

**CULTURAL RESOURCE LANDSCAPE OVERVIEW
OF THE
BUREAU OF LAND MANAGEMENT
COEUR D'ALENE FIELD OFFICE**

**By
Caroline D. Carley
Robert Lee Sappington**

**Department of Sociology/Anthropology/Justice Studies
University of Idaho
Moscow, Idaho**

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ABSTRACT

The objective of the project entitled *Cultural Resource Landscape Overview of the Coeur d'Alene Field Office* was to complete a cultural resource landscape-scale overview for the Bureau of Land Management Coeur d'Alene Field Office. The compiled research of the overview includes extensive information on the natural environment, prehistory, ethnography, history, and archaeology of the area, providing a background document that will assist in developing information that could be used for interdisciplinary decisions at both the landscape level and ultimately the project implementation level.

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ORIENTATION

Objectives

In September 2003 a Task Agreement by and between the Bureau of Land Management (BLM) and Department of Sociology, Anthropology, and Justice Studies, University of Idaho, was issued against the Rocky Mountains Cooperative Ecosystem Studies Unit Cooperative and BLM Agreement No. ESA-9900040, for the purpose of mutual assistance in conducting a project entitled *Cultural Resource Landscape Overview of the Coeur d'Alene Field Office*.

The objective was to complete a cultural resource landscape-scale overview for the Bureau of Land Management Coeur d'Alene Field Office (Fig. 1). Currently there is no overview for the field office. The document would include detailed information on the Natural Environment, with a Cultural Resource Narrative to include the prehistory, ethnography, and history of the area. Within the prehistory, cultural chronologies were to be provided, as well as a general discussion of prehistoric lifeways in the area. Major themes, such as fur trade, transportation, mining, etc., were to be used in the presentation of the history. Cultural Resource Investigations would provide a history of the archaeology of the area with a discussion of major investigations and sites. The overview would assist in developing information that could be used for interdisciplinary decisions at both the landscape level and ultimately the project implementation level.

Study Area

The Bureau of Land Management Coeur d'Alene Field Office administers 96,732 acres of public land in the Idaho counties of Bonner, Boundary, Benewah, Kootenai, and Shoshone (United States Department of the Interior 2004:2).

The Coeur d'Alene Field Office Cultural Resource is located primarily within the Lake Coeur d'Alene geographic region. This region includes the watershed of the Coeur d'Alene River and numerous lakes, including Lake Coeur d'Alene, Lake Pend Oreille, and Priest Lake. Ethnographically, the resource area is within the Plateau Culture Area. The prehistory may extend to 10,000 years ago. The relatively short historic period has been shaped by events of exploration, missions, military presence, tribal history, settlement, agriculture, timber, transportation, preservation and management policies, as well as tourism and recreation.

Coeur d'Alene RMP Planning Area Land Ownership.

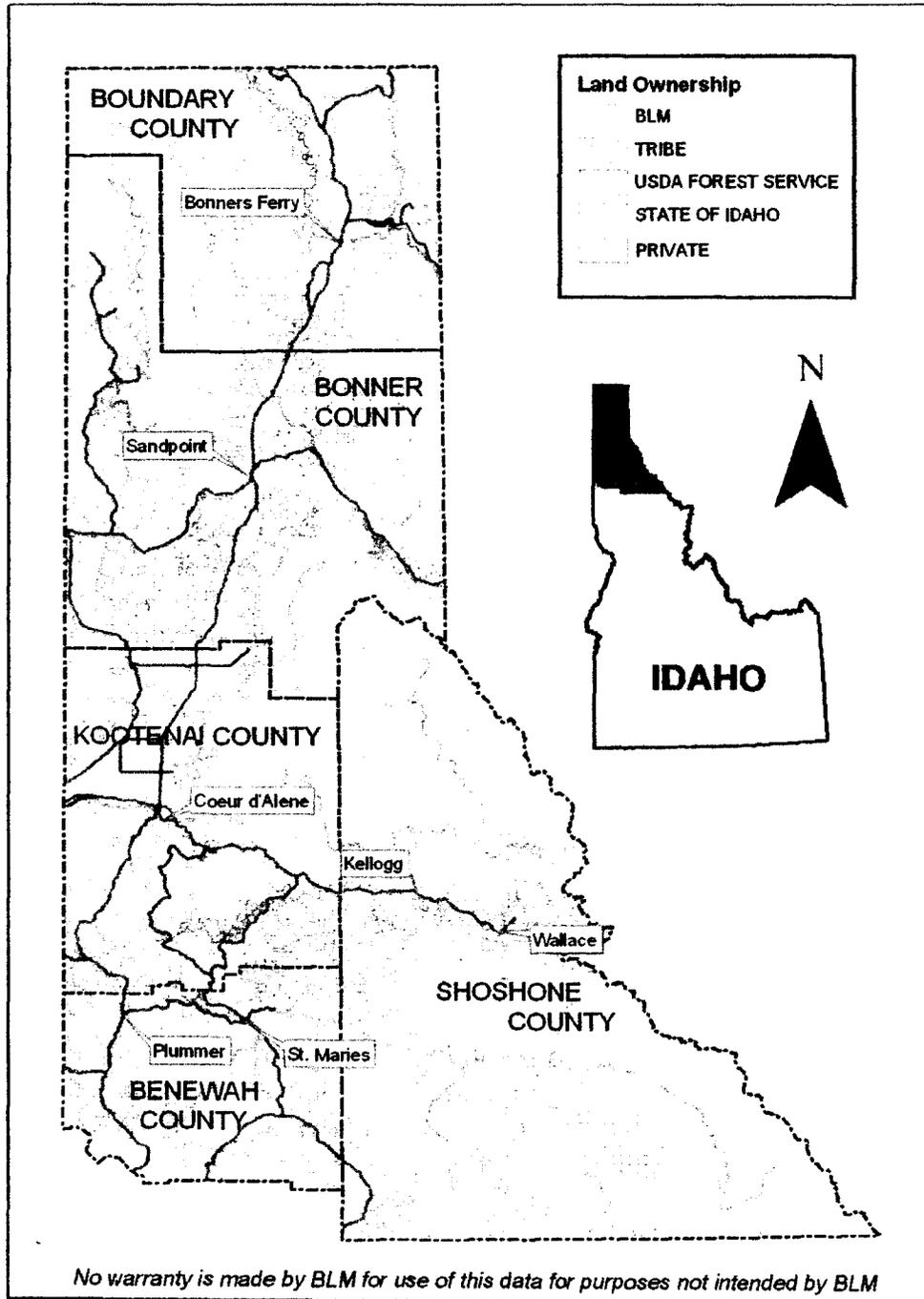


Fig. 1. Bureau of Land Management Coeur d'Alene Field Office boundaries.

NATURAL ENVIRONMENT

Geology and Physiography

The Coeur d'Alene Field Office area is dominated by mountains, rivers, and lakes and geological factors have created a variety of landforms with diverse flora and fauna.

The geology is complex, with formations dating from the late Precambrian (ca. 800 million years ago (mya)) into the Holocene (the present). Major geologic features include the Cretaceous Kaniksu Batholith in the Idaho Panhandle and the Idaho Batholith in central Idaho; evidence of extensive Miocene volcanic activity which produced the basalt flows covering southern portions of the study area; Pleistocene glaciations which sculpted the landscape to create the numerous lakes; and more recently, deposition and erosion along the various river terraces (Alt and Hyndman 1989).

From the late Precambrian into the late Mesozoic eras (ca. 800-100 mya), what is now western Idaho was the western edge of the North American continent. During the Cretaceous Period (ca. 144-65 mya) islands known as terranes collided with the western margin of North America and became a part of the Columbia Plateau. Portions of these terranes are found in the Seven Devils area to the south and in northeastern Washington, while the ancient continental margin is found as mylonite exposed south of Sandpoint. The ores in the Coeur d'Alene mining district originated in sedimentary formations about 1.2 billion years ago but concentrated into the vein deposits during the Cretaceous about 70 mya. Extensive volcanism occurred during the Miocene Epoch (ca. 24-5 mya) and lava flows from fissures in the Columbia Plateau covered broad areas so that evidence of older rocks is difficult to find. In some areas the flowing basalt dammed streams and formed lakes so that plant, fish, and other fossils from this epoch can also be found (Alt and Hyndman 1989).

During the Pleistocene Epoch (ca. 1.8 mya to 10,000 years ago) the upper elevations across northern Idaho were heavily glaciated. The craggy peaks and montane lakes were created by glacial activity, and traces of glaciers are still present in central Idaho. Massive lobes of ice from glaciers in British Columbia flowed south into Idaho and extensive areas were scoured so that lakes such as Pend Oreille were created. Larger lakes, up to 2000 ft. (610 m) deep, formed in other areas where water from melting glaciers accumulated. Warming temperatures at the end of the Pleistocene caused extensive flooding from glacial Lake Missoula in western Montana. Recurring as many as 40 times, the catastrophic Spokane floods flowed along the Clark Fork valley, across north Idaho, and into eastern Washington. In areas beyond the study area, slack water backed up into the Snake and Clearwater drainages; distinct sediments from these events that ended ca. 12,000 years ago are identifiable to ca. 1300 ft. (396 m) above sea level (asl) (Alt and Hyndman 1989).

During the Holocene Epoch (ca. the last 10,000 years) there have been a series of terraces formed along all the major rivers as various depositional and erosional events have occurred. All major rivers have cut through Pleistocene landforms and the canyons have a series of recent to modern terraces.

The modern physiography of the study area is characterized by a series of alternating north-south trending mountain ranges and valleys. From east to west, the Purcell Trench separates the Purcell and Cabinet Mountains from the Selkirks. The Selkirk Mountain system comprises the Selkirk Range, the Priest Valley, the Pend Oreille Mountains, the Pend Oreille Valley, the Chewelah Mountains, the Colville Valley, and the Huckleberry Mountains. The Columbia River flows southward through the Selkirk Trench, to the west of which are the Kettle Range, The Sanpoil Valley, and the Sanpoil Range. Northern Idaho's mountains are, on average, the lowest in the state. The Selkirks and Cabinets do not exceed 7000 ft. asl and the St. Joe and Purcell average less than 6,000 ft. (1829 m) asl (Hudson et al. 1981:8;Wuerthner 1986:36).

Northern Idaho has many rivers and lakes and among those within the study area are the Kootenai, Priest, Pend Oreille, Clark Fork, Coeur d'Alene, St. Joe, and St. Maries rivers and Priest Lake, Lake Pend Oreille, and Lake Coeur d'Alene (Fig. 2). The Kootenai and Pend Oreille rivers flow north to join the Columbia while the Clark Fork River provides most of the water for Lake Pend Oreille. Priest Lake and Lake Pend Oreille occupy glacially scoured basins dammed by morainal deposits. Lake Pend Oreille is the largest lake in the state, with a 180-square mile surface area. Its main outlet is the Pend Oreille River (Beal and Wells 1959:15). The Coeur d'Alene River empties into Lake Coeur d'Alene, created by glacial activity when outwash dammed the St. Joe River which formerly continued north through Rathdrum Prairie (Alt and Hyndman 1989:72). Today, the St. Joe River extends from the Idaho-Montana border 94 miles into the south end of Lake Coeur d'Alene.

Paleoclimate and Paleoenvironments

Paleoclimate studies, as inferred from vegetation succession, have been conducted across the general area since 1939. Numerous lakes and ponds have been sampled in northern Idaho as well as in Montana and Washington. Pollen sequences in the last 10,000 years have often been characterized in three parts, including a cool-moist early Holocene, a dry and warm middle period often known as the Altithermal, and a return to cool-moist conditions during more recent times. However, this sequence is too simple and there are major differences in various regions, due to the effects of local droughts, fires, and other factors. Pollen studies are beginning to allow comparisons between prehistoric situations and those known historically. For example, the moist hemlock forests characteristic of northern Idaho may be quite young with no indications of its presence before 2500 years ago; similarly, grass in the western Palouse/Scabland border reaches its largest values in the last 2400 years (Mehring 1985:177-178).

More specifically, a Holocene paleoenvironmental record for the study area may be reconstructed from palynological and sedimentological data. Studies of cores from a series of bogs across the northern part of the study area in the Sanpoil, Colville, Pend Oreille, and Priest valleys reveal that vegetation was established in the study area by the time of the Glacier Peak ash fall (ca. 11,250 years before the present). The early vegetation consists of an *Artemisia*-Gramineae-Haploxylon pine association. This association is somewhat anomalous; having no modern analogue but was widespread throughout northern North America south of the ice front. It apparently represents a tundra-like postglacial successional community in a cool, moist climate which was replaced about 10,000 years ago when the climate began a warming trend (Hudson et al. 1981:10).

A significant warm and dry climatic interval, variously known as the Altithermal or Hypsithermal Interval, occurred between about 8300 and 4500 years ago. The pollen profiles reveal peaks in frequency of grass, sagebrush, and pine. The deposition of Mazama ash in the study area 6700 years ago provides a useful temporal marker for interpretation of other environmental responses to the Altithermal (Fryxell 1965). The occurrence of charcoal strata both immediately above and below Mazama ash in the Kootenai River floodplain indicate that this period was characterized by frequent forest fires (Hudson et al. 1981:10, 13).

A return to cool and moist conditions between 4000 and 2000 years ago is revealed by peaks in *Abies* and *Picea* (fir and spruce) in the pollen profiles and by increased discharge in the Kootenai River. Frequency of forest fires in the Kootenai drainage was apparently low at this time (Hudson et al. 1981:13).

Pollen profiles suggest that modern vegetation has been present from about 2000 years ago onwards. Most paleoenvironmental studies in the region have not recognized the existence of a significant period of cooler and moister climate between ca. AD 1600 and 1870. However, this interval, the Little Ice Age, is well defined in glaciological records of the Cascade and Rocky mountains and is represented by the accumulation of a sandy alluvial terrace on the Kootenai River displaying little evidence of forest fires. A brief return to warmer and drier climatic conditions occurred from about AD 1870 to 1940 when forest fires were again extensive. Today's conditions reflect a cooling trend compared to the early part of this century (Hudson et al. 1981:13).

Climate

Mild, moist air masses from the Pacific sweep over northern Idaho for extended periods in the winter, causing cloudy, snowy weather with temperatures in the freezing range. "Northern Idaho is, in fact, one of the cloudiest places in the United States during the winter months, averaging only 30 percent sunshine and in some winters, as little as 10 percent sunshine. Even coastal Seattle sees more sun, with an average of 20 percent sunshine during its cloudiest month of December" (Wuerthner 1986:17).

The general climate in northern Idaho is determined by the interaction of numerous factors, including the prevailing westerly winds and the existence of the Bitterroot Mountains east of the study area. Warm moist winds from the Pacific Ocean produce graded amounts of precipitation as they encounter progressively rising topography. Approximately 50% of the moisture at higher elevations occurs as snow between October and March with the remainder arriving as spring, fall, and winter rains. Summers are hot and dry as a result of greatly diminished coastal winds combined with strong continental climatic factors and the driest months are July and August.

"Idaho is strongly influenced by its proximity to the moderating effects of the Pacific Ocean maritime climate. Northern Idaho in particular has a relatively mild climate for its far northern location" (Wuerthner 1986:16). The study area is under the influence of Pacific Maritime air masses for most of the year, resulting in a relatively moderate climate for the latitude. Infrequently, dry continental air masses enter from the north or east. Extremes in both summer and winter temperatures generally occur when the area is under the influence of air from over the continent (Hudson et al. 1981:9).

The westerlies carry moisture-laden air inland along the North Pacific storm track, depositing abundant amounts of precipitation during fall, winter, and spring. Most precipitation is orographic, resulting in a definite clinal distribution from the semi-arid Columbia Basin northward and eastward to the well-watered higher elevations. In the winter, influences of Arctic air masses are felt, particularly in the northeastern part of the area and most precipitation in the mountains falls as snow. Spring runoff is consequently heavy. The greatest long-term average of seasonal snowfall in Idaho, as well as the greatest snow depth (both 182 inches/462 cm), were recorded at Mullan Pass (Hudson et al. 1981:10). The vicinity of Wallace and Mullan is the wettest part of the state, with the weather station at Wallace in the Coeur d'Alene Mountains receiving some 46.1 inches of annual precipitation (Wuerthner 1986:14).

In summer, development of a high-pressure ridge off the Pacific coast shunts the storm track northward. The summer months are therefore characterized by dry, sunny weather. Precipitation at this time of year is mainly convective, the product of thunderstorm activity (Hudson et al. 1981:10).

Flora

The present vegetation of the study area is the result of climatically induced migrations modified by the effect of human behavior. The original temperate mesophytic forest of the mid-Cenozoic was disrupted by gradual global cooling and the creation of a rainshadow when the Cascade Mountains were uplifted. These events provided opportunities for an influx of xerophytic herbs and shrubs of boreal origin into the now arid, but cool uplands. In the Altithermal interval (circa 8000-5000 B.P.) a number of strongly thermophilic xerophytes were able to immigrate from the south. Until the advent of Euroamerican settlement, ungulate pressure played no significant part in the evolution (Hudson et al. 1981:13).

The middle elevations support a forest dominated by survivors of the Cenozoic temperate mesophytic vegetation. These include western hemlock (*Tsuga heterophylla*), grand fir (*Abies grandis*), western red cedar (*Thuja plicata*), and western yew (*Taxus brevifolia*) with an understory consisting mainly of mountain hedge (*Pachistima myrsinites*), service berry (*Amelanchier alnifolia*), fairy bells (*Disporum oregonum*), dwarf maple (*Acer glabrum*), wake-robin (*Trillium ovatum*), tiarella (*Tiarella unifoliata*), huckleberry (*Vaccinium membranaceum*), devil's club (*Oplopanax horridum*), and sweet cicely (*Osmorhiza chilensis*) (Davis 1952; Hudson et al. 1981:14; Patterson et al. 1985). In these forests, Douglas fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), western white pine (*P. monticola*), lodgepole pine (*P. contorta*), and western larch (*Larix occidentalis*) are seral species. Western white pine is the most valuable timber species in the study area, and the greatest volume of such timber has undoubtedly been harvested from the *Tsuga-Pachistima* habitat type (Hudson et al. 1981:14).

Coniferous forests at higher elevations are dominated by alpine fir (*Abies lasiocarpa*), mountain hemlock (*Tsuga mertensiana*), Engelmann spruce (*Picea engelmannii*), and whitebark pine (*Pinus albicaulis*). Beargrass (*Xerophyllum tenax*), big huckleberry (*Vaccinium membranaceum*), grouseberry (*V. scoparius*), fools huckleberry (*Menziesia ferruginea*), white rhododendron (*Rhododendron albiflorum*), and Labrador tea (*Ledum glandulosum*) are characteristic understory species of the high altitudes. Two types of upper timberline occur at the periphery of the study area. On the highest peaks of the Selkirks, Cabinets, and Purcells, where low temperatures are the factor that limits tree growth, a fringe of subalpine larch (*Larix lyallii*) often occurs, above which alpine tundra prevails. Certain other peaks and ridges around 6000 ft. asl, particularly in the Purcells and Bitterroots, support a high elevation grassland which is a response to a combination of climatic and topoedaphic factors, producing a drought microclimate. These xerophytic communities are dominated by some of the same herbs found in the steppes of the basal plain yet also contain a flora characteristic of only these habitats in the study area (Daubenmire and Daubenmire 1968:50; Hudson et al. 1981:14; Patterson et al. 1985).

Deciduous riparian communities dominated by quaking aspen (*Populus tremuloides*) and willow (*Salix* spp.) flank watercourses throughout the study area and, in mountainous terrain, seepage areas in shallow ravines support dense stands of Sitka alder (*Alnus sinuate*) along with rocky mountain maple (*Acer glabrum*), blue elderberry (*Sambucus cerulea*), (*Sorbus scopulina*) and willow (*Salix* spp.) (Daubenmire and Daubenmire 1968). Poorly drained valley floors or morainic ponds are dominated by sedge (*Carex* spp.) and spiraea (*Spiraea douglasii*) (Hudson et al. 1981:14; Patterson et al. 1985).

Fauna

The great environmental diversity of the study area provides habitat for a correspondingly diverse fauna. Both mule and whitetail deer (*Odocoileus hemionus* and *O. virginianus*) are present. Important winter ranges for the latter species occur in the deciduous

bottomlands of the major watercourses, an important consideration from the perspective of aboriginal subsistence. Elk (*Cervus canadensis* or *C. elephus*) are abundant in the Coeur d'Alene, St. Joe, Clearwater, and Bitterroot Mountains. Ethnohistoric evidence suggests that deer were becoming more numerous during historic times while elk populations may have been declining (Hudson et al. 1981:15).

Moose (*Alces alces*) are scattered in small numbers throughout the forested portions of the study area while mountainous terrain support populations of bighorn sheep (*Ovis Canadensis*) and mountain goat (*Oreamnos americanus*). In addition, caribou (*Rangifer tarandus*) inhabited the Purcell and Selkirk Mountains. Bison (*Bison bison*) and pronghorn (*Antilocapra americana*) were present on the Columbia Plateau during prehistoric times (Schroedl 1973), their ranges extending into the southwestern part of the present study area. Ethnographer James Teit reported the 1815 killing of two bison near Tekoa, Washington (Hudson et al. 1981:15).

Other large mammals include grizzly bear (*Ursos arctos*), black bear (*U. americanus*), gray wolf (*Canis lupus*), coyote (*C. latrans*), mountain lion (*Felis concolor* or *Puma concolor*), lynx (*Lynx canadensis*), bobcat (*L. rufus*), and wolverine (*Gulo luscus*). A number of furbearing mammals inhabit the study area including beaver (*Castor canadensis*), mink (*Mustela vison*), river otter (*Lutra canadensis*), marten (*Martes americana*), muskrat (*Ondatra zibethicus*), and weasel (*Mustela* spp.). A variety of small mammals are also present including squirrels (*Tamiasciurus hudsonicus*, *Citellus columbianus*, *Callospermophilus lateralis*), chipmunk (*Eutamias amoenus*), pocket gopher (*Thomomys talpoides*), striped skunk (*Mephitis mephitis*), snowshoe hare (*Lepus americanus bairdii*), hoary marmot (*Marmota caligata*), bat (*Myotis* spp.), and shrew (*Sorex* spp.) (Davis 1939; Hudson et al. 1981:15; Larrison and Johnson 1981).

