1977

Archaeology and ethnohistory of the Bearmouth area

Patricia Robins Flint

The University of Montana

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ARCHAEOLOGY AND ETHNOHISTORY

OF THE BEARMOUTH AREA

by

Patricia Robins Flint

B.A., Western College, 1968

Presented in partial fulfillment of the requirements for
the degree of

Master of Arts

University of Montana

1977

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Date: June 3, 1977
ABSTRACT

Flint, Patricia Robins, M.A. June 1977 Anthropology
Archaeology and Ethnohistory of the Bearmouth Area (119 pp.)
Director: Katherine M. Weist

Investigations within the Bearmouth area in Western Montana were directed towards defining a community pattern and describing the cultural history of the aboriginal people who used this twenty square mile area on the Upper Clark Fork River. The area was surveyed to locate artifacts which indicated aboriginal activity areas. Journals of explorers, trapper-traders, missionaries, and white settlers were consulted with respect to their mention of land use in the Bearmouth area.

By using the anthropological techniques of archaeology and ethnohistory, it was found that during the Late Prehistoric Period a group of people who practiced a Restricted Wandering Community Pattern used the area. After the advent of the horse in 1730 and into the Historic Period, the native people using the area were practicing an Equestrian Hunting Community Pattern.

Research work verified four general hypotheses: 1) Aboriginal occupation of the Bearmouth area was more extensive than has herefore been shown. 2) Use of the land was patterned in a systemic relationship to the resources of the area. 4) The unique topographic and geologic features functioned significantly in shaping use of the area. 4) The pattern of land use was altered by Euroamerican contact.
ACKNOWLEDGEMENTS

Without the inspiration and information from G. Maurice Weaver, this thesis would not have been undertaken. To Mr. Weaver, the oldest pioneer resident of the Bearmouth area, my thanks for being so willing to contribute to this endeavor. Data gathered from interviews with him made it clear that there was a great deal of information in the Bearmouth area worth putting to paper.

The fine members of my thesis committee provided incisive criticism and helpful suggestions. Thanks to Chairman, Dr. Katherine Weist for laboring over the initial manuscript and for continual support; to Dr. Dee C. Taylor for concentrating on critical assessment of the archaeological work; to Dr. Carling Malouf for providing the broad regional information on which this case study is based; and to Dr. K. Ross Toole for the important lessons in Montana history.

Special thanks to the land owners of the Bearmouth area where early Montana people lived and left their remains. All the sites in the Bearmouth study area are on the private land of G. Maurice Weaver, Fred Weaver.
Hazel Marsh, Eaf Parke, Don Redding, or Bob Browne. Without these people's consent to investigate, the research problems in the Bearmouth area could not have been solved.

All the site forms, full descriptions, and photographs of the sites located during this project have been filed with the Montana Statewide Archaeological Survey at the University of Montana, Missoula. This repository of site information was also of great value.

To all the people in and around the Bearmouth area who have been so interested in this project, my thanks. Finally, the contributions and encouragement of a husband can never be adequately acknowledged, but to John, my husband, who has lived through this project day by day, thank you.
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Chapter 1

INTRODUCTION

The Archaeology and Ethnohistory of the Bearmouth Area is a case study of changing environmental use in Western Montana by particular social groups over approximately a 400 year time span. From prehistoric times to 1860, aboriginal people used the land in the Bearmouth area for various purposes. In this thesis, the essentials of this varied land use were extracted and explained in terms of archaeological remains and ethnohistorical data. Four basic hypotheses were tested by the anthropological techniques of archaeology and ethnohistory: 1) The Bearmouth area was used more extensively than has been shown before. 2) The aboriginal use was systemically related to the available resources. 3) The unique topographic and geologic features functioned to shape aboriginal use. 4) Euroamerican contact altered the community pattern of land use in the Bearmouth study area.

The Bearmouth Area

The focus of this anthropological study was centered on a geographical area thirty-five miles southeast of Missoula, Montana along the Clark Fork River. This has been designated the Bearmouth area because of the name
of an exit off Interstate 90 which gives access to the land under investigation. Approximately eight miles of river frontage in the western Montana Region were included (see Figure 1).

Previous archaeological work here documented three aboriginal occupation sites and one pictograph site (Griswold, Larum 1954; Taylor 1977). Ethnohistorical studies done in connection with Indian Land Claims Act court cases have led students generally to accept an idea that the area was used over the past three or four hundred years by Salishan peoples (Chalfant 1974, Fuller 1974, Malouf 1967).

The purpose of this thesis was to formulate a cultural history of aboriginal land use in the Bearmouth area from prehistoric times to 1860 A.D. Some of the questions involved in the problem included: who moved through the area; what was the nature of the occupation; when was the area used during the yearly subsistence round; and for what reasons was the area used?

Research work focused on testing certain general hypotheses: 1) Aboriginal occupation of the Bearmouth area was more extensive than has heretofore been shown. 2) Use of the land was patterned in a systemic relationship to the natural resources in the area. 3) The unique topographic and geologic features functioned significantly in shaping use of the area. 4) The pattern of land use
Figure 1. Location of Bearmout Study Area
was altered by Euroamerican contact. The anthropological techniques of ethnohistory and archaeology were applied to test these hypotheses.

The Bearmouth area was only part of a larger region over which early peoples ranged to find the resources and conditions they needed to perform various activities. As they moved from place to place, they left archaeological remains from which it was possible to determine the type of activity which was carried on in the place where remains were found. From the variety of sites in this particular area, it was possible to define a total community living pattern. The community pattern is a model of the way in which a particular social group uses a particular environment.

Part of a community pattern reflects subsistence strategies, and part of the site configuration can reflect ideology. From an ecological point of view, the interaction between flora, fauna, moisture, minerals, and human life functions as a system of interdependent parts. At a given moment in time, an apparent equilibrium exists between any human society and the total natural setting (Clarke 1962). From a cultural point of view there is a system of relationships of man with habitat that is expressed through beliefs and rituals, and is not restricted to just technological or subsistence activities.

For the archaeologist, the community pattern is best
understood in prehistoric subsistence methods which are inferred from material remains. To a lesser extent some aspects of religion can be inferred. For the ethnohistorian, the community pattern is revealed in documents which provide information on specific areas of land use and behavioral descriptions. The ethnohistory rounds out the social aspects of the technological remains.

Research Design

The Bearmouth area has been included in major anthropological studies of the western Montana Region (Malouf 1956a; Griswold, Larom 1954); but the area has not been considered in detail with respect to its unique place in the community pattern of the aboriginal populations. There were several specific problems relating to the Bearmouth study area: 1) Archaeologically the left bank (meaning the bank on the left as one faces downstream) had not been surveyed. 2) The Bearmouth Pictograph site was not included in the two major regional studies. 3) One of the earliest pioneer residents of the area had never been consulted about the historic aspects of aboriginal land use in the Bearmouth area. The research design addressed these problems through the use of archaeological survey and ethnohistorical research.

Archaeological Survey

The fieldwork strategy of surface survey was the first
phase of archaeological work. The object of the survey was to make a more thorough search for prehistoric sites in the area. The survey was conducted under the assumption that aboriginal living areas were situated partly in terms of the distribution of certain natural resources. First, the setting was defined in terms of land forms, water sources, flora, and fauna. Then the study area itself was investigated by walking over the land, section by section. The intention was to locate all aboriginal sites, to recognize differences in land use in the assemblages at different site locations.

Artifacts recovered were analyzed by type to serve as initial guidelines for defining site types. The geographical distribution of artifacts and debris reflects human activity areas relating to the natural resources (Struever 1971). The variation in site location and size could also be a function of the level of technology or due to the requirements of the group's social institutions. Artifacts were compared with those already discovered in the region to establish a chronological control for sites in the study area.

Ethnohistorical Research

In its broadest sense the ethnohistorical method includes the use of written documents, comparative eth­nology, and oral tradition (Sturtevant 1970). For the
Bearmouth area, ethnohistorical research was directed to answering the questions of which native peoples moved through the study area during the historic period, who occupied the area to the exclusion or in conjunction with other tribes, and at what time of the year were different sites occupied?

Native peoples of Western Montana were all basically wandering or semi-nomadic people, and most had a very similar material culture. Without a well-developed pottery tradition, archaeologically there is little basis for saying a particular tribe used a particular site. Documentary evidence must pinpoint exclusive use of a specific area.

One of the roots of the ethnohistorical method is found in the direct historical approach of North American archaeologists. The archaeologist uses historical evidence to identify archaeological sites associated with known tribal groups. The association secures the upper ends of archaeological sequences to historical and ethnographic data (Sturtevant 1970). William Duncan Strong (1935, 1940) demonstrated that documentary materials could be used with archaeological data to provide a continuous record from the present into the past of particular sites.

Ethnohistorical data provide a valuable addition to the archaeological record. They describe perishable materials
such as wooden bows, clothing, and cooking methods, as well as information on the degree of aboriginal use of white trade goods. Changing economic patterns of land use may also be part of the written record. Ethnohistorians have also been concerned with the location and migration of tribes, changing cultural adaptations to the environment, the exact nature of the relations of particular tribes with Europeans, and effects which the fur trade, disease, and warfare had on American Indians (Cohn 1968). Ethnohistorical data can provide a diachronic picture of change in the social environment of aboriginal peoples. Ethnohistory also guides protohistoric and early historic archaeological field work while its greatest utility is in describing the relationship between European and non-European societies (Washburn 1961).

For the Bearmouth study area, the historical documents consulted included trapper-trader, explorer, and missionary journals; early maps; official U.S. Government papers; and early ethnographies of the Salish peoples. The compilation of government documents from the Indian Land Claims Commission cases edited by David Agee Horr was particularly useful.

Historians, in emphasizing a search for all available written records, place particular value on primary sources, i.e. written manuscripts closest to original eye-witness
accounts. The field ethnographers of the early 1900's, in particular Teit (1930), were engaged in assembling such primary historical documents. Another primary source and an important research tool used in this study was oral history. The tool is limited with respect to the selectivity of the human memory but, when used in conjunction with early ethnographies, evidence for land use was further substantiated. Residents are still alive who remember Indians camping or traveling through the area in the late 1800's. These people gave eye-witness accounts of aboriginal land use after white contact. Interviews conducted with these primary sources led to archaeological site locations as well as lifeway descriptions.

Theoretical Framework

In describing the community pattern of semi-nomadic hunting and gathering people, there are no permanent houses to show the center of their territory. The groups moved over a wide area for hunting and fishing, for root and berry gathering, for travel, for warfare, and for religious purposes. Sets of specialized and spatially differentiated work teams moved through accustomed yearly rounds of seasonal subsistence activities (Spaulding 1971). The community pattern for wandering hunting and gathering people is shown in sets of sites which represent the
total activity of a community at a given time in a repetitive sequence.

When a concentration of cultural debris is found, it locates an archaeological site, a space where people used or produced artifact. As Spaulding has theorized, the site often corresponds to a spot for particular activities—an area where chert was quarried and chipped, a culinary area, or a religious shrine. The site may reflect a subset of activities by a special segment of the group, or it may represent the entire group's activities at a certain time. Site function is usually indicated by the presence of particular artifact types which indicate that a particular activity was carried out there (Spaulding 1971).

The type of archaeological survey conducted in the Bearmouth study area may be classed as "Limited Survey" (Ruppe 1966). It was problem oriented and conducted for a specific reason. Surveys of this type seek information about certain attributes of an area. The archaeological survey of the Bearmouth area was designed to determine the kinds of sites and the extent of occupation along a specific stretch of watercourse in the Montana Western Region. In the survey, artifacts were sought which reflected technological activities as well as ritual and religion.

Sites were arranged chronologically based on artifact types and on documentary evidence. Where there was no evidence of trade goods, the site was defined as prehistoric.
On the other hand, historic sites were defined in their broadest sense following Fontana "if we have mention or description of a site by non-aborigines, such a site should be called historic whether or not it contained foreign material culture or not. This treats documentary evidence as if it were another artifact, not in situ perhaps, but an artifact associated with the site nonetheless" (Fontana 1965: 61). If it was known that a specific historic tribe used a particular site, the use of artifacts there is described by direct ethnographic analogy. At that point the theoretical mesh between archaeology and ethnology is clear.

If one takes cultural history as his problem and peoples of the early historic as his point of departure, the difference between strictly archaeological and strictly ethnographical interest disappears...Archaeology supplements the cultural picture drawn from historic documents and informant testimony. Ethnography explains archaeological materials in their cultural context. And where archaeology traces changes backward into the past, ethnography may trace them forward (Steward 1942: 341).

In cross-cultural analyses of community patterns, ten different types have been distinguished, based on the degree of community mobility (Beardsley et al. 1956). For the purposes of this thesis the "restricted wandering" and "Equestrian hunting" community patterns were most appropriate models for explaining site configurations.

Restricted wandering communities "wander about within a territory that they define as theirs and defend against trespass, or on which they have exclusive rights to food
resources of certain kinds, movement within the territory may be erratic, or it may follow a seasonal round depending on what kind of wild food resources are utilized" (Vanstone 1974: 38). The almost constant mobility prevents the extensive accumulation of camp refuse in any one place.

The model of the equestrian hunting community pattern is that of a group of hunters and gatherers who have the horse as a domestic animal but who use it primarily as a tool for hunting rather than as a food source (Beardsely et. al. 1956: 147). This community pattern developed in the New World after the introduction of the horse. It is hard to detect archaeologically because of the high degree of mobility and perishable nature of most of the material culture.

