of basalt and siltstone were of various types including end, side, plano-convex, and keeled. Four basalt perforators were collected. Nine stone knives comprised almost every type described by Loendorf (1964). Triangular, "classic" ovoid, and lanceolate types were represented. Two large pieces of gray slate worked into rough choppers also occurred.

Two aspects stood out when one considered the role of 24M0510 in prehistoric life patterns. The site produced many scrapers, knives, and perforators. This indicated a seasonal occupation site of a semi-permanent nature: a place where butchering and hide dressing was performed. The second aspect had to do with the site at Pine Creek seen in relation to several other sites in the Ninemile Valley. Sites have been found on several creeks below Pine Creek. This line of occupation sites, proceeding up the Ninemile Valley, seemed to indicate a local migration route from the Clark Fork Valley, over the Ninemile Divide at Siegel Pass. This thought will be expanded later. In any case, the sheer volume of material at Pine Creek argued for a site used repeatedly over a long
After discovery of the site at Pine Creek, we surveyed several other streams in the upper Ninemile Valley. One of these streams was Josephine Creek, and it too proved to be an interesting site. The site was surveyed for surface material a number of times after the initial inspection. Material, especially manufactural waste, proved to be almost as abundant at Josephine Creek as it was on Pine Creek. Josephine Creek is about four miles downstream from Pine Creek. It also empties into Ninemile Creek. The site was fairly open, but pine trees were scattered over most of it.

Material was collected from an area 200 feet by 300 feet on the northwest side of the creek. It included 60 chips of basalt; 18 of siltstone; 9 jasper; 4 chalcedony; 1 black; and 2 green obsidian. The site at Josephine Creek, like that at Pine Creek, produced many hand tools. Five siltstone end-scrapers; three siltstone side-scrapers; two basalt end-scrapers; and five basalt drills were collected. Knives were represented by the basal tang of a basalt, tanged knife, and a basalt knife blank. The single projectile point found at 24M0511 was a small triangular basalt point, unstemmed, with a straight base (Nba).

The comments made about the prehistoric use of 24M0510 also apply to 24M0511.

24M0512: Cyr Farm Site. Occupation Site. The John Cyr farm is located on Ninemile Creek only 100 yards from
its mouth in the Clark Fork River. There was a narrow bench above the Cyr house. It ran about one-quarter mile up Nine-mile Creek. The soil was never turned until Mr. Cyr began planting oats on the bench fifteen years ago. The plow cut to a depth of six inches and turned up one of the most significant occupation sites in the research area. It ranks with the Demin farm (24M0504) in the number of old projectile points it has produced. The site far surpassed any known in the research area for number and variety of large hand tools.

Basalt, siltstone, green obsidian, and chert were represented by chips and flakes. Basalt and flint cores were also collected. The small hand tools consisted of side and end-scrapers, retouched blades, perforators, ovoid, and triangular knives. The large hand tools represented were fully grooved mauls and pestles.

Pestle types ranged from the earliest found in the Montana Western Region, to types historically associated with the Flathead and Pend d'Oreille. Two conical pestles, each eight inches long, were of a type diffused from the Columbia Plateau during the Late Hunter: Phase I time period (Malouf 1962). Five pestles, ranging in length from 10 to 17 inches, demonstrated the development of an elongated conical pestle which post-dates the Columbia Plateau type. One eight-inch long pestle was the so-called "potato masher" type, favored by the Salish in late prehistoric and historic times. Three pestles, 12 to 17 inches long, showed wear from grinding
rather than pounding. Two of these specimens had markedly beveled surfaces due to this kind of use (Malouf 1962).

The three mauls represented in the Cyr collection were all fully grooved. They were the elongated type that diffused into the Montana Western Region from east of the Divide in late prehistoric times (Malouf 1962). Descriptively speaking, the largest was roughly the size of a cantaloupe, the second largest about the size of a large apple, and the third was slightly smaller than the second.

The 21 projectile points in the Cyr collection seemed to vary in age from the early Middle Period to the Late Hunter: Phase II Period. Specifically, McKean and Duncan points were represented; lanceolate and triangular forms with wide corner-notches; also triangular forms with narrow corner and side-notches.

Two other artifact types, each represented by a single specimen, were noteworthy. One was a small, flat stream pebble. It was four inches long, by two and one-quarter inches wide. Both edges showed one rough flake removed as if to facilitate hafting, or tying the pebble to a line. The other interesting objects are something similar to what Malouf has called a "ceremonial pestle," or "mystery object." The specimen from the Cyr collection was made of green argillite, and was 17 inches long. It was beveled bifacially at one end; the other end was somewhat flattened like the top of a conical pestle. It showed no wear from any kind of use.
Aside from its symmetrical form and a well polished surface, another singular detail was the series of short incised lines along one side of the pestle. These may be some kind of mnemonic device, which strengthens the likelihood that their use was ceremonial. Malouf has tentatively placed these pestles within the Late Hunter: Phase I time period (Malouf 1962).

The above paragraphs describe a sizable collection. Nevertheless, in several talks with Mr. Cyr the author learned that some years ago he threw away a box containing almost twice the number of large hand tools now in his collection. Mr. Cyr could not be sure but he felt those discarded were of essentially the same types as the ones he saved. Judging from past experience, I would suggest that there is probably much more material still on the site.

24M0513: Marion Creek Site. Occupation Site. Marion Creek is a tributary of Ninemile Creek, located one mile below Pine Creek, and three miles above Josephine Creek. Topographically, the site at Marion Creek is much like 24M0510 on Pine Creek, i.e., located in a large, grassy meadow, surrounded by thick stands of pine trees. The area of occupation lined both sides of the creek for some 250 feet upstream, and extended laterally about 150 feet on either bank. Fifty-six pieces of basalt were collected; sixteen pieces of siltstone; and two small chips of jasper. Two ovoid knives of basalt, and one of siltstone, were recovered. Scrapers were plano-convex,
end, and side types: made of siltstone and basalt. Three 
basalt flakes worked to points served as perforators. All 
material collected came from the surface. The area of occu-
pation may well have extended over the entire meadow, but 
appeared to be centered in the specified area.

The comments made with regard to prehistoric use of 
24M0510, also applied to 24M0513 at Marion Creek.

24M0514: Scheffer Ranch Site. Occupation Site. The 
Scheffer Ranch was located in the valley of Sixmile Creek. 
The creek itself ran through ranch property. Judging from 
the size of the artifact collection belonging to Mrs. Loretta 
Scheffer this small valley must have been used frequently as 
a camping area.

The site itself was located a short distance west of 
Sixmile Creek. Most of the site was in a large, open plowed 
field. There was a small grass-covered hill adjacent to the 
field. Material has been recovered from both areas.

The Scheffer collection is almost the equal of the 
Demin collection in size and variety. The collection consisted 
of scrapers, knives, and projectile points. It appeared the 
site has some antiquity, for there were four Duncan and Hanna-
type points in the collection. Corner-notched and side-
notched forms were represented by twelve specimens.

Mineral County

24MN1061: Alberton Site. Occupation Site. A site 
well known to local collectors was located on an alluvial
terrace near Alberton, Montana. It was visited by Mr. Larry Loendorf's archeological survey class in the spring of 1968. The class put down two test pits near the east end of the site. The tests uncovered nine jasper chips, and one basalt flake. Twenty-nine bone fragments, and several teeth were also found. Remains were too fragmentary for an identification of the species. Only two artifacts were found. One was a chert perforator in the upper levels of one pit. The other was a small, crudely flaked, jasper point from the surface. This material, and relevant field notes, were given to the author when this research began.

As stated, the site was a large terrace about 25 feet above the river. It was 2,881 feet long and 260 feet wide. The area had a pine tree cover which thinned out toward the river. Forest debris and bunch grass covered the ground (figure 14). In order to facilitate study of such an extensive site it was divided into two sections: A and B. Section A comprised 654 feet at the east (upstream) end of the site. The remaining 2,227 feet was designated Section B. Surface survey suggested that Section A was the most profitable area for study. Seven test pits were subsequently excavated in the section. Section B received careful surface checks repeatedly, but only two test pits in the middle of the section were dug. No pit was more than 90 feet from the river bank.

In September of 1968 the author took nine people from
Figure 13. 24MN1061 (Alberton Site), Excavation of Test Pit 2.

Figure 14. 24MN1061 (Alberton Site), Looking Northwest.
Loendorf's Indians of Montana class to the Alberton site. Three test pits, measuring five by five feet, were dug. Each was taken down by six inch levels, to a depth of 24 inches. Level 1 was designated from the surface to six inches below the surface; Levels 2, 3, and 4 followed. Pit 1 produced a few chips, flakes, and retouched blades. Pit 3 was sterile. However, in Pit 2, we found six projectile points (figure 13). Five points of chalcedony and jasper came from Level 1. A single point of basalt was found in Level 2. The Level 1 points were dated by material and type as Late Hunter: Phase II. The basalt point was plano-convex in profile. It had a stem produced by wide, shallow, corner-notches, and a straight base (SCb2). The convex side showed a medial ridge formed by transverse flaking. Points found by Mulloy (1958) in Level 1 of the pictograph cave placed this point in the Middle Period. Level 1 of Pit 2 also produced three interesting scrapers. One was a large green obsidian side-scraper, the other two were end-scrapers of jasper, and chalcedony. After this promising start, production in Pit 2 quickly faded. The only other material to come from the pit was five bone chips from Level 2; a fire-blackened rock; not associated with a hearth, came from Level 3. Test Pit 4 was the last work done on 24MN1061 in 1968. All material came from Level 2. It consisted of one chalcedony chip, and four small basalt chips.

During the period 5 to 7 May 1969, test pits 5, 6,
and 7 were dug. Level 1 of Pit 5 produced a few flakes of basalt, chalcedony and jasper. One triangular chalcedony point appeared. It was side-notched, with a straight base, and showed some basal thinning (NBa1). One jasper, one chalcedony, and one (retouched) basal flake came from Level 2. One bone chip, and several small pieces of charcoal completed the material found in Pit 5. Test Pit 6 was culturally sterile. One feature at 24MN1061 was found in the top of Level 2 in Pit 7. This was a small hearth consisting of 10 fire-cracked rocks (figures 15, 16). It measured 20 inches by 12 inches, with a lens of charcoal three inches thick. The matrix was light brown, water deposited sand. There were no associated objects. It appeared to be a cooking area but was not associated with a floor or structure.

Test Pits 1 and 2, in Section B, were excavated 10 May 1969. Neither pit produced any significant results. Fire-cracked rock (not associated with a hearth), charcoal, and a few basalt chips were found. Nothing occurred below Level 2.

Twenty-one projectile points were found on the surface of 24MN1061. Fourteen of these were made of flint, jasper or chert. They were all triangular with narrow corner-notches, or narrow side-notches (SCb; NBa). Bases were straight, convex and concave. All of these points seemed to be very recent in origin; Late Hunter: Phase II was indicated. The remaining seven points of basalt were
Figure 15. 24MN1061 (Alberton Site), Test Pit 7 Looking West.

Figure 16. 24MN1061 (Alberton Site), Close-up of Hearth in Test Pit 7.
also triangular in shape. For the most part their typology also suggested a relatively recent origin.

Like many other terrace sites found along the Clark Fork, 24MN1061 seemed to be an area frequently used for transient camps. The large number of recent point forms, and the siliceous nature of much of the material suggested that the site was used extensively in late prehistoric times. Indeed, the material frequencies may indicate a campsite that developed into something of a cultural center, or at least a semi-permanent village, during late Phase I and early Phase II Late Hunter times.

24MN1062: Mead Ranch Site. Type of site unknown. Moose Creek was a small trickle of water that emptied into the Clark Fork River from the north. It was six miles west of Alberton. On either bank, at the mouth of the stream, a scant amount of material was collected. Topographically this was an unimpressive site. It was very low along the river, and seemed to be formed entirely of river deposited sand and gravel. The site was thickly covered with scrub pine of no great age.

I found 14 basalt chips and two chips of green obsidian. Artifacts were scarce. The tip of a basalt knife, a triangular siltstone perforator, a flint perforator, and a retouched flake of flint were collected. The only diagnostically valuable artifact was a triangular point of basalt, with wide corner-notches and convex base (SCbl).
All material came from the surface of the sandy beach.

The type of site represented by 24MN1062 could not be determined with any certainty. It was probably a transient campsite favored because of its proximity to water and the shelter provided by steep surrounding hills.

24MN1063: Freezeout Creek Site. Type of site unknown. On the opposite side of the river (south) from Moose Creek, there was a narrow terrace. It ran from Moose Creek to Freezeout Gulch. The terrain was generally open, with small stands of pine trees in several areas.

About halfway between Moose and Freezeout Creeks, a projectile point was found on the surface. The point was made of basalt and was about two inches long. It had a shallow, wide, corner-notch on one side. The other side was not notched, rather it was constricted from the middle of the point to the base. The base was slightly indented. The point looked like a crude variant of a McKean point and appears to be related to the points found by Malouf on Level III, or perhaps even Level IV, at Flathead Lake. This, according to the horizons worked out at Flathead, would put the point type in the Middle Period.

24MN1064: Rivulet Site. Type of site unknown. Another site established on the basis of a single projectile point was at a place called Rivulet. Rivulet was a cluster of half a dozen homes built at a railroad siding, and occupied mainly by railroad families. Fifteen years ago a local school boy found
a point in a large field next to the South Side Road at Rivulet. He gave the point to William LaCombe, a teacher at Alberton Grade School. LaCombe made his collection and much other valuable information available to the author in the course of this research.

The point was made of basalt. It was slightly less than one inch long. It had an unusual shape: it was closer to being ovoid than triangular or lanceolate. The very wide corner-notches formed a stem that was slightly indented at the base. The shape of the point, the wide notches, and the somewhat crudely executed workmanship suggested this point belonged to the late Middle Period. As in the case of 24MN1063, no statement about the type of site could be made. My survey of the field and surrounding area failed to turn up any additional material.

24MN1065: Tarkio Site. Occupation Site. Another site located near a railroad siding was 24MN1065 near the community of Tarkio. The site and the town are set in one of the narrow canyons cut by the Clark Fork in this area. The site itself occupied a flat, narrow terrace about 75 feet above the river. The terrace was 150 yards long and 25 to 50 yards wide. Though the surrounding hills were well timbered, the site was an open, grassy area.

Fourteen chips of basalt were collected. Some showed secondary retouch. I also found two small pieces of black flint. Only one projectile point was recovered from 24MN1065.
It was a triangular-shaped point (SCb1). The corner-notches were so wide that they formed a stubby, convex stem (SCb1). Other finds were two basalt flake knives; a plano-convex scraper of basalt; and what appeared to be the blade of a base-corner-tanged knife, approximately four inches long when unbroken. All material recovered came from the surface.

A feature observed at the northwest end of the site was a pit at the edge of the bank overlooking the river. The pit was four feet in diameter, and two and one-half feet deep. It was located in the midst of several trees, and a log was placed along the wall parallel to the river. The dimensions and strategic placement of this pit strongly suggested that it was a "battle pit" such as those described by Thain White from around Flathead Lake (1952).

On the basis of the types and amounts of material recovered, I suggest that 24MN1065 was probably an infrequently-used occupation site.

24MN1066: Tarkio Flats Site. Occupation Site. Nemot Creek flows through the northwest corner of an area known locally as Tarkio Flats. The ranch of Mr. C. H. Frey extends outward along both sides of Nemote Creek, one-half mile east from the river. Once a stage station, then Anaconda Company land, the Happy Hollow Ranch was purchased by Mr. Frey's father in 1903. In the course of ranching activities, Mr. Frey found a number of artifacts. The material came from the surface of the barnyard and a pasture next to Nemote Creek.
The Frey collection contained a maul, two pestles and "four or five" projectile points. The maul measured six and one-quarter inches by four inches; it was fully grooved. The Frey maul closely resembled the elongated mauls from the Cyr collection. The two pestles were the conical type common to the Montana Western Region. The smaller one measured six and one-quarter inches long and was pecked round. The second maul was an angular specimen nine inches long and roughly diamond-shaped in cross-section. Mr. Frey had misplaced the projectile points but he was able to describe them in some detail. The author showed Mr. Frey a point made of basalt, and he was certain that his were made of a different material. From his description it sounded like they were jasper, or a siliceous material of some kind. Next, I drew Mr. Frey several point types. He picked a triangular corner-notched, and a triangular side-notched illustration, as being closest in form to his points. The above interview determined more about what the points were not than what they in fact were. It does seem reasonable to assume, however, that the points were probably of a recent type.

The Tarkio Flats Site was another link in the long chain of temporary occupation sites that follow the Clark Fork River Valley. A small meadow set between two sheltering ridges, with a year-round source of water, would certainly have been visited often by prehistoric residents of the Montana Western Region.
24MN1067: Forest Grove Site. Occupation Site. The Forest Grove Site was located across Highway 10 from the Forest Grove Motel south of Micayune Gulch. Since the construction of Interstate 90 the motel has had few visitors, and the picnic area occupying the site had only sporadic use. The site rested on a low river terrace. In places it was barely 12 inches above the normal water level. The terrace measured 150 yards by about 35 yards; the fill was composed of fine water-deposited sand. The pine trees scattered over the site were all young. Considering the topography, 24MN1067 appeared to occupy a sandbar deposited not more than 200 years ago. Archeological evidence supported a recent age for the site.