A diverse avifauna seasonally inhabited the study area. Those of potential importance to human populations include Canada geese (*Branta canadensis*), ducks (*Anas* spp.), grouse (*Dendragapus obscurus*, *Bonasa umbellus*, *Pedioecetes phasianellus columbianus*, *Canachites Canadensis franklinii*), chukars (*Alectoris graeca*), eagles (*Haliaeetus leucocephalus alascanus* and *Aquila chrysaetos canadensis*), falcons (*Falco* spp.), and hawks (*Accipiter* spp.) (Hudson et al. 1981:15; Larrison et al. 1967).

Three species of salmon (*Oncorhynchus tshawytscha*, *O. kisutch*, and *O. nerka*) ascended the Columbia into the study area. Steelhead (*Salmo gairdnerii*) also ascended these rivers. Falls on the lower reaches of the Kootenai, Pend Oreille, and Spokane rivers prevented the ascent of salmon into their upper reaches. Non-anadromous fish included Dolly Varden (*Salvelinus malma*), cutthroat and rainbow trout (*Salmo clarkia* and *S. gairdnerii*), whitefish (*Prosopium williamsoni*), suckers (*Catostomus* spp.), and minnows. Freshwater mollusks (*Margaritifera* spp.) were present in parts of some major watercourses (Hudson et al. 1981:15-16; Simpson and Wallace 1982).

CULTURAL RESOURCE NARRATIVE

PREHISTORIC THEMES AND LIFEWAYS

Cultural Chronology

The area of the Coeur d'Alene Field Office has recently been included within the boundaries of Eastern Plateau prehistory and a summary of the cultural history of this region has been compiled by Roll and Hackenberger (1998). The major drainages of the Kootenai, Pend Oreille, and Spokane rivers have been the main areas of study and have provided for the interpretation of the Kootenai-Pend Oreille region of prehistory (Roll and Hackenberger 1998).

Compared with other portions of the Plateau, the Kootenai-Pend Oreille region is unique due to physiographic factors affecting cultural development. Overall, one of the major resources for Plateau people is anadromous fish. However, within the Kootenai-Pend Oreille region, natural falls on each of the three major rivers prevents salmon from ascending to their upper reaches. Specifically, Bonnington Falls on the Kootenai River, Metaline Falls on the Pend Oreille River, and Spokane Falls on the Spokane River, prevent salmon from entering the study area (Roll and Hackenberger 1998:120). Cultural development in this region has been affected greatly by the absence of anadromous fish. As salmon have been considered essential to the emergence of Plateau culture, the absence of anadromous fish from the upper reaches of the Kootenai-Pend Oreille region rivers led to cultural strategies that contrast with those of the remainder of the Plateau.

Archaeologists have presented a number of synthetic schemes to account for Kootenai-Pend Oreille culture history (Roll and Hackenberger 1998:122). Most have focused on the relatively more investigated Kootenai River valley where studies have been conducted in northwest Montana in association with Lake Kooconusa. Few major studies have occurred within the boundaries of the Coeur d'Alene Field Office area.

Several regional prehistory schemes have been proposed since 1956, but none of the culture histories have gained a substantial following. Most attempts at cultural chronologies have emphasized broad-based comparison stressing cultural continuity. The chronologies developed by typological cross-dating from nearby regions, based mostly on projectile points, shed light on substantial portions of the Eastern Plateau. Generally, these studies have followed three periods, commonly referred to as the Early, Middle, and Late Prehistoric periods (Roll and Hackenberger 1998:122-123).

A more specific chronology proposed by Choquette (1984) divides the prehistory schemes into complexes. With a complex defined as a group of culture traits relating to a single activity, process, and/or culture unit, Choquette identified five prehistoric complexes: Goatfell (11,000-7500 BP), Bristow (7500-4000 BP), Inissimi (3500-2000 BP), Akiyin'ek (1000-500 BP), and Akaho'nek (550 BP-Historic Contact).

The Early Prehistoric Period (before 10,000 BP - 7000 BP)

The culture history of the Early Prehistoric Period in the Kootenai-Pend Oreille region is based on sparse remains combined with paleoenvironmental data demonstrating the potential for Paleoindian utilization of the area (Roll and Hackenberger 1998:123). By around 12,000 years ago, or the onset of the Holocene epoch, most of the area was open for settlement with the end of the Spokane floods and the retreat of glaciers to higher elevations. Large lanceolate and stemmed lanceolate projectile points characterize the early period. The oldest known styles, including fluted points such as Clovis and Folsom, occur infrequently, if at all. In the greater Eastern Plateau, eighteen sites have yielded classifiable Paleoindian projectile points; all of these are east of the continental divide and none included fluted points (Roll and Hackenberger 1998:123). Surface finds of Paleoindian projectile points are "rare" on the east slopes of the Rocky Mountains, while similar finds on the west slopes of the Rockies are even more "infrequent." Miss and Hudson (1986) have illustrated surface finds from 10 sites around Lake Pend Oreille and several suggest "considerable antiquity" comparable to the Windust phase varieties found elsewhere on the Plateau (Roll and Hackenberger 1998:123). Similarly, the Goatfells Complex (dated ca. 11,000-7000 BP) contains materials similar to those of the Windust phase (Choquette 1984). Most points have been found as surface collections but excavations have turned up single points in two sites in Boundary County near Lake Pend Oreille (Roll and Hackenberger 1998:123).

Discussions of subsistence, settlement, and human population dynamics derive mostly from environmental assessments and archaeological data outside the immediate region. The few surface finds and data from limited excavations provide little evidence directly applicable to such issues. Faunal remains from early components have not been preserved or have not yet been reported. The diverse faunal assemblages reported in early sites on the Plateau and the Rocky Mountain front contrast with sites on the plains where mammoth and bison are dominant. Presumably the early inhabitants of the Eastern Plateau maintained adaptations that favored diversity over specialty. A dispersed human population that maintained itself with a forager strategy dependent on seasonal movement regulated by the behavior of resident big game and seasonal abundance of seasonal plant foods seems consistent with the available information (Roll and Hackenberger 1998:124).

No buried Paleoindian site with indications of reasonably intact deposits has come to light within the Kootenai-Pend Oreille region. Several possibilities offer explanations for this phenomenon. Lack of Paleoindian occupation seems an unlikely possibility. More probably, an inadequate sample of landforms of sufficient antiquity has been examined. Most reconnaissance has emphasized floodplain and alluvial terrace settings where preserved sediments of appropriate age and context may occur infrequently, if at all. Although some exceptions to river-oriented studies do exist, these have yielded little definitive evidence of Paleoindian occupations. Recently, two radiocarbon dates of ca. 11,000-10,000 years associated with obsidian debitage were obtained from a site in the area (Roll and Hackenberger 1998:124) but the results have not been published.

The Middle Prehistoric Period (ca. 7000 – 1500 BP)

The beginning of the Middle Prehistoric period in the Kootenai-Pend Oreille region may be associated with a period of more effective moisture which led to an expansion of forests at the expense of grasses. In the Kootenai region the pollen record documents increases in larch and Douglas fir and decreases in grass and sagebrush between 7000 and 4000 BP. This change is also documented by an increase in charcoal which suggests an increased frequency in forest fires. The cultural developments of the early Middle period (ca. 7000-4500 BP) appear coevally with the inferred transition from a continental to a maritime climate (Roll and Hackenberger 1998:125). The tool inventory from this period shows little if any increase over the previous period although projectile styles change to two basic patterns, that is, to triangular side-notched and lanceolate unnotched (Roll and Hackenberger 1998:125). Various names have been assigned in different regions to very similar side-notched points. The lanceolate Cascade projectile point was one of the "hallmark" artifacts of the Cascade phase along the lower Snake River (Leonhardy and Rice 1970) and these items have been widely reported but their generalized shape makes them difficult for some archaeologists to identify.

Throughout much of western North America, lanceolate indented base points appear sometime around 5000 BP. Similar items have been assigned different names in areas between the Great Basin and the Northwestern Plains; lanceolate indented base and stemmed indented base projectile points have also appeared in a number of excavated contexts across the Kootenai-Pend Oreille region (Roll and Hackenberger 1998:127). These points may represent the advent of the Late Middle Prehistoric period but Late Middle Prehistoric Period corner-notched and corner-removed projectile points occur in abundance throughout the Kootenai-Pend Oreille region (Roll and Hackenberger 1998:125).

Within the Kootenai-Pend Oreille region corner-notched points appear frequently in excavated components. These points appear in six sites and represent 23% of all identifiable point types (Roll and Hackenberger 1998:128). In the eastern Plateau archaeologists treat a wide range of large to medium corner-notched to corner-removed projectile points as markers of the terminal Late Middle prehistoric period. Without corroborating evidence corner-notched projectile points probably provide a poor basis for assigning chronology or cultural affiliation (Roll and Hackenberger 1998:128).

The Late Prehistoric Period (ca. 1500 - 250 BP)

The introduction of the bow and arrow in the Eastern Plateau, as indicated by small side-notched and corner-notched projectile points, marks the beginning of the late Prehistoric Period of culture history (Roll and Hackenberger 1998:132). Throughout the eastern two-thirds of the Kootenai-Pend Oreille region specimens consistent with the Avonlea type on the northern Plains appear sometime after AD 500. While the middle Kootenai valley has yielded the greatest concentration to date, other sites occur in western Montana and points from along Lake Pend Oreille appear to be within the range of Avonlea (Miss and Hudson 1986).

Lake Pend Oreille Region

Early researchers of the prehistory of the study area were “unimpressed by the relative sparsity of cultural deposits within single sites and lacked a regional perspective within which to place the few distinctive aspects of the archaeological record that they did find” (Choquette and Holstien 1980:35).

Though much of the prehistoric archaeology of the area has been focused on the Pend Oreille River, especially in the area of Albeni Falls Reservoir, very little is known about the actual prehistory of the Pend Oreille Valley. Many sites have been recorded along the Pend Oreille River from observations of cultural remains in cutbanks or from artifacts lying on beaches. While surveys have been somewhat extensive, excavations have been limited.

Excavations of the Riley Creek Site (10BR99) yielded a date of 1240 ± 100 BP and cultural materials which included bone fragments, projectile points, bifacially worked spalls, large notched biface fragments, edged flake fragments, and other stone tools. The site was determined to be a small prehistoric habitation used briefly (Knudson et al. 1979). Excavations of 10BR94, located on Pend Oreille River just upriver from its confluence with the Priest River and part of Albeni Falls Reservoir, revealed three cultural components (one historic and two prehistoric), the earliest pre dating Mazama ash of 6700 BP. Materials recovered included bone fragments, projectile points, debitage, cores, battered cobbles, utilized flakes, slab tools, retouched flakes, end scrapers, unifaces, graters/perforators, bifaces, and a bead (Hudson et al. 1980). Excavations within the area suggest brief habitations (Knudson et al. 1979) possibly spanning the past 6700 years or more (Hudson et al. 1980). The use of locally available argillites and quartzites for most of the tool inventory has been found to be common throughout the area (Gough and Boreson 1985:3).

Surveys of the area indicate a widespread use of the Pend Oreille River and the northern half of the lake. Additional investigations have documented a number of prehistoric sites as occupation sites with significant quantities of thermally altered rock (Gough and Boreson 1985:20). Furthermore, survey investigations have determined that “sites are found wherever the terrace adjacent to the river is broad enough to have allowed activity and has been eroded enough to remove vegetation (Miss and Hudson 1986:19).

ETHNOGRAPHIC THEMES AND LIFEWAYS

The Plateau Culture Area

Territory

The study area for the Landscape Overview project of the Coeur d'Alene Field Office is within the boundaries of the Plateau culture area and includes the traditional territories of the Coeur d'Alene, Kalispel, and Kootenai/Kutenai Indians (Fig. 3).

A simple definition of the physical boundaries of the Plateau culture area is that it is the region drained by the Columbia and Fraser rivers except for certain portions of the northern Great Basin drained by the Snake River, itself a tributary of the Columbia River (Walker 1998:1). This corresponds generally to southeastern British Columbia, eastern Washington, northeastern Oregon, northern Idaho, and western Montana.

"Physiographically the area consists of an open central section surrounded by highlands. The central section, sometimes called the Columbia Plateau, is a surface of highly varied topography. Eastward the area extends into the Rocky Mountains of Idaho and Montana, northward into the broader valleys and lower peaks of the Okanogan Highlands, westward up the steep slopes of the Cascade Range, and southward into the Blue Mountains" (Anastasio 1985:117).

The highly varied topography of the area includes deep river canyons, open prairies, dense forests, and numerous rivers, streams, and lakes with an abundance of resident and anadromous fish. Though the Plateau climate can be harsh, it is generally moderated by the influences of the weather from the Pacific Ocean (Walker 1998:3). The maritime climate varies markedly throughout the area. Precipitation is affected by the high ranges of the Cascades which cut off most of the moisture from the ocean. Most of the precipitation occurs in the winter, with heavy snowfall in the upland and mountain areas (Anastasio 1985:117).

The Plateau culture area is bordered by the culture areas of the Great Basin on the south, the Northwest Coast on the west, the Plains on the east, and the Subarctic on the north. Physically, the Plateau is partially set apart from bordering areas by mountain barriers. Culturally, there is an aboriginal adaptation to a unique set of resources and an inland maritime environment.

Ethnographic Studies

The definition of the Plateau as a distinct culture area is based largely on the ethnographic work of Verne Ray. Ray conducted his field work between 1928 and 1940 resulting in the publication of several important and often cited documents (Ray 1936, 1939, 1942).

Ray's first publication (1936) was a result of field work conducted while an undergraduate. With sponsorship from the University of Washington's Department of Anthropology, Ray collected information regarding the locations of Indian villages and the territorial distribution of native groups. Published in 1936 as "Native Villages and Groupings of the Columbia Basin,"

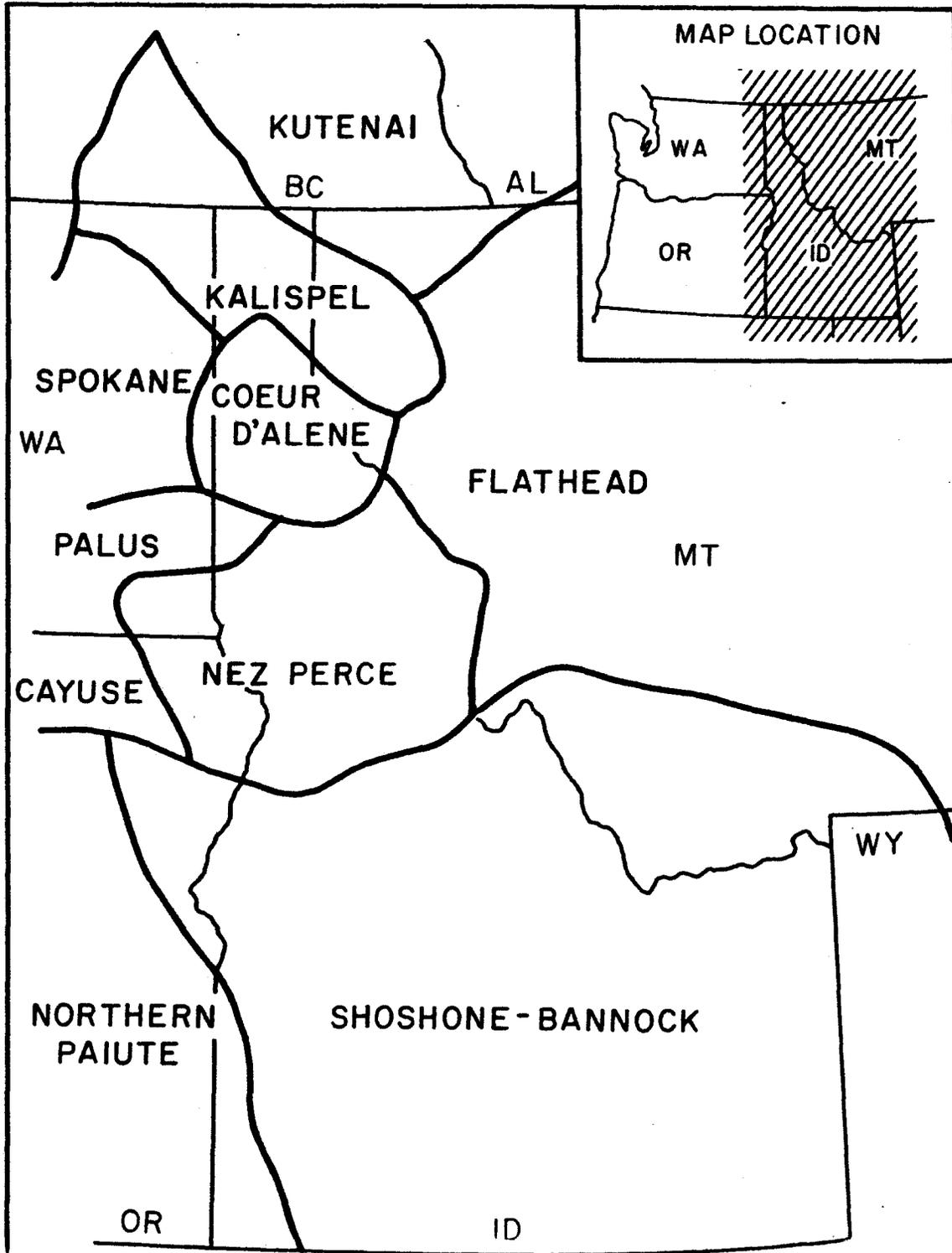


Fig. 3. Traditional territories of the Coeur d'Alene, Kootenai/Kutenai, and Kalispel (adapted from Sappington 1994:64).

Ray considered his work to be detailed and reliable with a wide range of interest and value for the historian, geographer, archaeologist, and ethnologist. He gathered data directly from native informants throughout the area, believing this type of information would be impossible to obtain from the Pacific Northwest within a few years (Ray 1936:99).

Ray's 1939 publication "Culture Relations in the Plateau of Northwestern America" was a result of his doctoral work at Yale University and a culmination of ten years of intermittent work on the Plateau. In addition to information gathered during his field investigations, Ray drew on historical accounts and other ethnographies.

Several years of data collection using revised versions of Alfred Kroeber's element list program, originally designed for California groups, resulted in Ray's 1942 "Culture Element Distributions:XXII Plateau." Beginning in 1936, Ray used the Culture Element Survey for the accumulation of ethnographic data that could be easily compared with other collections. A detailed list of culture elements was verbally presented by Ray, during fieldwork, to individual informants. The presence or absence of each element was then noted by the informant and recorded by Ray. Ray revised and changed the original list of elements during his July 1937 fieldwork, expanding the list and putting the elements in a more logical order for the Plateau data. Ray noted, "the list not only represents the Plateau, but it is a product of the Plateau" (Ray 1942:100). The resulting list included over 7600 culture elements and the presence or absence of these within Plateau groups.

Ray's extensive ethnographic work with Plateau groups led him to conclude that internal cultural cohesions existed within the Plateau and that similarities to adjacent areas were results of recent influences (Ray 1939, 1942). His work has become the basis for most ethnographic studies within the Plateau.

Culture Pattern

Some of the distinguishing features of the Plateau culture pattern are: riverine (linear) settlement; reliance on a diverse subsistence base of anadromous fish and extensive game and root resources; a complex fishing technology; mutual cross-utilization of subsistence resources among various groups in an area; trade links throughout the area; and limited political integration at the village and band levels (Walker 1998:3).

Settlement

A riverine orientation characterized the settlement pattern of the Plateau area. Rivers were important for the use of salmon and other fish. In some places the river valleys offered protection during winter months. Driftwood, a chief source of fuel in some regions of the Plateau, could also be found in rivers. Water transportation was used by all groups to some extent (Anastasio 1985:118). Villages were located along the main rivers in winter and temporary subsistence camps at higher levels during summer months. Winter villages, generally located near the conjunctions of tributary waterways, especially where fish were abundant, could

accommodate up to several hundred people (Walker 1998:3-5). Most villages were located along a river and exhibited a linear settlement pattern (Anastasio 1985:118).

Subsistence

The Plateau diet was dependent on gathering, fishing, and hunting. The gathering of plant foods provided one-third to one-half of all foods. The bulbs and roots of camas, kouse, and bitterroot formed the bulk of plant food, with a variety of berries, nuts and other plant items gathered as well. Plants were also used for basketry, tools, weapons, fishing gear, and mats. Fish, especially salmon, supplied another important source of food. Large game and small game were hunted throughout the Plateau area as food sources, and raw materials for clothing, shelter, and horse gear (Anastasio 1985:120-123). The annual subsistence cycle was related to the seasonal procurement of food sources. Late spring and early summer were times for fishing and harvesting of roots with a movement to higher elevations and tributaries. Gathering of berries and hunting continued into fall in the higher elevations with a return to the river valleys and villages in the winter.

Structures/Housing

Plateau winter village structures were of two types, the semisubterranean earth lodge and the mat-covered longhouse. The earth lodge was usually circular, with a flat roof, and supported by poles. Structures of the upland summer camps consisted of mat-covered lodges (Walker 1998:3-5).

Technology/Material Culture

The material culture of the Plateau groups consisted of implements of stone, antler, bone, wood, and plant fiber and included weapons, household utensils, and storage containers.

Travel/Transport

Ethnographically, most Plateau groups used water transport, commonly shovel-nose pattern canoes (Ray 1939:140). Snowshoes were used extensively during winter months by some groups. Early in the eighteenth century the horse was adopted by some groups, facilitating transportation and communication and increasing the scope and range of travel for trading and hunting (Anastasio 1985:127-129).

Political Organization/Social Organization

The village appears to have been the primary political unit. At times groups from several villages would band together at fishing sites and camas meadows (Walker 1998:5).

Burial practices throughout the Plateau included pit burials in sand or gravel near riverbanks and rockslide burials close to rivers. Houses of the deceased might be torn down or burned (Walker 1998:5). River banks and islands were frequently used for burials for cemeteries (Ray 1939:61).

Group relations among Plateau groups were highly interactive, maintaining extensive intertribal connections as well as extensive linkages with the Plains, Northwest Coast, and Great Basin groups (Walker 1998:5-6).

The Coeur d'Alene

Territory

The aboriginal territory occupied by the Coeur d'Alene was nearly entirely within the state of Idaho, with a small portion extending into Washington. Their territory included all of the headwaters of the Spokane River from just above Spokane Falls to the sources, including Coeur d'Alene Lake and all its tributaries. To the southeast, their territory extended across the head of the Clearwater. The eastern boundaries were the Coeur d'Alene and Bitterroot mountains (Teit 1930:37). As defined by Antelope (1938:18), the Coeur d'Alene territory was a little more than one hundred miles long and about ninety miles wide.