In this thesis, the ecological setting was first defined, the archaeological remains were described and interpreted, then the ethnohistorical evidence was used to detail a diachronic picture of human life in the Bearmouth area. Both the ecological system and the system of religious beliefs have functioned together to produce a unique land use-community pattern which changed during the 400 years from the Late Prehistoric Period to 1860 A.D.
Chapter 2
THE SETTING

The setting for this case study was all important in terms of the dramatic interplay between human populations and the environment in which they live. The way in which human groups adjust to and utilize a particular environment is herein called the community pattern. The whole intermountain region is an ecologically diversified area. There were both seasonal and year round food resources for hunting and gathering groups. The diversity of subsistence resources was offset by the specificity of stone quarries, suitable areas for equestrian trails, and physiographic features appropriate for ritual and religion. Favored raw material sources for a lithic technology were at a premium except in and near the Bearmouth area. The left bank flood plain area was most suitable for an equestrian group trail and associated transient campsite locations. The combination of thermal hot springs and pictograph panel made the Bearmouth area a unique religious place.

Montana Western Region

The Montana Western Region was defined by Malouf (1956b)
as that area bordered by the Continental Divide on the east and south, by the Bitterroot Mountains on the west, and by the Forty-Ninth Parallel on the north (see Figure 2). This area between the Plains and Plateau is drained by the Clark Fork of the Columbia and its main affluents: the Flathead, the Bitterroot, the Blackfoot, and the Hell Gate or Upper Clark Fork. The region may be considered as consisting of four main divisions corresponding to these main drainage basins. The Bearmouth area is a section of the Upper Clark Fork division.

The Bearmouth study area consists of approximately twenty square miles in the northeastern portion of Granite County, Montana. The land is set geographically in the southern part of the Garnet Mountains and in the northern part of the John Long Mountains. The area is seventeen miles west of Drummond along an eight mile stretch of the Upper Clark Fork River. The northwestern boundary is the Missoula-Granite County line and the southern boundary is the John Long Mountains. Nimrod thermal hot springs is located on the western edge of the study area while on the east, the Bearmouth thermal hot springs mark the arbitrary boundary. The meridian 113° west longitude and the parallel 46°40' latitude pass through the area (see Figures 1 and 2).

Of the major drainage systems in western Montana, only the Upper Clark Fork River and its tributary the Blackfoot
Figure 2. Montana Western Region

--- Region Boundary

■ Beachmouth Area
River provide an east-west passage through the Rocky Mountain Chain. From the west, the Upper Clark Fork trends generally south while the Blackfoot trends to the north. Most of the Upper Clark Fork provides a more southerly circuitous route to and from the Plains while the Blackfoot river is more direct.

**Land Forms and Geological Resources**

During the Pinedale glaciation (23,000-4,500 B.C.) glacial Lake Missoula repeatedly inundated all the land under 4,000 ft. in elevation in the Bearmouth area (Heusser 1969). Near Nimrod, faint shorelines of the lake can still be seen at 3,700 ft. (Montgomery 1958: 23). Since the final release of glacial Lake Missoula around 4,000 B.C., the Clark Fork River has entrenched itself and laid down recent flood plain sediments of fluvial silts, sands, cobbles, and boulders of limestone, quartzite, and igneous material. Soil over the flood plain is from one to three feet deep. The remains of old river channels, swales and sloughs, cut the narrow flood plain. Railroad and highway construction have constrained the meandering Clark Fork in the study area and produced an extensive swamp area south of the river.

Geologically the Bearmouth study area lies within the Montana lineament, a major east-southeast trending structural zone known locally as the Osburn-Bearmouth Fault.
The twenty mile-wide fault line marks a zone of fundamental crustal weakness. The movement in the fault zone has thrust quartzites, dolomites, and limestones of Cambrian, Devonian, and Mississippian Age. The upturned edges of these limestones and quartzites give the mountains a linear and rugged form.

The mountainous terrain and deep canyons indicate the area is in the mature stage of the erosion cycle. The Upper Clark Fork Canyon narrows on the eastern edge of the Bearmouth area where differential weathering of the limestone bedrock has formed tall columnar spires, and sheer cliffs with keyhole flexures. The canyon also narrows at the western edge of the study area where a gravel capped spur, Medicine Tree Hill, juts close to the weathered limestone and dolomite spires on the opposite bank of the river.

The profile of the land on the right bank rises in sharp contrast to the left bank (see Figure 3). Most of the left bank in the Bearmouth area has a wider flood plain area with more land below the 4,000 ft. elevation adjacent to the river. More creeks drain from the John Long Mountains on the south than from the Garnets to the north. The flood plain on the left bank ends abruptly in steep quartzite rock talus slides. The right bank is characterized by tablelands or terraces approximately 800 ft. above the flood plain, more than 4,000 ft. in
Figure 3. Idealized Cross-Section of the Bearmouth Study Area
elevation. The southern facing slopes on the north side of the river are open and exposed to maximum solar radiation and are usually grassy. The northern facing sheltered slopes along the south side of the river are more extensively forested. Overall the soil is stony with intact parent material reflecting intensive chemical alteration in an acidic environment.

The Madison Limestone Formation outcrops on the southwestern flank of Mt. Baldy and along the northern section of the Bearmouth study area. There are discontinuous beds, lenses, and nodules of dense black chert in several geologic beds related to the Madison Formation (Montgomery 1958: 20). An entire section of land just northeast of the Bearmouth area is capped with red chert and red-stained tan to gray-colored chert, approximately 150 ft. thick which is believed to extend into the Bearmouth area (Kauffman 1963: 9). Chert is a siliceous stone which was used extensively by native peoples in the production of stone tools including projectile points, knives, and scrapers.

The movement near the Osburn-Bearmouth Fault Zone has exposed an iron oxide (ochre) deposit on the north side of the river midway through the Bearmouth area. The outcrop is known locally as the Red Hill. Such deposits were often used as sources for paint pigment by the aboriginal population.
Water Sources

The Bearmouth area is drained by small intermittent and permanent streams entering the Upper Clark Fork River. As a general rule, waters are low in February but by June the streams are at flood stage, and their volume is as much as seventy times the water flow as measured in second feet. Part of the increase is due to heavier precipitation during May and June on the western slopes of the Rockies. The heavier rainfall is augmented by the altitude of the land and coolness from the accumulated snows. Most of the precipitation in the Northern Rockies falls in winter. Summer is a season of progressively intensifying drought at all altitudes (Daubenmire 1969: 26). By the first of July, the snows have disappeared and there is almost no rain in July and August. By fall, rivers are once again low, showing new gravel bars from the spring flood. Actual snowfall in the Bearmouth area is relatively light, two to three feet, because the area is sheltered by the Bitterroot and Cabinet Ranges to the west.

An abundance of permanent springs provides year-round potable water in the Bearmouth area. Of course, in a riverine situation, water was not one of the elements in least supply for local people. Besides cool streams and cold spring water there are several thermal hot springs and seeps. Nimrod hot springs have been measured at 22°C.
The seep next to the hot springs pool at Nimrod was measured at 23°C. The principal Bearmouth hot springs measured 23°C. (Williams 1975: 34). Seeps at the base of the cliffs at the southeast edge of the Bearmouth study area also have warm water running into them.

Floral Resources

There are two traditional floral life zones now represented in the Bearmouth area. Vegetation in the intermountain region is characteristic of the Transition (2,000-4,000 ft.), and the Canadian (4,000-10,000 ft.) Biotic Resource Zones. The flora of the Transition Zone is confined to foothills and valleys; the Canadian Zone is mountainous and subalpine. Throughout the region coniferous vegetation is dominant. Yellow pine (Pinus ponderosa Dougl.) and lodgepole pine (Pinus contorta Dougl.) are the primary constituents of the forested areas.

There is no evidence that floral components of the ecological system have changed appreciably in the last 6,000 years since the final draining of glacial Lake Missoula. Through the technique of pollen analysis, it has been determined that the chief constituents of early post-glacial forests in western Montana were lodgepole and western white pine (Pinus albicaulis) (Heusser 1969). Between the chronometric time markers of Glacier Peak volcanic ash (10,000 B.C.) and Mt. Mazama volcanic ash
(4,600 B.C.) there is a gradual increase in the occurrence of ponderosa pine, Douglas fir, and composite grasses (chenopods). After 4,600 B.C. spruce, true fir, and pine are best represented. The change in pollen frequency reveals a shift from warmer and dryer to cooler and more moist climate (Heusser 1969: 13).

Where there was once a thick growth of bunch grass (_{Agropyron spp._}) the foothills in the Bearmouth area are now used for cattle, sheep, and horse grazing. Grain and alfalfa are cultivated on the flood plain. The wild food resources for human consumption in this Transition Zone have included wild parsnips, carrots, sunflower (_{Helianthus annuus L._}), horsemint (_{Monarda fistulosa L._}), horse-tail (_{Equisetum hyemale L._}), nodding onion (_{Allium cernuum Roth}_), camas (_{Camassia quamash exculenta}_), and cattail (_{Typha latifolia L._}).

Along the river's edge cottonwood (_{Populus trichocarpa}_) and willow (_{Salix spp._}) now mark the abandoned river channels. Other floral food resources found throughout the Transition Zone include service berries (_{Amelanchier alnifolia, Nutt._}), choke cherries (_{Frunus virgiana L._}), and bitterroot (_{Lewisia rediviva Pursh}_).

The inner bark of the western yellow pine, lodgepole pine, and western larch (_{L. occidentalis}_) is edible and during May the sap can be used for human food. Black tree lichen (_{Alectoria fremontii Tuck}_) is another edible
floral resource found most often on larch trees. Larch is located on the well-watered slopes which face north in the Canadian Zone. Eleven types of grasses are found in this zone which provide feed for the native herbivores. 

Berries of the mountain area were a major natural resource. Aboriginal peoples ate them on the spot or dried them for future use. In the Bearmouth area there are red bristly currants (*Ribes montigenum*), wild strawberries (*Fragaria pauciflora*), red raspberries (*Rubus strigosus*), and the Montana huckleberries (*Vaccinium membranaceum Dougl.*). On the mountain slopes there is kinnikinnick (*Arctostaphylos Ura-ursa, Spreng*) which was used aboriginally in smoking mixtures.

**Faunal Resources**

There is evidence that before 1700 A.D. the intermountain bison (*Bison bison athabascae*) ranged through the Bearmouth area (Haines 1970; Griswold, Larom 1954: 24). Antelope (*Antilocapra americana*), mountain sheep (*Ovis canadensis*), and mountain goats (*Oreamnos americana missoulae*) also lived in areas adjacent to Bearmouth (Stuart 1925).

Today the Bearmouth area is known for recreational hunting of elk or wapati (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), moose (*Alces shirasi*), brown and black
bear (*Ursus americanus*), mountain lion (*Felis concolor*), wolverine (*Gulo gulo*), jack rabbit (*Lepus townsendii*), snowshoe hare (*Lepus americanus*), and cottontail (*Sylvilagus leporidae*). Some of these animals were undoubtedly in the area aboriginally but others such as elk and deer were probably in the Plains habitat before 1600 A.D.

The Bearmouth area also has animal populations of coyote (*Canis latrans*), skunk (*Mephitis mephitis*), Columbian ground squirrel (*Citellus columbianus*), badger (*Taxidea T. americana*), weasel (*Mustela erminea*), chipmunk (*Eutamia sp.*), porcupine (*Erethizon dorsatum*), muskrat (*Ondatra zibethious*), bobcat (*Lynx rufus*), fox (*Vulpes vulpes*), and raccoon (*Procyon lotor*). The area is known for its large rattlesnake population which feeds on the sagebrush deer mouse. There are water snakes and gopher snakes.

The Transitional Biotic Resource Zone is inhabited by beaver (*Castor canadensis*), squawfish (*Fychocheilus oregonensis*), Columbia River chub (*Mylocheilus caurinus*), cutthroat trout (*Salmo clarkii*), bull trout (*Salvelinus malma*), and white fish (*Prosopium williamsoni*). Large waterfowl were utilized in the native subsistence scheme for their eggs, flesh, and colorful feathers. locally there is mallard duck (*Anas platyrhynchos*) and wood duck (*Aix sponsa*). The Bearmouth area is along the Northern Pacific Flyway where migrating northern ducks and
Canadian geese \((\text{Branta canadensis})\) often land.

Above the valley floor there are hawks \((\text{Buteo})\), bald eagles \((\text{Haliaeetus leucocephalus})\), golden eagles \((\text{Aquila chrysaetos})\), western horned owl \((\text{Bubo virginianus})\), and snowy owl \((\text{Nyctea scandina})\). In the Canadian Life Zone blue grouse \((\text{Dendragapus obscurus})\) grow to the size of small turkeys. There are also the smaller Franklin or spruce grouse \((\text{Canachites canadensis franklinii})\) in the Transition and Canadian Zones.

The system of floral and faunal resources, raw materials, and land forms provided the setting for a hunting and gathering way of life. Since the final ebb of glacial Lake Missoula, the biophysical system has changed little. Two biotic life zones are represented in the study area which differentiate at about the 4,000 ft. level.

The subsistence strategy of prehistoric people of the Bearmouth area was probably most similar to that described in ethnographies of Montana Western Region tribes \((\text{Kalouf 1952, Hart 1976})\). All over the region common roots and berries were eaten. Bitterroot and service berry were sought most often in the Bearmouth area because they are particularly plentiful. Other berries could be picked over an extended period of differential ripening at different elevations in the Garnet and John Long Mountains. Roots were processed for future use after they were dug in the spring. The fall crop of berries was eaten.
immediately or dried for off season consumption. Inner bark of cottonwood, western yellow pine, and larch were emergency foods, but in May it was traditional to collect and eat the sap of these trees as a delicacy (Hart 1976: 68).