Five projectile points and two basalt side-scrapers comprised the artifact assemblage. The base was broken away from a triangular, chalcedony point. However, the other four points were of the same type. One was made of basalt while the remaining three were chipped out of jasper. These points were triangular, with narrow side-notches, and indented to concave bases (NBbl). Typologically, they were classic Late Hunter: Phase II points. A singular aspect of 24MN1067 was the lack of any type of manufactural waste. No chips or flakes of any material were collected.

Taken together, topographical and archeological evidence suggested that 24MN1067 was a campsite of recent origin, and relatively little used.
24MN1068: St. Clair Site. Occupation Site. Approximately one-half mile downstream from the Forest Grove Site the Clark Fork bends sharply west for a half-mile, then turns straight north. The St. Clair site was located on a terrace at the angle of this L-shaped meander. The terrace was 20 feet above the river and perfectly flat. It followed the river north for one-quarter mile, and remained about 50 feet wide for most of its length. Older terraces rose in steps behind it to a height several hundred feet above the river. The site was heavily timbered and covered with bunch grass. The thick grass, combined with forest debris, made ground survey difficult everywhere except along the edge of the bank.

Nineteen basalt chips were recovered from 24MN1068, as well as one yellow, and four red chips of jasper. A small jasper flake scraper was also found. Knives were represented by two broken specimens: the tip of an ovoid basalt knife, and the tip of a flint triangular knife. Two flake spoke-shaves, and four perforators were also found. Projectile points were numerous and typologically varied. Lanceolate forms were represented by a broken tip, and a stemmed lanceolate point with wide corner-notches and convex base. Triangular-shaped points had wide corner-notches, narrow corner-notches, and in one case narrow side-notches (SCb; NB). Of the 10 points from 24MN1068, 7 were basalt, 2 were flint, and 1 was jasper. One of the flint points was a
triangular form with very wide corner-notches and straight base. The material suggested a recent date but the typology was typical of late Middle Period points. It may be one of the rare examples of a point made from flint deposits native to the Montana Western Region. All material came from the surface.

Three battle pits were found on the St. Clair Site. The pits were numbered from the west upstream towards the east. Pit 1 was six feet in diameter and two and one-half feet deep. It was only a few inches from the edge of the present river bank. Pit 2 was 288 feet upstream. It was seven feet in diameter, two and one-half feet deep, and twenty-six feet from the river bank. There was a low earth mound four to eight inches high around the front and sides of the pit facing the river. Pit 3 was 82 feet from Pit 2. It was six feet in diameter, two feet deep, and eight feet from the bank. It had a remnant of a dirt mound on the three sides facing the river. All the pits were so placed as to be among, or screened by, pine trees. The pits could accommodate one or two persons and keep them concealed from anyone traveling on the river or along the opposite bank (figures 17, 18). There was no cultural material associated with the pits. Chips and flakes have been found near them. Thain White, in his paper "Battle Pits of the 'Koyokes,'" describes the use of these pits. He believes they were constructed by war parties to serve as a rendezvous for exchang-
Figure 17. 24MN1068 (St. Clair Site), Pit 2 Looking Toward the East.

Figure 18. 24MN1068 (St. Clair Site), Pit 3 Looking Toward the Southeast.
ing information, as a base from which to operate, and if need be a defensive position. In their study of the Hell-gate, Griswold and Larom described a pit located on a hill overlooking the river, which they called a Koyokee battle pit. It was six feet in diameter and one and one-half feet deep. They said, "The pit was placed so that it gave an excellent view through a screen of trees up the Clark Fork Valley" (Griswold and Larom 1954:19). They noted it was similar to pits found near Flathead Lake by Thain White. Griswold and Larom concluded the pit was a lookout post for a camp located some distance away (Griswold and Larom 1954:19). This conclusion may be valid for the single pit at Tarkio also. However, the St. Clair site may have been an occupational site used one or more times by raiding parties, as well as peaceful travelers.

24MN1069: Deep Creek Site. Occupation Site. Deep Creek was a perennial stream that entered the Clark Fork from the east, about nine miles above Superior. A site was located on the north bank of Deep Creek adjacent to the river. The site occupied a grass-covered terrace 100 feet above the river.

The site has produced a fair quantity of material, much of it old. A variety of chips and flakes were collected from the surface: 10 basalt chips, 1 chert, 1 jasper, and 3 flint. Surface artifacts included a chert perforator, the tip of a broken basalt knife, the base of a triangular basalt
knife, and six projectile points. There were four lanceolate, and two triangular types. One lanceolate point was unstemmed with a slightly indented base (NAb3). All the other points had wide corner-notched bases (SC). Fragments of a freshwater clam shell were also collected from the surface. There was no evidence that it was a source of food used by 24MN1069's occupants.

Due to the significant number of lanceolate projectile points which seemed to date from the Middle Period, a test pit was dug in the southeast corner of the site. The pit was taken down three levels, each six inches deep. Level 1 was the topmost. All back dirt was carefully screened. Level 1 produced six chips of flint, two chips of red jasper, three basalt flakes, eighteen pieces of charcoal, and one small piece of burned bone. One flint chip showed retouch and may have been a utilized flake. The upper part of Level 1 seemed to be disturbed, perhaps by traffic over the site. Level 2 contained the most material: 1 flint chip, 22 basalt flakes, and a basalt flake knife. Level 3 contained only four chips of basalt.

The site at Deep Creek appeared to be an occupation site that saw heavy use before the Late Hunter Period, and experienced a lessening of activity thereafter.

24MN1070: Second Creek Site. Type of site unknown. This site was located on a terrace about 500 feet south of Second Creek. The terrace lay 80 feet above the river.
Large pines covered the site but there were several open areas of bunch grass. The site was used by campers and fishermen, so there was a well traveled dirt road through it running parallel to the river.

The Second Creek site was not one of the most productive sites found during research. A few basalt flakes, and two artifacts were all that turned up. One of the specimens was a narrow ovoid knife, just over two inches long. It had a notch on one edge about mid-way along its length. If this was to facilitate hafting, the finished tool would resemble a small axe. A projectile point was also found. It was a triangular-shaped basalt point with wide corner-notches and an indented base (SCa3).

It was impossible to determine the type of site 24MN1070 represented. The scanty evidence recovered suggested a campsite. More study is required to determine the time span covered by occupation and the intensity of use.

24MN1071: First Creek Site. Type of site unknown. The site on First Creek resembled 24MN1067 at Forest Grove topographically. It was located on a low terrace of river-deposited sand, halfway between Second and First Creeks. The site had a mature pine tree cover with some bunch grass growing on it.

No chips or flakes were found on 24MN1071. One fragment of a flint blade, a flint scraper, and two projectile points were collected. A basalt lanceolate point one inch
long, with wide, shallow corner-notches, and convex base was one specimen. It looked unfinished or broken in manufacture. The other specimen was a triangular point of flint. It had wide corner-notches, and a convex base (SCal). It was similar to the flint point found at 24MN1068 (St. Clair Site) which was typologically Middle Period. The First Creek point had slightly more rounded sides, but they both appeared older than points usually made of a silicose material.

24MN1072: Otto Hanson Site. Type of site unknown. This site was located on the south side of the Clark Fork, approximately one-half mile upstream from Cougar Creek. It occupied a low, sandy terrace much like the Forest Grove and the First Creek sites. It was from two to six feet above the river, flat; covered with scattered pines and bunch grass. Directly behind 24MN1072 a steep bank rose 100 feet to another terrace. A few chips of basalt were found on the bench above 24MN1072, but none on the site itself.

Material consisted of a flint core three inches in diameter, a basalt scraper, a small river cobble with a groove pecked around it, and a finely worked flint blade one and one-half inches long, and three-eights inches wide at the mid-point. All three artifacts were somewhat unusual. The scraper was a tongue-shaped specimen, one and seven-eights inches long, that could have served as an end or side-scaper. A longitudinal flake struck from the center, and a base that was chipped straight and ground smooth
suggested a hafted implement. The grooved stone was three inches long by two inches wide. It looked like the net sinker from 24MO512, with a shallow groove instead of chips removed for hafting. The blade was small but carefully worked and it must have served some specialized purpose. All material came from the surface.

Considering the low elevation of the terrace, and the lack of chips and flakes it did not seem impossible that the material was water deposited; either by the river, or washed down from the terrace above.

24MN1073: Lozo Creek Site. Occupation Site. Directly across the river from 24MN1072 another site was located, called the Lozo Creek Site. The site occupied a river terrace 12 to 15 feet above the river. A thick stand of timber grew over the terrace, and the ground was covered with debris which made survey difficult. The terrace measured 200 yards long by 75 yards wide. I found cultural material in only three places.

Six basalt chips came from the north end of the site, near the river bank. A small piece of slate with a hole worked through its center was also found at the north end of 24MN1073. It lay at the foot of the bank some five feet from the river. The specimen is a quadrangular object two inches long, and one and one-half inches wide. The hole is a little above center and measures one-half inch in diameter. In trying to determine a use for a stone with a hole in it,
I considered several alternatives. It had no aesthetic value so a pendant was unlikely. Other possibilities were a thong stropper, shaft straightener and a net sinker. The latter two possibilities were considered the most probable.

While walking south along the terrace, I noticed some fire-cracked rock weathering out of the bank. A pit was laid out on the edge of the terrace; it was excavated by six inch levels. Five inches below the surface, a fire hearth two and one-half feet in diameter was uncovered. It was a well preserved hearth; the stones were all in place and the circle complete. The stones averaged about six inches in diameter. There was a lens of charcoal four inches thick in the hearth. A single flake of basalt was found in the center of the hearth, nine inches below the surface. Outside the hearth, but also in Level 2, one basalt chip, one flint chip, and a bone fragment were recovered. No other material was associated with the hearth. The terrace was comprised of a dark sandy loam, and the hearth was placed on this. I noted no associated floor or structure.

The Lozo Creek Site was used as a campsite. The vast amount of forest debris covering the site formed a real barrier to survey, however, and a great deal more time and effort would be required to determine how intensively it was used and over what period of time.

24MN1074: Brockway Site. Occupation Site. The Ponderosa Ranch, owned by the Brockway family, is five miles southeast of Superior. A site was located on their property
bordering the Clark Fork. The site occupied a terrace that was essentially flat and ran for about four miles along this section of the river. The site itself lay at the mid-point of this long terrace, directly behind the Brockway house. Along the entire length of the terrace there were alternating open fields and timbered zones. The cultural area was in a stand of young pines. The terrace was 25 feet above the river at this point.

Basalt chips, a few flakes of flint, a chalcedony side-scraper, a "classic" ovoid knife of basalt, and 16 projectile points were found on the site. Eight of the points were basalt. The Middle Period was represented by one Duncan, and one Hanna point; also three triangular points with wide corner-notches. The other basalt points were triangular corner-notched and side-notched specimens. The remaining points were made from several imported stone types: jasper, chert and chalcedony. Three of the points had wide corner-notches and straight to convex bases. One of the points was parallel sided with no stem and a straight base. Another had wide side-notches and straight base. The last two were Late Hunter specimens: triangular, with narrow side-notches and concave bases (NBbl). All the above material came from the surface.

It seemed probable that 24MN1074 was an occupation site. The ovoid knife, scrapers and basalt chips pointed to this conclusion. It was not clear why there was a
preponderance of arrow points on this quarter-mile of terrace. The trees on the site were all young. In former times the site may have been an open meadow attracting game and therefore favored by hunters.

24MN1075: Superior Site. Occupation Site. While fishing in the Clark Fork at the west edge of Superior, Montana, Mr. Bill LaCombe discovered a site he called the Superior Site. On several return trips to the site Mr. LaCombe collected basalt chips, flakes and a number of artifacts. Initial discovery was some 18 years ago. Material was spread over a triangular-shaped terrace area, approximately 300 by 150 yards. Most of the material was concentrated at the west end, or apex, of the triangle. Since then the city of Superior has constructed a reservoir on the site, and inundated the most significant part of 24MN1075.

Before the site was destroyed, the following artifacts were recovered. One flint end-scraper, one basalt end-scraper, a jasper graver, two jasper perforators, the bases of two flint ovoid knives, and three basalt projectile points. All of the points were triangular in shape. One had wide corner-notches with concave base (SCa3); the second a straight base (SCa2); the third had wide corner-notches and a straight base (SCa2). All material came from the surface of the terrace which was fifteen feet above the river.

The tool assemblage recovered from 24 MN1075 indicated it was an occupation site. Two of the points were the same
type as those recovered by Malouf on Level III at Flathead Lake. This indicated an age of at least late Middle Period for the site.

24MN1077: Kinney's Interstate 90 Site. Occupation Site. Among several informants living in the Alberton area, Mr. and Mrs. Leo Kinney were two of the most helpful. They related much useful information on the early history of the area and provided introductions to local people who owned collections. One of their most substantial contributions was telling the author about a site on a section of river terrace just across Interstate Highway 90 from their rock shop in Alberton. The site was approximately 600 feet long by 100 feet wide, although the terrace itself was much larger. It was 25 feet above the river, bounded on the south by the river and on the north by Interstate 90. Like the Alberton Site, 24MN1077 was known to local collectors and had been dug into in several areas.

Twenty-four chips of basalt and one of jasper were recovered from the site. One basalt core was also found. Four basalt projectile points, in the collection of Mr. Bill LaCombe, were the only artifacts that could be traced to the site. Two Hanna-like points were represented. They were lanceolate with wide corner-notches, and slightly convex bases. The other two points in the LaCombe collection were triangular. They were long and narrow, with narrow corner-notches, convex, and notched bases (SCa1; SCa3). All of
this material came from the surface.

It was difficult to type this site on the basis of the material recovered. In view of 24MN1077's location and the presence of manufactural waste as well as arrow points, I felt that the site was a transient occupation area. Not enough material was recovered to make a reliable estimate of the intensity and duration of occupation. At least two of the points did suggest that 24MN1077 was fairly old.

24MN1078: Fish Creek Site. Occupation Site. A small site was located on a terrace 40 feet above the mouth of Fish Creek. The terrace was bordered by the river on the northwest and Fish Creek canyon on the south. The Burlington-Northern roadbed cut across the rear of the site and made the total area of 24MN1078 approximately 60 by 50 yards. The site was open, covered with bunch grass and a few pines.

Little material has been recovered from this site to date. It consisted of 15 basalt flakes, 4 siltstone flakes, 2 jasper chips, and 1 chip of green obsidian. The only artifact recovered on two trips to the site was a plano-convex scraper of basalt. It showed excellent retouch along the cutting edge, and it was heavily patinated.

Scanty evidence made typing the Fish Creek Site with certainty impossible. Often sites in the Montana Western Region yield nothing more than a collection of chips and flakes. It has been assumed in the course of this research that the presence of such chips and flakes indicated the
manufacture of tools. It has also been assumed that normally such tool making was not done in haste while on the trail, but rather when the maker had some leisure, that is, when camped. On the basis of these assumptions 24MN1078 has been called a temporary occupation site.

24MN1079: Cyr Peak Site. Occupation Site. This site was located on a river terrace about two miles upstream from the mouth of Fish Creek. The terrace ran almost the entire distance between 24MN1078, at Fish Creek, and 24MN1079. It was also part of the same land form on which 24MN1080 was located. The river has eroded approximately 100 yards of terrace away thus separating 24MN1079, and 1080. It is possible that in former times the terrace was complete. More study may establish these two sites as a single, very large, zone of occupation.

The terrace in this area had a scattered evergreen tree cover and abundant bunch grass (figure 19). Most of the material was found along a 300-yard stretch of fire-road that cut through the site. The heaviest concentration was in the easternmost 100 yards of the road.

There was a generous amount of diversified material from 24MN1079. Chips and flakes included three of jasper, eight of green obsidian, five chalcedony, twelve siltstone, and 216 pieces of basalt. One fist-sized core of basalt was collected. Artifacts included retouched flakes, five spoke-shaves, four end-scrapers, five side-scrapers, five
Figure 19. 24MN1079 (Cyr Peak Site), Looking South.
perforators, one knife, four broken and three complete projectile points. All of the artifacts were made of basalt. Two of the broken points were triangular, plano-convex tips, with missing bases. The third fragment was the base of a point that had wide corner-notches and an indented base. The fourth fragment was a triangular form one inch long with about one-half inch of the tip missing. It was three-quarters of an inch wide across the base. It was unnotched and had a straight base (NBa). One of the complete specimens was a triangular point seven-eighths inches long and five-eighths inches wide. It had corner notches and a convex base (SCal). The second point was an unfinished specimen. The stem of the point was not completely chipped and part of the original surface of the flake was intact. It was one and one-quarter inches long and five-eighths inches wide. It had very wide corner notches and a convex base (SCal). The third point was lanceolate, two inches long and its maximum width was seven-eighths inches. It also had very wide corner notches which formed a slightly flaring stem and it had a straight base. The base was smoothed by grinding. All material recovered came from the surface or was found in the fire road which was about six inches deep.