The Coeur d'Alene territory contains rolling prairies, foothills, mountains, and valleys drained by streams tributary to the Spokane, Coeur d'Alene, St. Joe, Palouse, and Clearwater rivers (Palmer 1998:313). Much of the Coeur d'Alene country is mountainous and heavily forested, with more rain and snowfall than found in the territories of surrounding groups. The western portion, in the vicinity of Desmet, Hangman Creek, Tekoa, and Farmington, is drier and relatively more flat, consisting of open grasslands. Many navigable waterways exist within the territory, especially in the central area (Teit 1930:37).

Ethnographic Studies

Several published sources report ethnographic information for the Coeur d'Alene.

A primary source of published material on the Coeur d'Alene is based primarily on James Teit's (1930) work with Croutous Nicodemus. Teit stayed with Nicodemus for several weeks in 1904 and obtained most of the material included in his Coeur d'Alene ethnography. "Containing information on material culture, cooking and food preservation, subsistence techniques, religion, and social organization, this work by Teit and Croutous remains the best ethnography of the Coeur d'Alene" (Palmer 1998:325).

As with many other Plateau groups, Ray published a list of Coeur d'Alene villages and a great deal of ethnographic information in tabular and summary form (Ray 1936, 1939, 1942). Ray also testified on behalf of the Coeur d'Alene before the Indian Claims Commission (Ray 1975).

Stuart Chalfant also reported on the Coeur d'Alene Tribe for the Indian Claims Commission. His work was a result of "more than five months of research and ethnological field investigation of all known sources which have to do with that territory aboriginally used and possessed by the Coeur d'Alene Tribe of Indians" (Chalfant 1974a:39). Chalfant divided his final document into three parts: the written historical material pertinent to Coeur d'Alene territory, abridged and edited interviews conducted over three months in the field, and his ethnological analysis and opinion of Coeur d'Alene aboriginal territory (Chalfant 1974a:39).

More recently, compilations of ethnographic material and interviews with informants among the Coeur d'Alene have been undertaken by Roderick Sprague (1999).

Culture Pattern

Settlement

The Coeur d'Alene wintered in permanent villages on lakes and rivers within their territory. Three clusters of permanent winter villages constituted three major territorial divisions of the Coeur d'Alene tribe: the Coeur d'Alene and Spokane River Division (16 villages), the Coeur d'Alene River Division (11 villages) and the St. Joe River Division (6 villages). Summer camps were located on the St. Maries River and a large fish trap was located near Tekoa (Teit 1930:38).

"Judging from the number of their winter camps or villages, the population may have been between 3,000 and 4,000" (Teit 1930:39-40). Smallpox epidemics of 1831/1832 and 1850 diminished the population so that by 1905 the number of Coeur d'Alene on the Coeur d'Alene Reservation was given as 494 (Teit 1930:40).

Subsistence

The Coeur d'Alene relied on hunting, fishing, and gathering of plant foods for subsistence.

With spring, came the breaking of winter village populations into smaller groups for trapping, netting, hooking, spearing and gaffing of fish. Fishing stations were found at the head of the Spokane River at the north end of Lake Coeur d'Alene, at the rapids 15 miles above St. Maries on the St. Joe River, and occasionally on the Little North Fork of the Coeur d'Alene River, and along the Little North Fork of the Clearwater River with the Nez Perce (Chalfant 1974a:189).

Several varieties of fish traps were constructed at the outlet of the Spokane River from Lake Coeur d'Alene, on the St. Joe River near the old mission, and near Tekoa on Hangman Creek (Palmer 1998:315). In early spring cutthroat trout fishing began at the mouths of the St. Joe and Coeur d'Alene rivers and families gathered in April at

Hangman Creek prairie (Palmer 1998:315). When fresh, fish was roasted on spits or sticks in front of a fire. Fresh fish was also boiled. For storage, fish would be cut into thin slices and spread on a low framework then dried by fire or sun (Teit 1930:94).

In late spring and summer, roots, berries, and other plants were gathered. Large camas grounds were located around Tensed, DeSmet, and Sanders. Roots were also gathered near Colfax with the Palus, near Moscow and Clarkia with the Nez Perce (Chalfant 1974a:189-190), and on Hangman Creek as far north as Spangle, Washington, with the Spokane (Hudson et al. 1981:38). By early summer (June) camas digging attracted the largest Coeur d'Alene assembly. The most productive grounds for camas and wild onions were in the prairie near today's DeSmet (Palmer 1998:315).

Digging sticks with elk antler handles were used to gather camas and kous. The curve of the digging stick handle varied for different purposes. Wide and curved sticks were used for digging in soft ground, while hard ground brought the use of round, almost straight sticks. The wood of the sticks was from serviceberry trees, hawthorn trees, or syringa. Roots were gathered into woven baskets (Teit 1930:91). Preparation of roots included stringing and drying, spreading and drying, or hanging in sacks with open weave. Several kinds of roots were cooked in circular earth ovens (Teit 1930:92). Usually, after cooking, camas was crushed and made into cakes, which were then dried. Large cakes of camas were dried on frames made of slats or split pieces of wood (Teit 1930:92-93).

Small groups spent the late summer in the upstream meadows of the Coeur d'Alene, St. Joe, and Palouse river drainages for camas digging and berry picking, especially huckleberries (Palmer 1998:315). While at camas grounds around Tensed and Sanders, the Coeur d'Alene would pick berries in the mountains between Sanders and Clarkia. Other summer berry areas included Grizzly Mountain, the mouth of Pine Creek, the Little North Fork of the Coeur d'Alene River, and around the winter villages (Chalfant 1974a:149).

Among the berries gathered were service berries, chokecherries, bear berries, raspberries, strawberries, blackberries, currants, and huckleberries. Many varieties of berries, including huckleberries, were simply dried without further treatment. Service berries were generally spread on mats and dried in the sun. When cured, they were stored in bags. Service berries and huckleberries were sometimes boiled, then eaten. Often fresh berries were mashed and made into cakes, then dried on layers of grass spread on frames elevated on scaffolds of poles. Thick soups were made of dried berries and roots boiled together (Teit 1930:93).

The Coeur d'Alene also gathered nuts, seeds, tree sap, and tree cambium from ponderosa and lodge pole pines. Berry picking continued into early fall as the groups from camas meadows broke into small groups of two or three families for hunting and fishing in the uplands (Palmer 1998:315).

"In early fall the Coeur d'Alene traveled to salmon fishing sites at Spokane and Kettle Falls and on the North Fork of the Clearwater River. No river within their major territory was accessible to the returning fish. Large amounts of fish were dried for storage" (Hudson et al. 1981:39).

"Fish were split, cleaned, and hung on poles to dry in the sun and wind. If the weather were cloudy or rainy, the drying process was hastened by fire and smoke. Cooked salmon flesh was sometimes pounded up, salmon oil was added, and the whole thoroughly kneaded. This kind of pemmican was stored in salmon-skin bags, which were sealed with gum or glue. Salmon oil was put up in small salmon-skin bags or bottles, which were sealed in the same way" (Teit 1930:95-95).

During late fall and early winter groups returned to villages in the lowlands for hunting, fish trapping, and ice fishing (Palmer 1998:315). Hunting areas were favored near the permanent winter villages, along the river valleys and around lakes. Large fall hunts were undertaken, primarily for deer and elk, which were hunted for meat and skins. Also hunted, but of lesser importance, were moose, goat, sheep, antelope, bear, and beaver. Buffalo were hunted in late summer on the Plains (Teit 1930:96-97). Hunting involved the use of bows and arrows, drives, decoys, pole snares, and deadfalls (Hudson and others 1981:39).

Meat was roasted, boiled, and dried. Meat intended for winter use was dried by fire or sun, assisted by wind and smoke. Dried meat was often made into pemmican by pounding with pestles, mauls and stone hammers in mortars, on flat stones, or on rawhides. The jerked meat was stored in bags and usually eaten without further preparation. Nearly all the bags used for storing and carrying meat were made of rawhide. The principal meats cured were those of deer, elk, and buffalo (Teit 1930:94).

Before the introduction of the horse, deer and elk were the primary game hunted. After 1700, buffalo hunting was practiced and bow and arrow making were developed to a fine craft (Palmer 1998:315).

Structures/Housing

The Coeur d'Alene are not known to have made semisubterranean earth lodges. The most common family house among the Coeur d'Alene was the conical mat lodge, or tent, of poles covered with mats made of sewed tules. In the winter the lodge was pitched over an area excavated a few inches to a foot and a half in depth with the excavated earth banked around the base of the structure. Dry grass, dry pine needles, or pieces of bark were placed around the bottom of the mats to prevent decay. These lodges varied in diameter from five to ten meters and were made of three poles. One to three related families occupied the lodge; many were occupied by single families. In summer the lodge was pitched on a surface of level ground and single layers of mats were used (Teit 1930:58).

The long, communal lodge was also used by the Coeur d'Alene, especially for gatherings and at summer locations where many people congregated temporarily. During fair weather, the long lodge was often a single one-sided lean-to with fires built along the front in the open. Some of the single lean-to structures ranged from 30 to 50 meters. Double lean-tos were 18 to 35 meters long and, when necessary, could accommodate 75 to 100 people. The summer lodges were not excavated. At principal winter villages, a large, permanent lodge would be erected as a general meeting place or dance house. These winter long houses were excavated to 30 to 75 centimeters and covered with layers of mats. Earth banked the edges. The structures were five to eight meters wide and from 13 to 35 meters long. In a large house, there were usually six fires (Teit 1930:60).

Other structures used by the Coeur d'Alene were: cedar-bark lodges, where good bark was available; brush lodges, temporary shelters of poles and branches of coniferous trees; women's and girls' lodges, small conical lodges or tents placed at some distance from the main settlement; sweathouses, dome-shaped and of bent willows; scaffolds, poles erected for storing saddles, skins, and other goods; and caches and cellars, circular pits dug in dry ground where the drainage was good (Teit 1930:62-63).

Stockades, rows of posts set deeply in the ground and close together, were also constructed by the Coeur d'Alene. The stockades might surround a group of houses or, usually, were built near a camp and used as a place of refuge. The walls were three meters high and shelters of mats were erected within the walls for accommodations. For further protection, pits and trenches were sometimes dug within the walls. The shape of the stockades was circular (Teit 1930:117-118). Small, oblong, or square, log forts covered with brush and earth were also constructed (Teit 1930:118).

Technology/Material Culture

Tools of the Coeur d'Alene were made of stone, bone, antler and plant fiber (Palmer 1998:317). Stone tools included arrow smoothers, adze blades, pestles, hand hammers, mauls, arrowheads, spear points, knives, blades, and borers/perforators. Wedges for splitting wood were made of deer and elk antler or hard wood. Chisels for felling trees and cutting wood were made of basal parts of the antler. A few knives and spear points were made of bone and antler (Teit 1930:42-42). Weapons of stone and other material included bows and arrows, knives, daggers, clubs, and tomahawks (Teit 1920:115).

Mats were used for covering houses, floors, couches, seats, and beds. They were also used to dry berries. They were made in at least three kinds of weaving, the best of which consisted of rushes and tule and woven with Indian-hemp twine (Teit 1930:47).

A variety of baskets and bags were used for storage. Circular basket kettles were used for boiling food and the food was eaten out of the basket kettles or served on mats (Teit 1930:64). Small bowls were made of mountain ram's horn. Spoons and ladles were also made of horn and of wood. Other spoons were made of balsam poplar wood (Teit 1930:64).

Travel/Transport

"Prior to the use of horses, much transportation must have followed the waterways, using double-ended, sharp-pointed "sturgeon nose" cedar bark canoes. The Coeur d'Alenes also made tule rafts that were pointed at both ends like the canoes" (Palmer 1998:318).

All the canoes were the sharp-snouted "sturgeon nose" type and made of cedar bark. Dugouts were not used. Sizes of canoes varied from a small one-person variety to large sizes for transport of a number of people and cargo. Snowshoes were commonly used for winter travel. An abundance of horses by 1760 made traveling and buffalo hunting easier (Teit 1930:109-110).

Political/Social Organizations

Each village, or small cluster of villages, was the winter residence of bands of no more than 300 individuals. Each division recognized a chief who was also the elected leader of the largest band or of a band that supplied the division chief by tradition (Palmer 1998:320-321).

Burials occurred in the earth or in rock slides, but cremation or deposition on scaffolds or trees were not practiced. "People were buried in the nearest suitable place" (Teit 1930:172).

The Kalispel

Territory

The territory of the Kalispel extends from the confluence of the Clark Fork and Flathead rivers near Plains, Montana, down the Pend Oreille River to around Lake Pend Oreille and along the Pend Oreille River to the confluence of the Salmo River in British Columbia (Lahren 1998:283).

At the time of contact, the Kalispel territory covered all of the Pend Oreille and Priest River drainages including a northward extension along the Salmo River in British Columbia (Hudson et al. 1981:61). The Kalispel occupied a rather narrow strip of country following the Pend Oreille River and included the country around Lake Pend Oreille and Priest Lake in Idaho and nearly all of the Pend Oreille River in Washington. A small area of hunting territory expanded into the Salmo River district in British Columbia (Teit 1930:308). The Pend Oreille River was an important east-west trade route as the easiest gateway through the mountains toward the Columbia River region (Lahren 1998:283).

Ethnographic Studies

"The first and most detailed ethnographic works is that of Teit (1930). A. H. Smith conducted fieldwork among the Kalispel in 1937, and his field notes represent the most

comprehensive ethnographic treatment of the Kalispel. Ray (1942) also conducted fieldwork among them in 1937 and is the next best comprehensive ethnographic source" (Lahren 1998:296). Chalfant (1974b) also worked among the Kalispel for the Indian Claims Commission compiling ethnographic data.

Teit spent only about a week among the Flathead, and visited the Lower Kalispel and other tribes to obtain vocabularies and information regarding tribal boundaries. Teit considered his notes on the material culture of all the tribes to be very meager (Teit 1930:326).

Smith's (1950) work on the Kalispel is cited in Lahren (1998:296) as Kalispel ethnography, Manuscript, Exhibit 65, Docket 94, Indian Claims Commission, Washington, but is not readily available.

Chalfant's work among the Kalispel was undertaken on the Usk Reservation in Washington in the summer of 1952 and was limited to several weeks of field work gathering data for the evaluation of the extent of land owned and occupied by the aboriginal Kalispel (Chalfant 1974b:35). His ethnographic data comes largely from Teit (1930) and Ray (1942).

As part of a cultural resource overview, Hudson and others (1981) conducted oral history interviews adding to published ethnographic data available for the Kalispel and also cited personal communications with Smith regarding his ethnographic findings.

Culture Pattern

Settlement

The Lower Kalispel occupied the area west of the Pend Oreille River, near Calispell Lake, Washington. The Lower Kalispel country was nearly all in the state of Washington, where they occupied the Lower Pend Oreille River from Newport down. Winter camps were located on the Pend Oreille River, mostly on the east side, and within nine miles of the major center. Smaller bands were located elsewhere (Teit 1930:312-313).

The Upper Kalispel occupied all the tribal territory now within Idaho and Montana. The Upper Kalispel lived along the Pend Oreille River and at the outlet around Pend Oreille Lake in Idaho. Another band was located near Sandpoint (Teit 1930:313). Winter camps were also maintained around Priest Lake, Hope, Bayview, and at the mouth of Trestle Creek on Lake Pend Oreille (Chalfant 1974b:44). The dividing line between the Lower Kalispel and the Upper Kalispel was in the vicinity of Albeni Falls (Hudson et al. 1981:66).

Subsistence

"The Kalispel area was abundantly supplied in game, fish and edible vegetal and root products. Salmon were lacking, however, for these fish could not pass the Kettle Falls of the Columbia. The Kalispel relied on several major pursuits for subsistence; namely, camas root gathering, deer and other small game hunting and fishing. The latter two were pursued throughout the year in varying degrees, but camas roots, which were gathered in summer, provided their most reliable staple" (Chalfant 1974b:48).

Winter camps along the Pend Oreille River would break up with the coming of spring and families would move to areas for hunting and fishing. In March, fishing commenced on Lake Pend Oreille (Chalfant 1974b:48).

Bitterroot, dug in April, was an important root crop, especially in the mountains northwest of Usk, Washington (Chalfant 1974b:48). The most important vegetable food among the Kalispel was the camas and their territory was rich in camas areas (Lahren 1998:287). Wild onions were dug in May near Spokane and fishing took place in mountain lakes and streams (Chalfant 1974b:48-49). In June they would congregate at camas fields, the most important of which were located near today's Kalispel Reservation in northeastern Washington (Lahren 1998:285). "Gathering camas near Cusick brought a large number of people together at that locality, probably the most intensive population focus of the Kalispel" (Hudson et al.1981:65).

With the completion of the camas harvest in July, fishing, hunting, and gathering activities would begin and continue until late fall (Lahren 1998:285).

Most of the summer occupations took place at and near the major village sites along the Pend Oreille River (Chalfant 1974b:49).

Chokecherries and serviceberries were gathered mainly along the Pend Oreille River. Huckleberries were the most common of the berries collected and grew in the mountainous areas adjacent to the Pend Oreille Valley. The region near Hope, Idaho, was a prominent area for the picking of huckleberries (Hudson et al. 1981:64). Berries were abundant and eaten fresh and dried (Lahren 1998:287).

Other foods gathered included the Indian potato, moss, cattail roots, pine cambium, wild garlic, wild celery, wild carrot, Easter lily, black pine sap, and bitterroot. Berries gathered were red willow, goose, kinnikinnick, thimble, elder, huckle, service, foam, straw, black, rasp, dew, currants, thorn, chokecherries, and Oregon grapes. Hazel and pine were the only nuts harvested (Lahren 1998:287).

Late July and August were times for certain families to engage in fishing (Lahren 1998:285). Major fishing stations were located on the Pend Oreille River near Cusick

and at the mouth of the Clark Fork River. Priest Lake was an important fishing locality where much of the winter supply was caught, then smoked and dried (Hudson et al. 1981:65).

The Kalispel caught a variety of fish including char, chub, shiners, squawfish, suckers, trout, and whitefish. They would also travel to the Kettle Falls fishing area. Fish were taken by use of weirs, basket traps, spears, spear and torchlight, harpoons, hook and set line, hook, line and pole, hemp sets, seines, dip nets, conical falls traps, dams and impoundments, standing platforms, and standing traps. Two-thirds of the fish were caught using two types of weirs. They were eaten fresh, boiled, dried and smoked (Lahren 1998:286).

From the end of August until late fall small groups concentrated on hunting (Lahren 1998:285). During September, time was spent preparing, cooking, and storing camas and other food products for winter use. Berries and roots were dried. Roots were also cooked in pits heated with rocks. The processed vegetal foods were then mashed and kneaded into cakes for storage in pits or on pole platforms above ground (Hudson et al. 1981:65). Hunting, a continual occupation of the Kalispel, became a primary occupation in the fall as deer migrated from the higher mountain regions to the valleys. Deer was the most important and most heavily relied upon game resource. Priest Lake was a principal area for deer hunting and winter drives were made along the Pend Oreille River (Chalfant 1974b:51-51). Communal hunts, as well as ambush and stalking, were employed. Deer were the principal prey, although other animals such as elk, bears, moose, caribou, and rabbits were taken if the opportunity arose. Waterfowl were hunted on the major water courses (Hudson and others 1981:65). Hunting by the Kalispel was principally undertaken with deadfalls and bow and arrow. Deadfalls were used for marten, fisher, mink, weasel, ermine, fox, wolverine, mountain lion, lynx, black bear, and mice. Mule and white-tailed deer were important game and were hunted throughout the year, but mostly in winter. They were hunted all winter long with snowshoes and bows. Other times of the year deer were driven into the water by dogs or fire. Black bears were shot with bow and arrows during bear drives and captured in deadfalls. Caribou, elk, moose, and mountain sheep were other larger game hunted. Smaller mammals included otter, rabbits, muskrats, skunks, squirrels, beavers, and bobcats (Lahren 1998:286-287).

A variety of birds were part of the Kalispel subsistence and included swans, ducks, geese, grouse, partridge, prairie chicken, fool hen, sandhill crane, and chicken hawks. Eggs of waterfowl were eaten in large numbers and feathers of bald and golden eagles were used (Lahren 1998:286).

When snow fell, families and bands returned to winter camps along the Pend Oreille River (Lahren 1998:285). In November winter camp locations were selected and lodges constructed. By December, winter settlement was complete (Hudson and others 1981:65). Hunting and fishing were major economic pursuits in the winter months.

Deer were taken by hunters on snowshoes and communal deer hunts were also organized during these sedentary months (Hudson et al.1981:64).

As elsewhere, the adoption of the horse altered the subsistence cycle with the hunting of buffalo for three to four weeks on the Plains (Lahren 1998:285).

Structures/Housing

The semi underground lodge was not a widely used structure among the Kalispel. A winter long lodge was used as a communal meeting house in winter permanent sites and a conical lodge or tent was used by all families during summer months, and by most people during winter months (Teit 1930:331-332).

The winter long lodge was a double lean-to and used at all large winter camps, especially the permanent camp sites. They were dance and meeting houses and used for all public gatherings, ceremonies, and the housing of visitors. The long lodges were sometimes used as dwellings for six families with three fires, two families at each fire. All other houses were mat-covered tents (Teit 1930:331).

The conical mat lodge was the common living house for families (Teit 1930:332) and used in both summer and winter (Lahren 1998:288). A three-pole foundation was generally used with poles of black pine preferred. The covering consisted of sewn tule mats. One or two layers of mats were used during summer and three or four during winter. Varying in size, the conical lodge generally housed two families (Teit 1930:332).

Other structures of the Kalispel included the sweatlodge, menstrual hut, and elevated storage platforms (Lahren 1998:288). A bark lodge, double lean-to or oblong type and not very large, would be constructed in spring or summer at camps with good bark available (Teit 1930:333). Shelters of brush were sometimes used during mountain hunting activities. A circular house of posts holding up roof poles and covered with brush might be constructed as a summer dance house and meeting place, giving shade from the sun with the sides left open (Teit 1930:333).

Technology/Material Culture

Among the Kalispel, pestles, hammers, and mauls of stone were quite common and mortars were also used. Other stone implements included arrowheads, spearheads, knives, and pipes (Teit 1930:326).

Most baskets were made of split cedar roots; occasionally grass and tule were used (Teit 1930:329). The cedar bark basketry was prevalent and large baskets, two to three feet in length, would be used to hold several gallons of collected berries. Circular watertight coiled baskets were made from split cedar roots. Other containers, as well as some dishes, trays, spoons, and ladles were made of birch and cedar bark. Willow bark and rushes

were used to weave mats, and along with sewn tule mats, were used for lodge and floor coverings (Hudson et al. 1981:62). For root and berry gathering, side baskets, cedar baskets, hip baskets, and bark baskets were used, as well as the mortar and pestle, wooden shovels, and digging sticks (Lahren 1998:287).