Fish were available year round. Whitefish were a major source of fresh winter food (Malouf 1952). Local elk, deer, and moose were hunted. Smaller mammals and birds were also available. Before the horse, the hunting and gathering subsistence in the Bearmouth area was diversified, based on the wide variety of plant and animal foods available in the intermountain region.

A pedestrian population before 1700 A.D. could have successfully hunted bison in the intermountain area; but after the horse was introduced to the region the subsistence strategy changed. By the time the horse was in use (ca. 1710-30) the bison were gone for all major subsistence purposes west of the Continental Divide. That meat supply and versatile hide material had to be sought on the Plains.

No human culture can be understood apart from its environment in the natural world. Although no cultural configuration is automatically and rigidly determined by the environment, the community pattern is always influenced by environment in a varying degree. When "man's technology was still too simple to provide a protective screen, the
dependence of a culture on its natural surroundings and the closeness of the interrelationships between them were at a maximum" (Chard 1975: 70). The system of land use in the Bearmouth area was based on the availability of faunal and floral resources much like that of other areas of Western Montana. What made land use in the Bearmouth area different was the combination of a unique topography and raw material resources.

Topographically there is a contrast between the right and left bank of the river which would influence use of the Bearmouth area as a trail and as a source for floral resources. The wider flood plain on the left bank ends in steep talus slopes while the right bank is faced with high terraces. These topographic distinctions would have presented different opportunities for aboriginal occupation, either near berry patches and root gathering areas on the left bank, or for a look-out on the right bank.

The Osburn-Bearmouth Fault Zone in the Bearmouth study area is important in at least three respects: 1) Where the Madison Limestone Formation is uplifted at the eastern edge of the area, the sheer cliffs along the right bank afford the only suitable pictograph panel so far discovered on the Upper Clark Fork River (Keyser, Knight 1976). 2) The thermal hot springs are also associated with the crustal weakness. These warm waters were used by native
peoples for medicinal and religious purposes as documented ethnographically.  3) The red ochre deposit was exposed by the uplift at the fault line.

The conspicuous Madison Limestone Formation on the right bank contains suitable raw materials for aboriginal tools. In the Montana Western Region there is only one other chert quarry location so far discovered just twenty miles distant in Flint Creek Valley (24GN501: The Devil's Eyebrow Site).
Chapter 3
ARCHAEOLOGY

The archaeology of the Bearmouth study area deals with material remains of aboriginal groups. These remains were uncovered by the technique of surface survey. By analysis of the artifactual remains, five different types of archaeological manifestations were identified in the study area; occupation site, religious shrine, quarry, trail, and burial. The variety of types of sites reflected a community pattern unique to the Bearmouth area. Lithic analysis of the remains at the sites also suggested a differential occupational intensity of the opposing river bank areas from prehistoric to historic times.

Description of Findings

In the Bearmouth study area we know of six aboriginal occupation sites, two quarry sites, two religious shrines, and a burial site documented by archaeological survey. Two of the occupation sites, the quarries, and the pictograph religious shrine are on the right bank of the Upper Clark Fork. The other four occupation sites, the Medicine Tree Hill religious shrine, and the burial are located on the left bank (see Figure 4).
Figure 4. Location of Archaeological Sites in the Bearmouth Study Area
The Weaver and Little Bear occupation sites on the right bank are situated on the high river tableland terraces above the 4,000 ft. level. They are considered prehistoric aboriginal sites because no white trade goods were found in the surface survey or in test trenching. On the left bank the Tyler Creek, Old School House, Camel Slough, and Antelope Creek occupation sites are on bottomlands adjacent to present or dry stream feeders of the Clark Fork. Historic Flathead peoples are known to have camped at each of these sites. Both religious shrines are associated with thermal hot springs in the 22-26°C range.

Sites on the Right Bank of the Clark Fork

24GN3: Weaver Site. Located on the right bank of the Clark Fork, three miles from the western edge of the study area in Section 18, the Weaver Site is on benchland a quarter of a mile north of the river above 4,000 ft. elevation. The site was first reported by the Hell Gate Survey (Griswold, Larom 1954: 23). The survey party recovered a knife of basalt and one of yellow jasper, a basalt scraper, a flint scraper, eight large basalt flakes, and a flint chip (see Figure 5). The artifacts were concentrated near the rim of the benchland.
Figure 5. Artifacts from the Weaver Occupation Site

- **BASALT KNIFE**
- **JASPER KNIFE**
- **BASALT SCRAPER**
- **FLINT SCRAPER**

Shown actual size after Griswold and Larom 1954
24GN4: Little Bear Creek. This occupation site includes the mouth of Little Bear Gulch and the adjacent tableland to the west just above 4,000 ft. elevation. This concentration of surface lithics was about a mile east of the Weaver site and 300 yards from the river (Griswold, Larom 1954: 23). Extending over approximately three acres of tableland, the site proved to be the richest encountered by the Hell Gate Survey crew. A spring rises in a growth of willows at the base of the hill north of the tableland. The rivulet from the spring flows across the tableland depending on the time of the year and the amount of water available. The area has never been under cultivation, and a thin growth of Russian napweed and thistles covers the site. Even today there is evidence of occupation in the form of chipping debris. The original survey party recovered 271 items including those collected by the former resident, Mrs. Fred Decker (Griswold, Larom 1954: 25):

Basalt--1 projectile point; 2 knives; 3 scrapers; 91 chips, flakes, cores
Quartzite--1 projectile point, 2 flakes
Red jasper--43 chips, flakes, cores
Yellow jasper--6 projectile points; 1 scraper; 83 chips, flakes, cores
White chalcedony--31 chips, flakes, cores
Flint--1 projectile point; 7 chips, flakes
The Deckers also found a pair of bison horns buried under three feet of soil and a set of mountain sheep horns four feet below the ground in the Little Bear Creek area. They discovered the remains of a bison in Bear Gulch, three miles east of Little Bear. At the time the survey party spoke with the Deckers, the faunal specimens had been given away, so identification of the species involved was impossible.

On the tableland during the 1975-76 field season surface finds included:

- Basalt—2 broken knives, 1 core, 5 flakes, 2 chips
- Quartzite—1 side scraper
- Red jasper—1 basal end of a straight based corner-notch projectile point 12 mm. at the base, 5 chips
- Red chert—1 basal end of an indented base, corner notched projectile point 18 mm at the base, six chips, three flakes
- Yellow to brown chert—16 chips
- Red to white chert—3 chips
- White flint—3 chips
- Ground stone—1 pigment mortar

During the 1976 field season, a square test trench (one meter by one meter) was dug with trowel and shovel, but no subsurface material was recovered. It is possible that the small mound where the test trench was dug was a result of disturbance from an historic white burial on the tableland which had later been moved to a
Figure 6. Projectile Points from Little Bear Creek Site
conventional cemetery. At the edge of the tableland, in a cut made for road gravel, a jasper core 1.2 by .5 cm. was found.

24GN65: Red Hill Pigment Quarry. One quarter mile east of Little Bear Gulch is an iron oxide deposit exposed on a side hill. Ethnographic information indicated that this ochre deposit was the source of pigment used in local pictograph painting (Malouf 1969: 290).

24GN62: Mt. Baldy Chert Quarry. At the 6,000 ft. level more than three miles from the river, a stone quarry site was discovered in the 1975 summer field season in survey connected with this thesis project. The Mt. Baldy Quarry is adjacent to a typical subalpine park. Lithic debris, including both worked and unworked material, is strewn over an area about forty meters in diameter. There are ten roughly rectangular holes sixty by 240 cm., about a meter deep under a cluster of spruce. The owner of the land, G. Maurice Weaver, said that he found arrowheads here. They were triangular-shaped and usually unbalanced i.e. heavier on one side than the other. Hundreds of gopher holes revealed worked and unworked pressure flaking chips. In addition to the spruce trees, there is a low mat cover of herbaceous vegetation including strawberries, sage, buttercups, lupin, mint, and shortgrass. The nearest spring is 600 meters northeast
of the site.

The entire site was covered with pieces of varicolored indigenous chert. A large part of the debris consists of flakes and chips with bulbs of percussion or striking platforms indicating that they were formed by human workmanship. Many pieces appear to be blanks or preforms i.e. flakes with several chips removed to give them a basic form (see Figure 7). The material recovered resembles the other known chert quarry in Western Montana, the Devil's Eyebrow (24GN501), in the Flint Creek Valley approximately twenty miles from the Bearmouth area.

An assemblage of lithic materials recovered during the 1976 field season was all made of local material (limestone chert colored red, gray, brown, orange, white) unless otherwise noted:

16 fine chips less than 5 mm. indicating pressure flaking
43 chips greater than 5 mm. but less than 21 mm.
   one chip was made of non-local obsidian
11 flakes large enough to have secondary retouch
   one flake was made of non-local obsidian
8 blades, flakes twice as long as they are wide
1 spur type 30 (Formington 1962)
3 cores
2 choppers
13 scrapers, one of basalt
3 partial knives
Figure 7. Artifacts from Mt. Baldy Quarry
24GN1001: Bearmouth Pictographs. At the western edge of the Bearmouth study area, the Madison Limestone Formation is tilted to vertical on both sides of a narrow stretch of the Upper Clark Fork Canyon. Cliffs, towers, and spires lend an awesome character to the area. The Bearmouth Pictograph site is at the base of one of these limestone cliffs and at the edge of what was once flood plain. Now, just a wide ditch separates the cliff from the frontage road. A hot spring steams one hundred meters from the site across the river.

The Bearmouth Pictographs have been known to archaeologists for at least the last twenty years, although they were not reported in the Hell Gate Survey. Contrary to popular belief, the land on which the pictographs are located was private and not protected by the antiquity laws but, because it lacked surface material, it was never excavated until two amateurs dug there in 1971. The men shoveled and screened the ledge below the pictographs but have not reported their findings. The University of Montana Statewide Archaeological Survey has pictures of some of their collection.

The pictures of the artifact assemblage show stone projectile points, scrapers, blades, worked bone, shell, and antler. Some shells had been formed into circlets, some were perforated and incised. There were carnivore claws, pendants, and necklaces of bird and mammal
bones (Taylor 1977). In an attempt to salvage what was left of the cultural information, a University of Montana excavation crew under the direction of Dr. Dee Taylor got permission to excavate the ledge under the pictographs and, in the 1976 field season, they recovered similar materials and some potsherds.

Sites on the Left Bank of the River

24GN63: Medicine Tree Hill. Medicine Tree Hill is a gravel-capped spur that juts into the Clark Fork flood plain, narrowing the canyon at the western edge of the Bearmouth study area. Ponderosa pine and shortgrass cover the glacial gravel deposits. The Medicine Tree stump is in a clearing on the south side of Medicine Tree Hill. The tree was cut in 1974 and revealed growth rings which showed it was about 500 years old at that time. The tree stump is the largest on the hill, 93.7 cm. in diameter. In the clearing around the tree stump parts of a basalt knife and a basalt scraper were found during surface survey (see Figure 8). This site is directly south of the Nimrod thermal hot springs.

24GN2: Tyler Creek Occupation Site. The Tyler Creek site was recorded during the Hell Gate Survey. It is one-fourth mile from the Medicine Tree. The occupation site was on level bottomland about a half mile from the Clark
Fork River against the foothills of the John Long Mountains. The area has been under cultivation.

Griswold and Larom (1954) reported a gray quartzite pestle 25.5 cm. (ca. ten inches) long found by a small spring in the area. The large meadow east of the house yielded "a great many artifacts" to the former owners of the ranch. The survey team also found a yellow jasper flake. The present owner of the land, Eaf Parke, found an oblate maul near the creek.

24GN115: Old Schoolhouse Occupation Site. Two miles further east on the left bank of the Clark Fork, what remains of this historic contact Flathead occupation site is an outhouse that was formerly associated with a school house that was built on the spot in the early 1900's. According to the owner of the present hay field, Flathead peoples camped there when "there used to be quite a flat in there and now there's a swamp" (Flint 1975). Vegetation now at the 3,700 ft. flood plain spot is bunch grass, alfalfa, cottonwood, buck brush, and cattail.

24GN116: Camel Slough Occupation Site. Adjacent to an abandoned river channel of the Upper Clark Fork is a wide open field approximately 300 square meters in diameter. The flat area west of the slough was used as an historic campsite by the Flathead peoples in the late 1800's.
Figure 8. Medicine Tree Hill Artifacts

Figure 9. Artifacts from Camel Slough
Artifacts found in the area included a red and opalized quartzite knife, and a unifacially retouched brown chalcedony scraper (see Figure 9).

24GN117: Antelope Creek Occupation Site. Antelope Creek drains into an ox bow lake of the Upper Clark Fork. The Antelope Creek site is about a mile from the mouth of the creek in what is known locally as the Big Valley. The valley is now used for alfalfa hay and for grazing and wintering cattle. The site is about a mile from the old Mullan Stage Station. Bottomland brush, willow, alder, cottonwood, and sage cover these foothills of the John Long Mountains. Owner of the land, Mrs. Hazel Marsh, found a conical pestle 27.5 cm. (ca. 11 inches) long and a side-notched gray chalcedony projectile point about 5 cm. long and 3 cm. at the base (see Figure 10).