It seemed clear that 24MN1079 was no ordinary campsite. The site reflected a situation similar to that observed at Pine, Josephine, and Marion Creeks. Like those sites, 24MN1079 had many tools associated with skinning and dressing hides.
No projectile points of a recent type were found. Three specimens seem to predate Late Hunter times. In addition, although some siliceous material was recovered, all of the artifacts and the bulk of the manufactural waste was basalt.

One of the factors that made 24MN1079 unique was the superabundance of micro-chips. Well over half the basalt chips collected were one-quarter to one-eighth of an inch or less in diameter. No attempt was made to recover all available waste material and literally hundreds of these micro-chips were left on the site. The amount of detritus seemed to indicate that an unusual amount of fine pressure retouch workmanship was done at the Cyr Peak Site. Also, of the nine spoke-shaves recovered from the entire research area, five came from this site.

**24MN1080:** Many Points Site. Occupation Site. As mentioned above, this site occupied the same terrace as 24MN1079. It was located roughly 100 yards farther upstream, on the east side of a large washout area. It may have been related to 24MN1079 temporally as well as physically. The terrace at this site was extremely narrow and has been narrowed further by fill placed across the rear of the terrace for the Burlington-Northern roadbed. In places, the bench was only 10 to 15 feet wide. It reached about 20 yards wide in other places. Vegetation changed from scattered pines and bunch grass at the east end of the site to bushes
and deciduous trees at the west end. An extension of the fire-road on 24MN1079 was cut through this site also. All of the material collected came from this fireroad.

The material assemblage from 24MN1080 included single chips of jasper, chalcedony and siltstone; four of green obsidian; and thirty-nine basalt chips and flakes. Cutting and scraping tools were these: one triangular basalt flake knife, which could also serve as a perforator; three basalt plano-convex end-scrapers; and the basal portion of a basalt ovoid knife, about seven inches long when complete. One perforator or graver, of basalt, and one perforator of siltstone were recovered. Eight basalt points were collected from 24MN1080. One specimen was the tip of a large triangular plano-convex point. Two of the points were large triangular forms, with parallel to slightly convex sides, unstemmed, and with straight bases (NBa). They measured just over one inch long and were seven-eighths inches across the base. One point found was a "fishtail" type. Another point looked as though it was a smaller varient of the "fishtail" type. It was broken about halfway from the tip, so its shape could not be determined with certainty. The base, however, showed wide barbed corner-notches, which formed a slightly flaring stem with a concave base. The fourth type of point recovered from 24MN1080 was triangular in shape, and measured one and one-half by five-eighths inches. It had very wide side-notches. These notches produced a stem one-third the total length of
the point. The stem flaired slightly, the base was straight, and was ground smooth. Another point type was represented by two specimens. They were triangular in shape, with wide corner-notches, and slightly convex bases. The bases were notched also (SCa3; SCb3).

Based on the type of material found, I called 24MN1080 an occupation site. It was clear that the site dated from at least the Middle, and possible Early Middle Period. It also seemed clear from the insignificant amount of silicous material recovered that the site was not much used by Late Hunter: Phase II peoples. Indeed, all point types so far recovered suggested a decline in use preceded Late Hunter times.

There were several problems raised that would require an indepth study of 24MN1080 in order to be resolved. For example, there was relatively little waste recovered from this site, yet a significant number of artifacts, especially projectile points, appeared. This is even more puzzling when one regards the profusion of chips and flakes at 24MN1079. Also, what were the true temporal and physical relationships between sites 24MN1079 and 1080? Finally, why did these seemingly important sites undergo a decline in use or would excavation show the decline was more apparent than real?

24MN1081: Big Bend Site. Type of site unknown. Since significant finds were made at 24MN1079, and 1080, the terrace directly across the river from these sites was closely surveyed. In this area the Clark Fork had cut a deep canyon,
and terraces on both sides of the river were from 60 to 100 feet above the water. The terrace on the northwest side of the Clark Fork, where 24MN1081 was located, varied from under 500 to over 1000 feet wide. In places it was heavily timbered. Open areas, covered with weeds or bunch grass, occurred throughout the terrace. Much of the survey was carried out along one-half mile of an overgrown fireroad near the river bank. All material recovered came from this road.

Despite the presence of significant sites in the area, little material was collected from 24MN1081. Three chips and one large flake of basalt were found. Only three artifacts were recovered. One was a basalt flake knife an inch and one-half long, by three-quarters of an inch wide. It showed retouch along one edge. A heavily patinated and crudely worked plano-convex scraper of basalt appeared. It too showed some retouch along the cutting edge. The last tool recovered was a broken lanceolate ovoid knife of basalt. The break was diagonal: at about the middle of the knife. The specimen was then reworked to form a perforator or graver. Several chips were struck off the opposite edge from the break. This formed a pike a little more than one-quarter inch long.

Not enough material was recovered to determine the type of site 24MN1081 represented. Considering its proximity to two exceptional sites, the Big Bend Site was disappointing. Nevertheless, the importance of a freshly cut fireroad on the former two sites should not be underestimated. If some of the
blanketing debris was stripped from 24MN1081 it might also show rewarding results.

24MN1082: Miller Field Site. Occupation Site. A farm owned by Mrs. Freda Miller of Alberton is located along the banks of the Clark Fork River a short distance northwest of Alberton. Mrs. Miller resides in Alberton and rents the property to the Hunt family. A site was found on this farm several years ago.

The farm and the site occupied a low, flat terrace 10 to 15 feet above the river. Material came from a field behind the barn. A few pines grew along the bank and at the northwest end of the site. The field was a barren piece of ground used to confine animals. Its natural state had long been destroyed.

Material consisted of a dozen basalt flakes, and ten projectile points. One of the points was a Hanna type, slightly over one inch long. Two points were lanceolate forms with wide corner-notches, slightly flairing stems, and concave bases. They could be described as having indicative fishtail bases. They measured one and one-half, and one and three-quarters inches long. These points looked like material from Level 4 at Flathead Lake: Middle Period. All material was found eroding from the surface.

This site was tentatively identified as a temporary occupation site. It may be related to 24MN1061 which was only about one-eighth mile upstream and occupied the same
terrace. These two sites probably represented a widespread "zone of occupation" rather than two distinct camping areas. A stemmed lanceolate point from 24MN1061 suggested that they saw contemporary use, at least in their early development.

**Sanders County**

24SA1016: Cascade Tunnel Site. Occupation Site. This site was located on the north side of the river, near Quinn's Rapids, in Sanders County. The site was in an open area, between steep ridges. It formed a half-circle, with the river on the open side, and hills on three sides. The site was approximately one-quarter mile long and 100 yards wide at its radius. Two older terrace lines rose behind the bench occupied by 24SA1016. Behind these, the mountains sloped upward several hundred feet. The site was covered with bunch grass, weeds, mountain heather, and scattered pine trees.

Manufactural waste included 19 basalt flakes, 13 siltstone flakes, and 1 flake of chert. A basalt core and two siltstone knife or scraper blanks were also found. Recovered artifacts included one basalt and one siltstone end-scrapers, two siltstone perforators, one basalt perforator, and two basalt projectile points. The older point form was a classic "fishtail" type of the Forager Period: Level IV at Flat-head Lake on the local time scale. The point was one and one-half inches long. The second point was just under one inch long. It was triangular with narrow corner-notches, and a straight base (SCa2). The base of a third basalt point
was also found. This specimen was broken at the place where the stem joins the blade. It seemed to be about the size of the smaller point described above. It too was corner-notched and had a straight base. Most of the material, and all points, came from two fireroads cut across the site parallel to the river.

It appeared from the evidence recovered that 24SA1016 represented a temporary occupation site of considerable age. The lack of a significant amount of silicous waste material suggested the site was little used during recent times.

24SA1017: Sesame Creek Site. Occupation Site. A second site in Sanders County was 24SA1017, on Sesame Creek. It was located on a terrace adjacent to the west bank of the creek, about 600 feet from the river. The site was a quadrangular area about 80 yards across; bounded on the north by mountains; on the south by the highway; on the east by Sesame Creek; and on the west by a ravine. It was topographically part of a larger river terrace, intersected by the highway. The site was completely open. Bunch grass and weeds covered most of it.

Material came from the surface of the site. The majority was found in the eastern half, closest to the creek bank. Recovered chips and flakes included nine basalt, one chert, and one green obsidian. Four basalt arrow points were recovered. Each one was typologically different. The first specimen found was a triangular point one inch long,
with about one-half an inch of the tip broken away. It had very wide corner-notches, which produced a slightly flaring stem. The base had a notch one-eighth inch deep. The point was lenticular in cross-section and showed good workmanship. The edges of the basal notch were ground. The second point was also triangular-shaped, and just over one inch long. It had wide corner-notches, an expanding stem, and a straight base (SCa2). The point was plano-convex in profile. Extremely fine retouch along both sides of the point produced serrated edges. The third point was seven-eighths inches long and only five-sixteenths inches wide. It was triangular-shaped, with no stem, and a straight base (NBa). It did have a small flake scar on one side and it seemed to be ground in this area. The final point found was a crudely worked specimen. The point was unfinished or broken. What was left of the basal portion of it showed a parallel sided stem with slightly concave base.

This site was classified as a temporary occupation area. It was probably Late Hunter: Phase I, or possibly as old as late Middle Period.
CHAPTER V

ARTIFACT ANALYSIS

The following section is a detailed analysis of artifacts observed and recovered during the field research phase of this study. The purpose of this analysis is to give a picture of the relationships in various artifacts: style, form and use. Connections with peoples in areas or regions adjoining the Montana Western Region were also considered.

In analyzing the artifacts recovered during field research the usual method employed by North American archeologists was followed. That is, material was divided into broad categories such as chipped stone, ground stone and bone. Within each of these general classes the artifacts were further divided into types. An artifact type was defined as a group of artifacts bearing one or more similar attributes in addition to the general classification of chipped stone, ground stone, etc. Each artifact type was presumed to represent a particular style of implement favored by the makers. Furthermore, a particular artifact type was assume to occupy a recognizable temporal range and have a more or less specific geographical distribution. Since no deeply stratified sites were excavated during this survey, elucidation of the
local chronological sequence of artifact types depended on comparison with work done in other areas.

When dealing with projectile points, Strong's (1935: 88, figure 7) "Classification Chart for Chipped Points" was followed (figure 20).

![Classification Chart for Chipped Points](image)

Figure 20. Classification Chart for Chipped Points (after Strong 1935:88, figure 7).

It has been widely used in the midwest and western states, and offered the most useful way to make necessary comparisons in establishing a local sequence for that part of the Clark Fork under study. Taylor (1973), Malouf (1956b), Borden (1956), and Strong, Schenck and Stewart (1930) all
followed this classificatory system in dealing with materials recovered in the northwest.

**Chipped Stone Artifacts**

**Projectile Points**

*Type NAa.* Two specimens: Plate 1 a and b. Not stemmed, lanceolate, pointed at both ends.

The flaking on one specimen was rather crude. The second point exhibited well directed percussion flaking technique. Both points were retouched along their entire circumference. There was no evidence of grinding on either point. These points fell within the prescribed characteristics of Cascade points (Butler 1961). The Cascade point is a horizon marker within Butler's "Old Cordillerian Culture," dated from 9000 B.C. to 3000 B.C. Taylor (1964; 1973) has twice reported similar finds from Montana. In 1964 he recovered Cascade points from within the boundaries of Yellowstone National Park. He felt the Snake River Plains, or the Montana Western Region, were the probable routes of diffusion to the Yellowstone country. He further stated that Cascade points may represent "... the earliest evidence for influences into the park from the west" (Taylor 1964:184). Taylor (1973) reported a Cascade-like point from a site adjacent to the Canadian border (24LN517). He refused, however, to label the specimen a Cascade point. Taylor noted, "I cannot see our projectile point as Cascade; it occurred mixed in the
same level with other types, and no great antiquity can be ascribed to that level" (Taylor 1973:75). Cecil D. Barnier recovered a point that also appeared to be a Cascade type. The point came from the McDonald Lake Site (24LA504) high in the Mission Range of western Montana. The site was on the bank of a glacial lake, and appeared to have been occupied from the early Middle Period. In addition to the Cascade point, McKean and Duncan points were also found (Barnier 1971:1-47).

The points recovered in this survey were both surface finds. Consequently, the assertion that they represent the relatively ancient "Old Cordillerian Culture" was based strictly on typology. However, one of these points came from a site which produced McKean, Duncan and Hanna types also from the surface. With Cascade-like points now reported from at least four sites in the Montana Western Region, it does not seem unreasonable to hypothesize that an ancient culture type concentrated in the Cordillerian Region of the Pacific Northwest was present in the Montana Western Region from at least the early Middle Period and probably earlier.

Provenience: 24M0512; 24MN1082.

Comparable specimens: Dalles-Deschutes Region, Washington-Oregon (Strong, Schenck and Stewart 1930); Kootenay River, British Columbia (Borden 1956); Columbia Plateau (Daugherty 1956); Columbia Plateau (Butler 1961); Columbia Plateau (Butler 1962); Columbia Plateau (Swanson 1962);
Columbia Plateau (Butler 1963); southeastern Montana (Taylor 1964); McDonald Lake Area, western Montana (Barnier 1971); northwestern Montana (Taylor 1973).

**Type NAb2.** One specimen: Plate 1, c. Lanceolate, not stemmed, pointed at one end, straight base.

This point was a well made specimen, fashioned by percussion, with secondary retouch along the blade edges. Some basal thinning was apparent. The point was made with a single, shallowly sloping, shoulder about one-third of the way up the blade edge. At some time in its history the point was broken a few centimeters below the tip. The maker, or subsequent users, of the point then retouched the broken area into a sharp concave scraper. The reworked point might also have served as a spoke-shave. Taylor (1964) illustrated a similar point from Yellowstone Park which he called a Type IV point in that survey (Taylor 1964:106). Barnier illustrated a specimen exactly like the point herein reported from the McDonald Lake Site. It was approximately the same size, and exhibited a single shoulder with basal thinning. Barnier called this his "Type 4" lanceolate knife (Barnier 1971:34-35).

Provenience: 24MN1069.

Comparable specimens: Columbia Plateau (Butler 1961; 1962; 1963); Yellowstone Park Montana (Taylor 1964); Lake McDonald, Mission Mountains, Montana (Barnier 1971).
Type NAb3. Two specimens: Plate 10, a and b. Lanceolate, not stemmed, concave abse.

These points were formed by oblique percussion flaking, then retouched along the blades. Basal grinding was apparent on one specimen and possible on the other.

These points fit the type of early Middle Period projectile point called McKean. The McKean complex was widespread throughout the western United States and the prairie provences of Canada. It is thought to represent a culture centered around big game hunting; with the spear-thrower as its characteristic weapon. Dates for the temporal span of the McKean complex vary, but usually fall within the period of 6000 to 3000 before present (BP).

Provenience: 24MO507; 24MO512.

Comparable specimens: northwestern Wyoming (Mulloy 1954a); Saskatchewan (Wettlaufer 1955); Pictograph Cave: Level 1, Montana (Mulloy 1958); Columbia Plateau, Idaho (Butler 1962); Columbia Plateau (Swanson 1962); Yellowstone Park, Montana (Taylor 1964); Alberta (Wormington and Forbis 1965); north-central Montana (Stallcop 1966); southern Montana (Arthur 1966); southeastern Montana (Husted 1969); western Montana (Barnier 1971).

The following six points were not included in Strong's classificatory system because there were no similar types illustrated.

Lanceolate, stemmed, parallel-sided stem, shouldered, not barbed. One specimen: Plate 10 c.
This specimen was a large, well flaked, bi-convex point. The flake scars were oblique and ran from the upper left to the lower right of the point. The point had strong shoulders and a parallel-sided stem. The length of the stem and the form of the base were impossible to determine due to a fracture just below the shoulders. This point was similar to a number of points classified as SBa. However, they were all distinctly triangular, while this specimen was leaf-shaped. It, therefore, was not included in the SBa type.

No definitive statement can be made about the relationship of a single aberrant form to other types. Nevertheless, the size and shape of the point would seem to indicate some antiquity. It appeared to be too large for an arrow point. Also, it bore some resemblance to variant forms of McKean. On the basis of typology I would assign this specimen to the Middle Period.

Provenience: 24M0507.

Lanceolate, stemmed, insloping shoulders, expanding stem, concave base. Three specimens: Plate 10 d, e and f.