Extensive fishing technology consisted of cattail or tule creels, awls, weirs, basket traps, spears, spear and torchlight, harpoons, hook and set line, sinkers, hook, line and pole, nets, seines, dip nets, conical falls traps, fish dams and impoundments, standing platforms, standing traps for salmon, bow, and nooses (Lahren 1998:287). Scaffolds of poles were erected at all permanent camps for storage, and willows were used to make fish traps (Hudson et al. 1981:62).

In addition to deadfalls and bow and arrow, hunting technology included stone knives and spear points, bone and stone hide scrapers, snares, ropes, waterfowl nets, and snowshoes (Lahren 1998:287).

Travel/Transport

Before the introduction of the horse, the Kalispel walked overland by foot or with snowshoes in winter (Hudson et al. 1981:71) and traveled in summer by waterways with canoes. Canoes were shovel-nose, sharp-nose, or sturgeon-nose. They also used rafts, paddles, poling rods, and anchors (Lahren 1998:288). "Canoes had frames of cedar and coverings usually of white pine bark. These were of the 'sturgeon nosed' type with the ends cut off square and sewed" (Hudson et al. 1981:62).

A major east-west trade route passing through the territory of the Kalispel along the north of the Clark Fork and Pend Oreille rivers was the Pend d'Oreille or Kalispel Trail. Several routes of the trail passed between the Pend Oreille Valley and Colville (Hudson et al. 1981:72).

Political/Social Organization

The political unit was the village (Lahren 1998:288). Among the Kalispel, each band had a chief and an assistant chief. The powers of the chiefs were generally advisory (Teit 1930:374).

During burial, the corpse was sewed or tied in mats, skins, or robes and placed on a scaffold or in the branches of a tree until ready for burial. Graves were dug in sandy knolls or in the rocks at the base of a rock slide. Stones would be piled on top of the grave and the pole which had carried the body would be placed as a tripod over the grave (Teit 1981:382).

The Kootenai

Territory

The Kootenai inhabited a territory that included the entire Kootenai River drainage in the United States and Canada (Hudson et al. 1981:78). Kootenai territory was defined in terms of the course of the Kootenay River and their orientation to the river was basic to their culture. The river and its environs provided subsistence and transportation and were the location of permanent camp and village sites (Brunton 1998:223).

The Kootenai have generally been divided into the Upper and Lower Kootenai, referring to their position on the drainage of the Kootenay River. The boundary between the Upper and Lower Kootenai was in the vicinity of Kootenai Falls and extended north and south along the Purcell and Cabinet Mountains (Hudson et al. 1981:78). A small portion of the territory of the Lower Kootenai is within the study area of the Coeur d'Alene Field Office. The Lower Kootenai of the study area lived on the lower reaches of the Kootenay River, between the northern shores of Lake Pend Oreille and the International border, in the area of Bonners Ferry and the northeastern corner of the panhandle.

Ethnographic Studies

Ethnographic studies of the Kootenai are minimal. The 1941 monograph by Harry Holbert Turney-High remains a basic document for Kootenai ethnography. Turney-High worked among the Flathead and Kalispel before spending an intensive field season with the Kootenai. Relying initially on informal conversations with the Kootenai during his Flathead and Kalispel work, Turney-High sought to obtain additional ethnographic information from eighteen Kootenai informants. Turney-High's Kootenai ethnographic field work was undertaken from June through September of 1939, then for a brief period in 1940 (Turney-High 1941:7).

Culture Pattern

Settlement

The total population of the Kootenai in 1940 was estimated to be over 1000, about one-fourth of their previous size (Turney-High 1941:27).

Little ethnographic information exists pertaining to the size or locations of the Lower Kootenai settlements. The size of the camps would depend on the economic importance of the activities taking place in the area. The largest camps were probably associated with fishing on the Kootenai River floodplain. Large base camps were also likely to have been established at berry gathering locations, such as the north side of the Kootenai Valley east of Bonners Ferry. Small temporary camps were undoubtedly established and occupied by small hunting, fishing, or gathering groups and would be located near certain subsistence resources as level ground, adequate drainage, fresh water, and fuel allowed (Hudson et al. 1981:82). A Kootenai camp was arranged in a circle of lodges (Turney-High 1941:62).

Subsistence

Winter season among the Kootenai was marked by heavy snowfall and the freezing of the river. This was the time of winter village occupancy. Also the time of hunting and fishing at upriver locations and bison hunting on snowshoes east of the Rocky Mountains (Brunton 1998:22).

Summer season occurred with the melting of ice and snow and flooding of the river and the onset of canoe transportation. Temporary camps downriver were occupied with participation in communal deer drives on islands, gathering of plant foods, and netting waterfowl as family groups (Brunton 1998:223).

A new annual subsistence round was marked by the breaking up of river ice. The first intensive subsistence activity was netting of waterfowl as great numbers passed up the valley along a major flyway. This communal undertaking was under the direction of the Duck Chief. The birds were flushed and the net raised in time to snare them (Hudson et al. 1981:80). Duck flesh was considered a staple. Some ducks were eaten fresh, but most were usually dried as a supply of meat. The ducks were plucked and the feathers saved; skins were carefully saved for their fat. The carcass was then split down the breast bone and dried near the fire, then stored in cedar boxes (Turney-High 1941:42-43).

Early in the spring the Kootenai went to their fishing grounds (Turney-High 1941:54). From early spring to May, salmon, sturgeon, suckers, whitefish, and trout were caught with basket traps and wicker weirs (Brunton 1998:226). Fish formed a chief staple and were smoked or dried then stored in cedar boxes about four feet square (Turney-High 1941:48, 51).

As spring advanced into early May, the fishing season came to a close and the women entered the root gathering season (Turney-High 1941:54). Camas and bitterroot were gathered after fishing season ended (Brunton 1998:226) and summer months were used for gathering and preparation of berries (Turney-High 1941:54). Berries were collected in late summer and included chokecherries, red currants, gooseberries, Oregon grapes, raspberries, and huckleberries (Brunton 1998:226). The Kootenai considered only three kinds of berries to be of economic importance: serviceberry, huckleberry, and choke cherry. Other berries were picked for casual eating, while the berries of primary importance were dried in the sun for winter use. Berries were frequently made into cakes (Turney-High 1941:34). Onion, pine nuts, and tree lichen were also collected (Brunton 1998:226).

During the fall, communal deer hunts were organized (Turney-High 1941:54). Hunting by the Lower Kootenai involved a number of animals. These included deer, elk, antelope, caribou, moose, and bison. Beaver, muskrats, mountain goats, gopher, bear, lynx, wolf, and were also hunted for food and for furs. Bird hunting included cranes,

ducks, sea gulls, fool hens, and geese (Brunton 1998:226). The Lower Kootenai primarily hunted deer, considering bison hunting an individual pursuit, and did not consistently cross the Rockies for bison hunting (Turney-High 1941:39, 36).

With the return of cold weather, casual fishing was done through the ice for ling and char. The major deer hunts were conducted in the winter, under the direction of the Deer Chief. Most of these hunts were held to the east of Bonners Ferry. A variety of tactics were employed, depending upon local conditions. Such tactics included surrounding the deer by a ring of hunters, driving the deer into deep snow or steep terrain, or sweeping islands from one end to the other (Hudson et al. 1981:81).

Structures/Housing

Kootenai informants denied use of subterranean or semisubterranean lodges, as typically found among Plateau groups (Turney-High 1941:64). A household would occupy a conical lodge. "The standard habitation of the Lower Kootenai was the tipi with a vegetable cover for summer, and the long house for winter. These were considered complements of each other, the covers being transferred from one type of frame to the other according to season" (Turney-High 1941:62). The frame of the winter long house consisted of bipods in line; the cover consisting of multiple vegetable covers from the summer structures. "Among the Lower Kootenai these double leant-tos were often 'four fire lodges,' accommodating eight families" (Turney-High 1941:64). Sweat lodges were also constructed as dome-shaped structures with elliptical floor plans (Turney-High 1941:64).

After adopting the horse, and with the increase in bison hunting, skin-covered tepees replaced the earlier structures (Brunton 1998:232).

Technology/Material Culture

The technology of the Kootenai included: hide- and bark-covered canoes; stone pipes; flight nets for trapping water fowl; funnel traps and weirs for fishing; leister and detachable-point fish spears; baskets; clay vessels; stone knives; other cutting and scraping implements; and snowshoes (Brunton 1998:232).

Two types of digging sticks were used by the women for root gathering. "The willow digging stick was a simple stick about three feet long. One end was pointed and fire-hardened. A hole was bored near the other to receive a deer horn handle. This was the preferred tool since it had a better grip, was longer, and therefore made for faster work. The second form was made of elk horn. They endeavored to cut this so that it was about fifteen inches long and contained the crotch of one prong. No attempt was therefore made to put an artificial handle on this type, as it was of 'bone and would not hurt the hand'"(Turney-High 1941:33).

"The Lower Kootenai made considerable use of vegetal products. Ropes were made of twined silverberry bark while dogbane fibers were twined into fish lines and various lashings" (Hudson et al. 1981:79). Basketry was important in the lives of the Kootenai and served purposes of storage, boiling food, gathering berries. A wide range of sizes and shapes of coiled baskets were used. Water-tight containers were made of cedar roots while containers used for storage and gathering were made of bark (Turney-High 1941:76).

Wooden bowls were made, varying in size and shape according to function, and were most commonly used as eating containers with larger bowls used as cooking vessels in conjunction with hot stones (Turney-High 1941:78).

Pottery, made in the summer, relied exclusively on sun drying. It was neither coiled nor molded. Yellow, red, and white material for pottery was found in banks cut by the river. The "rock" was crushed with a maul or pestle until very fine, the consistency of flour, then tempered with river sand. Water was added carefully until the paste had the sought-after consistency. "A rounded mass of paste was set upon some flat surface. A hole was pushed in the center with the fist until a rough vessel was made. Care was taken to keep this depression full of water while the bowl was being worked and the shape was improved by smoothing thin, wide, and high with the two hands" (Turney-High 1941:78).

Stone objects were made for cutting, scraping, perforating, and cleaving implements by the techniques of chipping by percussion and pressure. Mauls and pestles were shaped by pecking (Hudson et al. 1981:78-79). Bows, arrows, and armor were made, as well as the war club. Informants reported that flint work was the oldest and best known Kootenai art (Turney-High 1941:81-87).

Travel/Transport

The relatively heavy snowfall of the Kootenai range made snowshoes an important device and much care was taken in their manufacture (Turney-High 1941:66).

Kootenai canoes were bark covered and made watertight at the seams with pitch inside and outside. Both the bow and stern had long projections, outstanding of the Kootenai design. These ends increased the ease of steering and the craft's buoyancy. "Many of the Kootenai rivers and lakes are quite boisterous with short, steep seas, so that the canoes had to be rough water craft. Elderly informants also allege that these snouts increased the vessels' speed" (Turney-High 1941:68). The chief function of the canoe was to transport the family and gear and was also important in salmon fishing (Turney-High 1941:69).

As the territory of the Lower Kootenai was heavily forested and well supplied with riverine food resources, horses did not have a great impact on their lifeways (Hudson et al. 1981:86). "Kootenai horse equipment was quite primitive. Bridles were made of moose, elk, or bison hide. Deer hide was considered too light" (Turney-High 1941:73).

Travois were not used (Turney-High 1941:74). The primary mode of transportation continued to be the distinctive "sturgeon-nosed" canoes (Hudson et al. 1981:86).

Political/Social Organization

When Kootenai bands were in winter villages, each was under the nominal and informal leadership of a respected man (Brunton 1998:229). Each band was politically autonomous with its own leadership and governing body or council and members could move from one band to another as membership was flexible. There were at least three bands of the Lower Kootenai centered in the vicinities of Bonners Ferry, Idaho; Creston, B.C., and Nelson, B.C. (Hudson et al. 1981:83).

Reportedly, treatment of the dead was somewhat casual. The deceased was wrapped in a robe, taken to its grave by two persons, and buried. The grave was a shallow hole, not prepared or lined. No effort was made to mark the grave (Turney-High 1941:120).

Areas of Interest

Currently, within the boundaries of the Coeur d'Alene Field Office, the Coeur d'Alene, Kalispel, Kootenai, Salish, and Nez Perce tribes have established aboriginal areas of interest indicating the fundamental geographic range of interest for each particular group (Figs 4-8). "Individual tribal governments express their interest and concerns for tribal traditional uses, landscapes and resources, and needs of its communities within the context of their own area of interest. A tribe's homeland is typically located near the center of its interest area and is where primary tribal use of resources and land occurs. Shared resource use areas (cross-utilization areas) are usually near interest areas' peripheries and contribute to why tribal interest areas often overlap on another" (May 1997:36). These tribal interest areas, while not legally defined, are used for ongoing interpretation and discussion of traditional resources and land use in the area of the Coeur d'Alene Field Office. The boundaries of these interest areas are vague, approximate, and do not reflect corrections provided by either the Coeur d'Alene or Kootenai of Idaho tribes (May 1997:36). In contrast, specific ceded or reservation boundaries (Figs. 4-8) have been determined by treaties or agreement with the U.S. government, while additional boundaries (Figs. 4-8) have been established by the Federal Claims Commission and tend to focus on "exclusive use" core areas, excluding the full area of a tribe's subsistence range (May 1997:37).

Coeur d'Alene Tribe

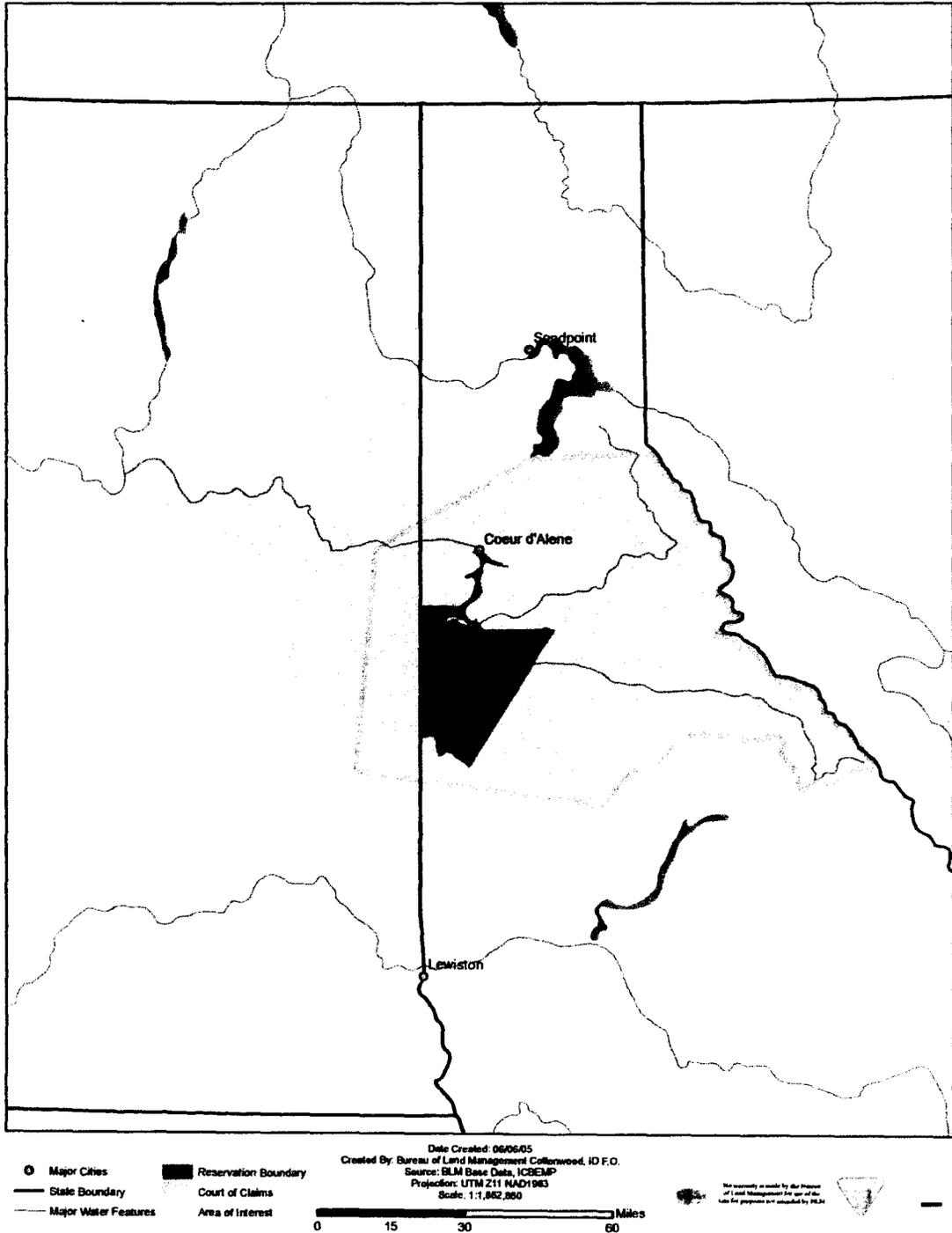
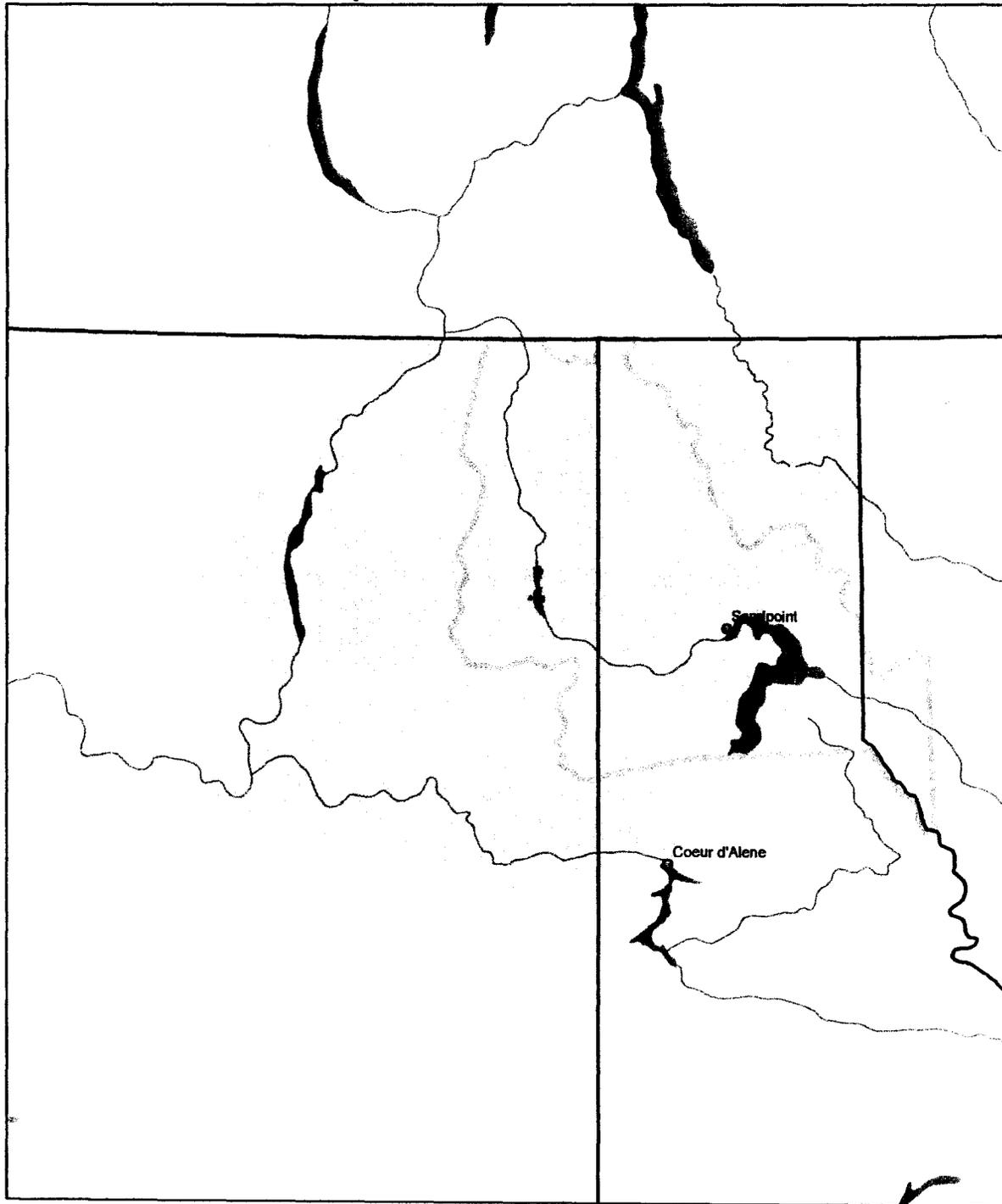


Fig. 4. Coeur d'Alene Tribe Area of Interest (adapted from May 1997).