24GN64: Talus Slide Burial. This is one of many talus slides on the left bank of the Clark Fork. The rock material from this particular slide was used in bridge construction in the early 1900's. According to the land owner, G. Maurice Seaver, the digging uncovered war clubs, skulls, and several skeletons. Only the war club was not given away or destroyed in the construction (see Figure 11).
Figure 10. Artifacts from Antelope Creek

Figure 11. Spear Club from Talus Slide Burial
Interpretation of Findings

Local Chronology

By definition, each of the archaeological sites in the Bearmouth area has a prehistoric component because there is no archaeological evidence of white trade goods. In the analysis of prehistoric sites, lithic material must be heavily relied upon in the absence of a pottery tradition.

Before 4,000 B.C. the evidence for man's occupation in the Montana Western Region is scattered and fragmentary. Near the National Bison Range projectile points were found which have been identified as Cascade type which are dated around 10,000 B.C. (Display at National Bison Range). Near Avon a chipped stone projectile point, identified as Agate Basin, was found associated with charcoal which was radiocarbon dated between 7,250-7,650 B.C. (University of Michigan Radiocarbon Lab 1968). Professor Richard Malouf found an Agate Basin projectile point near the confluence of the Clearwater River with the Blackfoot in Western Montana (Taylor, personal communication).

A local chronology for the Montana Western Region has been proposed from the analysis of lithic assemblages found in four different lake level strand lines of Flathead Lake (Malouf 1956a). The four strand levels correspond to four different cultural complexes that
followed one another in that region from 4,000 B.C. to historic times.

Strand level IV, the earliest level, was characterized by the stemmed or fishtail Duncan and Hanna points made exclusively of basalt and quartzite. These points were 3.8-7.5 cm. long (ca. 1 1/2 - 3 inches), barbless with straight shoulders. The stems of the projectile points were straight-sided with a concave base. There were no ground stone implements found associated with Level IV.

Level III, one hundred feet above the recent lake level, contained projectile points with wide and deep corner notches. The points were long in proportion to the width and were made almost exclusively of quartzite and basalt. The scrapers were simple and unretouched. There were more scrapers than knives.

In the second cultural horizon, Strand level II, corner notches were narrower and deeper, the blade averaged 2.5 cm. long (ca. one inch). Stem bases were convex or straight. Ovoid knives appeared with plano convex scrapers and there were ground stone conical pestles, 20 cm. long (ca. eight inches). There were some elongate grooved mauls but no oblate mauls or white trade goods. There was some use of flint, but basalt was the predominant material in the assemblage.

Level II can be dated approximately 1500-1750 A.D. or the Late Prehistoric Period in Western Montana. A
stratified burial at this horizon demonstrated that secondary burial practices were older than primary burial. The primary burial was associated with trade beads and metals. The secondary burial under it was not associated with trade goods or grooved mauls. Pictographs also occurred in this Late Prehistoric Period (Malouf 1956a: 248); in Western Montana only solid red figure pictographs are found.

Just before 1700 A.D. cultural traits from the Columbia River appeared in the stratigraphy: a long pestle thirty cm. long (ca. twelve inches), a hand maul, copper objects, dentalia shells, and abalone (Malouf 1956a: 248). At the same time Plains traits including plano convex scrapers and drills, and projectile points of chert, jasper, flint, obsidian and chalcedony were represented.

Strand line I at Flathead Lake, the most recent cultural horizon, is dated after 1700 A.D. by relative position. Corner-notched projectile points continued to be found. The points had convex sides, a straight base, and well formed notches. The side-notched type of projectile point appeared in Strand line I with straight bases, convex sides, and shallow or gaping notches. Point sizes ranged from two to five cm. long (ca. 5/8 to two inches). There was negligible use of basalt. The silicate family of chert, chalcedony, jasper, and flint were materials most often found.
On the basis of materials alone one might suspect that an invasion, or migration had occurred from east of the Continental Divide. The fact that eastern implement forms appeared...substantiates this contention...Earlier people in Western Montana who occupied higher terraces used quartzite almost exclusively for making points and implements. We have here archaeological evidences of the migration of a Kalispel band from the Sun River to Flathead Lake (Malouf 1956a: 172).

Apart from the Flathead Lake Strand Line sequence, the Montana Western Region lacks any well-stratified, reported, site for dating of the Late Prehistoric and Historic Periods. Even on the basis of typology there is no sequence comparable to the datable changes in projectile point forms on the Plains. East of the mountains, the corner-notched form of projectile point is usually superceded by the side-notched point; but in the intermountain area west of the Divide, corner-notched points are found well into the historic period. The stratigraphic sequence at Flathead Lake does clearly show that side-notched points do not appear in the Montana Western Region before 1700 A.D. By seriation one can infer that sites with side-notched projectile points were used after 1700 A.D.

In a cultural context, types of projectile points should be viewed as "artificial units set up by archaeologists in what actually was a continuous stream of ideas expressed in durable form, that were changing with the passage of time" (Ford 1949: 40). On the Plains, Forbis
(1960) and Kehoe (1966) attribute the change in projectile point form and size to the changes in methods of hunting bison. The size change is also related to the use of the arrow instead of atlatl spears. Hafting requirements resulted in change in the shape of projectile points. With the move to equestrian hunting from pedestrian communal buffalo jump kills, projectile point sizes and shapes were altered.

In the Montana Western Region, communal bison hunts were not of the magnitude or frequency of the Plains. The kinds of hunting methods used in the mountains were different from those used on the Plains if only because of the differences in environment. Hunting today in the Bearmouth area is still done on foot in the roadless areas. Even with the horse, hunting and gathering in the mountains was not changed to the degree that it was on the Plains.

A basic conservatism of the Intermountain Western Tradition often resulted in the adaptation of new materials to old basic patterns (Daugherty 1962). If projectile point form is related to projectile point function, then the reason for retention of the corner-notched projectile point in Western Montana may be due to the fact that the projectile point function did not change appreciably from 1,200 A.D. into the historic period.
Historic components of the sites in the Bearmouth area afford the anthropologist with a clear-cut interpretation of some of the archaeological findings. The religious shrine at Medicine Tree Hill is included in the historic literature concerning the study area. The occupation sites on the left bank are part of the historic record. The ethnographies of native people of Western Montana provide ample descriptions of pictograph use and of talus slide burial. Life style descriptions of hunting and gathering peoples give a picture of activities at occupation sites.

Prehistoric Components

Cultural horizons for the prehistoric components in the Bearmouth area are best determined by an analysis of lithic materials. Because the pottery tradition is not manifest, the archaeologist must rely on the similarities and differences between stone tools at different sites.

Taken alone, the shape of projectile points in the occupation sites of the Bearmouth area is inconclusive in establishing a relative chronology. One basalt projectile point (specimen 9) from Little Bear Creek resembles, typologically, artifacts from the Strand levels III or IV at Flathead Lake, the oldest horizons.

Eight, reasonably complete, projectile points were measured following specifications set up by Forbis (1960)
Comparison of these measurements shows that the projectile point found on the left bank of the river (specimen 12) is significantly different from the points found on the right bank. The gray chalcedony point is the only unquestionably side-notched point in the occupation sites' lithic assemblage. It has the largest basal height and the smallest notch width. This form of side-notched point occurs only in the most recent horizon at Flathead Lake, which has a relative date after 1700 A.D. The other point forms appear most like those at Level II or around 1600-1750 A.D., the Late Prehistoric Period.

Older levels at Flathead Lake were characterized by greater use of basalt and quartzite than the more recent strand line levels, although some flint appeared in the Late Prehistoric Level II, just before 1700 A.D. Basalt and quartzite tools were frequent in the assemblages from the right bank in the Weaver and Little Bear occupation sites: 13 large basalt flakes, a quartzite projectile point, a quartzite scraper, 4 basalt scrapers, 5 basalt knives, a basalt core, and 93 basalt chips.

Basalt and quartzite were found on the left bank of the river only at the Medicine Tree Hill site and then in small quantity compared with the right bank assemblages. Ground stone pestles were found in the Bearmouth area only on the left bank. Conical pestles were used by the Salish
peoples for pounding and grinding berries during the Late Prehistoric and Historic Periods. Pestles up to fifty-one cm. long (ca. twenty inches) were made in later times than those that averaged twenty cm. long (ca. eight inches) (Malouf 1962b: 3). The pestle at Antelope Creek was 27.54 cm. long (ca. ten inches), at Tyler Creek it was 25.5 cm. long. Based on their size, the pestles found in the Bearmouth study area would have been associated with use into the Historic Period. Because they were relatively heavy, pestles were probably cached along the Bearmouth trail where berries were readily accessible for processing on the spot.

The grooved stone maul in Western Montana was used only to process meat, never berries or pemmican (Malouf 1962a: 11). The introduction of the maul to the region is thought to be a result of Plains influences into Western Montana after 1700 A.D. The oblate form found at Tyler Creek is usually found in connection with historic materials after 1800 A.D. (Malouf 1962a).

Overall the artifacts recovered in the Bearmouth study area represent Late Prehistoric and Historic horizons. Following the local chronology established at Flathead Lake it is possible to associate occupation sites on the left bank with younger horizons than the right bank, based on the type of lithic material represented. The more extensive use of basalt and quartzite materials on
the right bank demonstrates an older component than that recovered on the left bank. The tableland occupation sites and the Mt. Baldy Quarry were never inundated by glacial Lake Missoula, a fact which would have allowed for earlier use of these sites but, without diagnostic artifacts, it is not possible to verify this possibility.

**Historic and Ethnological Components**

**Medicine Tree Hill.** Granville Stuart refers to this site in his *Forty Years on the Frontier*:

> There was one large pine tree on top of the hill just west of McCarty's bridge in Hell Gate Canyon on which Indians hung small articles of beadwork, bear claws, strips of red cloth, queer shaped stones, bunches of white sage, pieces of buffalo scalp, small pieces of bone, etc....The objects were hung on the tree as the Indians passed on their way out to the hunting grounds. Offerings were placed there to invoke the aid of the great spirit to make game plentiful and make them successful in their enterprises (Stuart 1925 II: 41)

In his study of sacred trees of the Salish, George Weisel found that "another sacred tree stood on Medicine Tree Hill near the old McCarty Bridge on Hell Gate River. It formed the southwest corner for the survey between what then constituted Deer Lodge and Missoula counties" (Weisel 1951: 4). Weisel recounts a legend that was current among "Indians on the western slope" in 1907. It told of a young man who was being pursued by his
enemies. When he came under this large pine tree the arrows of the enemy did not harm him. He, in turn, was successful in every shot against his enemies, so the tree was considered sacred and good luck.

**Camel Slough.** It is possible that this site was called *culm s* in Salish. Going east to the bison hunting grounds on the Plains, the Salish used the Upper Clark Fork Canyon route if the water was low in the river. Salish informant, John Delaware, said that after Beavertail, there was a campsite next to the river where the land was flat and swampy (Malouf 1952: 41).

Area resident, G. Maurice Weaver, said he used to run horse races near Camel Slough with the Flathead. "They had all kinds of tents there and we used to have a hell of a time. I've seen dancin', poundin' drums, and one thing or another" (Flint 1975). Mr. Weaver said the Indians would come through the area after the geese had flown through in April.

**Talus Slide Burial.** Talus slopes and gravel banks provided the most common sites for burial in the Montana Western Region. River banks and islands were also used. The Flathead selected an obscure spot (Ray 1939: 61). A Salish corpse was given tokens of affection, grave goods, which were interred with the corpse. The head was toward the east, the body extended, the face was painted
red after the body was washed from head to foot (Curtis 1911: 76). Bannock burials also took place in any convenient spot in the rocks with the body extended and the head toward the west (Ray 1939: 37).

From the eye witness description of the uncovering of this burial site, it can be concluded that this was a primary type burial where the dead were simply placed in a cleft of rocks in rock slides near camps where they died. The war club found in association with the burial is usually associated with the cultural assemblage of the Late Prehistoric Period or around 1700 A.D. in the local chronology.

Bearmouth Pictographs. These drawings are typical of Type 1 Pictographs (Malouf 1961) in that they are simple, realistically depicted, solid-colored figures. They are similar to ninety per cent of the twenty-nine pictograph sites thus far located in Western Montana. Keyser and Knight (1976), in a survey of the rock art of the region, concluded that Western Montana Pictographs were most closely linked to the Columbia Plateau cultures rather than the Northwestern Plains.

Functionally, pictographs are said to relate to the Plateau-Salish vision quest, although hunting magic may have been a minor function at some sites (Keyser and Knight 1976: 10). Guardian spirits were sought at
puberty and bathing in running water, fasting, praying, and keeping vigil in lonely places were prominent features (Teit 1930: 384). Boys age thirteen to fifteen sometimes made long journeys to seek visions.

The instructions were to go into the mountains alone and starve for many days. Boys continued their journeys up to the age of puberty when, as they were men, it was not likely that spirits would hold communion with them (Curtis 1911: 81).

"Flathead would continue one night vigils at any age but pre-puberty was more frequent" (Ray 1939: 80). The Pend d'Oreille used the vision quest more than the Flathead before the alliance of the two Salish groups (Malouf 1967).

The Bearmouth hot springs associated with the pictographs may also have been used for religious purposes. Lewis and Clark saw the Flathead using warm pools at Lolo to keep their horses warm during the winter (Thwaites 1904b: 5). Malouf found from his ethnographic work that the Salish associated hot springs with medicinal and religious power (personal communication). Near Deer Lodge the warm springs was called inhihikwa. Its waters were popular for bathing and were considered of great medicinal value (Malouf 1952: 41). Shoshoni also used hot springs for relief from rheumatism and for religious purposes of producing power (Hultkrantz 1974: 241, 23).