The above three specimens, though characterized by the same typological description, represented two distinct types. Specimens d and e are known as McKean variant, or "fishtail" types. The points show skillful overall flaking techniques. They were pressure retouched along the blade edges from tip to shoulder. The bases show fine retouch
work; the stem of specimen e exhibited some grinding. A relatively large flake was driven from the apex of the basal notch on one side of specimen e. This produced a flute that ran halfway up the stem of the point. Specimen f represented a type of early Middle Period point called Hanna. It too exhibited good flaking technique but was thicker and not so well retouched as d and e. The base and stem showed some grinding.

Provenience: 24MN1082 (d and f); 24SA1016 (e).

Comparable specimens: (d and f) eastern Nebraska, Signal Butte I (Strong 1935); Missouri River near Helena, Montana (Forbis 1950); lower level McKean Site, Wyoming (Mulloy 1954a); southwestern Idaho (Kehoe 1955); Level 4 Flathead Lake, Montana (Malouf 1956b); near Great Falls, Montana (Shumate 1962); eastern Idaho (Swansen and Bryan 1964); Yellowstone Park, Montana (Taylor 1964); southeastern Montana (Husted 1969). (e) eastern Nebraska, Signal Butte I (Strong 1935); south-central Montana (Mulloy 1943); lower level McKean site, Wyoming (Mulloy 1954a); Kootenay River, British Columbia (Borden 1956); southeastern Montana, Pictograph Cave; Level I (Mulloy 1958); south-central Idaho (Sevanson, Tuohy and Bryan 1959); south-central Idaho (Bawers and Savage 1962); Yellowstone Park, Montana (Taylor 1964); western Montana (Barnier 1971).

Lanceolate, stemmed, shouldered, expanding stem, concave base. Two specimens: Plate 10 g and h.
These two points varied greatly in workmanship. Specimen g showed highly competent percussion flaking and very finely controlled retouch along the blade edges. Blade edges were slightly convex and retouch produced a markedly serrated effect. The edges and base of the stem were smoothed by grinding. Specimen h appeared to have been knapped by percussion, but of a poor quality. The point was asymmetrically shouldered. One side had a sharp, straight shoulder; the other a weak insloping shoulder. The base and stem edges were ground. Both points were bi-convex in cross-section.

Points comparable to these were difficult to find in the literature. The best the author could do were two somewhat similar forms from Montana and Oregon-Idaho. Husted recovered a point similar to g and h from the Sorenson Site in Carbon County, Montana. His point was slightly larger and had a straight base. It also showed straight converging blade edges, rather than the ex-curved edges of point g. The point came from Occupation Level IV; dated by Husted at about 3,500 B.C. (Husted 1969:114). Caldwell and Mallory recovered a single specimen (Form 14) from the Hell's Canyon area of Idaho which had some attributes in common with point g. However, the stem of Form 14 was slightly converging and the base straight (Caldwell and Mallory 1967:131). In fact, no satisfactory correlation with any other find was accomplished. These points remain enigmatic.
Provenience: 24MN1069.

Comparable specimens: Hell's Canyon, Oregon-Idaho border (Caldwell and Mallory 1967); southeastern Montana (Husted 1969).

**Type NBa.** Six specimens: Plate 1, d to i. Not stemmed, triangular shaped, straight based, unnotched.

Although all six points fell within the NBa classification, at least two different varieties were represented. Point H was small, thin and very well flaked. The blade edges were ex-curved, and delicately retouched. The base was thinned and ground smooth. It clearly represented the Plains triangular point type, common in Late Period horizons throughout the northern Plains region. Four of the five remaining points were rather large; crudely flaked specimens. Flaking technique appeared to be of a random percussion method, with minimal retouch to the ex-curved blade edges. One of the points was bi-convex in cross-section; three were plano-convex. All points showed extensive basal thinning, but no grinding. These points appeared to have their antecedents on the Columbia Plateau. However, two similar points were reported from eastern Montana. Hoffman recovered a large, triangular, basal point from Yellowstone Park. He noted, "I know of no exact relationship for this point in context of the Plains area. The form and flaking technique, as well as the size suggest that this point belongs to the Early Prehistoric period" (Hoffman 1961:61). Feyhl found one large, triangular
unnotched point that resembles (e) and (f) at the Stark-Lewis site (24GV401). This point came from Level 4, and was found in stratigraphic association with Pelican Lake points (Fehyl 1972:22). Caldwell and Mallory recovered 19 of these points from sites along the Snake River at the Oregon-Idaho border-line in northeastern Oregon. They noted that triangular, nonstemmed points occurred throughout the Northwest, but did not appear to be useful index artifacts (Caldwell and Mallory 1967:59). Strong, Schenck and Stewart (1930-32) recovered 18 Type NBa points from the Wakemap Mound in Washington. More than 50 percent of these points came from the lower levels of the mound. They inferred that the Wakemap Mound was a pre-Caucasian village site. The inhabitants had a basic Salish culture type, adapted to a riverine life-way; featuring a semi-subterranean, earth-covered house type, and a dependence on fishing. Strong, Schenck and Stewart illustrated a point identical to i from Wakemap (Plate 13, 1). They considered this point to be the same type as those resembling d, e, f, g, despite the large variance in size (Strong, Schenck and Stewart 1930-32:78-80, 144).

Provenience: 24MN1061 (h); 24MO511 (g); 24MN1079 (e); 24MN1080 (d & f); 24SA1017 (i).

Comparable specimens: (h) The Gates of the Mountains, near Helena, Montana (Forbis 1950); Hell Gate Canyon, near Missoula, Montana (Griswold and Larom 1954); Flathead Lake, Montana (Malouf 1956b); Kootenay River, British Columbia
(Broden 1956); Long Creek Site, southeast Saskatchewan (Wettlaufer and Mayer-Oakes 1960); Columbia Plateau, Idaho (Butler 1962); central Alberta (Forbis 1962a); southeastern Montana (Husted 1969); Wahkpa Chu'gn bison pound, northern Montana (Brumley 1971); Libby Reservoir area, northwestern Montana (Taylor 1973). (d, e, f, g, & i) Columbia River, Washington-Oregon (Strong, Schenck and Stewart 1930); Camas Creek Site, lower Flathead River, Montana (Jenni 1962); Hells Canyon, Snake River, Idaho-Oregon (Caldwell and Mallory 1967); Yellowstone Park, Montana (Hoffman 1961); central Montana (Feyhl 1972).

Type NBal. Seven specimens: Plate 1, j to l; Plate 2, a to d. Not stemmed, triangular, straight base, small, thin, side-notched.

These points were small, thin, and expertly chipped. Blade edges were ex-curved. Side-notches were delicate, and well defined. Notches were one-third to one-half the way up the blade. These points exhibited very fine pressure retouch along the blade edges, and the base. All but one of the points were made from siliceous material.

This type point has been found universally in the Plains region; in the Great Basin area; and on the Columbia Plateau. It appears everywhere in a Late Period context and as noted earlier is particularly indicative of Phase II: Late Hunter times.
Provenience: 24M0506 (d); 24M0507 (b); 24MN1061 (k, a, c); 24MN1067 (d, l).

Comparable specimens: Dalles-Deschutes, Washington-Oregon (Strong, Schenck and Steward 1930); Mortlach site, south-central Saskatchewan (Wettlaufer 1950); Gates of the Mountains area, near Helena, Montana (Forbis 1950); Kootenay River, British Columbia (Borden 1956); Flathead Lake, Montana (Malouf 1956b); Level III and IV: Pictograph Cave, Montana (Mulloy 1958); Long Creek Site, southeastern Saskatchewan (Wettlaufer and Mayer-Oakes 1960); Columbia Plateau, Idaho (Butler 1962); Madison Buffalo Jump, eastern Montana (Malouf 1962b); Yellowstone National Park (Taylor 1964); southeastern Montana (Loendorf 1967); Wahkpa Chu'gn Bison Pound, near Havre, Montana (Brumley 1971); Libby Reservoir area, northwestern Montana (Taylor 1973).

Type NBb. One specimen: Plate 2, e. Not stemmed, triangular blade, unnotched, concave base.

This specimen was a large, plano-convex point. The convex side showed large, mostly random, percussion flake scars. The excurved blade edges had been retouched. The only work done on the flat side was retouch along the blade edges. It appeared that only a few flakes were driven off the flat side of the point. No real attempt was made to thin the basal area, and no grinding was evident. Overall workmanship was rather crude. This specimen may have been a stemmed point, or knife, which has been broken at the
shoulders. It may also be a point type related to NBa points discussed above. However, it was much larger, thicker, and demonstrated none of the basal thinning of Type NBa. If NBb represented a projectile point, its size, form and flaking technique point to a Middle Period association.

Provenience: 24M0506.

Comparable specimens: No satisfactorily comparable specimens were found in the literature.

Type NBb1. Twenty specimens: Plate 2, f to p; Plate 3, a to h; Plate 9, n. Not stemmed, triangular, side-notched, concave base.

There are two distinct point forms here classified as Type NBb1. The first of these is called the Avonlea point; represented by specimens f through l. These points were small and extremely thin in cross-section. They exhibited a high degree of knapping ability. Flake scars were broad, shallow and generally oblique. Blades were excurred. Side-notches were symmetrically placed and either u or v-shaped; sometimes both styles on the same point. The basal areas showed thinning by pressure retouch.

The Avonlea is the earliest of the point types that comprise Kehoe's side-notched point system on the northwestern Plains. He dates its occurrence from A.D. 210 to A.D. 660. Avonlea is considered to be the first true arrow point found on the Plains. Kehoe believes Avonlea points can be attributed to an influx of Athabascan peoples from northern Canada.
He infers that as these Athabascans moved out onto the north-western Plains they displaced an earlier woodland Algonkian people using a point type called Besant. Along with the bow and arrow, Kehoe believes these Athabascan newcomers brought a hunting technology that was already familiar with the game-drive technique. He notes that pounds were used in the north to hunt caribou, and the Athabascans simply adopted their hunting technique to bison. Avonlea points are numerous in eastern Montana kill sites (Kehoe 1965-66:837-41). The Avonlea also represents a horizon marker for Mulloy's Late Pre-historic Period (Mulloy 1958:163).

Provenience: 24MN1061 (f, g, h, i, j, k); 24MN1068 (l).

Comparable specimens: Alberta (Forbis 1957); Long Creek Site, Saskatchewan (Wettlaufer and Mayer-Oakes 1960); eastern Montana (McCarquadale 1961); Alberta (Kehoe and McCarquadale 1961); eastern Montana (DesRasier 1964); eastern Montana (Davis and Stallcop 1965); eastern Montana (Shumate 1965); eastern Montana (Davis and Stallcop 1966); eastern Montana (Davis 1966); Alberta (Kehoe 1966); Saskatchewan (Kehoe 1966); eastern Montana (Brumley 1971); McDonald Lake, western Montana (Barnier 1971).

The second point type covered in this NBbl classification is the Plains side-notched, already discussed under Type NBal. These points differed from the NBal variety only in that they had a concave, rather than a straight base. They
have been found stratigraphically associated with NBal points in many bison kill sites and date from the same period.

Provenience: 24M0503 (n); 24M0506 (b); 24M0507 (c); 24MN1061 (n, p, d, h); 24MN1067 (c, g); 24MN1074 (a, f); 24MN1082 (e).

Comparable specimens: Gates of the Mountains, near Helena, Montana (Forbis 1950); Kootenay River, British Columbia (Borden 1956); Pictograph Cave, Levels III and IV, Montana (Mulloy 1958); Columbia Plateau, Idaho (Butler 1962); central Alberta (Forbis 1962a); Yellowstone Park, Montana (Taylor 1964); Boarding School Bison Drive, Browning, Montana (Kehoe 1967); Sorenson Site, Level VI, southeastern Montana (Husted 1969); Libby Reservoir area, northwestern Montana (Taylor 1973).

**Type ND.** One specimen: Plate 3, i. Not stemmed, straight parallel-sided, straight base.

This specimen was the only one of its kind recovered. It was a rather thick, plano-convex point. Blade edges were straight and parallel. The tip was sharp and formed an isosceles triangle set upon the parallel-sided blade. Flake scars were broad and relatively shallow. Collateral flaking from both edges extended to the mid-section of the point. They formed a dorsal ridge. Pressure retouch was extensive along the blade edges. The base was thinned by retouch.

Provenience: 24MN1074.

Comparable specimens: no solidly comparable specimens
were found in the literature. Barnier illustrated an implement (1971:35, Fig. 8, i) that he called a Type 5 knife from the McDonald Lake site. It is quite similar to point i. However, it could best be characterized as having straight-converging blade edges, rather than parallel-sided blade edges (Barnier 1971:34-35). Taylor (1973:79, Fig. 33, u) illustrated a Type ND point from the Libby Reservoir area. His specimen was incomplete and only the basal portion is shown. Taylor noted that his ND point may be the basal portion of a blade and not a projectile point (1973:84).

Type SAa. Three specimens: Plate 3, j to 1. Stemmed, contracting stem, shouldered, rounded base.

These were large to medium-sized points of fairly good workmanship. They were made by a combination of random and oblique percussion flaking. The blade edges were straight-converging, with extensive retouch. Shoulders were well pronounced. In cross-section these points were bi-convex.

This point type had an affinity with the Columbia Plateau region. Strong, Schenck and Steward recovered a large number of these points from the Dalles area on the Columbia River. They noted, however, that compared to other forms, this SAa point was not common (Strong, Schenck and Steward 1930:81, Plate 13, g to j).

Barnier illustrated the basal portion of an SAa point similar to those from the Clark Fork Valley. It came from the McDonald Lake area in the Mission Mountains (Barnier
1971:33, Fig. 7, v). In his survey of Yellowstone Park, Taylor recovered a number of Type SAb points. These points differ from SAa points only in having barbed, rather than straight or insloping shoulders. Taylor observed that similar SAb points were found in south-central Idaho; Canyon Ferry area, Montana; and at Danger Cave, Utah (Taylor 1964: 120, Fig. 15, i).

Provenience: 24M0507 (j, k); 24MN1061 (l).

Comparable specimens: Dalles-Deschutes region, Columbia River (Strong, Schenck and Steward 1930); McDonald Lake area, Mission Mountains, Montana (Barnier 1971).

Type SAC. One specimen: Plate 3, m. Stemmed, contracting stem, rounded base.

This point was a medium-sized triangular form with oblique percussion flaking. Very little retouch occurred on the point, it was concentrated on the blade edges near the tip. The point was bi-convex in cross-section. It was widest across the shoulders. The stem was lozenge shaped and rather thick. The overall appearance was that of an aberrant form or an unfinished artifact. If the stem were complete and indented, this point could probably be classed at a Duncan-type projectile point.

Provenience: 24MN1074.

Type SBA. Five specimens: Plate 3, n, o, p; Plate 4, a and b. Stemmed, parallel-sided stem, shouldered, not barbed.

More than one point form was covered by this general
SBa classification. In size they ranged from large to medium and small. Only one of these points fits Strong's classification exactly (Plate 3, p). The others all have bases that are not straight.

Points n and o of Plate 3 appeared to be typologically the same. They were both fairly large points, bi-convex in cross-section. Blade edges were excurred. Point n was asymmetrically shouldered; one shoulder was weak and insloping, the other was nearly straight and very pronounced. Stems on both specimens were parallel-sided and concave. Flaking was random percussion, with some retouch on point n. Point o was more skillfully flaked. It showed broad, shallow flake scars. Collateral flaking produced a weak medial ridge. Some grinding was evident along the stem sides and at the shoulders of point o. The blades of both points were retouched. Points n and o of Plate 3 fell within Wheeler's definition of a Duncan point type (Wheeler 1954:7-14). Point p, Plate 3, and point a of Plate 4 were both long, triangular specimens with straight converging blades. Shoulders were straight, or nearly so, and well developed. Point p was plano-convex in cross-section. The flat side showed only minor retouch along parts of the blade edges. The convex side was shaped by collateral flaking, the blade edges were retouched. The flaking technique produced characteristically broad, shallow flake scars with a definite medial ridge following the long axis of the point. Point a of Plate 4 was randomly flaked but skillfully made.
The sharply pointed stem on this point was unique in this survey. Both of these points were reminiscent of specimens recovered from the Dalles-Deschutes Region of the Columbia River (Strong, Schenck and Steward 1930, Plate 14). Point b of Plate 4 was a small, crudely flaked artifact. It had excurred blade edges and was thickly bi-convex. Very little retouch occurred on it.

Provenience: 24MN1082 (n); 24M0512 (o); 24MN1061 (p); 24MN1061 (Plate 4:a); 24MN1074 (Plate 4:b).

Comparable specimens: (n and o, Plate 3) Mortlach Site, south-central Saskatchewan (Wettlaufer 1955); Pictograph Cave; Level I, near Billings, Montana (Mulloy 1958); Yellowstone National Park, Montana (Hoffman 1961); north-central Montana (Stallcop 1966); upper Yellowstone River drainage, Montana (Arthur 1966); McDonald Lake, Mission Mountains, Montana (Barnier 1971). Plate 3, p) Yellowstone National Park (Hoffman 1961). (Plate 3, p; Plate 4, a) Dalles-Deschutes Region, Columbia River (Strong, Schenck and Steward 1930).