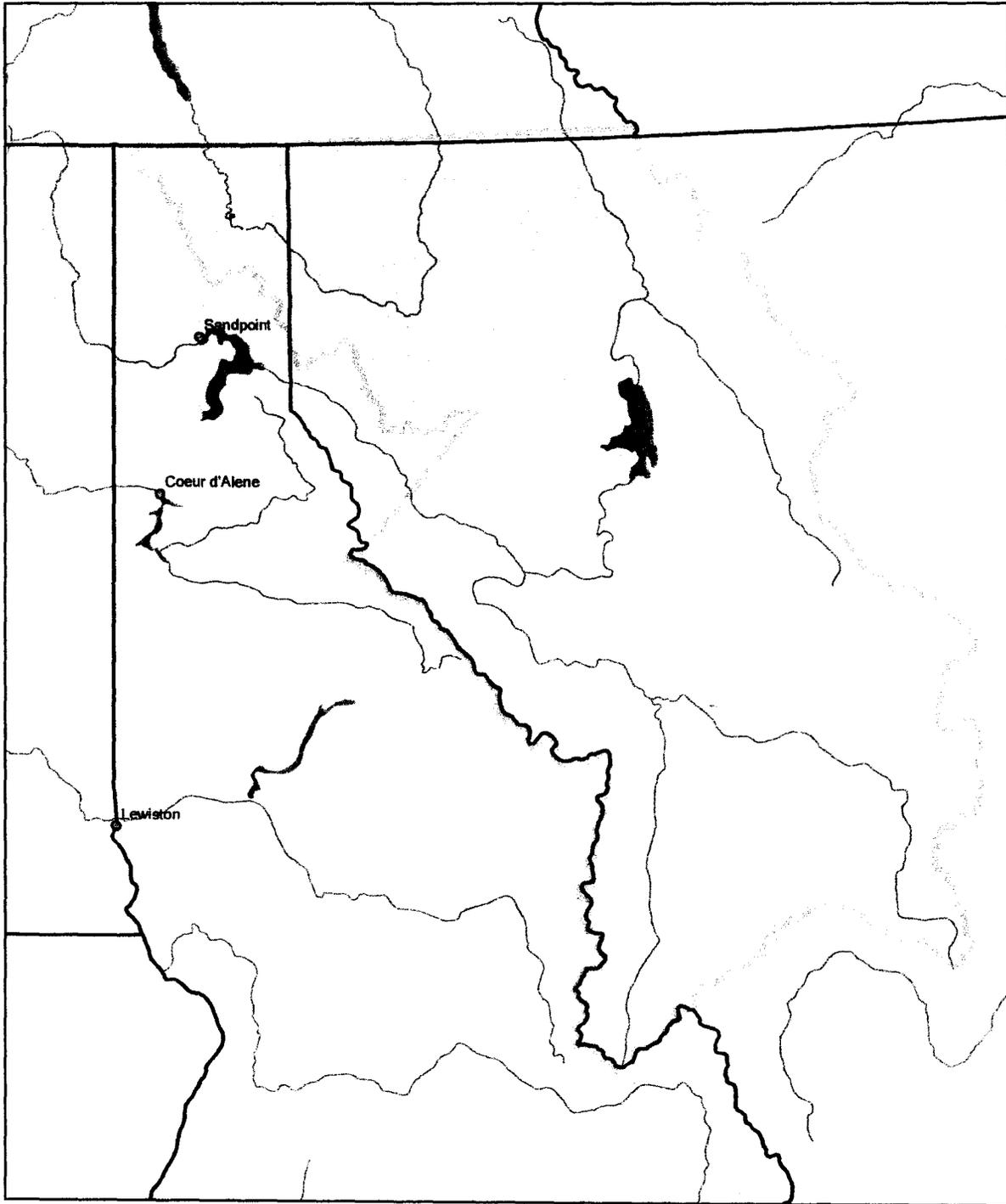
Kalispel Tribe of Indians



○ Major Cities	■ Reservation Boundary	Date Created: 06/06/05	<small> Created By: Bureau of Land Management Cottonwood, ID F.O. Source: BLM Base Data, ICSEMP Projection: UTM Z11 NAD1983 Scale: 1:1,677,330 </small>	<small> No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM. </small>
— State Boundary	⋯ Court of Claims	Miles 0 12.5 25 50		
— Major Water Features	⋯ Area of Interest			

Fig. 5. Kalispel Tribe Area of Interest (adapted from May 1997).

Kootenai Tribe of Idaho



○ Major Cities ■ Reservation Boundary
— State Boundary ····· Ceded Lands
- - - Major Water Features ■ Area of Interest

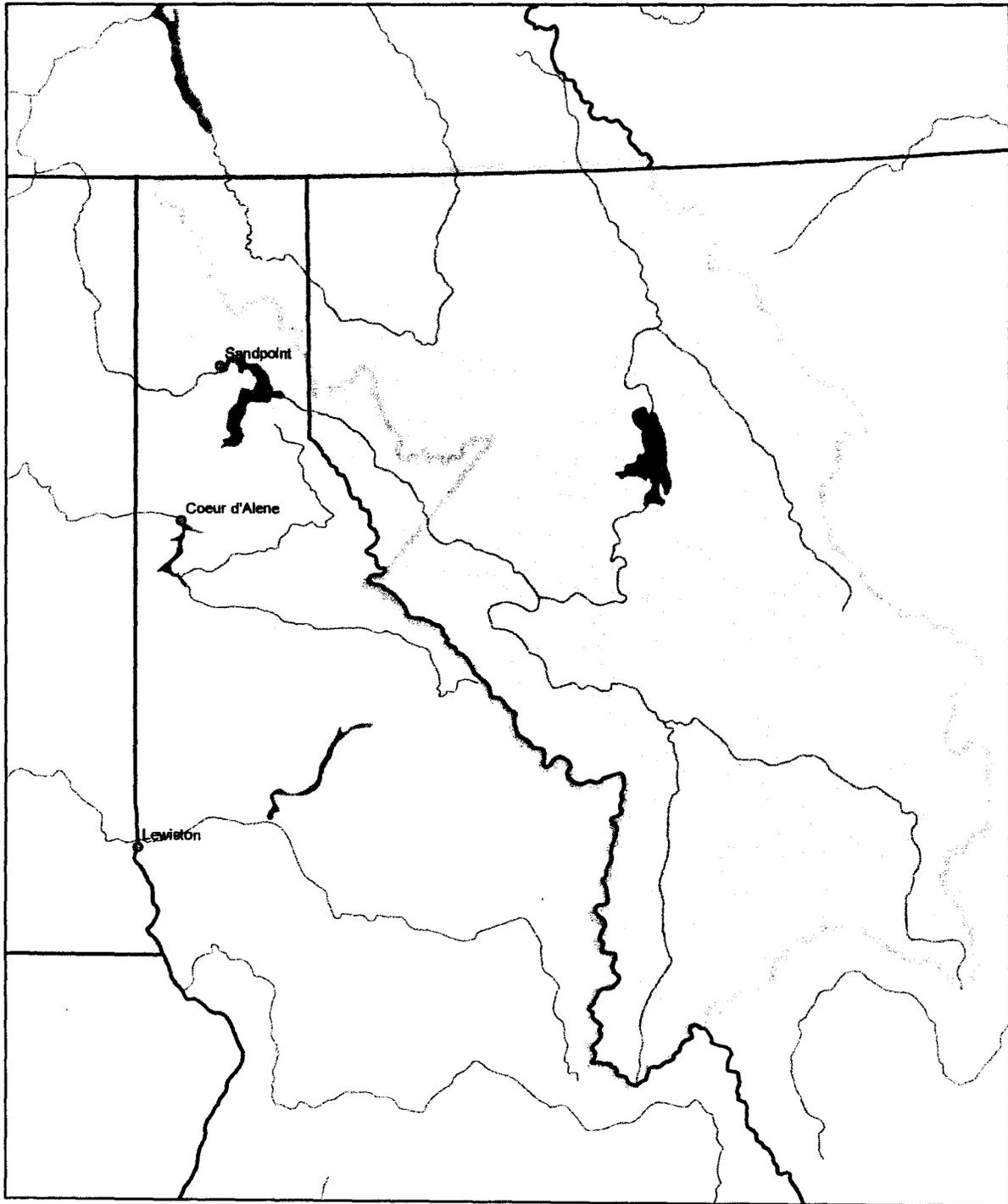
Date Created: 06/06/05
Created By: Bureau of Land Management Cottonwood, ID F.O.
Source: BLM Base Data, ICDEMP
Projection: UTM Z11 NAD1983
Scale: 1:2,526,726

0 20 40 80 Miles

No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

Fig. 6. Kootenai Tribe of Idaho Area of Interest (adapted from May 1997).

Confederated Salish and Kootenai Tribes



● Major Cities
— State Boundary
— Major Water Features
Ceded Lands
Area of Interest

Date Created: 06/06/05
Created By: Bureau of Land Management, Cottonwood, ID F.O.
Source: BLM Base Data, ICSEMP
Projection: UTM Z11 NAD1983
Scale: 1:2,561,388

0 20 40 80 Miles

No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

Fig. 7. Confederated Salish and Kootenai Tribes Area of Interest (adapted from May 1997).

Nez Perce Tribe

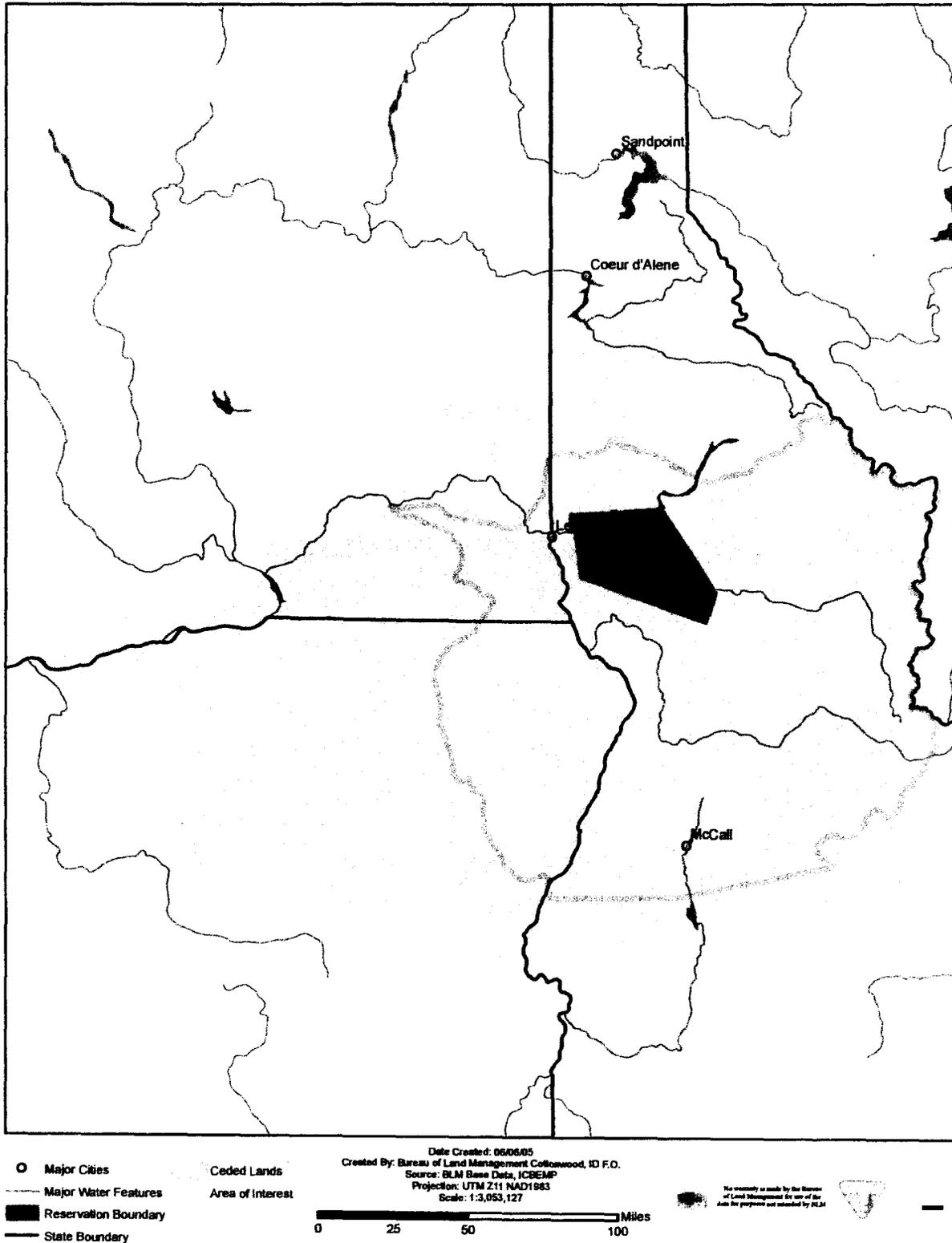


Fig. 8. Nez Perce Tribe Area of Interest (adapted from May 1997).

HISTORIC THEMES AND LIFEWAYS

Fur Trade

Two years after Lewis and Clark and their Corps of Discovery moved through Nez Perce country enroute to the Pacific Ocean, and back again, David Thompson of the North West Fur Company entered Kootenai country from the north, arriving in the vicinity of today's Bonners Ferry. On May 8, 1808 he established fur trade with the Flathead and Kootenai Indians. In September of 1809 Thompson constructed a Northwest Company post on the eastern shore of Lake Pend Oreille (Beal and Wells 1959:79). The substantial log structure, together with tents and a lodge, was called Kullyspell House after the Kalispel Indians (Arrington 1994:88). Thompson's post was the earliest fort in the Pacific Northwest and the first non-Indian habitation constructed in Idaho (Beal and Wells 1959:82). The trading post was used for two winters before it was abandoned for a more favorable location near Spokane. Kullyspell House was destroyed in 1835 by fire (Brosnan 1948:53).

Under the auspices of the North West Company, Thompson carefully surveyed and mapped the north Idaho region, drawing the first map of northern Idaho. "...he skirted along the shore of Lake Pend d'Orielle and came to a place that he noted as 'A Point of Sand.' It became Sandpoint. He crossed the Priest River and continued to what he called 'Pointed Heart's Lake.' It became Lake Coeur d'Alene (Arrington 1994:88-89).

The merger of the North West Company and the Hudson's Bay Company in 1821 led to a reorganization of the fur trade and a concentration of trading and trapping activities in the Snake River Country of southern Idaho (Brosnan 1948:72).

Missions

In North Idaho, when Presbyterian and Roman Catholic missions were established, permanent settlements were developed and an agricultural economy was introduced among the original inhabitants of the region (Beal and Wells 1959:215). The first mission established within the Idaho borders was in 1836 among the Nez Perce by Presbyterian Reverend H. H. Spalding at Lapwai (Arrington 1994:126). Soon after, Catholic missionaries began work among the Coeur d'Alene.

In 1840, Jesuit Father Pierre J. De Smet surveyed the upper Columbia for mission possibilities and had arranged for work to commence in the Bitterroot valley of western Montana at Saint Mary's. He next commissioned Father Nicholas Point to expand the work in the Northwest from the Flathead at Saint Mary's to the Coeur d'Alene. The result was the selection of a mission site on the St. Joe River, December 4, 1842 (Beal and Wells 1959:210). The site for the Mission of the Sacred Heart among the Coeur d'Alene was located on the north bank of the St. Joe River, about one mile from the southern end of Lake Coeur d'Alene (Beal and Wells 1959:211). The site chosen was already a known

campground with a spring that had long been a source of water for Indians and their horses, as well as for elk and deer. Both game and fish were plentiful here and Father Point called it the "River of Gold and Green" (Derig 1996:318-319). An Indian settlement was built around the church of the Sacred Heart Mission and the next spring the Coeur d'Alene Indians plowed the land and planted crops (Beal and Wells 1959:211).

In 1846 the spring runoff raised the level of the St. Joe River to flood stage and inundated the mission grounds. As the site was subject to spring floods and mosquitoes, Father Point selected a hilltop location on the Coeur d'Alene River for a new mission. The entire Indian community and the mission were moved to the new site ten miles from Lake Coeur d'Alene. Located at present day Cataldo, the Coeur d'Alene Mission of the Sacred Heart reopened April 9, just in time for the celebration of Easter on April 12 (Arrington 1994:131; Beal and Wells 1959:212, 412; Derig 1996:318-319).

In 1850, Father Anthony Ravalli arrived at the mission and began construction of the Greek Revival church with a broad ax, an auger, some ropes and pulleys, a pen knife, and unskilled labor. The building measured ninety feet by forty on a four-foot wide foundation with walls nearly a foot thick. Ceiling panels, altars, picture frames, and statues were carved from wood. Candle holders and hinges were forged at the mission. No pews were placed in the structure, as the Indians preferred the floor. The Mission was completed in 1853 (Conley 1982:454). From 1846 to 1876, about 50 Coeur d'Alene Indians lived at the mission (Palmer 1998:322) and Catholic priests labored to convert them to the new religion and an agricultural way of life (Schwantes 1991:37). One hundred acres of land was enclosed and cultivated; wheat and potatoes were grown and oxen and cows pastured. For years the mission served as a hospice to travelers and miners through the area (Conley 1982:455).

In 1873 President Grant created a reservation for the Coeur d'Alene by Executive Order. The tract included a wedge extending from De Smet north to Cataldo, then northwest to Post Falls, and south to De Smet. However, Grant's order lacked the finality and security of a Congressional treaty, and no remuneration was offered for expropriated lands. At this time Fr. Diomedi urged the Coeur d'Alene to at least protect this remnant by moving to within the reservation boundaries (Conley 1982:655).

New boundaries were created for the Coeur d'Alene Reservation in 1877 and the church building of the Sacred Heart Mission lay outside of the newly created reservation. The site of the mission was subsequently moved to De Smet. Temporary quarters were built at the site, two miles from De Smet. The following spring Fr. Diomedi moved the furnishings out of the Cataldo Mission and the Indians began to erect permanent buildings at De Smet. Most of them settled within fifteen miles of the mission (Conley 1982:655). In July of 1881, the cornerstone for the Cathedral of the Sacred Heart was laid. The church served as a center of worship for almost sixty years, until 1939, when it burned, along with the mission records (Conley 1982:655).

Shortly after the Coeur d'Alene moved to De Smet, the Sisters of Charity of Providence opened the Convent of Mary Immaculate for the education of girls. A fire destroyed part of the convent-school in 1881, but two years later the Providence Academy at Sacred Heart was dedicated. The Academy burned in 1908 and was replaced with the prominent brick building which now occupies the hilltop. The Academy closed in 1978, 96 years after it was established (Conley 1982:657-658).

After the move of the mission to De Smet, the Old Mission Church at Cataldo fell into disuse and disrepair for nearly 50 years. In 1929, as Idaho's oldest standing structure it was restored (Brosnan 1948:103). By the 1970s, the Old Mission was again in need of extensive preservation work. From 1973-1975, \$310,000 was spent on the restoration of the mission. The Old Mission became a state park in 1975 (Conley 1982:457) and today remains as the oldest standing structure in Idaho (Schwantes 1991:37). Every year, on August 15, the Feast of Assumption is celebrated at the Mission by the Jesuit priest who serves the Coeur d'Alene is celebrated here (Conley 1982:457).

Treaties and Reservations

When Washington Territory was created in 1853, Isaac I. Stevens was appointed governor and Superintendent of Indian Affairs. He was also given charge of four survey groups of civilians and military men sent by the War Department to find a route across the trans-Mississippi West for a railroad to the Pacific. As governor of the new territory Stevens ambitiously planned to increase the population and prosperity of the new territory by finding a railroad route that would link the territory to the commerce of the rest of the nation. To do this, Stevens needed to clear Indians from the railroad route and from the land to be settled by newcomers (Josephy 1983:80).

In 1855, from May 19 to June 12, Stevens held the largest council ever held in the Northwest to negotiate a treaty with several thousand members of the Nez Perce, Walla Walla, Cayuse, Umatilla, Yakima, and other tribes in the Walla Walla Valley (Josephy 1983:80). Here, Stevens secured one of the earliest treaties negotiated between whites and Indians of the Pacific Northwest. "This harshly constructed document, which Indians of the interior signed only reluctantly, allowed the Nez Perces to keep intact their 11,000-square-mile homeland in central Idaho, Oregon, and Washington" (Schwantes 1991:47). Treaties and reservations for the Coeur d'Alene, Kalispel, and Kootenai soon followed.

The Coeur d'Alene Indian Reservation, Worley, Idaho

In 1866, President Andrew Johnson, ordered a reservation established for the Coeur d'Alene Indians. "An area about twenty miles-square was withdrawn from the public domain, but no effort was made to confine the Indians within its limits. It was just as well, because when the tribal members learned of the reserve's existence several years later, they summarily rejected it as too small" (Conley 1982:655).

A number of years passed before the Coeur d'Alene Reservation was created by President Ulysses Grant in 1873. "This measure forced Indians to abandon three-quarters of their huge holdings in northern Idaho, move away from the mission at Cataldo, and relocate on a 600,000-acre reservation to forestall white encroachments" (Schwantes 1991:47). Reluctantly, the tribe moved to the reservation in 1877 and settled near the new Sacred Heart Mission at De Smet, along Hangman Creek. They ceased hunting buffalo and plowed land, raised wheat, and built roads, fences, and two-story farm houses. "Several families developed large prosperous farms. Most obtained a portion of their subsistence from gardening and from traditional pursuits of root digging in summer, with berrying, deer hunting, and trout fishing in the mountains in late summer and fall" (Palmer 1998:322).

"After first promoting the reservation system in an effort to keep Indians and whites separate and thus minimize conflict, Congress changed its mind and passed the General Allotment Act (or Dawes Severalty Act) in 1887" (Schwantes 1991:131). The new act encouraged assimilation and an agrarian life style. The Dawes Act diminished reservation lands by nearly two-thirds between 1887 and 1934 by opening major portions of native land to white settlement (Schwantes 1991:131).

The new legislation, allowing each individual Indian to choose 160 acres of agricultural or grazing land, and then opening the remainder of reservation land to new settlers as homesteads, was rejected by the Coeur d'Alene. Tribal representatives met with the Commissioner of Indian Affairs in Washington, D. C. to protest allotment and were "told to go home and select their quarter-sections before the special allotment agent did it for them" (Conley 1982:657).

Between 1887 and 1889 the Coeur d'Alene negotiated an agreement for a reservation of 598,000 acres, ceding "3,000,000 acres more or less" of land for \$650,000, or approximately 22 cents per acre (Palmer 1998:322). "Most of the money was distributed on a pro rata basis among tribal members; \$150,000 was expended over a fifteen-year period on reservation developments" (Conley 1982:655).

In 1905 the reservation land was surveyed and the Dawes Severalty Act was applied in 1909 as each tribal member was required to take an allotment of 160 acres and give away any other claims on reservation land. A total of 541 Coeur d'Alene Indians and 97 Spokane Indians were allotted land. Most of the Coeur d'Alene allotments were located on good farming land in the original settlement area of Hangman Creek and along the Washington-Idaho border (Palmer 1998:324). The remainder of the agricultural land was opened by a homestead lottery for settlement (Conley 1982:657).

"The Wheeler-Howard Act of 1934 was an admission by Congress and the Bureau of Indian Affairs that allotment was a wretched failure" (Conley 1982:657). The Wheeler-Howard (Indian Reorganization) Act, enabled tribes to purchase additional land, made

loans available for tribal business ventures, gave Indians preference in employment, and permitted tribes to draft constitutions that would establish self-government (Arrington 1994:258). The Coeur d'Alene organized under the new Act, replacing the traditional council with an elected Tribal Council (Conley 1982:658).

In 1946 the Indian Claims Commission was created by Congress to settle tribal claims against the government. "In many suits filed by Indians and their lawyers, some sizable judgments were rendered in their behalf" (Arrington 1994:258). The Coeur d'Alene, obtaining an award from the Indian Claims Commission for land the tribe had owned, used the money to buy additional property. "Some \$500,000 of this fund was invested in a six-thousand-acre farming venture that proved successful. The largest Indian-owned farm in the nation, the property grows winter wheat, lentils, spring wheat, and spring barley. Its earnings support construction, logging, hog-raising, and a gasoline station" (Arrington 1994:260-261)

Today, the Coeur d'Alene Reservation totals 69,000 acres and the tribe has 1,500 members (Conley 1982:658). The towns of De Smet, Tensed, and Plummer are all on the Coeur d'Alene Reservation. The tribal headquarters is located at Plummer and each year a tribal festival is held during the second week of July (Conley 1982:658).