At the Bearmouth Pictograph site, pottery was
recovered from a depth of twenty cm. (ca. eight inches) and has been identified as Great Falls Ware which was produced by Shoshoni or Salishan peoples (Taylor 1977: 179). Great Falls Ware was made during the Late Prehistoric Period as defined for the Northern Plains from 1400-1800 A.D. Kehoe (1959) postulates that Great Falls Ware was very likely made by an eastern Plateau tribe, "such as a Northern Shoshoni band, the Flathead, or the Kutenai, since the site locations tally with the ethno-graphic information on the hunting forays of these groups" (Kehoe 1959: 243).

Artifactual evidence at the six occupation sites in the Bearmouth area reflects a community subsistence pattern of a hunting and gathering people with the typical hunting and gathering lithic tool kit: projectile points, knives, scrapers, pestles, and mauls. Judging from their size, projectile points were probably used as arrow tips. From direct ethnographic analogy, the knives and scrapers were used in preparation of animal food and hide clothing; pestles were used in preparation of plant food, and mauls in preparation of dried meat.

From the comparison of the local relative chronological framework for the Montana Western Region established at Flathead Lake (Malouf 1956a), it appears that the table-land or terrace occupation sites on the right bank were
not occupied into the historic period, whereas the low level flood plain sites on the left bank have this recent component. Along with scrapers, the low level occupation sites have ground stone implements. The pestles, used ethnographically in berry preparation, would indicate that sites associated with these implements were probably occupied during the berry picking season in the fall. With the associated scrapers for hide processing at the occupation sites, an entire hunting and gathering group could have camped and carried on subsistence activities for a few days.

In the Great Basin, Smith (1940) found that areas of prehistoric settlement coincided with those of historic white settlements. He determined that water was the most important determining factor in controlling areas of land use.

The location of trails across deserts and plateaus is largely in accordance with water levels where nomads may obtain their supply of water and food as well as where white settlements may have been made. Refreshing springs or wells and streams have always been a source of attraction" (Smith 1940: 19).

The location of archaeological and historic sites in the Bearmouth area along the Upper Clark Fork adds further substantiation to Smith's theory but in a different region. Besides the use of water the systemic relation between people and environment included technological
adaptations including food drying for off season consumption, the ability to make warm hide clothing; coupled with the continual availability of fish in the Clark Fork and wild game in the Canadian Life Zone.

It is hypothesized that prehistoric use of the Bearmouth area was also governed in part by that element which was plentiful and extremely useful to people who were dependent on stone tools to make their living. The Mt. Baldy chert quarry could well have been the main focus of a hunting and gathering group's activities in the Bearmouth area before the introduction of metal. During the summer an entire group could have camped there or a special segment of the population could have camped on the mountain for shorter periods. As evidenced by the extensive worked lithic debris, the quarry area was the customary spot for obtaining and chipping chert. Because of the availability of animal and food resources there during the summer, and the spring close by, a group could have camped at the quarry site while preparing a tool assemblage.

The other quarry resource at the Red Hill was a magnet to the area for a hunting and gathering group that utilized ocher in their religious life. The religious shrines in the Bearmouth area also made this particular eight mile stretch of the river front unique. The shrines probably represent a subset of activities by a special
segment of the social groups who used the area, from what is indicated by ethnographic analogy. The pictographs were associated with the vision quest experience of teenage boys. The concentration of non-mundane, special artifacts in the cultural debris beneath the panel also indicates the shrine may have been associated with hunters' offerings for a successful hunt. The offerings at the Medicine Tree were also placed for propitious hunting, as is described in the historic literature. Also in the community pattern of archaeological sites associated with religion and ritual, the talus slide burial is well established in the ethnographic literature. The association of the war club with the burial places it as Late Prehistoric or Historic burial of aboriginal people in the Montana Western Region.

The major recent archaeological components in occupation sites appear on the left bank of the river in the study area. The wider flood plain there provided extensive seasonal food resources including service berries, cattails, and bitterroot. The left bank is also associated with aboriginal and early white trail use. Now, the left bank is the location of the major highway and a greater number of hay fields and ranch locations than the right bank.

Archaeological survey of the Bearmouth area has documented three occupation sites, two quarry sites, a
religious shrine, and a burial that had not been recorded before. The extent of aboriginal land use was greater than that already recorded in the archaeological literature. A pattern of community settlement can be defined for the area which appears to change over time. The occupation-subsistence pattern is related to the availability of natural resources of the area. The pattern, as manifest in archaeological sites, is also related to specific land forms and geologic features which provided unique areas for religion and ritual. Because the need for lithic raw material decreases over time, there is a demonstrated change, reflected in the lithic assemblage, which indicates decreasing use of the right bank for occupation sites with a demonstrated increasing preference for the left bank as a trail and for transient occupation into historic times.
Chapter 4
ETHNOHISTORY

The material culture of wandering hunting and gathering groups was so similar that, without documentary evidence, it is difficult to ascribe an area or a site to a particular historic tribe. Such is the case in the Bearmouth area. However, ethnohistorical data can identify native occupants of the Montana Western Region and other native people's movements through the area. Documentary evidence, including early ethnologies and post-contact, eye-witness accounts, sufficiently narrows the range of answers to the question of who used the Bearmouth study area and how it was used.

In general there were two recent phases of occupation of the study area, first from 1650-1750 A.D. by the Semte'use; the second after 1750 A.D. by the equestrian Salish (Flathead and Pend d'Oreille), their allies, and Salish enemies. The Bearmouth area was part of a trail during the equestrian phase. The extent of that trail use increased from 1800-1860, according to journals of explorers, trapper-traders, missionaries, and settlers.
These documents also revealed the fact that Euroamerican metals rapidly replaced stone as raw material for aboriginal tools.

Aboriginal Inhabitants

The Semté'use

The major early ethnographers of the Salish peoples, James Teit and Harry Holbert Turney-High, disagreed on the existence of the Semté'use. Teit did fieldwork among the Salish in 1904; Turney-High's work was in the 1930's.

Turney-High considered the Semté'use to be purely a legendary people. His interpretation of pre-white tribal distribution placed the Pend d'Oreille originally in the Bitterroot Valley, later occupied by the Flathead. According to a migration myth that he recorded, the Flathead had their origin near the Pacific coast. The Pend d'Oreille moved north when the Flathead arrived, but "both cultures lived in close relationship for centuries, their dialectic and cultural differences tending to disappear" (Chalfant 1974a: 38, 10).

Teit, on the other hand, thought the Semté'use were a band closely related to the Pend d'Oreille. Their territory was immediately west of the Rocky Mountains in what is now Powell County and in parts of Lewis and Clark, Missoula, and Granite Counties. The southern boundary ran from Garrison at the junction of the Little Blackfoot and
the Upper Clark Fork to Missoula; and their western boundary went northeasterly to a point in the northern end of Powell County (Teit 1930: 307). Their neighbors on the west and south were Shoshoni, on the southeast the Flathead and Tunaxa and to the north the Pend d'Oreille (see Figure 12, Map I).

Malouf (1967) has proposed a tribal distribution which places the Semte'us in the Bearmouth area from 1650-1750, during the Late Prehistoric Period. "A branch of the Pend d'Oreille, the Semte'us, occupied the Bitterroot and Missoula Valley as centers. They spoke Salishan mutually understood by Flathead and Spokane" (Malouf 1967: 3).

The Semte'us are probably best thought of as a branch of Pend d'Oreille peoples who occupied the Bitterroot, Blackfoot, and Upper Clark Fork Valleys before 1750. Teit admits there was considerable interaction and intermarriage between the Pend d'Oreille and Semte'us (Teit 1930: 322). There were several bands of Semte'us who wintered at Camas Prairie between the Upper Clark Fork and the Big Blackfoot (Teit 1930: 311).

The Bearmouth area is diversified country, hilly and wooded with good shelter, abundant water, a variety of game and fish, roots and berries, and raw materials for stone tools. Before the introduction of the horse, the Semte'us life, like that of Plateau peoples in general,
Figure 12. Tribal Distributions in Montana
involved wintertime occupancy of river villages and summertime camping at fishing, berry gathering, and root gathering grounds. Plateau people's hunting territory was usually used in common by a number of small bands (Ray 1939: 15).

Considering the Semte'use as part of the Pend d'Oreille, the subsistence scheme before the horse probably followed the ethnographic description of the Pend d'Oreille which was:

based on hunting local game, in acquiring small animals, fish, and a wide variety of plant foods. Dugout canoes were used to navigate Flathead Lake, Clark Fork River, and the Flathead River. Fish were obtained in the main river and from side streams by using special weirs or traps made of wickerwork. Conical lodges, some covered with skins were used to live in while frequently they also used grass mats for covering (Malouf 1967: 4).

This pattern of subsistence most closely follows the restricted wandering model of community pattern in that "they exploited their territory by hunting, fishing, and collecting food. Community mobility is required by the seasonal nature of the food supply" (Vanstone 1974: 38). The restricted wandering community defends its range against outsiders, but also occasionally allows other individuals, or groups to exploit the territory under special conditions. Movement within the territory followed the seasonal round, based on a knowledge of subsistence resources and technological knowledge.
Because these people moved frequently, their material culture, as evidenced in the Bearmouth area, was usually highly portable, consisting for the most part of equipment for procuring food.

By ethnographic analogy, the Semte'use were probably organized into local groups or bands which consisted of related or friendly families (kin and clique) or a single extended family. Formal leadership among restricted wanderers is usually minimal and, if it exists at all is primarily of an advisory nature. Religious behavior includes a reliance on magic to bring luck in hunting and for curing (Vanstone 1974: 39).

Documentary evidence indicates that the Semte'use were either decimated by disease and war, or absorbed by the Pend d'Oreille and Flathead bands by 1810. From 1770-1800 the Blackfeet were advancing west and southwest through Alberta to the Rockies and northern tributaries of the Missouri, evicting the Kutenai and Flathead as well as the Shoshoni. None of these western groups had a source of rifles (Secoy 1953: 152). The Blackfeet had firearms from traders in Saskatchewan from about 1732 (Ewers 1948: 14); they made frequent raids over the Continental Divide into the Montana Western Region. The Semte'use, living closest to the divide suffered during those early raids. By 1800 they had drawn away from the Divide and from the Bearmouth area and grouped near Missoula where they were
attacked again and many were killed (Teit 1930: 319).

Just prior to their retreat to Missoula, the Semte'uséalong with Flathead, Kutenai, Nez Perce, and Shoshoni, suffered high mortality rates during the smallpox epidemic of 1780-82. The remainder of the Semte'usecame from the Crow to the Flathead around 1810. The few survivors settled among the Pend d'Oreille. The Pend d'Oreille, claiming to be the tribe most closely related to them, occupied their country for hunting and root digging (Teit 1930: 19).

The story of the Semte'use substantiates theoretical conclusions concerning the same phenomena in the Northern Plains. "After an epidemic groups tended to merge with their component units or even unite with another ethnic group to defend themselves...The process of post-epidemic raiding led to demographic and territorial change" (Taylor 1976: 6).

The Salish

Just prior to 1800, the Pend d'Oreille combined with the Flathead to hunt on the Plains. The Pend d'Oreille had by that time given up the life of restricted wandering for a lifeway dependent on the bison hunt. The earliest center for the Flathead had been east of the mountains in Three Forks of the Missouri and the Gallatin Valley. Bison were of great importance in their economy (Malouf 1967: 4).
After the Flathead were driven from the Plains by the Blackfeet, they established an alliance of western tribes so they could hunt in the old Flathead country east of the mountains. The Blackfeet continued to try to deny the western tribes access to the Plains by guarding the eastern exits of the most commonly used mountain passes (Tyrell 1916: 370).

The Salish, now including the Pend d'Oreille and Flathead, developed a specialized hunting and gathering way of life, economically oriented to the bison hunt. This type of specialization led to a need for a larger territory to support the human population and, with greater territorial requirements, there was a greater competition for natural resources. Warfare resulted as did group cooperation. By 1800 the Salish laid claim to a region including the Bearmouth study area. Their defended home base was west of the mountains, but they did not relinquish their right to hunt bison on the Plains. Once supplied with guns, the western tribes (Kutenai, Flathead, Pend d'Oreille, Nez Perce) shifted from the defensive to the offensive, and in a series of battles won back a section of the Plains for bison hunting after about 1812 (Secoy 1953: 60). The section they won was south of Sun River country. The most direct route to this new area was along the Clark Fork through Bearmouth rather than the traditional route over the Big Blackfoot. The more southerly
route was also influenced by continuing Blackfeet threats. After the absorption of the Sente'use, the Bearmouth area was used primarily as part of a trail system and seasonal camping area associated with equestrian hunting communities. The Salish spent part of the year east of the mountains following the bison herds and the rest at a settlement that was established in successive locations for a period of years. They maintained some sedentary members at locations in the Bitterroot Valley and Flathead Lake while others conducted seasonal expeditions (Ronan 1890: 32, Curtis 1911: 45). The Bearmouth area became part of a larger range over which the Salish traveled. The selection of the route to the Plains bison was influenced by the season and the outlook for obtaining food and resources on the way (Malouf 1952: 39). Fishing and gathering roots and berries along the trail provided a balanced diet.