**Type SBB.** One specimen: Plate 4, c. Stemmed, parallel sided stem, shouldered, barbed, straight base.

This specimen was a small, triangular point with straight converging blades. Deep corner-notches produced prominent barbs. Flaking technique was excellent. Pressure flake scars were small and regular. The specimen was bi-convex.

This SBB point conforms to a type called Columbia Valley Corner-Notched. They have been found at numerous sites in the
Pacific Northwest; they are usually regarded as late in the temporal scale. Their geographic distribution has been stated by Caldwell and Mallory as "... from southern Oregon to Northern Washington and from the western edge of the Rocky Mountains to the eastern slopes of the Cascade Range" (Caldwell and Mallory 1967:50). Caldwell and Mallory's summary of this type is compendious. It is herein repeated verbatim:

... the Columbia Valley Corner Notched Type appears to be an horizon marker for the late prehistoric, protohistoric, and early historic components in the interior Pacific Northwest. The points are found from northern California to central Washington. They clearly terminate in the early historic period, but the time of their initial appearance is still somewhat in doubt. The best estimate would be about A.D. 1000 to 1100 for the large variety, and ca. A.D. 1450 for the small variety (Caldwell and Mallory 1967:53).

Provenience: 24MN1082.

Comparable specimens: Wakemap Mound, Dalles-Deschutes Region (Strong, Schenck and Steward 1930); Moses Lake area, central Washington (Daugherty 1952); Wakemap Mound, Dalles-Deschutes Region (Caldwell 1956); Klamath Lake area, Oregon (Cressman 1956); McNary Reservoir Basin, Oregon (Osborne 1957); Five-Mile-Rapids Site, Oregon (Cressman 1960); Snake River, Idaho (Rice 1965); Snake River, Washington (Kenaston 1966); Three Springs Bar Site, lower Snake River, Washington (Daugherty et al. 1967).

Type SCal. Nineteen specimens: Plate 4, d to p; Plate 5, a to d; Plate 10, i and j. Stemmed, expanding stem, shouldered, convex base.
As was true with several preceding types, individual specimens within this group varied greatly in size. Blade edges were straight-converging, or convex. Notches ranged from narrow and deep to very wide. Bases were slightly convex to markedly convex. Knapping skill differed from point to point. Some specimens showed well controlled percussion flaking with skillful retouch. Other points demonstrated crude percussion work with minimal retouch. In the case of several large basalt points the original flake surface was unmodified. Points of this type have a wide geographical distribution. They have been found on surface sites and buffalo kill sites on the northwestern Plains. They have occurred throughout the Montana Western Region in surface sites. They have also been recovered from surface sites and stratified occupation sites throughout the Pacific Northwest.

Provenience: 24M0501 (Plate 4:d); 24M0512 (Plate 5:a; Plate 4:e and o); 24MN1061 (Plate 4:h, m, n); 24MN1068 (Plate 4:f, p); 24MN1071 (Plate 4:j, l); 24MN1074 (Plate 4: g, k); 24MN1076 (Plate 5:b, d); 24MN1077 (Plate 10:i, j); 24MN1082 (Plate 4:i; Plate 5:c).

Comparable specimens: Dalles-Deschutes area, Washington Oregon (Strong, Schenck and Steward 1930); near Great Falls, Montana (Schumate 1950); near Helena, Montana (Forbis 1950); Flathead Lake, Montana (Malouf 1956b); Kootenay River, British Columbia (Borden 1956); Pictograph Cave: Levels I and II (Mulloy 1958); Yellowstone Park, Montana (Hoffman 1961);
central Alberta (Forbis 1962a); Yellowstone Park, Montana (Taylor 1964); McDonald Lake area, Mission Mountains, Montana (Barnier 1971); Libby Reservoir area, Montana (Taylor 1973).

Type SCA2. Twenty-five specimens: Plate 5, e to p; Plate 6, a to m. Stemmed, expanding stem, shouldered, straight base.

These were triangular points with open corner-notches. They varied greatly in size. A few were small and a few were quite large. The majority, however, were medium-sized points. Workmanship was likewise highly variable. All points exhibited direct percussion flaking; all showed at least some secondary retouch. Points j and k, on Plate 6, were plano-convex in profile. All other specimens were bi-convex. Blade edges ran the gamut from straight to excurved to asymmetrical.

Taylor and others have noted that these points have a wide distribution throughout the western states. They were by no means limited to the Plains region. SCA2 points have occurred in many sites throughout the mountain regions of the northwest. Taylor quoted Forbis as dating this type from A.D. 600 to A.D. 1600 (Taylor 1973:257). These corner-notched points are found stratigraphically lower than side-notched forms, indicating a greater age for them. However, in speaking about the Montana Western Region, Malouf noted, "The older type of corner-notched point was retained by immigrants
from the Plains" (Malouf 1956:257). The use of SCa2 points persisted down to historic times in western Montana. In many cases SCa2 points are contemporary with side-notched forms.

A few comments regarding specific points within this class is necessary. Points a and k, on Plate 6, are very large, heavy specimens. Their size and weight would make for an unwieldy arrow point, but their form does not suggest an atlatl point of the Middle Period. The width of the stem suggests that these specimens were hafted to a large shaft. They may represent a type of hafted triangular knife. Points h, i, and j, on Plate 6, resemble Pelican Lake points found at the Mortlach and Long Creek sites in Saskatchewan. Wettlaufer and Mayer-Oakes illustrate triangular points with open corner-notches, expanding stems, and straight bases from the Long Creek Site (Wettlaufer and Mayer-Oakes 1960:46). The major difference between points i and j and those from Long Creek is that the Long Creek points are markedly tanged. Point h fits more closely the classic Pelican Lake type. If these points are in fact Pelican Lake, they date from the late Middle Period.

Provenience: 24M0507 (Plate 6:j); 24M0512 (Plate 6:a, b and h); 24MN1061 (Plate 5:j, l, m; and Plate 6:1 and f); 24MN1068 (Plate 5:e, k; and Plate 6:g); 24MN1069 (Plate 6:i); 24MN1070 (Plate 5:p); 24MN1074 (Plate 5:g, i; and Plate 6:c); 24MN1075 (Plate 5:n; and Plate 6:d); 24MN1079 (Plate 5:h; and
Plate 6:m); 24MN1080 (Plate 5:f); 24MN1082 (Plate 5:o; and Plate 6:k, l).

Comparable specimens: Dalles-Deschutes, Washington-Oregon (Strong, Schenck and Steward 1930); Gates of the Mountains, near Helena, Montana (Forbis 1950); near Great Falls, Montana (Shumate 1950); Hell Gate Canyon, near Missoula, Montana (Griswold and Larom 1954); Flathead Lake, Montana (Malouf 1956b); Kootenay River, British Columbia (Borden 1956); Pictograph Cave, near Billings, Montana (Mulloy 1958); Craig Mountain section, Columbia Plateau (Butler 1962); Yellowstone Park, Montana (Taylor 1964); southern Alberta (Wormington and Forbis 1965); Carbon County, Montana (Loendorf 1967); Hells Canyon of the Snake River, Idaho-Oregon border (Caldwell and Mallory 1967); Bighorn Canyon, southeastern Montana (Brown 1967); Clearwater River, Montana (Tro 1968); Libby Reservoir area, northwestern Montana (Taylor 1973).

**Type SCa3.** Nine specimens: Plate 7, a to i. Stemmed, shouldered, expanding stem, concave base.

These points were triangular with straight to convex blades. Shoulders were usually well developed, corner-notches were wide and open. Percussion flaking was evident, random and oblique. Pressure retouch occurred along blade edges; all bases were thinned by retouch.

Two points in this class, h and i, need further comment. They are very similar to points called Oxbow by
Wettlaufer and Mayer-Oakes. This point type came from Levels 7 and 8 at the Long Creek Site in southeastern Saskatchewan. Level 7 was dated at 2663 ± 150 B.C. (Wettlaufer and Mayer-Oakes 1960:52-67). Wormington and Forbis also illustrate Oxbow points from several localities in southern Alberta. They characterized the Oxbow Culture as a subsistence economy based on hunting. It was derived from an Archaic type culture east of the Great Plains and gradually spread westward into the Plains area. They speculate that Oxbow peoples may have developed into "true Plains bison hunters who appeared as modern climatic conditions began about 4,500 years ago" (Wormington and Forbis 1965:190).

Provenience: 24M0503 (a); 24M0509 (b); 24M0512 (e, f, g); 24MN1069 (i); 24MN1074 (d, h); 24MN1077 (c).

Comparable specimens: Dalles-Deschutes, Washington-Oregon (Strong, Schenck and Steward 1930); Gates of the Mountains, near Helena, Montana (Forbis 1950); Flathead Lake, Montana (Malouf 1956b); Pictograph Cave: Level II, near Billings, Montana (Mulloy 1958); Long Creek, southeastern Saskatchewan, Canada (Wettlaufer and Mayer-Oakes 1960); near Livingston, Montana (Arthur 1962); Craig Mountain section, Columbia Plateau (Butler 1962); Yellowstone National Park (Taylor 1964); southern Alberta, Canada (Wormington and Forbis 1965); near Havre, Montana (Davis and Stallcop 1966); Carbon County, Montana (Loendorf 1967); Clearwater River, Montana (Tro 1968); lower Bighorn Canyon, Montana (Brown
1968); Libby Reservoir area, northwestern Montana (Taylor 1973).

**Type SCbl.** Seven specimens: Plate 8, a to g. Stemmed expanding stem, barbed, rounded (convex) base.

The majority of these points were fairly large. Their blade edges were straight in every case but one. Most of the points showed well controlled percussion flaking. Corner-notches were narrow and deep, giving the shoulders a decidedly barbed effect. Three of the specimens had marked serrations along their blade edges. Maximum width was across the shoulders.

Caldwell and Mallory illustrated points very similar to these SCbl points, especially a and b. They called their points Snake River Corner-Notched. Snake River Corner-notched points have been found at various localities in Oregon, Washington and on the Snake River in Idaho. They have been variously dated at 2000 B.P. to A.D. 1400. The SCbl points from the Clark Fork Valley differ from Snake River Corner-Notched in one important aspect. Over 70 percent of Caldwell and Mallory's sample have concave bases, while only 2 percent have convex bases (Caldwell and Mallory 1967:53-55, 127, Plate 12, a to o).

Husted also illustrates a point very similar to point a. His point, from Bottleneck Cave in the Lower Bighorn Canyon, has a slightly convex base, too (Husted 1969:135, Plate 30, t).
Taylor recovered fifteen SCbl points from northwestern Montana in the vicinity of Libby Dam (Taylor 1973:86).

Provenience: 24M0506 (b); 24M0512 (a, c); 24MN1061 (d, f); 24MN1068 (e); 24MN1074 (g).

Comparable specimens: Gates of the Mountains, near Helena, Montana (Forbis 1950); Moses Lake, Washington (Daugherty 1952); Flathead Lake, Montana (Malouf 1956b); Pictograph Cave, near Billings, Montana (Mulloy 1958); Yellowstone National Park (Taylor 1964); Keaster bison kill, Phillips County, Montana (Davis and Stallcop 1965); Carbon County, Montana (Loendorf 1967); Clearwater River, Montana (Tro 1968); northwestern Montana (Taylor 1973).

**Type SCb2.** Five specimens. Plate 8, h to l. Stemmed, expanding stem, barbed, straight base.

These points are essentially the same as Type SCbl, except they exhibited straight bases. They were well flaked by the percussion method. Very delicate secondary retouch along the blades produced serrated edges. The bases were thinned by retouch.

These SCb2 points show a marked similarity to the Snake River Corner-Notched points illustrated by Caldwell and Mallory, and Husted, cited above.

Provenience: 24M0512 (j, i); 24MN1061 (h); 24MN1068 (l); 24SA1017 (k).

Comparable specimens: Dalles-Deschutes, Washington-Oregon (Strong, Schenck and Steward 1930); Gates of the
Mountains, near Helena, Montana (Forbis 1950); Kootenay River, British Columbia (Borden 1956); Flathead Lake, Montana (Malouf 1956b); Pictograph Cave, near Billings, Montana (Mulloy 1958); Kootenai County, Idaho (Miller 1959); Columbia Plateau, Idaho (Butler 1962); Fraser River, British Columbia (Sanger 1964); Yellowstone National Park (Taylor 1964); Keaster bison kill, Phillips County, Montana (Davis and Stallcop 1965); Carbon County, Montana (Loendorf 1967); Hells Canyon of the Snake River, Idaho-Oregon border (Caldwell and Mallory 1967); Bighorn Canyon, southern Montana (Husted 1969); McDonald Lake, northwestern Montana (Barnier 1971); northwestern Montana, near Libby Dam (Taylor 1973).

*Type SCb3.* Four specimens. Plate 9, a to d. Stemmed expanding stem, corner-notched, barbed, concave (indented) base.

These points were triangular with wide corner notches. Blade edges were excurved in three examples, straight in the fourth. The points exhibited a skillful knapping technique. They were flaked by random pressure with secondary retouch along the blade edges. All bases were thinned by secondary retouch. Point d was plano-convex in cross-section; all of the others were diamond-shaped in cross-section.

Points a and b are very similar to points illustrated by Caldwell and Mallory (1967) in Plate 12, page 127. These are Snake River Corner-Notched points mentioned above.

Brown (1968) illustrated a point much like Point b:
Plate 7, Point p. This point came from a Middle Prehistoric Period level at the Black Canyon Site.

Point c is fragmentary and therefore difficult to type. Classification as an SCb3 type is tenuous. This point may, in fact, be a Middle Period "Hanna" type projectile point.

Provenience: 24M0512 (a); 24MN1075 (b); 24MN1080 (c and d).

Comparable specimens: Flathead Lake, Montana (Malouf 1956b); Hells Canyon of the Snake River, Idaho-Oregon border (Caldwell and Mallory 1967); lower Bighorn Canyon, south-central Montana (Brown 1968).

Type 3. Hells Canyon Basal Notched. Four specimens. Plate 9, f to i. Triangular, corner-notched, barbed, stemmed, expanding stem, variable base.

These points were basically isosceles triangles in outline. Corner-notches were narrow and deep-set. Workmanship was of a high quality. They were manufactured by a random percussion method with secondary retouch along bases and blade edges. Bases were varied in form: one straight, one convex, and two concave. Type 3 points reversed the normal material frequency of projectile points found in western Montana. Three points were siliceous and one was basalt.

Caldwell and Mallory report that Hells Canyon Basal-Notched points are found in association with Columbia Valley Corner-Notched points and they have identical temporal
distributions. Regarding Columbia Valley Corner-Notched points, the authors said:

To summarize, the Columbia Valley Corner-Notched Type appears to be an horizon marker for late prehistoric, protohistoric, and early historic components in the interior Pacific Northwest. The points are found from northern California to central Washington. They clearly terminate in the early historic period, but the time of their initial appearance is still somewhat in doubt. The best estimate would be about AD 1000 to 1100 for the large variety, and ca. AD 1450 for the small variety (Caldwell and Mallory 1967:53).

Type 3 points from the Clark Fork Valley were of the small variety. The authors felt these points might be lance tips or knives, because their shape is considerably different from most projectile points (Caldwell and Mallory 1967:55).

It is interesting to note that all four Type 3 points came from the area of the Lolo Trail at its eastern terminus in the Clark Fork Valley. This positive evidence indicates Columbia Plateau peoples were visiting the Montana Western Region at least from late prehistoric times.

Provenience: 24M0507 (g); 24M0512 (f, h); 24MN1061 (i).

Comparable specimens: Dalles-Deschutes, Washington-Oregon (Strong, Schenck and Steward 1930); Moses Lake, central Washington (Daugherty 1952); The Dalles of the Columbia River, Washington-Oregon (Caldwell 1956); Klamath Lake area, Oregon (Cressman 1956); McNary Reservoir, Washington-Oregon (Shiner 1961); near Bend, Oregon (Ice 1962); Hells Canyon of
the Snake River, Idaho-Oregon (Caldwell and Mallory 1967); northwestern California (Leonhardy 1967); Lower Snake River, southeastern Washington (Leonhardy and Rice 1970).

**Type 1.** Five specimens. Plate 9, e and j to m.

Triangular corner-notched stemmed, expanding stem, notched base. These points did not fit Strong's typology.

Although these points fell within the same general type described above, there was considerable variance from point to point. Points e, k, and m were skillfully made. They showed well controlled pressure flaking. Their blade edges were retouched and the bases were all thinned by re-touch. Blade edges were convex in two specimens, straight on the third. These points were all diamond-shaped in cross-section. They were widest and thickest, just about the shoulders. Point j was broken and its inclusion in this type is problematical. Point 1 was a rather crude example. It was flaked only partially on one face and the inverse side was very poorly worked. The concave blade edge might represent a break during manufacturing, which may explain the point's overall lack of finish. However, it may never have been worked at all. In this case, point 1 probably represents a small hafted knife rather than a projectile point.