The Kalispel Indian Reservation, Cusick, Washington

In 1856, Stevens' attempt to negotiate a treaty with the Kalispel failed. During the 1860s, miners pursuing sporadic gold strikes passed through Kalispel territory on the Wild Horse Trail. For the most part, the Kalispel were able to pursue an essentially aboriginal economy augmented by some agriculture. In 1879, with the entry of the Northern Pacific Railroad into Kalispel country, homestead claims were soon filed on Kalispel lands. Attempts were made to create a reservation for the Kalispel, without success, through the 1880s (Hudson et al. 1981:75-76). By 1887 the Kalispel were encouraged to cede their lands and move to the Flathead reservation or to the Colville or Coeur d'Alene reservations (Lahren 1998:294). The construction of the Great Northern Railroad in 1890 brought additional settlers to Kalispel territory and in 1903 the Kalispel were transferred to a newly created agency at Fort Spokane (Hudson et al. 1981:76).

In 1914, by Executive Order, President Woodrow Wilson created the Kalispel Reservation on the east side of the Pend Oreille River (Hudson et al. 1981:76). The reservation, about twenty miles west of the Idaho border, near Cusick, Washington, consisted of 4,629 acres. It was allotted in 1924 in 40 acres allotments. Today the Kalispel Reservation has an enrollment of 246 members (Lahren 1998:294-296).

The Kootenai Indian Reservation, Bonners Ferry, Idaho

Stevens created the Flathead Reservation in Mission Valley, Montana, for the Kootenai, Pend Oreille, and Flathead Indians with the Hell Gate Treaty of 1855 (Lahren 1998:294). When the Flathead Reservation was established, the Lower Kootenai claimed not to have been represented by signers of the treaty and remained as nontreaty Indians at Bonners

Ferry (Hudson et al. 1981:87). The U.S. Government urged the Kootenai to migrate to the reservation, but only a few families were persuaded. Most of the Lower Kootenai of Bonners Ferry refused to go (Conley 1982:671).

When a number of Kootenai converted to Catholicism, a log mission church was built at Bonners Ferry on Mission Hill in 1888. By 1890 some members of the band had settled in eighteen houses in a circle around the church (Conley 1982:672). Additional houses were built in the Mission Hill District in 1902 and in 1907 another church was built here. "By this time, there were 18 houses in a circle around the church, built of scrap and salvaged lumber. New houses were added by the government in 1931" (Hudson et al. 1981:87).

When the federal government formalized a land allotment policy for the Kootenai in 1895 the land was divided by the Indian Council so that each family received about eight acres (Conley 1982:672), only 40 gave their names and received parcels of land (Hudson et al. 1981:87). Today, tribal land totals about 2,700 acres (Conley 1982:672). There are about eighty members of the Idaho Kootenai tribe, most living in the Bonners Ferry area. "In recent years this small group has built thirty homes, a community building, a school, and the elegant forty-eight-room Kootenai River Inn. They have improved their educational system, held regular culture days and pow-wows, and helped the teachers of non-Indian children to prepare sessions on Indian history and culture" (Arrington 1994:260).

Military

In north Idaho, a military presence in the late 1870s in the Coeur d'Alene area resulted in the establishment, on the north shore of Lake Coeur d'Alene, of Camp Coeur d'Alene, which later became Fort Coeur d'Alene, and then, Fort Sherman.

In 1877, the year of the Nez Perce War, General William Tecumseh Sherman traveled west over the Mullan Road in search of sites to establish forts against possible Indian hostilities. He chose a strategic location at the head of the Spokane River on the north shore of Lake Coeur d'Alene and recommended to Congress that a military post be established here. Congress set aside 999 acres for a military reservation. "Camp Coeur d'Alene was pitched in April, 1878, and became Fort Coeur d'Alene a year later. A team-powered circular sawmill was hauled in to produce the lumber for more than fifty buildings" (Conley 1982:438). Four military companies were usually stationed at Fort Coeur d'Alene with a total of 250 men. By 1883 the fort had a company barracks building, officers quarters, a chapel, library, bakery, blacksmith, carpenter and plumber shops, two ice houses, a recreation hall, and stables for 100 head of stock. Settlers around the fort provided services and supplies. By 1887, nearly a thousand people had moved to the area and settled nearby, when the fort was renamed Fort Sherman. Today, the military reservation is occupied by the city park of Coeur d'Alene and North Idaho College (Conley 1982:438-439).

Transportation

"No single factor has played a more significant role in the development of Idaho than transportation" (Beal and Wells 1959:392). Fur traders, missionaries, and miners entered and moved through north Idaho along the well established trails used by Indian populations of the area (Fig. 9). The construction of military roads facilitated movement through the area, as did the use of water transportation. When railroads were completed, the opportunity for settlement increased, and as more and more settlers located in the area, a need for more and better roads arose.

Trails and Roads

Wild Horse Trail

The Wild Horse Trail was a well known trail through Lower Kootenai territory and during the 1860s was the main route for prospectors traveling from the south to the mines in British Columbia (Hudson et al. 1981:75). The southern end of the trail was east of Spokane at Platte's Ferry on the Spokane River. The route moved from there northeastward through Rathdrum to the Pend Oreille River at Seneacquoten. After crossing the Pend Oreille River, the trail continued northeastward crossing the Pack River. It then continued up the Purcell Trench to Deep Creek and across the Kootenai River near Bonners Ferry (Hudson et al. 1981:60). In the late 1860s, when steamers were introduced on Lake Pend Oreille, the route was shortened by the use of water transportation. Miners caught a steamer at the southern end of the lake and landed near what is today Kootenai (Hudson et al. 1981:261).

Monument Trail

An east-west trail north of the St. Joe River was established by native Americans and ran east and west along the divide between the St. Joe and Coeur d'Alene rivers. The route connected northern Idaho and eastern Washington with western Montana. The trail led from the area of Worley and Plummer, crossing the St. Joe near Chatcolet, and from here following the north bank of the St. Joe to Mission Point. Here it forked. The route connected the Missoula country, the territory of Coeur d'Alene Lake, the Palouse country, and areas of eastern Washington as far south as the Snake River (Scott 1967:255, 256).

Montana Trail

The Montana Trail, sometimes called the Father DeSmet Trail, was an east-west trail south of St. Joe River with a crossing at St. Maries River (Hudson et al. 1981:258).

Mullan Road

Following routes of established Indian trails, the Mullan Military Road was built to facilitate the passage of troops, settlers, and freight in case the Oregon Trail, the only

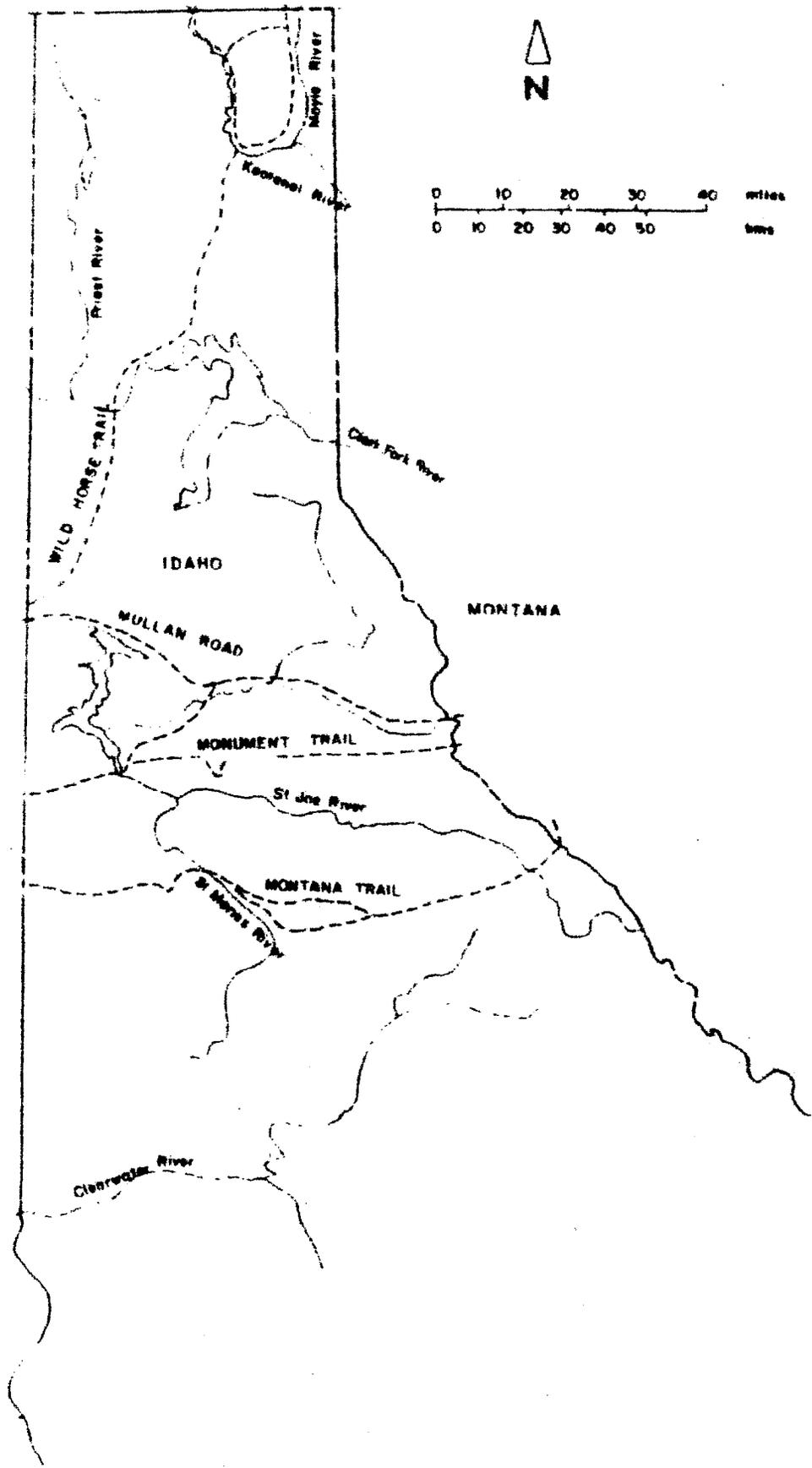


Fig. 9. Routes of early nineteenth century trails (adapted from Hudson et al. 1981:258).

east-west route to the Pacific Northwest, was closed. The 624 mile road extended between Walla Walla on the Columbia River and Ft. Benton on the Missouri River (Hudson et al. 1981:262), connecting the navigable waters of the Columbia and the Missouri, and giving settlers access to Puget Sound (Beal and Wells 1959).

John Mullan and his road builders started at Walla Walla and worked their way east until they reached the southern end of Lake Coeur d'Alene in the summer of 1859. "The Idaho portion of the road would prove unexpectedly difficult to build. The land south of the lake was swampy, the climb over the Bitterroots meant hacking a trail through thick stands of timber. Even before the road, repeated flooding made it necessary to relocate a part of it to high ground north of Lake Coeur d'Alene" (Schwantes 1991:46). "At one time 150 men were at work cutting a 25-foot swath through dense forests for 124 miles and 30 miles of rock, through the Bitterroot and Coeur d'Alene mountains, grading across open country, building hundreds of bridges, and establishing many ferries" (Arrington 1994:156). The road was completed in August 1860. Almost immediately an army unit traveled its full length, an accomplishment that required fifty-seven days (Arrington 1994:156).

The road never served as an important military route, but it played a significant role for north Idaho and Montana during the historic gold rush that began in 1861. By 1866 some 20,000 people had passed over Mullan Road, mostly from west to east, and primarily from Missoula to Fort Benton (Arrington 1994:156, Schwantes 1991:46). "The road was also used by immigrants and cattlemen driving herds from the upper Columbia to the Montana mines (Arrington 1994:156) and by cattlemen who drove livestock west to the Columbia River during the open range years of the 1870s and 1880s (Schwantes 1991:46).

Spring flooding and lack of congressional funds for maintenance eventually took their toll on the road and it fell into disrepair (Schwantes 1991:46). From 1880-1920 several railroads traversed Idaho near the Mullan Road, including the Northern Pacific; Chicago, Milwaukee, and St. Paul; and the Oregon Washington Railway and Navigation Company (Arrington 1994:156). With the federal road program of the 1920s the route became regarded as part of a transcontinental highway and today Interstate 90 closely follows Mullan's route across the Idaho panhandle (Schwantes 1991:46).

Water Navigation

"The use of natural waterways for transportation was a vital element in the development of this region. Steamboats provided the primary transportation link that made possible the early exploitation of the mineral and forest resources in the regions contiguous to the Columbia River, the Kootenai River, Lake Pend Oreille, the Pend Oreille River, the Clark Fork River, the Coeur d'Alene River, and the St. Joe River. Indeed, in the early phases of exploitation, steamboats often provided the only feasible transportation approach" (Hudson et al. 1981:264).

Steamboats

Lake Pend Oreille

On Lake Pend Oreille a small number of steamboats began operating at intervals in 1866 when the *Mary Moody* was launched (Schwantes 1991:82). The *Mary Moody* was "to be the primary link in the Oregon Steam Navigation Company's attempt to capture the trade going to and from the Montana gold fields at the time" (Hudson et al. 1981:266).

With the completion of the Great Northern Railroad in 1892, steamers became links between the rail terminals at Hope, Sandpoint, and Priest River. By 1903, three steamboat lines served the lake and steam tugs became increasingly important for the transport of lumber (Hudson et al. 1981:268). On Lake Pend Oreille steamboats provided links with rail centers, hauled ore from mines to a smelter at Ponderay, and towed booms of logs to the mills (Renk 1990:5).

Lake Coeur d'Alene

"At one time, there was more steamboat traffic on Lake Coeur d'Alene than on any other lake west of the Great Lakes. Lake Coeur d'Alene had over 100 miles of shoreline where the boats could dock. In addition, the St. Joe and the Coeur d'Alene Rivers flow into the lake. This allowed the steamboats to use the rivers as well as the lake to transport large quantities of ore and lumber" (Fisher 1983:195).

In the summer of 1880 the *Amelia Wheaton* was launched by the U.S. Army on Lake Coeur d'Alene, beginning steamboat commerce on that lake and tributaries. "Through explorations undertaken by the *Amelia Wheaton*, the St. Joe River and the Coeur d'Alene River were both found to be navigable for approximately 35 miles above the lake. This discovery meant that there were over 100 miles of navigable waterways serving remote areas that would prove to be rich in both mineral and forest resources" (Hudson et al. 1981:270).

A large fleet of steamboats eventually operated on Lake Coeur d'Alene and the St. Joe River. They appeared on the lake with the mining rush of the 1880s and hauled passengers and freight up the Coeur d'Alene River to a landing at Cataldo mission (Schwantes 1991:82). The Lake Coeur d'Alene steamboats provided connections between different rail lines around the lake (Renk 1990:5). In 1886, the operation of a steamboat line on Lake Coeur d'Alene between Coeur d'Alene City and the Old Mission Landing at the head of navigation on the Coeur d'Alene River, connected two railways and a transportation network for the Coeur d'Alene Mining District (Hudson et al. 1981:270). By the 1890s, steamboats were facilitating the exploitation of the white pine forests of the region, especially adjacent to the S. Joe River drainage (Hudson et al. 1981:271). "About 60 steamboats operated on Coeur d'Alene Lake in 1903 bringing, primarily, lumber and mine products to Coeur d'Alene for shipment to markets" (Robertson 1986:205).

Priest Lake

Steamboats operated on Priest Lake in the early 1900s, mainly from the southern end of the lake at Coolin, serving the timber, recreation, and mineral industries. In the early 1920s one of the two remaining steamboats on the lake transported people, crops, and animals of the Nell Shipman Production Company across the lake from Coolin to Lionhead Lodge at Lionhead Creek (Peters 1976). By the early 1930s, passenger and freight traffic on Priest Lake was rapidly declining (Hudson et al. 1981:268).

"The heyday of the steamboat on Idaho waters lasted from the 1880s until the late 1920s, when river traffic declined as a result of rail and highway competition" (Schwantes 1991:83).

Tugboats

Tugboats were almost always propeller-driven with steam, gas, or diesel and were important in the 1890s for the exploitation of forest resources (Hudson et al. 1981:265). They were built and used on Lake Coeur d'Alene for moving the large quantity of logs from the mouths of the St. Joe and Coeur d'Alene rivers to mills in Harrison and Coeur d'Alene (Hudson et al. 1981:271). Tugs continue to be an integral part of the forest products industry of the area. "Today, much of the timber cut in Coeur d'Alene sawmills is still moved by tugs" (Hudson et al. 1981:272).

"There was a small amount of tugboat activity on the Pend Oreille River below Albeni Falls during the timber boom period. Tugs and small passenger vessels continued to provide important services on Lake Pend Oreille, Priest Lake, and the Pend Oreille River for many years after the demise of the larger steamboat lines. These services faded as the automobile and trucking network became more and more pervasive" (Hudson et al. 1981:268).

Railroads

"The development of railroads in the Inland Empire had a significant impact on the economy and settlement of the area. The lumber and mining industries were able to expand with improved transport offered by the railroads. Towns were often established only after a railroad line was constructed through the area, and agricultural and ranching communities benefited from the improved modes of shipping products to market" (Hudson et al. 1981:274). A number of railroads began crossing through northernmost Idaho in the late nineteenth century (Fig. 10).

"The immediate effect of railroad building in Idaho was the development of the territory along agricultural and mining lines and a great increase of immigration. From a population of 14,999 in 1870, the state grew to a population of 445,032 in 1930...Situating as it is, far from water transportation, it would have been impossible for Idaho to make real progress without the railroad" (Brosnan 1948:297-298).

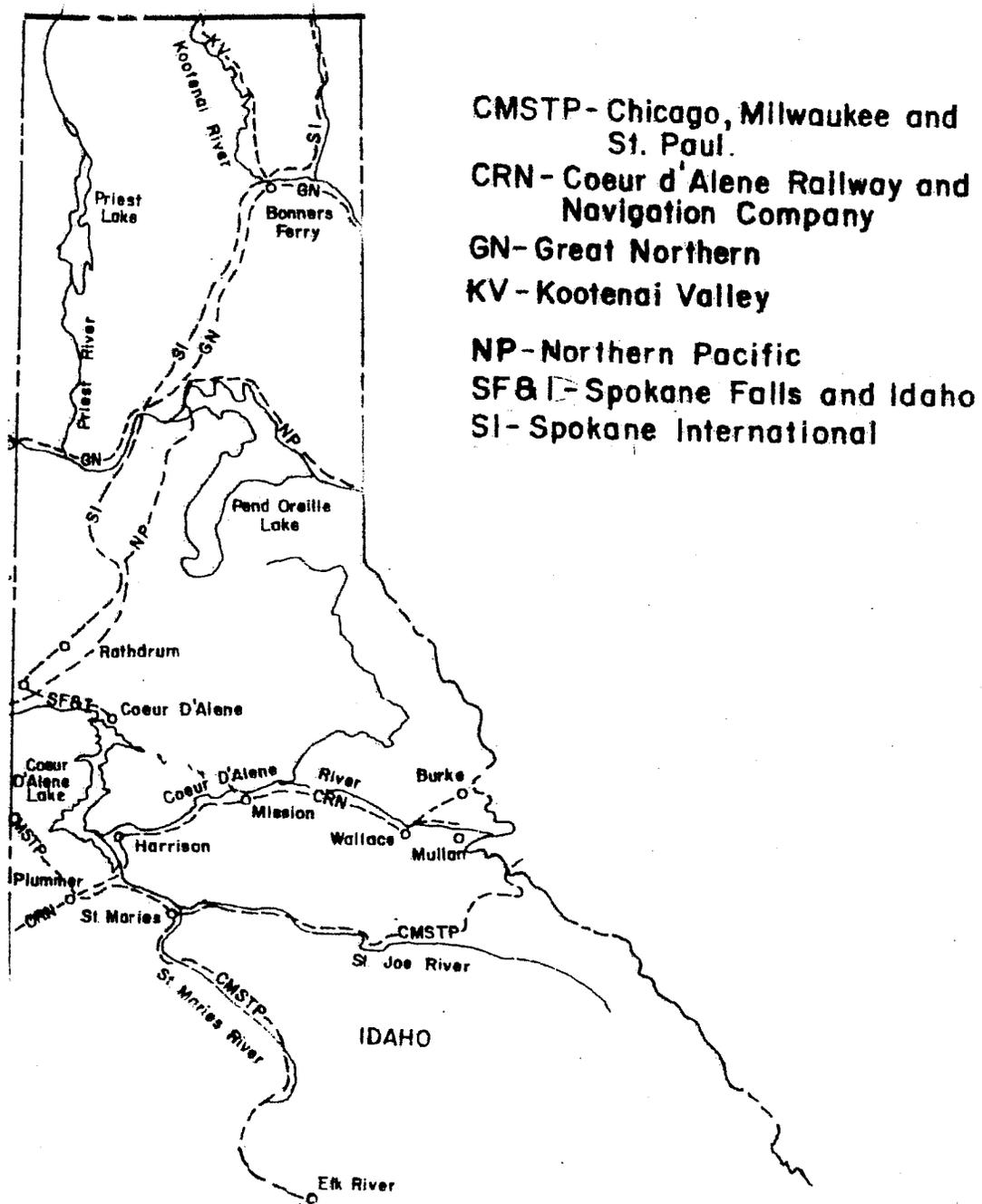


Fig. 10. General locations of early railroads (adapted from Hudson et al. 1981:275).

The transcontinental railroads were catalysts speeding up the processes of settlement and greatly increasing Idaho's income from agriculture, mining, forestry, and commerce (Arrington 1994:335). Opening new and distant markets for the products of the state's forests, fields and mines, they also were active promoters of the resources, stimulated tourism, and promoted vacations in national parks and forests (Schwantes 1991:87).

Between 1880 and 1910, three transcontinental railroads were constructed through northern Idaho.