Some Upper Pend d'Oreille remember placing considerable reliance on fishing "moreso than did the Flathead people to the south" (Malouf 1952: 47). They used traps, wiers, nets, hooks, spears, and harpoons. During the wintertime fishing in streams and lakes provided an important source of fresh food, whitefish was especially popular at that time (Malouf 1952: 34).
The horse was introduced to the western tribes sometime between 1710 and 1720 from the Shoshoni (Haines 1938: 430). Subsequently the horse became a significant part of the people's lifestyle and effected alteration of the community pattern. The introduction of the horse is seen as a new and efficient hunting tool in grassland or parkland environment, according to findings by Beardsley et al. (1356). It increases the capacity both to acquire food and to transport it. The ability to exploit a larger radius for daily subsistence and to accumulate food in quantity permits a larger population concentration than in the same environment where the horse is absent. Although community mobility remains high, it is possible to maintain a level of socio-political and religious development similar to that associated with greater sedentariness among agricultural people. Some of the characteristics of semi-permanent sedentary people are also common to the equestrian hunting communities: 1) well-defined sexual division of labor in acquisition and preparation of food, 2) warfare and rivalry as a means of improving social status, 3) temporary confederation in time of crisis.

About 1830 the Flathead and Nez Perce had fifty horses to a lodge (Ewers 1943: 603). But the Flathead were continually plagued by Blackfeet raiding parties. From 1842-1880 severe winters and disease took a heavy toll on
Blackfeet horse herds. Raiding parties rarely succeeded in taking more than sixty horses on a single raid (Ewers 1943: 607). Surplus horses were an item of wealth because they were valuable in trade and they also enhanced social standing for marriage and exchange. An average family needed about 15 horses (ibid.).

In the 1840's on a typical winter hunt, the Salish took everything they possessed with them. Each winter lodge counted usually seven or eight persons, and these, together with their provisions, required the use of about twenty horses. Some fifteen parallel trails, formed by dragging tipi poles, wound between two chains of mountains which sometimes drew together to offer at close range a view of what was most majestic about the wilderness, sometimes separated to reveal a series of infinitely varied and distant perspectives. This was called the great hunting trail (Point 1967: 43).

Where restricted wandering peoples had followed many small game trails down a river course bank, now one main trail was made for the larger equestrian group.

On the trail equestrian travelers could make thirty miles a day with their packs (Turney-High 1937: 116). The main early Salish trail was over the Big Blackfoot River, Cokalahishkit, or "Road to the Buffalo," after the Salish term for bison (quoil quai) (Weisel 1952: 353). This route took them closest to their old territory in Sun River Country. "Rogers and Lewis and Clark passes were
much more important in those days then they have been in historic times for the flow of east-west traffic" (Malouf 1956: 255). There was another route from the Bitterroot Valley over Skalkaho Pass to Deer Lodge; another through the Big Hole Valley.

Routes that took the hunters through the Bearmouth area included one from the Bitterroot up Burnt Fork to Bonita or Nimrod, a journey that required only one overnight camp in the mountains (Malouf 1952: 40). Another led up the Clark Fork and Deer Lodge Valleys to present day Butte where crossings were made by Pipestone or Homestead passes to Three Forks of the Missouri. The third route through the Upper Clark Fork Canyon was up the river to the Little Blackfoot, then up the Little Blackfoot to Mullan Pass or McDonald Pass, and into Helena and the Missouri (Phillips 1974: 237, 3). All these routes were interconnected by watercourses through the mountains (see Figure 13).

The hunting season started in late April for bison bulls. Only bulls were killed in the spring, as a general rule, because cows already had calves or would soon have them. "They do not hunt the cows or disturb them if they can help it, but leave them and the calves until fall. The bulls were in herds by themselves and were very fat and fine eating" (Stuart 1925 II: 246). By early June river crossings were dangerous because of a combination
Figure 13. Bearmouth Study Area
Geographical Relationship to Major Trails
of melting snows and rain swelling the Western Montana drainage. In late June and early July the Salish returned from the bull hunt (Gibbs 1860). At the end of September, movement to the annual fall hunt started with practically the entire tribe frequently accompanied by Coeur d'Alenes, Lemhi River Shoshoni, Nez Perces, and Yakimas. They spent the autumn hunting and returned at the end of December "except when winters of unusual severity compelled them to defer crossing the mountains until spring "(Curtis 1911: 45). The fall hunt was conducted primarily to get meat from fatted calves and skin robes in their prime (Stuart 1925 II: 246).

The dependence on the bison cannot be overrated, but there remained an underlying and sustaining dependence on vegetable sustenance. Spring and early summer were devoted to root digging and sap tapping; fall to berry picking, so that there were about six months of gathering fresh vegetable food. Roots and berries were preserved by sun drying. "Berrying and root gathering was done in small family groups which split from the main body after the spring ceremonials and spread over all of Western Montana" (Turney-High 1937: 112). "While women gathered bitterroot the men occupied their time horse racing and gambling or hunting on nearby mountains" (Kalouf 1952: 14). Bitterroot was dug as early as March or April but the height of the season was usually in May. The roots were peeled off,
washed, dried for a few days, then stored in skin bags (Malouf 1952: 14). "The bulb-like underground corms of yellowbells formed a minor portion of the native people's vegetable diet in Montana. Flathead women normally gathered them in early May, about the time the bitterroot was ready for digging" (Hart 1976: 25). The corms were washed, boiled and often mixed with the bitterroot.

Also in May the sap runs and was collected from both the evergreens and deciduous trees. The western yellow pine was favored but lodgepole pine, white pine, quaking aspen, and cottonwood were also used (Griswold, Larom 1954: 17). The inner bark was scraped from the outer bark. The cambium layer was also used for food either fresh or pounded into cakes and dried for future use (Malouf 1952: 19).

In June-July camas ripened and was found in the Transitional Zone meadows. "They preserve great quantities of this root for winter which they store in baskets" (Strachan 1952: 45). Dried camas was a major trade item. "When Flatheads traded with the Blackfeet they would give more in exchange for a few bags of camas than for anything else; they often got a buffalo robe for a few handfuls of it" (Merriam 1973: 118). Other roots obtained from may through July were wild parsnips, wild carrots, and a root called "white root." "These were mashed with a maul or pestle and dried as a sort of flour"
Black tree lichen was usually obtained from larch and was used in the winter to make a kind of bread..."that looked very much like plug tobacco" (Strachan 1952: 9). "Indians first cleaned and soaked black tree lichen in water before preparation. They baked it for one or two days in underground fire pits in a manner similar to the preparation of camas... After baking, black tree lichen loses its coarse and stringy appearance, becoming a black, compact and gelatinous mass" (Hart 1976: 11). During the growing season some greens were eaten including the sunflower stem, watercress, and wild onions (Malouf 1952).

By August the berries in the Montana Western Region begin to ripen. Along the Clark Fork service berries grew in thick profusion (Strachan 1952, Kautz 1946). They were gathered in bark or grass baskets, pulverized with a pestle and sun dried (Malouf 1952: 18). Choke cherries were eaten raw or processed in much the same way. In the Canadian Zone red raspberry, huckleberry, and strawberries mature at different rates on hillsides, so it was possible for people of the intermountain area to extend the gathering period in a particular place following the differential maturation of the fruit (Malouf 1952: 46).

In their seasonal subsistence round, the equestrian hunters would most often have used the Bearmouth area in late April or early May for the root season and the
start of the bison bull hunt. This would have had to have been before the spring floods. The second major use was probably in September-October for the gathering of the berry crop and the start of the fall hunt (see Figure 14).

The return route from the bull hunt would probably have followed the Big Blackfoot River drainage because the tribe would return in time for the camas gathering season at Greenough where the camas was shallow and easy to dig (Malouf 1952). The spot near Potomac provided the most abundant supply of camas to the Flathead in recent times (Hart 1976: 15).

The Bearmouth area was certainly used at other times than those indicated in Figure 14 but, within the framework of an equestrian hunting community pattern, major use of the Bearmouth area was probably on the way to the bison hunting grounds rather than from the Plains to the home base.

Non-Salish Aboriginal Trail Use and Trade

Alliances, war parties, and trading parties traveled through the Bearmouth area, further complicating the association of sites in the study area with specific historic tribes. The Salish along with Nez Perce, Coeur d'Alene, and Yakima traveled through the Upper Clark Fork Canyon to the Plains (Malouf 1967: 1). "Mixed bands of Lemhi Northern Shoshoni and Bannocks would
Figure 14. Yearly Subsistence Round
sometimes join their friends the Flatheads and Nez Perce for a hunting trip (Trenholm 1964: 22). The Blackfeet raided in Salish territory using the Upper Clark Fork as a trail.

From prehistoric times there was considerable trade on the Clark Fork with the western tribes (Phillips 1974: 239,5). The bulk of Interior Salish trade developed after the introduction of the horse in the first quarter of the eighteenth century, when the easternmost Plateau people began to make annual expeditions to bison country (Griswold 1970: 22). On the Plains the Salish traded with Crow and Blackfeet.

Horses were the major Salish trade item. Other intermountain trade articles included horn bows, greenstone pipes, wild hemp, berries, camas cakes, dressed moose skin, mountain sheep horn spoons and bowls, coiled baskets, and eagle tail feathers, all of which could have been obtained in the Bearmouth study area (Griswold 1970: 23).

By 1730 articles manufactured in Europe were part of the trade goods: blue and white beads (Flathead clothes were decorated with these by the time of the arrival of Lewis and Clark), copper and brass from the coast. From the Missouri via the Crow came metal knives, hatchets, and arrowheads (Griswold 1970). The general increase in the use of European trade goods to replace the lithic tool kit coincides with the increasing use of the horse
after 1730. Both technological innovations were brought initially through Euroamerican contacts.

**Euroamerican Contacts**

The documentary evidence of Euroamerican contacts gives some indication of who used the Bearmouth area as well as a diachronic picture of change in the material culture of the peoples of the Montana Western Region. In the period from 1800 to 1860, the left bank was more and more favored for trail use along with increasing use of the Upper Clark Fork canyon over the Big Blackfoot River route. By 1860 the pattern for trail use was set by the location of the Mullan Trail on the left bank through the Bearmouth area and association of more aboriginal and white occupation sites with this trail (see Figure 15).

**Explorers**

The first Euroamericans known to have traversed near the Bearmouth area were Lewis and Clark in 1805-1806 A.D. They recorded that the Qate-lash-shute tribe of the Tush-she-paw nation (Salish peoples) roved in the Rocky Mountains on Clark's River and occasionally crossed over to the Missouri to make robes and dried meat (Thwaites 1904b: 114).

Before the explorers' arrival in Western Montana, the Hidatsa told Lewis and Clark that the Flathead resided in one village on the west side of a large rapid river which
Figure 15. Route of Mullan Trail Through Bearmouth Area
ran from south to north at the foot of the western slopes of the Rocky Mountains. The Flatheads had no trader at that time and were "defenseless and said to possess an abundance of horses" (Thwaites 1904b: 111).

When they reached the headwaters of the Clark Fork around Deer Lodge, Lewis and Clark did not go directly through the Bearmouth area on the river route; instead they traveled west over the mountains to the Bitterroot Valley and Lolo Pass. On their return trip they parted at Missoula and Clark headed down the Bitterroot Valley while Lewis took the Big Blackfoot River northeast.

Along the Continental Divide, Lewis and Clark encountered Indians who were still using flint and obsidian for arrowheads and knives. The natives had some iron and brass arrowpoints which they informed Lewis they had obtained in exchange for horses from the Crow on the Yellowstone (Thwaites 1904b: 19).

In 1812, David Thompson traveled close to the Bearmouth study area near present day Missoula. Thompson counseled with the Flathead and their allies in February of that year. The meeting concerned making peace with the Blackfeet as requested by five "respectable" men of the Piegan tribe. "After each of the old men (Salish) had spoken of the treachery of the Piegans and had expressed doubt concerning the possibility of a lasting peace, the Salish chief spoke again, reminding them of the change in
their condition since the white men had brought them guns and iron for their arrows" (White 1950: 209). In conclusion the chief asked for Thompson's opinion. Thompson replied that the Salish and their allies should claim freedom to hunt bison by ancient rights, vow not to be aggressors, but to be on the defensive at all times. In August the chief formed a strong party and marched to hunt bison.

David Thompson's journals describe some of the perishable material culture of the Salish. Bows made from mountain sheep horn were overlaid with several successive layers of sinew glued to the thickness of one third of an inch and covered with rattlesnake skin..."arrows were usually tipped with flint but of late years iron has been procured for that purpose, which saves an immense deal of trouble in working flint to proper shape and size" (Coues 1897:II: 713). With the decreasing use of flint or chert, there had to be a decreasing use of stone quarries in the region. Thompson also recorded that the Salish during the winter of 1809 had "traded upwards of twenty guns from me with several hundreds of iron arrowheads, with which they thought themselves a fair match for the Peegan[Blackfeet] Indians in battle on the Plains" (Tyrell 1916: 370).

In relation to subsistence patterns, David Thompson saw Indian fish wiers just below Flathead Lake where
"they were catching a few gray carp with small scales" (White 1950: 213). He also noted the use of small nets near Lake Pend d'Oreille (ibid.: 45) attesting to the continued importance of fishing into the historic period. Bull trout were widely used on the Upper Clark Fork River. The Salish place names for Missoula, Milltown, and Butte refer to the bull trout which were once caught there with bone hooks and horse hair lines (Malouf 1952: 34).

**Trapper-Traders**

Trapper-trader Alexander Ross visited the Montana Western Region in 1823 but did not ascend the Clark Fork at the Hell Gate Pass.