Provenience: 24M0512 (j); 24MN1068 (k); 24MN1080 (e, 1); 24SA1017 (n).

**Unclassified Forms.** Three specimens. Plate 9, n; Plate 10, i and j.
Point n, Plate 9, was a triangular form with no stem and a markedly concave base. One shoulder shows an extremely shallow side-notch. The opposite shoulder is broken. If both shoulders were notched, this point would fall within Strong's NBbl type. It was well flaked. Flake scars were generally oblique with finely controlled retouch along the blade edges. The point was made of jasper. The form, together with the manufactual material, suggest a Late Prehistoric or Early Historic date for Point n.

Provenience: 24M0507.

Points i and j, on Plate 10, were fragmentary. They both appeared to be uncompleted specimens.

Provenience: 24MN1077 (i and j).

**Fragmentary Projectile Points.** Eight specimens.

Plate 11, e to g; i to n.

In addition to the above described points, eight broken points, too incomplete to type, were recovered from several sites. Material included basalt, chert, obsidian, and jasper.

Provenience: 24M0501 (n); 24M0507 (e); 24M0509 (j, l); 24M0512 (g); 24MN1074 (f, i, k).

**Perforators (Drills)**

In this report no differentiation has been made between tools variously called perforators, drills, punches, or gravers. Little could be deduced about function from a
group of rather nondescript forms. It was assumed all of these tools were used to make holes in leather, wood, fiber, bone, etc.; but to single out one type as perforators used in leather work, and another type as drills used to make holes in shell or bone, proved impossible. Nonetheless, three very loose classes or types of perforators were delineated as a matter of descriptive convenience.

**Type 1.** Seventeen specimens. Plate 12, a to n; Plate 16, n and o.

This type varied widely in skill of manufacture. They were all flakes reworked by pressure retouch. Flaking was random, and in some specimens occurred only around the working point. Bases tended to be ovoid and flattened. The characteristic feature of Type 1 perforators is a pile long in relation to the base. All Type 1 perforators appeared to be hand held.

Provenience: 24M0501 (k); 24M0502 (g); 24M0509 (Plate 16, o); 24M0510 (i); 24M0507 (a, n); 24M0511 (f); 24M0512 (c); 24M0513 (l); 24MN1061 (j); 24MN1068 (b, e; Plate 16, m, n); 24MN1079 (h); 24MN1082 (m); 24SA1017 (d).

**Type 2.** Three specimens. Plate 13, a, c, g. Hafted perforators.

These three specimens were all of basalt. Specimens c and g were skillfully made. They were randomly flaked, with finely controlled retouch along the blades. Specimen a was a small, thin flake. It was roughly notched two-thirds
of the way up from the base. The base was concave. This tool was highly patinated. The characteristic feature of Type 2 perforators was their modification for hafting.

Provenience: 24M0502 (a); 24M0507 (c); 24MN1074 (g).

**Type 3.** Thirty-nine specimens. Plate 13, b, d, to f, h to j; Plate 14, a to h; Plate 15, a to l; Plate 16, a to l.

This type was extremely varied in shape. Some specimen bodies were ovoid, others were trapezoidal, and still others were amorphous. They were also widely divergent in size and weight. Some were large and heavy, with thick, blunt piles. Others were thin, light flakes with minute nibs. Some Type 3 perforators were well flaked, as for example, h of Plate 15. Some were little modified chips or flakes, as g and h of Plate 14. The single trait they seemed to share was a small or short pile in relation to overall body size.

Provenience: 24M0502 (Plate 16, g); 24M0503 (Plate 15, e); 24M0506 (Plate 14, b; Plate 15, d); 24M0507 (Plate 15, l); 24M0510 (Plate 14, a; Plate 15, j; Plate 16, c); 24M0511 (Plate 13, d; Plate 14, e, g; Plate 16, a); 24M0512 (Plate 16, f); 24M0513 (Plate 13, b, i; Plate 14, f, h; Plate 15, c); 24MN1061 (Plate 13, e; Plate 16, b, d, h, j); 24MN1062 (Plate 15, a); 24MN1072 (Plate 15, h); 24MN1075 (Plate 15, f); 24MN1079 (Plate 14, c; Plate 15, b, g;
Plate 16, e, i); 24MN1080 (Plate 15, i; Plate 16, l); 24MN1081 (Plate 15, k); 24MN1089 (Plate 13, h); 24MN1016 (Plate 13, f, j; Plate 16, h).

Comments: It was clear that some of these tools could have served more than a single function. For example: Plate 14, f, may be a spoke-shave as well as a perforator; the same could be true for l on Plate 15. M and n on Plate 16 would have made excellent side-scrapers; the list could be expanded to include almost every artifact in this type.

Specimen k, on Plate 15, was a good example of a reconditioned tool. Originally, it was a well made ovoid knife. After breakage it was reworked into an excellent perforator.

Specimen i, of Plate 15, is the only tool I would speculate about regarding specific function. It, too, could have served several purposes. After perforator, the most obvious function is a spoke-shave. The striking feature of this specimen was the short, blunt nib, in relation to the heavy, massive body. I inferred that this specimen was a graver: a tool used specifically to engrave or incise stone, bone, wood, etc.

End Scrapers

Fifty-four specimens. Plates 17 to 21.

Specimens ranged from small, thin flakes with a
minimum of retouch; through large, thick moderately well flaked tools; to plano-convex specimens which were skillfully made. End scrapers were defined as tools whose working edge appeared to be at a right angle to the long axis of the specimen. End scrapers were grouped into three classes. As in the case of perforators, these classes were mainly a matter of descriptive convenience. Only in the case of Type 3 end scrapers did the class share a number of clear diagnostic traits.

**Type 1 End Scraper.** Thirty-one specimens. Plate 17, a to n; Plate 18, a to i; Plate 20, a to h.

These specimens were small to medium-sized flake tools; very amorphous in shape. Most were little more than waste-flakes retouched along one or two edges.

Proveniences: 24M0501 (Plate 17, j); 24M0502 (Plate 17, c; Plate 18, b); 24M0503 (Plate 17, k); 24M0506 (Plate 17, e; Plate 18, i; Plate 20, b, e); 24M0509 (Plate 20, f); 24M0510 (Plate 17, h, n; Plate 18, f, g); 24M0511 (Plate 17, n; Plate 18, d, h); 24M0512 (Plate 17, l); 24M0513 (Plate 18, a, e); 24MN1062 (Plate 20, g); 24MN1069 (Plate 20, h); 24MN1075 (Plate 20, a, c, d); 24MN1076 (Plate 17, d); 24MN1079 (Plate 17, a, f, g; Plate 18, c); 24MN1080 (Plate 17, b, i).

Comments: The following specimens were broken through the middle—Plate 17, k; Plate 18, d, e, i. Plate 18, specimen g is a "keel-shaped nose scraper," as defined by Winick:
"a large heavy flat-bottomed core with one well-worked nose. It is often large enough to be grasped by hand and may have been used like a push plane" (Winick 1972:474).

**Type 2 End Scraper.** Ten specimens. Plate 18, j, k, l; Plate 19, a to f; Plate 20, i.

These tools differed from Type 1 End Scrapers in only one significant attribute. They were all large, heavy and rather thick. Retouch occurred only along the working edges.

Proveniences: 24M0503 (Plate 19, c); 24M0509 (Plate 19, b); 24M0511 (Plate 18, j, l; Plate 19, e); 24M0512 (Plate 19, a); 24M0513 (Plate 18, k); 24MN1061 (Plate 19, f; Plate 20, i); 24MN1079 (Plate 19, d).

**Type 3 End Scraper.** (Turtle-back/Thumb-nail scrapers) Thirteen specimens. Plate 20, j to l; Plate 21, a to j.

In outline these scrapers were ovoid, or roughly triangular. They were plano-convex in cross-section with the underside unmodified or very slightly modified. Flaking was well controlled in all specimens.

Proveniences: 24M0502 (Plate 21, e); 24M0506 (Plate 21, c, i); 24M0509 (Plate 20, k); 24M0512 (Plate 21, a); 24MN1061 (Plate 20, j; Plate 21, b, e, g, j); 24MN1074 (Plate 20, l); 24MN1076 (Plate 21, h); 24SA1017 (Plate 21, d)

Comments: All Type 3 scrapers recovered, or seen in collections, were made of siliceous material: flint, chert, jasper, obsidian. Taylor said these scrapers were probably used with a pushing motion; they were intended to scrape and
thin hide (Taylor 1973:97). He further stated that they were probably used unhafted (Taylor 1973:97). Malouf dated thumbnail scrapers from Late Hunter: Phase II times in the Montana Western Region (Malouf 1956:256).

**Side Scrapers**

Fifty-seven specimens. Plate 22, a to 1; Plate 23, a to h; Plate 24, a to h; Plate 25, a to h; Plate 26, a to 1; Plate 27, a to i.

Side scrapers were defined as tools whose working edges were parallel to the long axis of the specimen. They were flake tools of extremely variable size, shape, thickness, and sophistication. Some were struck from a core by percussion, and very little modified. Others demonstrated percussion flaking to make a more symmetrical tool, with fine pressure retouch along the working edges.

Proveniences: 24M0501 (Plate 22, a; Plate 23, a; Plate 27, f); 24M0502 (Plate 24, a; Plate 27, b); 24M0503 (Plate 27, a); 24M0506 (Plate 22, b, e, f, 1; Plate 23, e; Plate 24, e, g; Plate 25, f); 24M0507 (Plate 25, d; Plate 26, a); 24M0509 (Plate 25, a; Plate 26, k; Plate 27, c); 24M0510 (Plate 25, g, h; Plate 26, c, j); 24M0511 (Plate 25, c; Plate 26, f); 24M0512 (Plate 22, c; Plate 26, i; Plate 27, i); 24M0513 (Plate 22, i; Plate 26, d); 24MN1061 (Plate 22, j, k; Plate 24, c, d; Plate 26, b, e; Plate 27, h); 24MN1065 (Plate 22, h; Plate 26, h; Plate 27, e); 24MN1067 (Plate 25,
b; Plate 26, 1); 24MN1068 (Plate 22, d); 24MN1069 (Plate 22, g); 24MN1072 (Plate 25, e); 24MN1078 (Plate 26, g); 24MN1079 (Plate 23, b, e, f, h; Plate 24, b, f, h; Plate 27, d; Plate 27, g); 24MN1080 (Plate 23, d, g).

Comments: I did not feel that it was useful to categorize some of these specimens as flake knives, or utilized flakes. However, some of these tools would appear under those classifications in the literature. As, for example, Plate 22, a to f, and Plate 23, b to d. Specimen j, on Plate 22, may also be called a blade elsewhere. Specimen d, on Plate 24, may be a spoke-shave rather than a scraper designed for leather work. Both of these artifacts (j and d) were red jasper. Specimen j, on Plate 26, might have been termed a knife blank. It made an excellent, though somewhat heavy, scraper. Specimens f and d, on Plate 27, were broken through the middle.

**Hafted Blades**

Four specimens. Plate 11, a to d. Two specimens had ovate blades, and two were asymmetrical in shape. Three of the blades were stemmed and shouldered, with expanding stems, and straight bases. The fourth blade was roughly triangular, with a notch struck from one side. These specimens were percussion-shaped flakes. Blade edges were retouched from shoulder to shoulder with well controlled flake scars evident. Specimens a and c were chert; specimens b and d were basalt. These tools were modified for hafting. They may
have served as specialized knives or perhaps in the case of a and b, hafted end scrapers.

Provenience: 24MN1064 (Plate 11, b); 24MN1068 (Plate c, d); 24MN1076 (Plate 11, a).

Knives

Twenty specimens. Plate 28, a to f; Plate 29, a to d; Plate 30, a to c; Plate 31, a to g. Knife-tip fragments. Nine specimens. Plate 32, a to i. Knife-base fragments. Twenty specimens. Plate 33, a to f; Plate 34, a to h; Plate 35, a to f.

These specimens were varied in form. They were made by percussion flaking on large, thick flakes. Some specimens were only slightly modified beyond the general roughing-out process, and may represent blanks. Others were carefully flaked over their entire surfaces. Almost all showed pressure retouch along their entire circumferences. All of these tools were bi-facially flaked. The term knife implies that the artifact was primarily a cutting instrument. It does not imply that it was set in a handle. Some specimens may have been hafted, but most were probably used in the bare hand. Loendorf outlined a number of diagnostic features used to group stone knives. His types have been used in this paper (Loendorf 1964:1-10).

Ovoid knife. Eight specimens. Plate 28, c; Plate 29, a to d; Plate 30, a to c. These artifacts fell within
the type Loendorf called ovoid knives. That is, they were bi-facially flaked; their greatest width was across the middle of the specimen; they had convex bases and rounded sides which converged into a narrowed point (Loendorf 1964: 1). Specimens a, on Plate 29 and a and c on Plate 30 were broken. However, they would seem to conform to the above criteria in their unbroken state. Specimen c, on Plate 28, was a special type of ovoid, called a piriform. This simply means that it was narrower at one end than a classic ovoid (Loendorf 1964:2). It was broken near the tip and may have been an unfinished form. Specimen b, on Plate 29, had a slight shoulder on one side. The fact that this specimen was so carefully thinned and shouldered would indicate it was hafted.

Provenience: 24M0507 (Plate 29, c); 24M0510 (Plate 29, a); 24M0512 (Plate 30, c); 24M0513 (Plate 29, b, d); 24MN1061 (Plate 28, c) 24MN1074 (Plate 30, b); 24MN1076 (Plate 30, a).

Lanceolate ovoid knife. Four specimens. Plate 28, a, b, d, e.

Of this type Loendorf said, "A second type of ovoid knife is a long, slender lanceolate form with rounded points. They were usually well chipped and sometimes they show a medial ridge running lengthwise" (Loendorf 1964:2). Specimens a and e had this characteristic medial ridge.

Triangular knives. Seven specimens. Plate 31, a to g. These tools were bi-facially flaked; with secondary
retouch along the working edges. In outline, some resembled an isosceles triangle; others resembled a right-angle triangle.

Comments: Specimens b, c, d, and e were broken.

Provenience: 24M0507 (Plate 31, a); 24M0510 (Plate 31, c); 24M0512 (Plate 31, f, g); 24MN1074 (Plate 31, b); 24MN1069 (Plate 31, e); 24MN1080 (Plate 31, d).

Fragmentary knife-tips. Nine specimens. Plate 32, a to i.

It was impossible to be certain about the original forms represented by these tips. However, it appeared that triangular, ovoid, and lanceolate forms were all exemplified.

Provenience: 24M0513 (Plate 32, h); 24MN1061 (Plate 32, f); 24MN1062 (Plate 32, e); 24MN1065 (Plate 32, i); 24MN1068 (Plate 32, a, b, d); 24MN1069 (Plate 32, g); 24MN1080 (Plate 32, c).

Fragmentary knife-bases. Nineteen specimens. Plate 33, a to f; Plate 34, a to h; Plate 35, a to f.

The form of some bases suggested that ovoid, and triangular, knives were represented. It appeared that specimens c to h, on Plate 34, were modified for hafting. Specimen g, on Plate 34, was unique in that it had a bifurcated basal tang. Specimens e and f, on Plate 35, appeared to be blanks. They were bi-facially flaked, but only around the edges. Specimens e and f, on Plate 34, show opposite sides of the same artifact.
Provenience: 24M0503 (Plate 35, d); 24M0507 (Plate 33, b, d; Plate 34, c; Plate 35, b); 24M0510 (Plate 33, a, c, f; Plate 35, c, f); 24M0511 (Plate 34, e, f); 24MN1061 (Plate 35, e); 24MN1068 (Plate 34, a); 24MN1069 (Plate 34, g); 24MN1075 (Plate 34, h); 24MN1079 (Plate 34, d); 24MN1080 (Plate 33, e; Plate 34, b); 24MN1082 (Plate 35, a).

**Subrectangular knife (?)**. One specimen. Plate 28, f.

Loendorf mentioned a knife type he called "the subrectangular form." The typical subrectangular form had two parallel sides terminating in a triangular-shaped tip. It was a rather long, narrow knife, in relation to the ovoids. Loendorf mentioned Forbis found six of these knives at the MacHaffie Site. They were associated with Scottsbluff material (Loendorf 1964:6). It is not suggested that Specimen f should be considered part of an Early Hunter assemblage. Since it was broken one-third to one-half of the way up from the base, the specimen could not even be called a subrectangular form without reservation. Subrectangulars have been found only on the Plains. Also, Specimen f was a gray siltstone; subrectangulars from the MacHaffie Site were siliceous.

**Spoke-shaves**

Nine specimens. Plate 36, a to i.

These were small flakes irregularly chipped. They had no exact form, although most tended to be on blades.
Their one diagnostic feature was the removal of small chips to produce a notch, or convex cutting edge, somewhere on the artifact. It was assumed that these tools were used to trim and shape wooden shafts.