Northern Pacific

Between 1880 and 1882, construction of the Northern Pacific railroad proceeded 87 miles across the state. Moving eastward from Wallula northeast through Spokane Falls, by mid-July 1881, the track reached Rathdrum (then called Westwood), the first community in Idaho on the track. Most of the work around Lake Pend Oreille was undertaken during the winter of 1881-1882 complete with heavy snows, deep woods, and swampy waters. Thousands of men were used to shovel snow. High water in the spring entailed the use of lake steamers to haul supplies to construction camps (Bilger 1969:34-35). Thousands of workers were recruited for construction of the Northern Pacific railroad, including a large number of Chinese laborers (Wegars 1991:186).

The Clark Fork division, from Sandpoint to Missoula, was the most difficult section of line to build. The route moved through deep forests with heavy undergrowth. No valley plain exists along the Clark Fork River and the river flows through a tremendous gorge for 100 miles. Sides of the canyon rising straight out of the riverbed were blasted for the roadway. "On the western approach to Lake Pend Oreille it was necessary to build many trestles because of the presence of numerous deep ravines. Within three miles of the lake three trestles had to be built—of 2000, 1400, and 1300 feet in length. A pile bridge over 8,400 feet long was required to cross one arm of the Lake to Sandpoint. Because of the great depth of the lake, pilings 90 to 100 feet in length were needed" (Bilger 1969:35).

By January of 1882, Northern Pacific trains were operating around Lake Pend Oreille and by August of the next year the line was completed to Hell Gate Canyon, Montana (Bilger 1969:35). The completion of the Northern Pacific line formed the connecting link uniting the Great Lakes at Duluth, Minnesota with Puget Sound at Tacoma, Washington (Brosnan 1948:292). "The immediate cause for the construction of the road was a demand in the East and abroad for the abundant timber from the forests of western Washington and the salmon and fruit from that region" (Brosnan 1948:292).

In Idaho, the line was in operation just in time for the Coeur d'Alene mining stampede the next year (Arrington 1994:325). With the completion of the line, the company actively sought settlers for the territory, promoting the area's great agricultural, mineral, and timber resources (Bilger 1969:36). When the Northern Pacific issued pamphlets reporting the recent findings of gold in the Coeur d'Alenes, thousands of prospectors poured into the area.

“The Northern Pacific was instrumental in developing the Coeur d’Alene mining region through its support of the Coeur d’Alene Railway and Navigation Company and the later extension of its own line into the area from Missoula” (Bilger 1969:36). Mining activity expanded and lumber resources on the route became highly valuable. “Stretching in a belt along the Pend Oreille Lake and River for nearly 200 miles, the thick sands of pine, fir, cedar, spruce and tamarack were used by the company to supply construction needs. Eventually mills were constructed along the line to supply building materials to the towns and mining industries which were growing up in the area along the railroad in Washington, Idaho and Montana” (Bilger 1969:36).

Spokane Falls and Idaho Railroad

The Spokane Falls and Idaho Railroad Company built a 13.5 mile-long line from the Northern Pacific rail at Hauser Junction through Post Falls to Coeur d’Alene City in 1886. Here passengers and freight transferred to a steamer that made its way up the Coeur d’Alene River to the Old Mission landing. The line was built to get supplies to Coeur d’Alene Railway and Navigation Company which had begun laying line to the silver-lode mining district of the Coeur d’Alenes. The Northern Pacific formally leased the Spokane Falls and Idaho Railroad in 1887 and it later became known as the Fort Sherman Branch. In the early years operation of this branch was centered around the ore shipments from mining district. Steamboats would arrive at the Northern Pacific dock in Coeur d’Alene in the evening and the ore would be transferred by hand to the rail cars. The next morning the train would leave for Spokane Falls (Hudson et al. 1991:278; Robertson 1986:232; Wood 1983:14-18).

Coeur d’Alene Railway and Navigation Company

During the mining activity in the Coeur d’Alenes, wagon roads and stage coach lines ran into the area from connections with the Northern Pacific at Spokane Falls, Rathdrum, and Thompson Falls. Steamers transported prospectors and supplies between Coeur d’Alene City and the Old Mission. By the end of 1886, increase in silver-lead ore production, the development of Bunker Hill and Sullivan, and the large number of mines in the area called for the construction of a rail line to move the growing piles of ore to market (Bilger 1969:39). As a result, the Coeur d’Alene Railway and Navigation Company constructed a rail line from the Old Mission through the Coeur d’Alenes to Wallace (Beal and Wells 1959:546-547). “When it was completed [September 1887], the Coeur d’Alene Railway and Navigation Company’s thirty-five miles of track meandered around hills and trees and crossed the South Fork of the Coeur d’Alene thirty times in twenty miles. The line was on such an uninterrupted grade that a car released at Burke on the Canyon Creek line would roll all the way to the Mission terminal if it could have been kept on the tracks. Stations were located at Mission, Kingston, Wardner Jct., Osburn, Wallace and Burke...”(Bilger 1969:48). Passenger rates from Wallace were 50 cents to Osburn, one dollar to Wardner, two dollars to Kingston, two dollars and 50 cents to Mission, and five dollars and 50 cents to Coeur d’Alene City. Freight rates were 85 cents per 100 pounds between Coeur d’Alene City and Burke, 80 cents per 100 pounds

between Coeur d'Alene City and Wallace, and 10 cents per 100 pounds from Wallace to Burke (Wood 1983:22). In January of 1897 the Coeur d'Alene Railway and Navigation Company was sold to Northern Pacific for \$220,000 (Bilger 1969:48). The narrow gauge track from Kellogg to Old Mission was abandoned in 1898 and to Wallace in 1902, at which time Northern Pacific operated from the Montana side only (Robertson 1986:206).

Great Northern

The line of the second transcontinental railroad to cross Idaho had the northernmost route. The Great Northern Railroad line was completed in 1892, following six years of construction, and stretched from Great Falls to Puget Sound (Beal and Wells 1959:548). In north Idaho, it followed from Spokane, through Newport and then along the north bank of the Pend Oreille River to Sandpoint. From here the route moved north to Bonners Ferry and paralleled the south bank of the Kootenai River into Montana. "This railroad was the impetus for the establishment of new communities along its route and for an increase in the development of timber and mineral resources. Today, this railroad route is part of the Burlington Northern Railroad system" (Hudson et al. 1981:277).

In the winter of 1892 equipment arrived in Sandpoint via the Northern Pacific and grading began between here and Bonners Ferry. By working day and night, even in snowfalls, the track was completed to Bonners Ferry in March. On May 28, 1892, the first train from St. Paul to Spokane crossed northern Idaho. "With the coming of the railroad, the former trading post settlement of Bonners Ferry was given new life" (Bilger 1969:54).

Kootenai Valley Railroad

Railroad operations expanded at Bonners Ferry in 1899 when the Canadian company, Kootenay Railway and Navigation Company, Ltd., began carrying lumber over a private line constructed from Bonners Ferry to Porthill, where it connected with the Canadian Pacific. The Kootenai Valley Railroad became an operating subsidiary of Great Northern in 1908 (Bilger 1969:55; Robertson 1986:215).

Chicago, Milwaukee and St. Paul

The third transcontinental railroad to cross northern Idaho was the Chicago, Milwaukee and St. Paul Railway as part of their line from Evarts, South Dakota, to Seattle and Tacoma. The new railroad would compete with two well-established companies, paralleling the Northern Pacific for some distance. However, the new line would also pass through new and undeveloped areas and the company hoped to attract settlers to this territory and open up some of the Indian reservations along the route for development. "Increasing competition for the Oriental trade through Puget Sound ports, and development of the agricultural and mineral resources of Alaska were added incentives for a new rail line through the Northwest" (Bilger 1969:58).

Construction began in 1907 and the Milwaukee's route in Idaho was southwesterly from St. Regis Pass to the St. Joe River, through Shoshone and Benewah counties. Branches were built from St. Maries to Elk River and from Spokane to Coeur d'Alene and Plummer. Along the St. Joe River, 40 miles of line cost over \$170,000 per mile. At that time, it was the most expensive line of similar length ever constructed by a railroad company. The 8571-ft. long Taft Tunnel through the Bitterroot Range between Idaho and Montana was one of the most important engineering events in railroad history (Bilger 1969:59). As the railroad line moved through the mountains, construction camps and settlements sprouted along the way. Nine thousand people worked along the right-of-way and half a dozen camps were occupied for varying amounts of time (Crowell and Asleson 1980:59-61).

The last spike was driven on May 14, 1909. Freight service began July 4, 1909 and local passenger service followed on July 10 providing a route from Seattle and Tacoma to St. Joe and Avery. The Milwaukee made connections with Tacoma's lumber mills and in August a contract was made with Japanese shippers for five hundred tons of freight to go east (Crowell and Asleson 1980:59-61). In 1910, services began on a 71 mile branch line from St. Maries to Elk River, and also on the Plummer, Spokane, and Coeur d'Alene branch connecting with the local Idaho and Washington Northern (Bilger 1969:60).

Other Railroads

Spokane International

The Spokane International Railway Company route extended from Spokane east toward Post Fall then northeast to Sandpoint and north to Bonners Ferry. Here it turned east to follow the Kootenai River until it reached the Moyie River where it turned north again and crossed the international border at Eastport, connecting with the Canadian Pacific Railway. The primary purposes of the line were the reduction of freight rates to Spokane and the development of a mining district near Kootenai Lake. The area offered other opportunities as well. Timber interests were increasing as Weyerhaeuser bought land and established mills, and mining activity had increased around Lake Pend Oreille with the establishment of a smelter at Sandpoint (Bilger 1969:63). "Tracklaying was begun on February 19, 1906 and completed nine months later in Spokane. When the new railroad opened for business it owned eleven locomotives, 200 new freight cars and 12 passenger cars which must have rivaled any in operation" (Bilger 1969:66). In 1910 the Spokane International organized the Coeur d'Alene and Pend Oreille Railway Company to extend branch lines from Corbin Junction to Coeur d'Alene and to Bayview on Lake Pend Oreille. The branch lines opened in 1911 and gave Spokane International access to the lumber mills from both lakes. The branch line extending from Corbin Junction to Bayview was abandoned in 1939 (Bilger 1969:66-68).

Lake Coeur d'Alene Railroads

Railroads operating in the Lake Coeur d'Alene area were constructed by the Coeur d'Alene and Spokane Railway Company, Ltd.; Idaho and Washington Northern Railroad;

Idaho Northern Railroad Company; and the Lake Creek and Coeur d'Alene Railroad Company (Robertson 1986). Many of these lines were used for the shipment of lumber and mining products and supplies and were connected to steamboat transportation on Lake Coeur d'Alene (Robertson 1986:205). Many were eventually leased or purchased by the larger transcontinental companies, or ceased to exist.

Highways

Idahoans were slow to embrace travel by automobile. The state lacked good roads and the climate made year-round driving difficult. In 1910 there was an average of one car for every 197 Americans, in Idaho there was one car for every 700 residents (Schwantes 1991:193).

Federal legislation for the improvement of the nation's highways was passed in July of 1916 when President Woodrow Wilson signed the Shackleford Good Roads Bill. Congress appropriated seventy-five million dollars to improve rural roads over a five year period. The money was available to states with established highway departments as a fifty-fifty match. Idaho's State Highway Commission had been authorized in 1913 (Renk 1992:95). Idaho began a large and well-planned state highway program, which included the North and South Highway (Brosnan 1948:369).

The primary road concerning Idaho's legislature was the North and South Highway running from the Canadian border to Nevada. The first plans for Idaho's 525 mile long north-south highway were made in 1913. The legislature authorized the sale of \$200,000 worth of bonds in 1914 to help finance the road. The name "North and South Highway" was adopted in 1915 and work began in 1916. In 1917 the state of Idaho appropriated \$1,000,000 for the construction of a system of state highways. Additional millions of dollars were raised in succeeding years with state bonds, gasoline taxes, and federal and local appropriations (Brosnan 1948:299-303; Renk 1992:97).

Work proceeded so slowly that the route north of Moscow was not even located until 1917. Most of the construction took place in 1919. The most difficult section was along the Salmon River where miles of the roadway were blasted from the solid rock of the mountain side and concrete retaining walls were built to protect filled-in portions of the roadbed which were close to the river (Brosnan 1948:299-303; Renk 1992:97). Further north, the original route of the highway ran northeast of Moscow to St. Maries, along the eastern side of Lake Coeur d'Alene to Wolf Lodge Bay, west to Coeur d'Alene, and then north to Sandpoint and the border (Renk 1992:97).

The North South Highway was opened to traffic during 1923-1924, though still incomplete. Designated U. S. Highway 95 two years after opening, it did not receive a hard surface until the 1930s (Renk 1992:97). "Crews finished the Sandpoint to Coeur d'Alene segment with a hard surface in 1933, and two years later the entire highway received a bituminous surface" (Renk 1992:142). Prior to the completion of the highway the only practical route between north and south Idaho had been along highways in

Oregon and Washington (Idaho Transportation Department 1985:73). The completed highway opened an avenue of communication between northern and southern Idaho, which had always been separated by forbidding mountain barriers (Brosnan 1948:301).

North Idaho residents were also concerned about an east-west road that would extend from Spokane across the panhandle. By 1916 "Apple Way" was a paved road running along the Spokane River between Spokane and Coeur d'Alene. East of Coeur d'Alene to Wallace and the Montana line was a more difficult proposition because of the mountainous terrain. Starting in 1911 money was raised and volunteers worked along the north shore of Lake Coeur d'Alene pushing the highway through an area of heavy rock. Three years later, with the route winding through Fourth of July Canyon, the road was opened as part of the national Yellowstone Highway (Renk 1992:97-98).

Idaho citizens purchased cars at a rapid rate during the first decade of the twentieth century. In 1913, there were 2083 automobiles in the state. By 1915, the number tripled to 7074 and three years later the total number of automobiles in Idaho reached 32,281 (Renk 1992:103). The state highway system in 1919 consisted of about 2,200 miles with less than 50 miles of pavement. By 1930, this was expanded to 4,500 miles with 1,000 miles paved. By 1950 5,128 miles with 3,600 paved miles of road existed in Idaho (Idaho Transportation Department 1985:160).

Mining

"From 1805, when the first whites entered the land destined to become Idaho, until the 1860s, the inhospitable terrain and the Indians were of little interest to anyone except a few trappers, explorers, and missionaries. Most white pioneers, in fact, had a very low opinion of Idaho, regarding it as only a barrier to be crossed, not a land to be settled" (Schwantes 1991:49). The Idaho country was one to be passed through enroute to the Oregon Country. Until the mining frontier expanded northward from California, the Idaho area was nearly devoid of settlers. With the discovery of gold, "Idaho ceased to be a barrier to occupation of the Pacific Northwest, and became instead a positive inducement to settlement" (Beal and Wells 1959:281).

In the early 1860s prospectors discovering gold moved into the north central Idaho mountains and river drainages of the Clearwater and Salmon. In the north Idaho panhandle, miners moved through the area, to gold mines in the Wild Horse country of British Columbia. In the early 1880s, discovery of gold, then lead and silver, in the Coeur d'Alenes, and the completion of a railroad through the area, led to a flurry of mining activity which would last through the twentieth century.

The Coeur d'Alene discoveries of the early 1880s transformed a thinly populated agricultural area of north Idaho into a region of nationwide importance. The population of north Idaho grew from 7,000 in 1880 to 25,000 ten years later. The population of Shoshone County rose from 469 to 5,382 between 1880 and 1890 (Arrington 1994:360).

The Coeur d'Alene Mining District

"The Coeur d'Alene Mining District is an east-west belt about thirty miles long and ten miles wide, in the Coeur d'Alene mountains of North Idaho. It lies at the west edge of a 200-mile square block of ancient siliceous sedimentary rocks called the Belt Series" (Day 1963a:1). Among its mines are some of the world's greatest--Bunker Hill and the Page mine, on the west side, the Morning and Star, on the east, the Sunshine on the south, and the Hercules, Hecla, Tamarack, Standard-Mammoth, and other mines in the north-central area (Shenon 1961:1).

Today, Silver Valley is the name given to the old Coeur d'Alene Mining District which stretches 40 miles along I-90, from Pinehurst to Mullan. "The ninety mines located here have turned out record amounts of silver, lead, and zinc for more than a century. According to the Idaho Geological Survey, Silver Valley holds the world record for silver production. The Sunshine mine alone has lived up to its name by producing more than 350 million ounces of silver" (Derig 1996:322). Today most of the mines are closed.

Gold

The Coeur d'Alene district opened to mining in the early 1880s with discoveries of rich gold deposits on Prichard Creek, a tributary of the Coeur d'Alene River. The Northern Pacific Railroad, having just finished its transcontinental line in 1883, published news of the discovery in a circular letter. The circular advertised the "rich mineral wealth of the Coeur d'Alene mountains" as "unequaled in richness and extent, the yield being practically inexhaustible" (Smith 1932:115). Copies of the sensational circular were scattered over the country, stimulating passenger traffic by advertising the new mines (Smith 1932:27).

The railroad passed down the Clark Fork valley in western Montana, along the north shore of Pend'Oreille Lake in northern Idaho, and then westward to Spokane, sweeping around three sides of the Coeur d'Alene district (Smith 1932:27). Such luxury as rail service to the new mining region made the Coeur d'Alene mining camps into some of the most progressive communities in the territory. "No longer did the gold seekers have to travel great distances by primitive means of transport: by 1884 the railroads could bring them close to the new gold fields" (Beal and Wells 1959:572).

"The Coeur d'Alene stampede occurred during the winter and spring of 1883-1884 when five thousand gold seekers scrambled to reach the diggings" (Schwantes 1991:94). From October 1883 to April 1884, thousands of prospectors rushed into the Coeur d'Alenes (Smith 1932:27).

Eagle City, located at the juncture of Eagle and Prichard creeks, was the first, and for one season, the largest mining camp established in the area. Founded in November of 1883, approximately 6000 miners were living in tents and log houses that winter with stores, saloons, and gambling houses (Brosnan 1948:150-151). Eagle City had two principal

streets, Eagle Street, extending north up Eagle Creek, and Prichard, extending east up the valley of Prichard Creek. Town lots were laid out and sold and businesses were established. Cabins and business buildings were quickly built. "Its rise was meteoric, and its decline almost as rapid" (Smith 1932:31). Within a year the metropolis had become a small mining camp. Today, there are no evident remains of Eagle City (Smith 1933:49).

In the spring of 1884 a large number of miners moved four miles up Prichard Creek close to the scene of the original gold discovery (Brosnan 1948:150-151). Murray was founded on January 22, on the north bank of Prichard Creek between Alder and Gold Run gulches, where the richest and most workable mines on Prichard Creek were located. Murray grew rapidly and by the summer of 1884 had 2500 inhabitants (Smith 1932:5-61). A visitor to Murray in 1884 described it as the chief town of the Coeur d'Alene mining country. "It is composed of a hideous half-mile long street of huts, shanties, and tents, with three or four cross streets that run against the steep slopes...A more unattractive place than Murray I have seldom seen. The trees have been cleared away, leaving a bare gulch...stumps and half-charred logs encumber the streets, and serve as seats for the inhabitants" (Rabe and Flaherty 1974:16).

In addition to Eagle City and Murray, a collection of tents and houses could be found on every little mountain prairie along the main routes of travel during the boom years. Minor towns included Delta, Little Field (Butte City), Raven (Raven City), and Thiard (Myrtle) (Smith 1932:69-76).

Murray became the center of Coeur d'Alene mining activity and for dozens of years was the largest and most important place in Shoshone County (Brosnan 1948:151). In 1885, the county government was moved from Pierce City to Murray. A total of \$4,000,000 worth of gold was sold from the Coeur d'Alene mines between 1885 and 1900, most passing through Murray (Brosnan 1948:151).

The placer diggings of the Coeur d'Alenes were rich, but limited in area (Smith 1932:77). By 1886 the placers began to weaken. Though quartz mining sustained the town for a few years, by 1909 Murray had the appearance of a deserted village, with one street, unoccupied stores, dilapidated houses, and four abandoned mills (Eaton 1995:13, 20; Smith 1932:5-61).

Placers of the Coeur d'Alenes were difficult to work. Many feet of soil and gravel had to be removed to reach the bedrock where gold could be found. Many miners became discouraged by the enormous amount of labor and money required to buy equipment to reach the well-covered gold. Many gold seekers left the Coeur d'Alenes soon after arriving (Rabe and Flaherty 1974:18).

Following the mining of placer deposits, was the search for quartz ledges containing gold and veins, located as early as January 1884. While placer deposits could be mined by one

or two prospectors shoveling and washing the gravel using sluice boxes and flumes, quartz deposits required the prospector to dig a tunnel into the hillside following the ore vein, then cutting out the gold-bearing quartz and carrying it outside the mine to crush the ore and separate gold particles from the rock. A large amount of labor and equipment was needed for the successful operation of a quartz mine. Thus, quartz mines of the Coeur d'Alenes developed slowly. The first quartz mills were built in early 1885 at the Golden Chest mine a mile above Murray, followed by one at the Golden King, or King, and the Mother Lode. The years of greatest quartz mining activity were 1891-1898 (Smith 1932:92-94).

In 1900, the Coeur d'Alene Mining Company acquired practically all of the placer ground in Prichard Creek and its tributaries. The company leased ground to the Yukon Gold Company for dredging purposes and, controlling the whole valley, leased ground to individuals and groups (Smith 1932:86). A large-scale effort to recover gold from below ten to twenty-five feet of gravel and rocks was undertaken at Prichard Creek. The Yukon Gold Company began operations above Murray in 1917 assembling a great dredge in a deep pit on Prichard Creek near the mouth of Dream Gulch. In the course of 8-1/2 years the Yukon Gold Company dredged about seven miles of Prichard Creek, each year cleaning from 21 to 24 acres of bedrock. In addition to digging away the gravel and boulders which lay above the bedrock, the dredge dug two to four feet of the bedrock itself in order to make sure of saving the gold. A boom with buckets worked through 5,000 cubic yards of material from depths of fifty feet or more in a day. The dredge separated the gold from the rock and the leftover boulders, gravels and sand were "spewed out" behind (Rabe and Flaherty 1974:18). "In the process of dredging, the bottom of the creek was upheaved and turned up-side down, leaving a solid pile of huge boulders over the surface of the valley, a feature of the landscape which now distinguishes Prichard Creek from all other valleys of the Coeur d'Alenes" (Smith 1932:103). In nine years of operation, the Yukon Gold Company recovered over one million dollars of gold (Rabe and Flaherty 1974:18).

Chinese Miners

"One of the distinctive features of the Coeur d'Alene district is the complete absence of Chinese labor... The very first suggestion of Chinese miners in the Coeur d'Alenes aroused a storm of protest and opposition" (Smith 1932:73). In many areas of Idaho, when the placer and quartz operations in the area were played out, many of the claims were sold to the Chinese. The Chinese began working the low-grade or abandoned mines in the Clearwater and Salmon Mountain areas in the early 1860s. By 1867, 2000 Chinese were working in the region, most of them miners (Arrington 1994:252). In 1870, 4274 of the 14,999 people in Idaho were Chinese. The census's classification by occupation listed a total of 6579 men of all races as 'miners.' Of these, 3853 were Chinese" (Paul 2001:144).