This place is rendered notorious as being the great war road by which the Piegans and Blackfeet often visit this side of the mountains, by the same pass the Flatheads and other tribes cross over to the Missouri side in quest of buffalo. The spot has therefore been the scene of many a bloody contest between these hostile nations. This being the usual and only place known to the whites for passing the mountains (Ross 1855: 213).

Ross turned south up the Bitterroot for the winter. From there in the spring of 1824, he traveled through the mountains to the source of the Clark Fork near Butte.

Ross wrote that Kutenai and Salish tribes lived at the foot of the mountains and often crossed them. He said that "they have suffered greatly of late years; the Blackfeet being too numerous for them" (Thwaites 1904a VI: 211).
The Hudson's Bay Company sent Peter Skene Ogden in Ross's footsteps in 1825. Ogden trapped up Flint Creek but did not cross the Bearmouth area. He said that no whites had been on the Clark Fork in that area before him and that "it has never yet been visited or trapped by whites but the Kootannais (sic) I am informed were here in the spring, if so, I fear they have left us nothing" (Ogden 1950: 70).

Ogden saw Blackfeet in the Flint Creek area. One of his trappers captured a Blackfeet who told them he was in the company of twenty others. Following the encounter on August 10, there were ten horses missing from Ogden's camp. Despite his fears that the area was trapped out, Ogden's party found numerous beaver, they also found red deer, bear, moose, and horse flies.

Joshua Pilcher was another trapper-trader who skirted the Bearmouth study area. Pilcher came from the Bear Lake Summer Rendezvous of 1828 with a party of eight trappers to make a winter camp on Flathead Lake. In February 1829, he met a representative of Hudson's Bay Company who came to Flathead Lake to make his annual trade with the Flathead. "The British have spread over most of the area west of the Rocky Mountains...both Hudson's Bay Company and citizens of the United States engage in trapping and each suffer occasionally from the attacks of Indians" (Pilcher 1831: 17). Pilcher
estimated that there were 30,000 Indians in western Montana based on information from Hudson's Bay Company. He said "the Indians depend on hunting and fishing and use their arms with great dexterity on horseback" (Pilcher 1831: 20).

W.A. Ferris, working for the American Fur Company between 1830 and 1835, verified that the Big Blackfoot River was still the main east-west route through the Rocky Mountain Chain. In September 1831 he found the Rocky Mountain Fur Company trappers using the trail. On the fifteenth of the same month, in the Deer Lodge Valley he found 100 Pend d'Oreille lodges (Ferris 1940).

In the Montana Western Region, Ferris found black and white-tailed deer, elk, sheep, antelope, moose, mountain goats and very few bison. Ferris saw Blackfeet in 1831 near the Bearmouth area. A year later, in early September, traveling west to Hell Gate Defile, Ferris' party met a group of Shoshoni on horseback who "discharged their guns in the air and reflected the rays of the sun upon us with a mirror. The Snakes said they had been on a war party against the Blackfeet (Ferris 1940: 167).

Ferris drew a map which included the Bearmouth area. He labeled the entire Clark Fork above Missoula as Arrowstone River "La Riviere des pierres a fleches." Ferris said it was named from a kind of semi-transparent stone found near it "formerly used by Indians for making points of arrows" (Ferris 1940).
Trade among the western tribes had increased such that by 1831 the Flatheads had a constant supply of arms (Ronan 1890). "The Blackfeet became enraged and declared ... that all white men found west of the mountains would be treated as enemies, because they had furnished the Flatheads with weapons which were used effectively against their nation" (Ronan 1890: 7).

Although most trapper-traders did not directly travel through the Bearmouth study area, their journal accounts do verify a great deal of tribal movement around Bearmouth including groups identified as Flathead, Pend d'Oreille, Kutenai, Piegan, Blackfeet, Shoshoni, and Bannock. In relation to the alteration of the community pattern in the Bearmouth area, the trapper-traders were bringing in metals to replace stone for tool manufacture.

Missionaries

In his 1835 journal, the Rev. Samuel Parker discussed the Flathead situation "The Flatheads have 800 persons and live a wandering life. Flathead for subsistence follow the buffalo upon the headwaters of the Clark and Salmon Rivers and often pass to the headwaters of the Missouri. They have become a small tribe by constant wars with the Blackfeet Indians though they themselves are not of a ferocious or hostile disposition" (Parker 1842: 31).

By the 1830's reliance on white trade goods was
increasing; cooking utensils and iron arrowheads were obtained from traders. In dressing skins, the hair and flesh were removed by scraping with a hard stone or wood, "or when it can be obtained a piece of iron hoop" (Parker 1842: 232).

Father DeSmet's party in 1841 was the first white group to travel through the Bearmouth area and leave a record of the trip. DeSmet's group descended Deer Lodge Creek and followed what was then called Hell Gate Canyon to the Hell Gate-Bitterroot junction. Father Mengarini described the trail which "...ran along the sides of steep mountains, so steep, in fact, that oftentimes it was only by attaching ropes to different parts of the wagons...that we could keep the wagons upright" (Partoll 1938: 6). The party met a group of fifty Bannock warriors armed with poisoned arrows near the Bearmouth area. They were traveling in autumn, during the time of low water in the Clark Fork.

That fall DeSmet established St. Mary's Mission in the Bitterroot Valley which was constantly harassed by Blackfeet war parties. In 1849, fifty Blackfeet took two bands of horses that belonged to the mission and to the Flathead.

Jesuit efforts to turn the Salish into sedentary farmers were not successful: the Flathead still went east of the Divide on bison hunts so a priest usually accompanied them (Ewers 1948: 20). The community pattern followed the equestrian hunting model.
White Settlement

When Major John Owen took over the St. Mary's Mission property in 1850, he felt it necessary to build a stockade "...to protect the inmates and their property from the incursions of the numerous war parties of the Blackfeet Indians that continued to make raids into the valley up to 1855" (Woody 1896: 92). Owen's travels took him through the Bearmouth area. On the way to Fort Hall in 1851 he said that the road was "tolerable." His party camped at the present day town of Clinton. The next camp was in the Bearmouth area where "grass good, 1 sheep, 1 duck, and 20 fine salmon trout brought into camp" (Dunbar and Phillips 1927: 28). In the study area, Palchana, a Flathead, joined Owen's traveling party. Then just east of the Bearmouth area, Owen discovered a trail which appeared to have been left by Blackfeet.

The men of the Northern Pacific Railroad Explorations Survey entered the Bearmouth area in 1853. Governor Isaac Stevens reported "no serious difficulties in the entire region though we met numerous bands and tribes" (Fisk 1862). Chief explorer for the survey, John Mullan, employed Piegan guides who took him west in the
Deer Lodge valley in 1853 but left when the exploration party encountered a group of Flathead (Mullan 1854).

At one of Mullan's winter encampments on a high flat in the forks of the Blackfoot and Clark Fork Rivers, he found that the Indians had suspended all travel in the winter "...but as snow disappeared they were once more crossing the Plains in quest of buffalo whilst others were returning enroute from the same point where they had passed the winter" (Mullan 1862: 33).

In contradistinction, it was winter weather mobility that turned the Upper Clark Fork into a major east-west highway on the recommendation of John Mullan. Mullan terms the winter weather in the canyon a meteorological paradox. "I have noticed this so often and often taken advantage of it that I have been disposed to regard the question of snow in this quarter as the all determining element in the location of a Pacific railroad northward through the Rocky Mountain section" (Mullan 1862: 56). Snow obstruction on the Big Blackfoot would have lengthened building time, not to mention difficulties in running the road when it was built. The route along the Upper Clark Fork involved no tunnels, followed a continuous line of watercourse, traversed a region capable of white settlement, and tapped all mining regions (Mullan 1862).
Increased white and native use of the Upper Clark Fork Canyon followed the construction of the Mullan Road. Through the Bearmouth area, the Mullan Road came from the east to the area, over the eastern foothills of the John Long Mountains. The trail met the Clark Fork at the town of Bearmouth on the left bank of the river and did not cross the river until it reached Medicine Tree Hill (see Figure 15).

The Mullan Trail followed a more southerly route to the Plains than the Big Blackfoot. The Blackfeet war parties and U.S. Government treaty negotiations made the Mullan Trail one of the more favored aboriginal routes.

The 1855 Blackfeet Treaty included the Piegans, Blackfeet, Blood, Nez Perce, and the Flathead Nation (consisting of Flathead, Pend d'Oreille, and Kutenai). Article III provided for preservation of the ancient rights of the Flathead which included the right to hunt east of the mountains. Article V stipulated that the Flathead could not enter the common hunting ground nor any part of the Blackfeet territory or return home by any pass in the main range of the Rocky Mountains to the north of the Hell Gate Pass (Kappler 1903: 737). Governor Isaac Stevens' map of the territory at that time showed Hell Gate Passes from the head of the Little Blackfoot south through the Deer Lodge Valley (Stevens 1854). The area labeled "common hunting ground" on the map was south of a line
from the Hell Gate Pass east to the nearest source of the Muscleshell River. The old Salish "Road to the Buffalo" over the Big Blackfoot would not take the hunters into the "common hunting ground" after the treaty had been signed.

Before the Blackfeet treaty in July of the same year, Stevens concluded a treaty with the Flathead, Kutenai, and Upper Pend d'Oreille. By this treaty, the Bearmouth area was part of the land ceded to the United States and therefore opened to white settlement. The treaty did not, however, stop the Salish from using the area. In 1856, John Owen met thirty lodges of Nez Perce in the Upper Clark Fork canyon on their way out of the Beaverhead where they had passed the winter. It was February and the canyon was windy and cold with plenty of snow all the way. Owen mentions that the Nez Perce had broken the trail for him (Dunbar and Phillips 1927: 117).

On the Mullan Trail route in 1858, Blackfeet stole horses from Granville Stuart's hunting party and from eight lodges of Flathead camped with Stuart in Flint Creek. Subsequently Stuart established American Fort on Gold Creek where he said he never refused Indians credit. He traded calico, red cloth for ladies leggings, calico shirts, vermilion paint, beads, knives, handkerchiefs, powder, lead, percussion caps, combs, and sometimes blankets in exchange for buffalo robes, dried meat,
dried tongues, and skins (Stuart 1925 I: 9). Up through 1861 Stuart said Nez Perce, Yakima, Coeur d'Alene, and Flathead passed every fall on their way to the Plains of the Missouri and Yellowstone to spend the winter hunting buffalo (Stuart 1925).

By 1858 construction on the Mullan Trail had reached the Bitterroot River where John Strachan, a crew member, saw Pend d'Oreille, Flathead, and Nez Perce. He mentioned their use of buffalo robes and buffalo skin lodges and saw native men leaving daily for local hunting of deer and elk. At that time, the Salish were using flint locks for large game or bow and arrow for small game (Strachan 1952).

Strachan's is one of the few early white journals which described flexed primary burial in three feet deep graves. The corpse was washed and wrapped in skins, then the legs were drawn up to the chest. "The grave was surrounded and covered with stones and sticks to prevent the wolves' depredations" (Strachan 1952: 41, 42). At the village camp he saw clothing ornamented with fringe and beads as were the moccassins. Horse racing and gambling "was carried on to a great extent among them" (Strachan 1952: 46).

Traveling east up the Upper Clark Fork canyon, Strachan's group continued from Bearmouth over "fine rolling prairie country" heading south. In the area now known locally
as the Big Valley, they met a party of Bannock who were noted for their horse stealing propensities. Strachan says the Bannock were carrying their lodge poles (Strachan 1952: 47).

The Salish continued to use the Bearmouth area as a trail with transient occupation sites on the left bank into the twentieth century. In the early 1900's, G. Maurice Weaver lived on a ranch in the Bearmouth area and said that "the Indians stopped at Bearmouth and Camel Slough. They camped there for three or four days. I never saw other Indians there but Flatheads. They were just about like the geese. You'd see flock after flock of geese go through along in April and next those Indians would come (Flint 1975).

The ethnohistoric evidence indicates multiracial use of the Bearmouth area. The Semte'use, a branch of Pend d'Oreille, were probably the earliest identifiable inhabitants of the area and left most of the prehistoric remains uncovered in this archaeological survey. Before the introduction of the horse, around 1730, they utilized the Bearmouth area on a regular basis to the exclusion of most other tribes. The community pattern was most like that described for restricted wanderers. The remains at the occupation sites on the right bank are more extensive and would more likely be associated with this type of community pattern than those archaeological
manifestations on the left bank.

After the Semte'use consolidated with the other Salish peoples and after the introduction of the horse to the Western Montana Region, the Bearmouth area was used primarily as part of a trail, a brief camping spot on the way to or from the Plains. The sites on the left bank are clearly associated with this community pattern of an equestrian hunting group. It is known that Plateau-Salish alliances (Pend d'Oreille, Flathead, Yakima, Nez Perce, Coeur d'Alene, Spokane), Blackfeet, Bannock, and Shoshoni traveled from their more permanent locations through the Bearmouth area.

The change in use of the land in the study area from basic subsistence to trail use was paralleled by a progressively increasing acceptance of white trade goods by the native population, specifically in 1810 with the introduction of iron arrowheads and rifles in Western Montana. The demise of flint-tipped arrows is clearly documented in the journals of Thompson, Parker, and Ferris.

Rather than following several game trails through the Bearmouth area, the equestrian hunting community consolidated their group on the left bank trail. The main route was also the location chosen by John Mullan for the military wagon road. The left bank along this stretch of the Upper Clark Fork is still the location of the major trail today, Interstate 90.
Chapter 5
SUMMARY AND CONCLUSIONS

Through the use of the anthropological research techniques of archaeology and ethnohistory, the Bearmouth study area has been shown as a place in which there was diversified aboriginal land use related to two different community patterns. The first pattern was during the Prehistoric Period with a group of people associated with the restricted wandering community pattern, the Semte'use; the second community pattern of equestrian hunting included Salish alliances and their enemies.