Provenience: 24M0503 (Plate 36, g); 24M0510 (Plate 36, f); 24MN1068 (Plate 36, h and i); 24MN1079 (Plate 36, a to e).

Ground Stone Artifacts

Stone Mauls

Seven specimens. Plate 37, a to c; Plate 38, a and b; Plate 39, a and b.

These tools were ovoid or spheroidal in shape. They were made from quartzite—a metamorphosed sandstone. Most were probably made from stream-rolled stones which approximated the desired shape. A groove was pecked around the circumference of each specimen to facilitate hafting.

Malouf (1962:11-12) has described two types of stone mauls found in Montana. The first, and older type, was somewhat elongated. The second type was an oblate maul; it was more flattened on the ends. The second type has been found ethnographically among the Salish and Kutenai peoples of western Montana. Malouf stated mauls were a recent diffusion from outside Montana; they date from late prehistoric times. Malouf also stated that while mauls were used to pound meat and berries east of the Divide, in western Montana they were
used only to pound meat.

All specimens found, or observed, during this re-
search were of the elongated type. Specimen b, on Plate 37,
was a borderline case. It was somewhat less flattened than
the usual oblate maul, but may be of that type.

The scale on Plate 37 is true for Plates 38 and 39
as well.

Provenience: 24M0507 (Plate 39, a); 24M0512 (Plate 37,
a to c); Bill Daigle farm near Cyr, Montana (Plate 38, a and
b); Mrs. Leo Kinny's family ranch at the headwaters of Petty
Creek (Plate 39, b).

**Stone Pestles**

Five specimens. Plate 40, b and c; Plate 41, a, b,
and c.

These artifacts were conical stone tools used to
pound vegetable foods, such as berries (Malouf 1962:3). They
ranged in length from about 8 inches to 13 inches. They were
shaped by pecking at various places on each specimen to pro-
duce the characteristic conical form. The larger end showed
the marks of wear. All specimens were made from a granitic-
type stone.

Malouf (1962:3-6) believed that the use of pestles by
peoples in the Montana Western Region was introduced from the
Columbia Basin, where they were an important part of archeo-
logical assemblages. He felt their use dated from the late
prehistoric, and precedes the introduction of stone mauls from east of the Continental Divide. Specimens b and c, on Plate 40, and Specimen b, on Plate 41, illustrate the earliest pestle type found in western Montana. Specimen a, on Plate 41, illustrates an indigenous development. The earlier conical pestles were lengthened much beyond their earlier forms. A still later development is shown by Specimen c, on Plate 41. This form Malouf called a "potato masher" type. These pestles have been found ethnographically among the Kutenai and Salish.

Provenience: 24M0512 (Plate 40, b and c; Plate 41, a, b and c).

Edge Ground Cobbles

Three specimens. Plate 42, a, b, and c.

These specimens were tubular-shaped stones. Unlike pestles, which were pecked to the desired shape, these artifacts occurred naturally. The only modification visible was on working surfaces. All specimens demonstrated wear on their ends. Two specimens, b and c, had marked concavities indicating wear along their sides.

Loendorf (1969) has suggested that these tools were used to grind vegetable foods. He also felt they may have been rubbing and smoothing implements used in the hide tanning process.

Provenience: 24M0512 (Plate 42, a, b, and c).
**Net Sinkers**

Two specimens. Plate 40, a; Plate 11, n.

These items were small stream-rolled pebbles. Specimen a, on Plate 40, had two small notches in opposite sides of its edges. Specimen n, on Plate 11, was very lightly pecked all the way around. This pecking produced a very shallow groove around the middle of the artifact. These artifacts were called "net sinkers" in the literature (Taylor 1973; Borden 1956; Malouf 1956b). They were probably used in the taking of fish from streams and lakes. Exactly how they were used is a matter of speculation.

Provenience: 24M0512 (Plate 40, a); 24MN1072 (Plate 11, n).

**Bone Artifacts**

**Bone Perforator (Awl)**

One specimen. Plate 11, h.

This specimen was a small piece of unidentifiable bone; probably mammal. The pile was long compared to the chipped stone perforators described above. The entire pile was very smooth and polished. The tip was smoothed and needle-sharp.

Provenience: 24M0509.
Post-Contact Artifacts

No trade goods of any kind were recovered during this research. None were observed in any collection.

Other Cultural Manifestations

Ground Stone Shaft

One (?) specimen. Plate 43, b; Plate 44.

These stone shafts were discussed by Malouf (1962: 9-12) in a short article. He stated their origin and derivation were unknown, although they appeared to be related to similar stone work found in the Columbia Basin. He noted that these objects show no signs of wear. They were often incised with simple designs, such as "|s, or short parallel lines. Malouf speculated that these objects may have had a ceremonial function, or perhaps they were a kind of mnemonic device. No positive statement about their use could be made. At the time of his writing, Malouf noted about ten such specimens had been found. They appeared only in western Montana and most came from around Flathead Lake.

The current example of these unusual artifacts came from the bounty of the Cyr farm on Ninemile Creek. It was made from a light green argillite. Both ends were slightly beveled to a blunt edge. No signs of wear were found on the specimen. It had a series of short parallel lines incised on two sides. The exact number of lines could not be
determined because some of them were obliterated (see Plate 44).

Specimen a, on Plate 43, was a problem. It was a very well dressed piece of quartzite. The artifact was diamond-shaped in cross-section. It seemed to taper slightly from the butt toward the missing end. There would have been no problem in calling the artifact an elongated pestle, except that the base showed little or no wear. In addition, the pestles collected or observed were not so carefully prepared. It may be a pestle; it may also be a stone shaft like Specimen b, in an intermediate stage of the pecking process.

Provenience: 24M0512 (Plate 43, a and b).

Perforated Stone

One specimen. Plate 11, o.

This item was a small piece of grey-green slate or shale. The specimen was one-half inch thick. There was a small hole to the right of center. It seemed to be the result of deliberate drilling, rather than a natural occurrence. The specimen was broken; no idea of its original form or function came to mind.

Provenience: 24MN1073 (Plate 11, o).

Pictographs

The significance of pictographs has been discussed above under the description of 24M0505, and in the general
remarks concerning religious beliefs. At this point I will make a few specific comments regarding 24M0505. I will also represent the major stylistic forms present.

All pictographs at 24M0505 were done in red. All, except those indicated, were solidly painted. They fit within Malouf's Type 1 pictograph.

One question which presented itself was the average length of time spent at 24M0505. Two assumptions were made. First, the vertical lines called "day counts" were actually time markers. Second, each vertical line represented one day's stay. Every series of day counts noted on each of the three panel faces was examined and counted. More had doubtless faded into unrecognizability, but a fairly good sample of complete day count series remained. The number of day counts in each series was:

1. Face A-3; 3; 3; 6; 5; 13; 10; 5; 3; 7; 9; 5.
   Average - 6 days.
2. Face B-4; 7; 8; 7; 10; 4; 3; 9; 7; 17; 10; 4; 17; 9; 4; 3; 12.
   Average - 7.94 days.
3. Face C-3; 4; 10; 4; 5; 8; 10; 6; 8.
   Average - 6.44 days.

There were an indeterminate number of day counts above the rock shelter adjacent to Face A. At least six were observable, but there may have been more.

It would appear from this data that the shortest stay
recorded at 24M0505 was three days. The longest stay would seem to be 17 days. It seems about one week was the normal length a man might stay at the site.

It appears many stays at the panel were short. A three-day sequence occurred seven times. The next most frequent sequence was four days, which occurred six times. Stays of 12 and 13 days were each noted once. Stays of 6 and 17 days each appeared twice.

If we assume each series of day counts represents a single stay at the panel, there were in excess of 38 separate occasions when the site was visited. Presumably, this means that a number of individuals sought religious power at 24M0505 at least 38 times.

Stylistic Forms Represented at 24M0505

Those forms represented without measurements were so high off the ground that they were inaccessible. They were sketched in a field journal.

Face A - only day counts could be determined.
Face B - bear (?) claw print; circles; left hand print; animal figures; elk (?); serpent (?); partial human figure; obscure designs.
Face C - day counts (joined and unjoined).
Figure 21. Example of Day Counts on Face A.

Figure 22. Selected Stylistic Forms on Face B.
Figure 23. Selected Stylistic Forms on Face B.
Figure 24. Selected Stylistic Forms on Face B.
Figure 25. Example of Day Counts on Face C.
CHAPTER VI

INTERPRETATIONS AND CONCLUSIONS

A reconstruction of the prehistory of the research area will be attempted in a subsequent section. This section is intended to point out some anomalies discovered during research, discuss site locations and characteristics, discuss aboriginal trails, and review a part of the data that has a bearing on this writer's thesis.

Interpretations

There were inconsistencies between this research and other research done in western Montana. Taylor (1973) described and illustrated a Type NBb point from his study of the Libby Reservoir area. He found eight such specimens. Taylor noted that Borden (1956) found 10 NBb points along the Kootenay River in Canada. Taylor's citations regarding comparable specimens indicated this type was widespread throughout the Columbia Plateau, and eastern Montana. Yet, no such points were recovered or noted during this survey.

Ward's (1973:104) studies in the Bitterroot Valley presented a surprising difference in material frequency. In her interpretations Ward said of the Bitterroot,
"... there simply appeared to be a paucity of sites." She recorded 19 sites. Why should this be true in the Bitterroot, and not true elsewhere in western Montana. It was a center for Flathead activity. Doubtless, southern influences came into western Montana via Lost Trail Pass and the Bitterroot Valley. It is even more curious when an area immediately north of the Bitterroot yielded much evidence of prehistoric activity. The problem encountered in the Middle Clark Fork Valley was no lack of sites. The problem was an unexpected abundance of sites. It was difficult to keep in mind that this study was preliminary; a survey. Many promising areas were bypassed because a number of other sites had already been established in the area. It is possible that for every site reported two or more exist that are unrecorded. Material occurred for uninterrupted miles of river terrace in some areas. It was difficult to tell where one site ended and another began. To cite one example, the Alberton area produced material all the way from Petty Creek to Nigger Gulch. This represents a distance of about five miles. It is odd that such abundance gives way to "paucity" in so short a distance. This lack of material in an adjacent area was recorded again by Malouf (n.d.) from Thompson Falls to the Idaho State Line. Only 12 sites were recorded along 60 miles of the Lower Clark Fork Fork.

There were several parallels regarding site location and site characteristics between Taylor's (1973) findings at
Libby, and the Middle Clark Fork Valley. Taylor noted that several of his sites showed concentrations of material near the river bank. These concentrations grew thinner as distance from the river increased. Many sites in this survey demonstrated a similar distribution. For example, 24M0501, 502, 503, 24MN1061, 1068, 1074 produced material at the edge of the terrace, and very little farther from the river. The Fisher River Site (24LN10) produced no cultural material below the level of 18 inches. All of the tested sites in this research indicated a shallow level of material occurrence. The Alberton Site (24MN1061) always proved sterile at Level 4 (24 inches). The majority of all material recovered from test pits came from Levels 1 and 2. This held for every site tested.

There was a similarity in the type of site found at Libby, and sites along the Middle Clark Fork. Taylor recorded many sites which were small. These sites had little cultural material. Taylor felt they were temporary campsites used by single families. Other locations, such as the International Boundary Site (24LN517), were extensive. A great deal more material was recovered from the larger sites. Taylor inferred that the large sites were occupied by more than a single family group. Sites recorded during this survey followed the same general pattern. There were many sites that seemed to be transient. They were visited rarely by small groups of people, who left scant material evidence behind. Sites such
as 24M0509, 24MN1062, 24MN1070, and 24MN1071 were good examples. Other sites were obviously areas of much activity. In some cases this activity stretched from the recent back through the Middle Period. Sites such as 24M0504, 24M0507, 24M0514, 24MN1061, 24MN1074, 24MN1079, and 24MN1080 were cases in point.

There was divergence in site location between this study and that carried out by Griswold and Larom (1954) on the Upper Clark Fork. Their sites tended to be on terraces as much as one-half mile from the river. Sites along the Middle Clark Fork were on terraces immediately adjacent to the river or major tributary streams (figures 26, 27). Their sites were on the north side of the river. This follows because the aboriginal trail was on the north side of the Clark Fork as it ran through Hellgate Canyon. Griswold and Larom also searched this side of the river more closely, so any statement about site position may have to be altered in the future. If Ninemile and Sixmile Creeks are excluded, about two-thirds of the sites along the Middle Clark Fork were on the north side of the river; one-third were located on the south side. Ward (1973:117) also reported that her sites followed no discernible pattern.

Three sites in the Ninemile Valley had an unusual concentration of a specific material. A dark brown, fine-grained, siltstone was a frequent material found at 24M0510, 511 and 513. This material occurred at other sites. It was,
Figure 26. 24M0507 (Petty Creek Bridge Site), Typical Terrace Site Along the Middle Clark Fork River.

Figure 27. 24MN1073 (Lozo Creek Site), Typical Terrace Site Along the Middle Clark Fork River.
however, a rarity. In the same manner, green obsidian seemed to be concentrated at 24MN1079 and 1080. This material was not found in quantity at any site.

There was another curious association at 24MN1079 and 1080. Of the nine items identified as spoke-shaves, five came from these two sites. Considering the countless micro-chips found at the sites and the significant number of projectile points, these sites seem to be important centers for the manufacture of projectiles and other hafted tools.

No burials were discovered during the survey. Malouf (1956b) explained that prehistoric peoples were constantly moving; they buried the dead wherever they happened to be. Systematic searching of talus slopes and rock shelters is fruitless. Most burials are uncovered by accident. The Lozeau burial, for example, was discovered during mining activity.

A by-product of searching for evidence of major cultural movement up and down the Clark Fork Valley was the delineation of at least one local migratory route. The importance of aboriginal trails and their locations have been discussed by Malouf (1956b), Griswold (1970), and Fredlund and Fredlund (1971). Of the three major trails through western Montana, the Lolo Trail was probably the most important. This trail entered western Montana from the headwaters of the St. Joe River, via Lolo Pass. It followed Lolo Creek to the Bitterroot Valley. Travelers then turned south up
the Bitterroot Valley, or east into the Missoula Valley. If their destination was the Middle Clark Fork Valley, rather than the Hellgate or Bitterroot, there was an alternative route. A branch of the Lolo Trail turned east up Graves Creek. Crossing the Graves Creek Divide, it followed Petty Creek down to the Clark Fork River. It is inferred that this was not the terminus. Sites 24M0507, 24M0506, 24M0512, 24M0514, 24M0504, 24M0511, 24M0513, 24M0510, and 24SA1016 form a chain of campsites up the Ninemile, over Siegel Pass, and down again to the Clark Fork. This route eliminates a long meander by way of St. Regis. It would be the most expeditious route to the Jocko and Mission Valleys from the Lolo Trail. Malouf (1956b) has stated that jasper found in the Swan Lake and Bigfork country, demonstrated the importance of Lewis and Clark Pass and the Blackfoot River. This stone was often imported from the east and points to the Blackfoot as an important migratory route. The Ninemile trail probably had no such immediate links to the Plains. It is nevertheless intriguing to note the frequency that jasper, chalcedony and obsidian appears in the Ninemile. Taken together 24M0504, 24M0510, 24M0511, and 24M0514 had more jasper, chalcedony and obsidian than the rest of the entire research area. As mentioned above (p. 39) sites 24M0501, 502 and 503 seemed to indicate an alternate route to the Missoula area from the Graves-Petty Creek Trail. Two unconfirmed sites on Deep Creek, one at the mouth and the other about halfway up, lend
support to this hypothesis. Travelers heading for the Hell-gate would save much time by leaving the Graves-Petty Creek Trail and following Deep Creek to the valley. Safety from Plains raiders may have dictated that these travelers camp on the terrace rather than down on the valley floor.

Data bearing upon the correctness or incorrectness of the thesis stated at the outset of this paper has been more plentiful than expected. Previous research has shown that western Montana was influenced by peoples and traits from farther west in the Columbia Basin. The problem of documenting this influence in that portion of the Clark Fork under study was resolved by field research. The task of determining from what direction this influence came was significantly more difficult. Even more vexing was the difficulty encountered in understanding the intensity of the contact.

This last problem has plagued others in the past. Malouf (1956b) felt that diffusion between the Plains and the Columbia Basin was never very significant. He thought movement north and south might eventually turn out to be the most important. Earlier, however, Malouf (1951) described trade between peoples in western Montana and the lower Columbia. He pointed out that a lack of surplus commodities made trade impracticable for western Montana peoples. Items of Pacific Coast origin did appear in western Montana, despite weak trade connections. Malouf specifically mentioned shell,
pipestone and obsidian.

Griswold (1970) took a different view of the trade complex. Like Malouf he felt trade between the Plains and the Columbia Basin was minimal until the coming of the horse expanded territories and increased mobility. The Columbia Plateau's extensive system of rivers made trade considerably easier than on the Plains. Griswold postulated a "considerable" amount of traffic all along the Columbia River System.

Burial practices and grave goods provided another link between western Montana and the lower Columbia. Malouf (1956b) reported a nephrite celt found in a burial at site 24SA6. This celt was identical to others found at the Grand Coulee Reservoir. The Lozeau burial was a significant find made in the research area in 1934. Turney-High (1937) reported that the skeleton was a "North California" physical type. Material found with the body pointed to the Pacific Coast. Grave goods included a cold-hammered copper bead, and a dentalium shell necklace. An obsidian point found with the burial was similar in form to points found along the Thompson River in British Columbia. The method of burial was also revealing. A six inch layer of charcoal indicated the Lozeau burial was a cremation. Strong, Schenck and Steward (1930) reported cremation burials from southern British Columbia, and parts of Washington. They pointed out that the historic Salish buried their dead, and they had no tradition mentioning
cremation. At site 24RA510 Ward (1973) investigated what seemed to be a secondary inhumation. She quoted Collier, Hudson and Ford (1942) as saying secondary pit burials were a late Columbia Plateau trait. Citing burials near Dayton, Montana, Malouf (1956b) demonstrated secondary burials were older than primary burials practiced by the historic Salish. Ward recovered a nephrite celt from the grave. As previously mentioned, these celts were derived from the lower Columbia. Taylor (1974) reported recovering a whistle, made from the wing bone of a trumpeter swan, in a burial near Missoula, Montana (24M01071). The whistle had a "ladder motif" design incised into the distal end. The ladder motif was an indication of Columbia Plateau influence. Taylor quoted Collier, Hudson and Ford (1942) as illustrating the ladder motif on an awl and on digging stick handles found in sites on the Columbia River.

Rock art also points to the Columbia Basin. Keyser and Knight (1976:8) felt that the rock art they examined in western Montana was related to similar rock art on the Columbia Plateau. They listed specific traits that pointed to this relationship: the sites were usually inaccessible, zoomorphic forms were more common than anthropomorphic forms, motifs mentioned were bison, sunbursts and circles (figure 22, p. 152), deer herds, ribbed figures (figure 24, p. 154), and a large number of "tally marks" (figure 21, p. 152, and figure 25, p. 155).
A brief review of the artifact analysis should help to clarify the impact of various artifact types on western Montana. Those artifact types which were very widespread throughout the northwest were not listed below.

**Western Influences:**

- Cascade points ................................................. 102
- NBa points ..................................................... 110
- SAa points ...................................................... 116
- SBa points ...................................................... 117
- SBb points (Columbia Valley corner-notched) ............... 119
- SCb1 (Snake River corner-notched) ........................ 126
- SCb2 (Snake River corner-notched) ........................ 127
- SCb3 (Snake River corner-notched) ........................ 128
- Hells Canyon basal-notched points .......................... 129
- Stone pestles .................................................. 145
- Net sinkers .................................................... 147
- Ground Stone Shaft .......................................... 148

**North/eastern influences:**

- NBbl points .................................................... 113
- Avonlea points ................................................ 113
- Pelican Lake points .......................................... 123
- Oxbow points ................................................... 125
- NBa points (Plains triangular) .............................. 110
- NBbl1 points ................................................... 112
Triangular knives ................ 141
Tanged knives .................... 41

Fredlund and Fredlund (personal communication) investigated an unusual site located at the conflux of the Yaak and Kootenay Rivers in extreme northwestern Montana. The site (24LN1013) was an extensively used camp. Material recovered included fire-cracked rock, fish and mammal bones, projectile points, mauls, slate tools, and human effigies of stone. An effigy head in the Lefty Young collection also came from the site. It was a stream-rolled boulder 25 by 65 centimeters. A human face had been carved on both sides of the rock. Fredlund and Fredlund felt this effigy head was related to stone carving traditions in British Columbia.

Conclusions

This last section is intended to be a rather brief sketch of prehistoric life in the Middle Clark Fork Valley. Evidence in support of this reconstruction is based on material found during research, which was compared to earlier work in western Montana. Regional influences were traced by reference to work done on the Plains, the Great Basin, the Columbia Plateau and elsewhere. This attempt at a local chronological ordering of prehistoric cultures is not presented as the final word. Though sites and material proved more plentiful than expected, large gaps remain to be filled before the last word on western Montana's prehistory is
written. A problem encountered by every other researcher accompanied this work as well. No deeply stratified sites were found. Few artifacts appeared in clear stratigraphic associations. Even at 24MN1061, the most extensively tested site, there was some mixing of forms that were typologically placed in different time periods.

This summary is made with reference to the three cultural periods described in HISTORY OF THE AREA.

Early Hunter Period (ca. 10,000 to 6,000 B.C.)

No matter how old and experienced the archeologist may be, he always goes into the field hoping for a really spectacular and significant find. In western Montana these fantasies often revolve around the discovery of some evidence of Paleo-Indians. The previously mentioned Cascade Points (p. 102) represent the hoped-for fulfillment of this fantasy.

There appears to be no good reason why Paleo-Indians would inhabit territory surrounding western Montana, and not exploit it as well. Glacial Lake Missoula may have precluded occupation of the river valleys, but not the ridges. Cascade is not the first Paleo-Indian point type found in western Montana. Allen Carmichael and Richard Malouf recovered an Agate Basin point from the Blackfoot Valley (unpublished field notes). Philip Hobler found another at a site near Avon, Montana (unpublished field notes). Confirmed, or
suspected, Cascade points have now been reported from four locations in Montana. A hypothetical Paleo-Indian presence will thus be described.

The Cascade point is an index artifact in Butler's Old Cordilleran Culture. With respect to the Old Cordilleran Culture, Daugherty (1962:149) says the traits are too widespread, and generalized, to constitute a culture. He proposes the term "Northwest Cordilleran Area Tradition," to designate those traits concentrated in the Cordilleran region. Daugherty notes that linguistic studies (Sattles and Elmendorf 1962) show a relationship between the Northwest Cordilleran Area Tradition and the incidence of Salish languages. The Northwest Cordilleran Area Tradition is centered in Oregon, Washington, and southern British Columbia. Farther east on the Columbia Plateau, Daugherty sees another tradition in operation. This he calls the Northwest Riverine Tradition. The Northwest Cordilleran Area Tradition forms a basis for later cultures along the coastal areas, such as Puget Sound. The Northwest Riverine Tradition was a forerunner of the riverine and lacustrine cultures of the upper Columbia River. Daugherty (1962:144) says:

The hallmarks of this tradition are (1) a diversified economy, not strongly oriented toward big game hunting, except locally; (2) strong similarity throughout the Intermountain West in artifact traditions, the specific artifacts within these traditions, plus other cultural practices; and (3) strong cultural stability with slow gradual change involving principally the accretion of new elements with little loss or replacement of the old.
Not a great deal more can be said about Paleo-Indian in the Northwest. There is simply not enough evidence. The users of the Cascade points found in the Clark Fork Valley probably entered western Montana in small, highly mobile bands. They hunted available large game animals. Doubtless they exploited plant resources as they followed the rivers or lake shores.

**Middle Period (ca. 6,000 B.C. to A.D. 800)**

Two events which had an impact on western Montana during the Middle Period were the onset of the Altithermal, and the drainage of Lake Missoula. The first was only remotely important to western Montana. The drainage of Lake Missoula, however, was direct and of far-reaching importance.

Jennings (1964:162-3) says that following the Old Cordilleran Culture the Desert Archaic lifeway appeared in the Northwest. The important points of this lifeway were discussed earlier (pp. 19-21). It is necessary to reiterate that this Desert Archaic stage should be seen as relevant to the cultural assemblage and not the climate of western Montana. It was during the Altithermal that people may have partly abandoned the Plains of eastern Montana. The Yellowstone Plateau and the Rocky Mountains offered them refuge (Hoffman 1961:93).

The final drainage of Lake Missoula occurred about 6,000 years ago (Malouf 1956b:12). This opened vast areas which were soon filled with plant and animal life. Man,
too, discovered this new area and began to exploit it. The Oxbow, McKean, Duncan, and Hanna points represent early Middle Period hunters who were living in western Montana.

The two Oxbow points seem to represent a very early intrusion of eastern Plains people into western Montana. The Oxbow was an Archaic subsistence economy based on hunting.

The McKean points also represent an early Middle Period hunting economy. The origins of the McKean complex are a matter of contention. Jennings (1968:153) believes the complex originated in the Great Basin and spread northward into the Plains. Husted (1968:65-67) and Benedict and Olson (1973:326) believe that the McKean complex originated in the central and northern Rocky Mountains from an earlier Plano tradition. Benedict and Olson point to the typological continuity between James Allen, Pryor Stemmed, McKean, and Duncan points as proof of a mountain origin. It seems McKean and Duncan peoples spread west, as well as back into the Plains at the end of the Altithermal. Geologic and palynologic studies indicate the Altithermal ended about 4,000 B.C. (Benedict and Olson 1973:326). The climate grew less arid and increased rainfall enabled big game and man to reenter the Plains.

In Daugherty's Northwest Riverine Tradition, the Middle Period is called the Transitional Period (Daugherty 1962:144-48). It dates from 6,000 B.C. to 2,500 B.C. Lanceolate points occur less often. There is an introduction
of the Desert side-notched point from the south.

In western Montana the late Middle Period is represented by Pelican Lake and corner-notched point forms. The Pelican Lake culture has been dated at about 1450 B.C. to 300 B.C. (Wettlaufer and Mayer-Oakes 1960:108).

Referring again to Daugherty (1962:144-48), this late Middle Period is called the Developmental Period (ca. 2,500 B.C. to A.D. 0). He says Desert side-notched points remain the most frequent, but corner-notched points increase. In western Montana, however, the corner-notched point was the dominant form during the late Middle Period.

Recounting the lifeway of Middle Period people is only slightly less risky than defining Early Hunter times. The evidence that exists allows several inferences. Middle Period people probably moved about in small bands made up of several extended families. They were highly mobile. Perhaps they already had more or less definite territories and were not aimless wanderers. They were intimately familiar with their environment. Men hunted; women gathered and performed camp chores. Loendorf (1967:136; 1970:17-44) feels the dominant subsistence pattern in the Clark Fork of the Yellowstone River (south-central Montana) was one of seasonal migration from valley floor to mountain top. This seasonal transhumance hypothesis has received support from a computer-based study of site distribution in the Custer National Forest of south-eastern Montana (Beckes 1976:76-80). Beginning in early
spring, people left their permanent camps in the valley and began to follow the sequentially maturing biotic zones towards higher elevations. In late fall the people moved down to the shelter of the valley and settled for the winter. Arthur (1965) proposed this same cycle of seasonal transhumance for the Yellowstone Plateau. Perhaps sites such as 24M0504, 24M0514, 24MN1061, 24MN1079, and 24MN1080 should be seen as repeated stops on an annual transhumant cycle. Loendorf believes this pattern began in the Middle Period and persisted until the arrival of the horse. Whatever power structure that existed in these small bands must have been minimal. It was likely no more that the "first among equals" authority of the eldest male, or headman.

**Late Hunter (ca. A.D. 500 to A.D. 1806)**

The Late Hunter Period is divided into two subphases. Phase I: Late Hunter (ca. A.D. 500 to A.D. 1730).

The beginning of the Late Hunter Period is a time of increasing cultural divergence and complexity. Jennings (1964:168) concludes there was no important difference in cultures between the Plateau and the Great Basin until after A.D. 1. He says:

In both areas, by that time, we find lacustrine and riverine specialization in subsistence and increasing coastal contacts, but in no case do we find abandonment of the full exploitive round until quite late in historic times, when some Plateau tribes took on a patina of Plains horse culture.
Daugherty (1962:144-48) calls this the Late Period (ca. A.D. 0 to Historic Period). He sees the two area traditions reaching their fullest development at this time.

The earliest Late Hunter points to appear in the Clark Fork are the Avonlea from 24MN1061 and 24MN1068. Kehoe (1966:827-44) dates their occurrence at A.D. 210 to A.D. 660. Presumably, they are somewhat later than A.D. 210 in western Montana. The Avonlea represents another intrusion of bison hunters from the northwestern Plains. So small and delicate a point is inappropriate for use with a spear thrower. Avonlea is certainly the earliest example of an arrow point in western Montana.

Coastal peoples were influencing the interior Columbia Plateau by at least A.D. 500 according to Butler (1961). This influence may have been indirectly felt in western Montana at this time also. The Columbia Valley corner-notched, Snake River corner-notched, and Hells Canyon basal-notched points found in the survey area are positive indicators that western Montana was influenced from the lower Columbia during the early Late Hunter Period. Conical pestles are another manifestation that appear during early Late Hunter times.

Corner-notched points remain in use throughout the Late Hunter Period. They were the most common type found in Level I at Flathead Lake (Malouf 1956b:174).

The lifeway pursued by the inhabitants of the Montana Western Region during Phase I: Late Hunter was little differen
than the late Middle Period. People were still traveling about on foot in small bands. East of the Divide the economy centered on communal bison drives. It could be argued that such a plentiful food source had an impact on social organization. More food meant an increase in population. It meant that the need to move often was reduced. Larger groups of people would give rise to the need for greater social control. It might indicate an increase in ceremonialism to insure success in so large an undertaking as the bison drive. Such theoretical changes had little effect in western Montana. There were no huge bison herds. Men still hunted alone or in small family groups. Life went on as before.

Phase II: Late Hunter (ca. A.D. 1730 to A.D. 1806).

An event of monumental importance separates the second phase from the first. Some time near A.D. 1730, western Montana Indians acquired the horse. To trace the diffusion of the horse from Spanish rancheros, through southern tribes, to the Montana Western Region is beyond the scope of this thesis. It is enough to say that having received the horse from southern neighbors their way of life changed utterly. People became more prosperous. They were more effective hunters. The horse enabled them to have and carry more possessions. Groups grew much larger as people were better able to feed themselves. The horse increased tribal mobility and tribal warfare. It is noteworthy that "battle pits," which served as headquarters and refuges during warfare, may
date from this period (Malouf 1956b:258). Groups moved less frequently. They began to establish tribal centers in favored areas. The lower Bitterroot Valley, and Flathead Lake, were two such centers (Malouf 1956b:248).

Pressure from aggressive Plains tribes drove the Flathead, Pend d'Oreille, and Kutenai back into the western mountains. They continued to make corner-notched points (Malouf 1956b:257). At this time, however, Plains triangular side-notched and unnotched points also appear. The triangular side-notched, the triangular unnotched points, the tanged knives, the thumbnail scrapers and the fully-grooved mauls recovered from the Clark Fork indicate the movement of these people to permanent homes in the Montana Western Region. Some of this material probably represents later contact as well.

The cultural evidence (e.g., artifacts, pictographs, burial practices) from this research indicates that there was contact between people in the Middle Clark Fork Valley and people further west on the Columbia Plateau. The evidence also indicates that the Clark Fork Valley was an important travel route north and south in the Montana Western Region. More evidence needs to be gathered on the relative importance of travel east and west over mountain passes, such as Lolo Pass. This is especially true in view of Malouf's (n.d.) studies in the Noxon area and Ward's (1973) study in the Bitterroot Valley. The apparent lack of sites in these two areas point to east-west travel over the mountains as being
at least as important as north-south travel up and down the Clark Fork Valley.

I feel this thesis has confirmed the Middle Clark Fork Valley as an important route of cultural diffusion from the Columbia Plateau. It has also added a new dimension to future work. This work should examine the St. Regis River Valley as a possible travel route from the Salish cultural centers around Lakes Pend d'Oreille and Coeur d'Alene.
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PLATES
Plate I: Projectile Points

a

b

c

d

e

f

g

h

i

j

k

l
PLATE II: Projectile Points
PLATE III: Projectile Points

a b c d e f g h i j k l m n o p
PLATE IV: Projectile Points

a  b  c  d

e  f  g  h

i  j  k  l

m  n  o  p
PLATE VI: Projectile Points

a b c d e f g h i j k l m
PLATE VII: Projectile Points

a  
b  
c  
d  
e  
f  
g  
h  
i
PLATE VIII: Projectile Points
PLATE IX: Projectile Points
PLATE X: Projectile Points

a  b  c

d  e  f

g  h  i  j
PLATE XII: Perforators
PLATE XIII: Perforators

1. a  2. b
3. c  4. d  5. e  6. f
7. g  8. h  9. i  10. j
PLATE XVI: Perforators
PLATE XVII: End Scrapers

a b c d e f g h i j k l m n
PLATE XIX: End Scrapers
PLATE XX: End Scrapers
PLATE XXI: End Scrapers
PLATE XXII: Side Scrapers

a  

b  

c  
d  
e  

f  
g  
h  

i  
j  

k  
l
PLATE XXIII: Side Scrapers

a  b  c  d  e  f  g  h
PLATE XXV: Side Scrapers

a

b

c
d

e
f

g
h
PLATE XXVI: Side Scrapers

a  b  c

d  e  f

g  h  i

j  k  l
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a

b

c

d

e

f

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a

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c
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a

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