The setting for this case study was a diversified mountainous country of the Montana Western Region along the Upper Clark Fork River above Missoula. The area had unique topographic and geologic features which functioned in each particular community pattern in the study area. The underlying basic subsistence scheme was much like that described for the Montana Western Region.

The archaeological remains in the Bearmouth study area reflected the technology, religion, and hunting and gathering activities of groups who are known to have traversed the region. Archaeological occupation sites
showed that there was more recent use of the left bank than the right bank of the river.

The ethnohistorical data showed that, after the introduction of the horse, there was a main trail through the Bearmouth area on the left bank of the river. Discontinued extensive use of the right bank occupation areas and associated stone quarry reflected discontinued importance of stone material for tools after metals were introduced by trapper-traders.

Extent of Aboriginal Use

The Bearmouth study area was only part of the Montana Western Region over which aboriginal peoples ranged in a hunting and gathering subsistence pattern. The use of archaeological survey and ethnohistorical sources have brought evidence to support the hypothesis that the Bearmouth area was more extensively used than had heretofore been shown.

A previous archaeological survey located three occupation sites and later a pictograph site was found. Eight additional aboriginal sites were found as a result of research connected with this thesis project. We now know of twelve prehistoric archaeological sites in the study area. The artifacts at these archaeological sites indicated probable functions of the activity areas in which they were found. Thus it was possible to designate
five different types of sites in the area: occupation, quarry, religious shrine, burial, and trail.

The site configuration reflected a hunting and gathering community pattern 1) near the available tool-making materials at the Mt. Baldy quarry, 2) near the extensive service berry patches and bitterroot areas on the left bank of the river, 3) associated with unique physiographic features which in part determined the location of religious shrines.

Systemic Relationship Between the Resources and Land Use

The relationship between people and subsistence resources is best viewed as a system, in that one part effects and is effected by another part. The Bearmouth area had the soils, climate, and water to produce edible food from the ground to support a faunal population which was utilized by a human population that hunted and gathered for a living. The area also provided raw materials for producing tools, and places suitable for religious experience.

The systemic relationship between resources and land use is most clear in relation to subsistence strategy. Where the food resources are scattered and generalized, and the methods of food preservation limited "the equilibrium system can be expressed in rather simple and direct terms" (Birdsell 1968: 230). Biophysically the
system of flora, fauna, soils and moisture changed very little in the Bearmouth area after 4,000 B.C., but the timing and extent of land use changed in the period from the Late Prehistoric to 1860. There was a basic conservatism in the methods for obtaining biotic resources within the Montana Western Region which helps, in part, to explain the similarity in the form of lithic assemblages over time. The diffusional elements from Euroamerican contact, in part explain the changes in human use of the Bearmouth area.

Before the advent of the horse, hunting and gathering people inhabited the Bearmouth area in a subsistence strategy that most closely resembled the model of a restricted wandering community. Year round they fished and hunted elk, deer, mountain goat, mountain sheep, some bison, and smaller mammals. Edible plant resources included wild berries, shoots, and roots.

The Semte'use, restricted wandering community, of the Late Prehistoric would have had substantial reason to occupy the right bank in the Bearmouth area because of the need for raw materials for lithic tools. The right bank occupation sites are near the Mt. Baldy chert quarry and are still the locations of much lithic debitage. In terms of a systemic relationship, the gradual replacement of these stone materials with metal, in the technological realm, probably reached a climax around 1810
as a result of trapper-trader influence.

Campsite location would also have been effected by the physiography of the Bearmouth area. The right bank, facing south for the most part, receives more sunshine than the left bank. Wintertime occupancy of the left bank is colder even today. If the Semte'use formed winter camps for extended periods they would have been aware of the favorable conditions on the right bank.

Before the horse, the Semte'use hunters would have followed several game trails through the Bearmouth area in a community pattern of scattered occupation sites associated with the seasonal food supply. Prehorse people traveled shorter distances and remained longer at campsites. In the case of these restricted wandering people, the community pattern was probably most influenced by the wide seasonal variation in the Montana Western Region. Water was not the element in least supply although the location of occupation sites along the river shows the importance of this waterway in hunting and gathering subsistence schemes. If a people were technologically adapted to the cold weather i.e. through preservation of food, continued winter hunting and fishing, and the ability to produce warm hide clothing and shelter; then it would have been possible to survive year round in the Bearmouth area.

After the horse was introduced to Western Montana and the bison were gone, the subsistence strategy changed in
part because a new element was introduced to the system. The subsistence territory was expanded in quest of the Plains bison while the biotic resources in the Bearmouth area were sought only at seasonal peaks. The area became one through which people passed, making only brief transient camps. Out of the many game trails through the Bearmouth area, the number followed by the human population was reduced in favor of a major trail for equestrian travel. Transient camping spots were made along the main trail, near the most productive root and berry areas on the wider flood plain on the left bank through the Bearmouth area.

The main trail through the study area has historically held to the left bank, even now the interstate highway basically follows the original aboriginal equestrian trail. In terms of a systemic relationship, the land on the left bank is flatter and thus easier for a non-pedestrian group to traverse. If the left bank through the study area was the location of the most recent main trail, then the occupation sites on the left bank had the most recent archaeological components. There would have been some minimal continued use of the right bank; but the major trail use and associated occupation sites were on the wide floodplain rather than on the steeper terraced side of the river (see Figure 15).
Unique Topographic and Geologic Features

Function in Land Use

The land in the Bearmouth area was used for more than the basic subsistence resources of flora and fauna. The unique topographic and geologic features of the area promoted land use in terms of raw material quarries, religious shrines, a burial, and as a southerly trail route to the Plains. Each factor also helped to define the community patterns in the study area.

The use of the study area as part of a secondary east-west trail depended in part on these topographic and geologic features. The Clark Fork River follows the Osburn-Bearmouth Geologic Fault Structure and is therefore a major lowland route through the mountains. The main aboriginal trail along the Upper Clark Fork held to the right bank of the river except in the Bearmouth area where the steep-sided face of the right bank precludes equestrian travel.

Crossings to the flood plain route on the left bank were made at Medicine Tree Hill which also afforded a strategic view up and down the river channel trail. Across the river from the sacred Medicine Tree, a thermal hot springs drains into a deep pool. This configuration of sites at the western edge of the Bearmouth area was about a day's travel from a camp at Missoula.
Topographically, the Madison Limestone Formation on the east edge of the Bearmouth study area has formed natural limestone towers, across from the Bearmouth hot springs where a pictograph panel marks the locus of another religious shrine. In the Late Prehistoric Period (ca. 1500-1750 A.D.), aboriginal young people made vision quests at such pictograph panels. The Bearmouth panel is the only such place available for pictographs between Missoula and the Continental Divide on the Upper Clark Fork. The action at the fault line in part resulted in the clear, vertical area for a pictograph panel.

The relatively close proximity of the pictographs to the Medicine Tree parallels the situation in the Bitterroot Valley site 24RA513 where pictographs were found directly above a Medicine Tree (Ward 1973: 118). The association of thermal hot springs with each religious site in the Bearmouth area is significant in that the hot springs themselves were used for obtaining religious power. In terms of a unique community pattern, the apparent religious orientation of people's use of the Bearmouth area cannot be ignored.

The numerous talus slides along the left bank of the Clark Fork in the Bearmouth area also promoted a form of land use. With limited tools, the slopes provided a practical way to bury the dead.
Raw materials were an important determining factor for the unique pattern of land use in the study area. The conspicuous Madison Limestone Formation, in which various colors of chert, jasper, and chalcedony are dominant, is extensively exposed in the northwestern part of the study area at the Mt. Baldy Quarry. Lithic raw materials were essential to a successful food quest for prehistoric peoples. Since the production of a hunting and gathering tool kit of projectile points, knives, and scrapers was possible in the Bearmouth area, there was no need to import raw materials. Rather, knappers would come to the area to quarry stone and produce tools.

The geologic action at the fault line also exposed the iron oxide deposit on the right bank. The ocher was prized as paint pigment for use in pictographs, in burial, and in magic potions.

Alteration By Euroamerican Contact

It is generally agreed by archaeologists that the first material goods to disappear as a result of Euroamerican contact were the stone tools. It would follow that stone quarry use would have been gradually discontinued with the increased use of metal. In the Bearmouth area the evidence adds further substantiation to the theoretical assumption.

Ethnohistorical data indicate that metals were obtained
in sufficient quantity to supplant lithic material by the beginning of the Historic Period around 1800 in Western Montana. The solely prehistoric remains at the Mt. Baldy Quarry and occupation sites on the right bank attested to the discontinuation of chert quarry use following Euro-American contact. During the same Historic Period the use of firearms would have been supplanting the use of the bow and arrow in hunting and warfare.

Prior to direct contact with Euroamericans, their influence was felt with the introduction of the horse to the Montana Western Region, about 1710-1730. About the same time the ecological system had been altered by the practical extinction of the bison population west of the Continental Divide. With the horse, the community pattern in the Bearmouth area changed from one of restricted wandering to equestrian hunting. The horse enabled greater movement which allowed continued dependence on the bison on the Plains for food, lodge skins, and clothing.

With the influence of the Blackfeet in the region from north and northeast, the 1855 treaty enforcing more southerly routes to the Plains, aboriginal travel was directed to the Clark Fork Canyon in preference to the original "Road to the Buffalo" on the Big Blackfoot River. The building of the Mullan Road on the left bank through the study area followed the main equestrian Indian trail. On the wide flood plain, natural resources were used at
seasonal peaks and travel through the Bearmouth area by the aboriginal population coincided with root, berry, and sap gathering times.

In Prehistoric times a hunting and gathering people used the Bearmouth area as evidenced by the archaeological remains they left. The nature of the occupation ran the gamut from camp sites to religious shrines to quarry locations. With lithic raw material resources close at hand a restricted wandering community could have used the study area year round. Equestrian hunting communities traveled through the Bearmouth area during seasonal peaks of the floral resources on their way to hunt the Plains bison. Euroamerican influences including the horse and metal raw materials brought a change in technology and in trail use which in turn effected the location of occupation sites in the Bearmouth area. The changes were reflected in archaeological assemblages and ethnohistorical data which help to demonstrate a chronological change in the community pattern.

The research associated with this thesis has demonstrated that: 1) The Bearmouth area was occupied more extensively than had been believed before. 2) Aboriginal land use was systemically related to the available natural resources. 3) The unique topographic and geologic features functioned to shape aboriginal land use in the area. 4) Euroamerican contact altered the community pattern.
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Wormington, H.M. and Richard Forbis
APPENDIX

Analysis of Projectile Points

Projectile point types are based on shared physical characteristics such as size and form. There are eight projectile points found in the Bearmouth area which were in complete enough condition to be analyzed with respect to other types outside the study area. Specimens 1, 5, 6, 7, 8, 9, 10 are part of the Little Bear Creek assemblage. Specimen 12 is from Antelope Creek.

Specimen twelve is a distinctive side-notched point associated with the latest cultural horizon in Western Montana Region. The other seven points are associated with older cultural horizons as defined for the region (Malouf: 1956a). Projectile point measurements were taken following the specifications set by Forbis (1960), in millimeters.

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Projectile points 6, 7, and 9 resemble Hogan Type VII (Hogan 1974: 56), expanded basal notched points. This
type of point was found in the earliest occupation strand level of Flathead Lake (Malouf 1956a). In Birch Creek Rock Shelters of Idaho Swanson et. al. (1964a) found similar points in Phase III, radiocarbon dated 1,000 B.C.-400 A.D. Several comparative examples are shown in Level II at Pictograph Cave (Mulloy 1958) attributed to the Late Middle Prehistoric Period.

The other corner-notched points, specimens 5 and 10, compare favorably with Mulloy's (1958: 163) placement of corner-notched points with concave and convex bases in the Late Middle Prehistoric. At Birch Creek Rock Shelters 60.7 per cent of all corner-notched points were recovered from a stratum associated with radiocarbon dates 400 A.D.-1200 A.D. (Swanson et. al. 1964b). However, corner-notched points were also associated with the most recent level at Flathead Lake (Malouf 1956a).

The small side-notched point, specimen 8, most closely resembles part of the Late Prehistoric component at Pictograph Cave Level III (Mulloy 1958: 163). Side-notched points are "probably a result of Plains influence into Western Montana after 1700 A.D." (Malouf 1962: 4).

Specimen Descriptions

1. Triangular Unnotched. This straight-sided point of red jasper was broken at the distal end. There is bifacial horizontal transverse flaking on the point.
5. Triangular corner-notched. This straight-sided jasper point had a broken edge. The actual length was 26 mm. but the extrapolated length was 30 mm. as was used in the analysis.

6. Triangular corner-notched. This projectile point of jasper had a slightly concave base.

9. Triangular corner-notched. This triangular straight-sided basalt point was broken at the distal end. The actual length was 27 mm. with extrapolated length 29 mm. used in the analysis.

7. Triangular corner-notched. This point of jasper had a slightly indented base.

8. This triangular side-notched point of jasper had an indented base.

10. Triangular corner-notched point of red jasper was broken well down the distal end. It had a straight base. It appeared that one side of this specimen had a corner-notch closely resembling a Besant point side-notch but the other side was definitely corner-notched as the measurements show.

12. This side-notched point of gray chalcedony had fine bifacial pressure flaking horizontal transverse.