A U.S. policy of free immigration allowed the Chinese to enter the regions of mining. In 1866, the territorial legislature gave the Chinese consent to engage in mining (Derig 1972:5). The Burlingame Treaty signed in 1868 between the United States and China provided for free emigration and immigration to citizens of both countries and guaranteed to alien residents all the rights and privileges of citizens (Derig 1972:5).

As the Chinese population increased, so did an overwhelming anti-Chinese sentiment. Congress passed a bill that would have excluded Chinese immigration. As the bill violated the Burlingame Treaty, it was vetoed by President Hayes. However, soon after, the Chinese Exclusion Act of 1882, was passed and signed by President Chester A. Arthur. The act severely restricted Chinese immigration and many Chinese left Idaho Territory, decreasing in number from over four thousand in 1876 to less than two thousand by 1890 (Derig 1972:15-17).

In the Coeur d'Alene mining region, Chinese miners were non-existent. "When the call went out for the Idaho Territorial Anti-Chinese Congress meeting in Boise, February 25, 1886, nearly every mining camp in the Territory responded. Coeur d'Alene was a notable exception, boasting that it was the only community on the Pacific Coast that did not have a single Chinese. When the district was first organized, the miners passed a formal resolution that the first Chinaman who struck camp would be hanged" (Derig 1972:16). With the anti-Chinese attitudes of the Coeur d'Alene district miners, Chinese were unwelcome and no Chinese appear in the area's census for any of the available years (Wegars 1991:52).

Silver and Lead

While gold was as an important resource of the Coeur d'Alenes, the long-lasting wealth of the area was in the lead, silver, and zinc rather than the gold placer and quartz deposits (Hudson et al. 1981:146). After 1880 lead, silver, and zinc discoveries in the Coeur d'Alene district brought a profitable new era in the history of Idaho mining. The production of base metals and silver after 1880 became possible with improved transportation that came with construction of railroads through Idaho at that time. "No longer were the miners of Idaho so isolated and remote from their sources of supply and industrial equipment. With easy access to the important new mining areas, cost of living went down and the labor supply improved" (Beal and Wells 1959:571).

Within the Coeur d'Alene district were four of the five largest silver-producing mines in the United States, four of the 10 largest lead producers, and two of the 10 leading zinc mines (Day 1963b:2). Lead-zinc ores have been abundant in the Wallace-Burke-Mullan area and in the Wardner-Kellogg-Pine Creek area. Silver ores have been found mainly between Wallace and Wardner (Day 1963b:4). Within the United States, Coeur d'Alene silver mines are known as the deepest—the Star Morning (7,900 feet deep); the richest—the Sunshine mine (over 300 million ounces of silver; and the biggest—the Bunker Hill

(over 180 miles of underground workings) (Idaho Geological Survey nda). "In addition to silver, the 40 major mines in the district have yielded substantial amounts of zinc, lead, copper, antimony, and cadmium" (Idaho Geological Survey nda).

Lead and silver were discovered in May of 1884 at the Tiger mine on Canyon Creek at the site of Burke. Within a year, many other large and valuable deposits of lead and silver were located in the Coeur d'Alene area. Among these were the Morning and Hunter mines near Mullan; and the Poorman and the Frisco mines in Canyon Creek, between Burke and Wallace; and the Polaris mine, five miles east of Kellogg. The largest mine, Bunker Hill, was discovered in Milo Gulch just above Wardner in August 1885. In October of the same year the Sullivan mine was located in the same gulch. These two mines, which were soon united into one corporation, the Bunker Hill and Sullivan Mining and Concentrating Company, became the largest and most productive of all the Coeur d'Alene mines. The Bunker Hill and Sullivan produced a vast quantity of lead and silver and became north Idaho's most important single enterprise of the nineteenth century (Livingston-Little 1963:36).

Mining flourished in the Coeur d'Alenes. The mining camps of Wardner, Kellogg, Osburn, and Wallace grew into towns and forty properties were developed. Thirteen concentrators were in operation, the largest of which was the Bunker Hill and Sullivan mill. By 1891, twenty-six of the forty developed properties were producers. In addition to Bunker Hill and the Sullivan were the Tiger-Poorman, Frisco, Hercules and Hecla mines along Canyon Creek. Along the South Fork near Mullan were the Lucky Friday, Morning, and Gold Hunter. By 1900, the Sunshine, Polaris, Las Chance, Page, Consolidated and Crescent mines were also producing ore (Rabe and Flaherty 1974:46).

"As these valuable mining properties were developed, the Coeur d'Alene country came gradually to be settled with a permanent population. New towns grew up close to the new mines, and many of them have grown into attractive cities. On the south fork of the Coeur d'Alene River stand the cities of Kellogg, Osburn, Wallace, and Mullan, in favorable locations six to eight miles apart. In Milo Gulch, one mile south of Kellogg, lies the town of Wardner. On Canyon Creek three and seven miles respectively, north of Wallace are located Gem and Burke. By 1890, the population of these new mining towns had become larger than that of the older gold-mining region around Murray. Hence, in 1898, the county government of Shoshone County was moved again, and this time it was set up in Wallace, where it has remained ever since" (Brosnan 1948:154).

From 1905 until the Depression of 1930 was a period of discovery, growth, and stabilization for the mining industry of the Coeur d'Alenes. Old mines were worked out and new mines were discovered. The years 1925-1930 were among the most prosperous in the area (Day 1963a:6).

The early 1930s and the Great Depression affected the output from the Coeur d'Alene mines more than any single event. The decreased output was caused by all-time-low metal prices. For five years, the smaller producers were shut down or operating on a greatly curtailed basis. The larger mines operated as little as half-time (Day 1963a:6). The Sunshine Mine was an exception, increasing its silver output, becoming a high silver producer. "In 1937, when the claim yielded more than twelve million ounces of silver, Sunshine became the largest producer of silver in the world" (Arrington 1994:129).

World War II shook the district and made operations difficult with federal controls over metal prices and wages and allocations of available labor, materials, and supplies (Day 1963a:6). However, the Coeur d'Alene district produced 6,491,332 tones of ore and treated 3,666,161 tons of old tailings and slag. During this time 33 concentrating mills were in operation (Shenon 1961:2). Idaho led the nation in the production of tungsten and antimony, two metals vital to the war effort (Arrington 1994:128).

In recent decades, the mining history of the Coeur d'Alene district has been one of recurrent discoveries. "Great faith and courage were required to search for the deep ore bodies at the Bunker Hill mine when the early ore bodies appeared to have bottomed. The same sort of faith and courage were required to find the great Hercules ore body and to develop the deep levels at the Sunshine mine where the fabulously rich silver veins were found. In more recent years no other word than courage can describe the commitment required to sink the 3000-foot shaft and explore the deep levels of the Vulcan mine, largely on the promise of what appeared to be favorable geological conditions. The same sort of courage has recently developed the Lucky Friday into a great mine and in the future, when economic conditions justify the necessary exploration costs, we can expect that other great mines will be found in the Coeur d'Alene district" (Shenon 1961:2).

In 1981, the Bunker Hill mine and smelter in Kellogg closed after 98 years of production. Prior to its closure, Bunker Hill produced 20 percent of the nation's zinc and lead and 25 percent of its refined silver (Idaho Geological Survey nda). "The Bunker Ltd. Partnership purchased the giant Bunker Hill mining and refining complex in 1982. The company currently operates the Crescent mine and maintains the Bunker Hill on standby while awaiting more favorable prices in the metals market" (Idaho Geological Survey nda).

Within the Coeur d'Alene district today, the Hecla Mining Company is the largest domestic producer of silver. "Its flagship mine, the Lucky Friday, vies annually with the Sunshine mine down the road for the title of No. 1 silver producer in the country. The Friday is highlighted by its 'Silver Shaft,' which presently extends to a depth of 6,100 feet will eventually go to 7,500 feet. Hecla's other mineral properties include the Consolidated Silver project (a major exploration program) and the Escalante mine in Utah, another big silver mine" (Idaho Geological Survey nda). The Sunshine Mining

Company operates the Sunshine mine which is totally independent as its own miner, refiner, fabricator, and distributor of silver and is probably the richest silver mine in the world (Idaho Geological Survey nda). The Galena and Coeur mines are operated by Asarco Inc., an international mining company known for excellent labor relations and efficient mining operations (Idaho Geological Survey nda). Galena is owned by Callahan Mining Company; the Coeur by Coeur d'Alene Mines Corporation (Idaho Geological Survey nda).

"The Coeur d'Alene mining region in northern Idaho produces about 10 percent of our nation's newly mined silver. In 1996, mines produced metals valued at \$53,793,000. Since its beginning in 1884, the region has produced metals valued at \$5,428,091,000" (Idaho Geological Survey ndb).

Other Mining Areas

In addition to the extensive Coeur d'Alene Mining District, other areas of mining activity have been located in the vicinity of Lake Pend Oreille and further north, in Boundary County.

In the late 1880s discoveries of gold, silver, lead, and copper were made in the Lakeview area at the southern end of Lake Pend Oreille. By this time, the Northern Pacific Railroad was completed from Spokane to Lake Pend Oreille and up the Clark Fork River (Hudson et al. 1981:168). Mines were found all around Lake Pend Oreille, although operations were small until 1917. The area around Lakeview boomed for several years. Following discoveries here were finds in the Blacktail Mountain, Talache, and Granite Creek areas. The Talache mill turned out about \$2,000,000, mostly in silver, from 1922 to 1926, and some areas, particularly around Hope, were especially active or promising (Wells nd).

There was an increase in mining activity in the Hope/Clark Fork area when a lead vein was discovered in 1905 near Lake Darling north of the town of Clark Fork. Following this, prospects were made along Trestle Creek, Wellington Creek, and Howe Mountain. High grade silver was discovered in 1926 at the Whitedelf Mine on east end of Howe Mountain (Hudson et al. 1981:171). "Today, the Clark Fork District still has potential, according to mining sources, but large capital is needed for exploration" (Hudson et al. 1981:171).

Mining in Boundary County has been located on Tungsten Mountain, Bethlehem Mountain, Miller Creek, Bussard Mountain, Buckhorn Mountain, Boulder Creek, and Continental Mountain and included Bethlehem and Tungsten Hill Mines, Miller Brothers Mine, Buckhorn Mine, Idamont Mine, and Continental Mine (Hudson et al. 1981:170). The Continental Mine, located on the crest of the Selkirk range about six miles south of the international boundary, produced 849,791 ounces of silver and 43,913,407 pounds of lead for the Bunker Hill and Sullivan company between 1915 and 1924 (Wells nd). The

Continental, the richest mineral discovery in Boundary County, shipped ore concentrate to the Wallace-Kellogg area for smelting. Production slowed by the 1920s, continuing intermittently through the 1930s to the present (Hudson et al. 1981:170).

Mining Techniques

Gold Placer Deposits

Placer gold is the gold that has eroded out of rock and is found in a loose condition. It is found in beds of streams, or former streams, where metal has washed during erosion. The sources for the gold include gold-bearing veins or lodes, pre-existing placer deposits reworked by running water, alluvial material with no placer concentration, and sedimentary rocks. Ninety percent of all the gold in a placer deposit is found within one foot of bedrock. As prospectors find the sources of the stream deposit, a placer district usually expands upstream (McKay 1998:17).

Prospecting for gold was carried on in small organized parties of five to fifty men. Mining utensils included the pick, shovel, and gold pan (Trimble 1914:223). Once the gold was discovered the next step was to stake a claim. A placer claim would approach the size of an agricultural claim. Claims within a gulch would usually extend from hill to hill and be one hundred feet in width. Numbered up and down the gulch from the "discovery" claim, individual claims would range in size from 100 feet square to 250 feet square, depending on the district laws. Having staked their claims, the miners returned to a mining camp or town where structures and businesses were comparatively concentrated (Trimble 1914:224-225).

In the case of placer mining, one or two miners, with little capital investment, could easily and quickly recover the gold. Equipment included a camp kettle, coffee pot, frying pan, tin cups, and knives. Food staples would consist of bacon, beans self-rising flour, sugar, and coffee. Other equipment would include a pick, shovel, and axe as well as a Colt revolver, a Henry rifle, and a double-barreled shot gun. Blankets would be taken, and possibly a tent (McKay 1998:22).

Most placer claims passed through two or three stages of development using various techniques of recovering the gold. Techniques initially included prospecting with the gold pan, followed by washing dirt with rockers, and then replacing the rockers with sluices (Gallaher 1976:30).

Gold pan

The gold pan was made of sheet or tin iron with the bottom about twelve inches in diameter. As sand, gravel, cobbles, and gold could all be bound together, panning for gold involved filling the gold pan with the mass of elements, soaking it under water to dissolve the clay, picking out rocks and cobbles and, finally, swirling the pan around and tipping it so that mud ran off and gold settled to the bottom (Gallaher 1976:31).

Panning was an effective, but slow method of recovering the gold. An experienced miner could wash 60 pans in a 10 hour day, processing one cubic yard of gravel in three days. Unless the gravel was very rich, panning was only practical as a way of sampling the gravels (Miss 1994:182-183).

Rockers, Long Toms, and Sluices

The rocker could handle larger quantities of pay dirt and was essentially a wooden box mounted on rockers and open at the lower end. Moving rock and water through the box as it rocked left gold caught on cleats nailed on the bottom (Gallaher 1976:31). The rocker was more efficient than the gold pan and two men could process three to five cubic yards of gravel during a ten hour period. The rocker was a simple device and operated with a minimum amount of water. It was especially useful in deposits of cemented clays or gravels which needed to be pulverized by the rocking motion. If the gold was fine, the rocker was preferred to a method using high volumes of water in which the gold could be washed away (Miss 1994:183).

The long tom was a compact sluice box with a screen that separated out coarse gravel and was more efficient than a rocker. If lumber was available, the miner built the long tom as a box 10 to 30 feet long and 1.5 feet wide at the lower end. Like the rocker, it had cleats across the bottom. The bottom of the lower end was perforated or screened (the "grizzly" was a perforated plate of sheet iron) and had a shallow, flat riffle box below it, four to five feet long, that caught most of the remaining gold (McKay 1998:27-28).

Sluices were a line of open troughs with cleats, blocks of wood, or other obstructions along the bottom to catch gold. Sluices would extend from 100 feet to over 1000 feet in length (Gallaher 1976:32). The sluice box required a large amount of water. More efficient than a rocker, the sluice box allowed the miners to profit from larger quantities of leaner gravel. Sluice operations involved several men, at least four. One removed the sod, a second dug and wheeled the material to the sluice, a third kept the grizzly clear, and a fourth moved tailings. The operation worked its way upstream and, as digging progressed, the lower sluice box was moved to the upper end, leaving a line of waste rock or tailings (Miss 1994:183).

Ditches, Flumes, and Dams

Mining ditches were often dug in order to provide a constant water flow to the sluices. The ditches were dug and then a water channel was diverted into the ditch (Gallaher 1976:32). Flumes were also constructed as a means to carry water across rocky terrain or deep canyons, though they were more expensive to build than ditches. Flumes were supported on trestles or bracketed along cliffs and could have a steeper grade than the ditches. Flumes did not last more than ten years due to the effects of natural decay, fires, floods, wind, snow and other elements. In some areas flumes were replaced by sheet-iron pipes (McKay 1998:31). Dams would be built to collect water from a drainage and direct it to the ditch system or to create a storage reservoir to guarantee a water supply during the dry season. Splash dams were built just above the diggings and accumulated water

which was released in a power flood onto ground that had been stripped of overburden for sluicing (McKay 1998:31). Large amounts of water were turned into the debris and the water and gravel were carried through the flume where gold settled at the riffle blocks (Gallaher 1976:33).

Tunnels

To get to the deep gravels with gold deposits, tunnels were dug 1000 to 2000 feet into the deposits. Underground, the dirt would be removed and washed through a sluice (Gallaher 1976:32).

Hydraulic Mining

Deep gravels could be exploited most effectively with the use of hydraulic mining. This was a large-scale method for placer mining on low-grade bench gravels and required a large capital outlay and plenty of water. This method also required terrain with sufficient hills to create falling water with high pressures (McKay 1998:32). Hydraulic mining entailed a stream of water directed under heavy pressure against a bank or hill-side containing placer gold. The earth was removed by the fluid and carried into the sluice to be washed. Long ditches were dug to get the water far above the diggings. A pipe was then established from the ditch to the placer pit and a Hydraulic Giant was attached. Water passed through the ditch, the pipeline, and the Giant and the gravel was washed away to a bedrock flume that caught the gold in riffles (Gallaher 1976:33).

With hydraulic mining, huge volumes of tailings were created by the operation, sometimes totaling hundreds of cubic yards per day. "Large boulders were carried away before going into the sluices. A grizzly separated the smaller cobbles moving through the sluice-boxes, and they were carried by water to a separate moveable tailings sluice or flume and then washed out the end into a pile in a previously excavated area. When the dumps became full, the sluices were extended to a new area. To help with their disposal, tailings could also be hand-stacked into rock walls of great height...In some areas where streams became choked with tailings, miners constructed bedrock tunnels that led from a shaft at the bottom of the washing pit and discharged the tailings into adjacent ravines and valleys" (McKay 1998:33).

Dredging

Dredging techniques used machines designed to be operated in rivers or streams. These dredges scooped up the placer gravels from the sand bars and river beds and the gravels were processed through a sluice (Gallaher 1976:33). Dredges were able to operate in stream gravels too flat for mining by hand or hydraulic methods. The dredge was a flat-bottomed boat with excavating and gold-washing equipment. Gravel was brought up from the river bottom by various methods and then was washed and screened and put through a sluice. Tailings were deposited on the banks of the stream or river (McKay 1998:35).

Gold Quartz/Lode Deposits

Quartz mining involved the discovery of veins of gold that had not yet eroded out of the rock. Several veins close together would be referred to as a lode. A prospector often chose to sell his claim before development work began, using his skills to find, rather than mine, the gold. The development of lode deposits required more amounts of capital than placer mining and miners worked for corporations in an operation designed by professional mining engineers (Miss 1994:195-196).

Tunnels

To mine quartz, a payable vein was first identified and then the ore had to be broken loose, taken to the surface, and the gold retrieved from the ore. Mines were opened with tunnels and or shafts. Explosives were used to break up the rock. The broken rock was then hoisted by bucket, or carried by wheelbarrow, to the surface. The ore was then crushed and processed using a mill (Gallaher 1976:34).

Arrastaras

The simplest machinery for recovering gold from quartz (ore dressing) was the arrastara, a Mexican invention. This consisted of a circular area paved with stones. In the middle was a post and to this post was attached a sweep to which a mule or horse was hitched. A block of granite, fastened to the sweep, was dragged around by the horse over the quartz distributed within the circle (Trimble 1914:231). An arrastara was efficient, could be made from local materials, required little money to establish, and could be operated by a small group or one individual (Gallaher 1976:35).

Stamp Mills

Early equipment used in processing ores were stamp mills using mechanical hammers for crushing the ore to a fine powder (Rabe and Flaherty 1974:46). A stamp mill consisted of large stamp, heavy iron heads mounted on vertical stems, weighing 500 to 700 pounds. These were operated by steam power. The stamp mills could break large amounts of ore into small pieces quickly. They were expensive, specialized equipment difficult to get to the mines, usually financed by companies or corporations (Gallaher 1976:35). Stamp mills were used for the reduction of both gold and silver (Trimble 1914:232).

Ball Mills

Rock breakers and stamp mills were the industry standard throughout the second half of the nineteenth century. By the 1910s however, the stamp mill was being replaced by ball, tube, and rod mills (McKay 1998:76). Rod and ball mills were introduced which were electrically driven for grinding ore into very fine particles (Rabe and Flaherty 1974:46). These smaller and more uniform particle sizes were required by cyanidation and flotation methods of recovering gold from low-grade ores (McKay 1998:76).

“The ball mill was a large steel cylinder or drum that was slowly rotated about its long axis by means of a gear train. Inside were five-to-six gorged-iron balls up to three inches

in diameter that would ride up the inside and then fall back as the cylinder turned, pulverizing the ore and mixing it with the water than had been added. Ball mills were cleaner and more efficient than stamp mills, and they worked continuously rather than by batches. The crushed ore would emerge from the ball mill as a clay-like slime” (McKay 1998:76). Like other mills, ball mills were located close to the mine so that water could be run to it by gravity and ore cars could bring out the ore more easily. “They were excavated into the sides of hillsides so that gravity could be used to transport materials from one state in the milling process to another” (McKay 1998:77).

Flotation

In 1928, the flotation method was instituted with a nearly complete extraction of all important metals (Rabe and Flaherty 1974:46).

“After the ore was crushed, simple methods of gold recovery involved amalgamating plates and concentrators that separated the metal from the gangue. The resultant concentrate was then shipped to a smelter” (McKay 1998:78). The common methods of concentrating ores involved a shaking process, running ore across an inclined, vibrating, endless canvas belt to separate the gangue from the heavier particles. The flotation method was not used widely until about 1910, and by 1930, was considered the best method to recover gold from sulfide ores. The ball mills of the 1930s often had flotation and cyanidation plants (McKay 1998:78).

“The flotation process involved creating air bubbles in a liquid solution of finely ground ore. The ground ore was “frothed” with air and pine oil or other reagents. The metal compounds floated to the surface with the air bubbles and were collected by the oil. The gold recovered by flotation resulted in a high-grade concentrate that, after drying, could be treated with cyanide solution or used to produce gold bullion. Most often, however, the concentrate was shipped to a smelter” (McKay 1998:78).

Cyanidation

The method of cyanidation was invented in 1887 and the process was first tested in Elk City in 1892. It was used in connection with other methods of ore treatment and to recover gold from old tailings. The process grew slowly in popularity as miners had to recover gold from sulfide ores after oxidized ores were exhausted. Many ball mills of the 1930s also had a cyanide plant (McKay 1998:79).

“Cyanidation was a technical process that required the help of an experienced metallurgist. The process used a compound of cyanide in solution to dissolve gold and silver from the crushed ore. Zinc shavings were added to precipitate a silver-gold sludge, which was then refined into bullion” (McKay 1998:79).

Smelting

Smelting, a method of concentrating ores by fusing them in fire within a furnace, is an expensive procedure requiring rich ore, lead ore, and cheap fuel (McKay 1998:80).

Silver/Lead Deposits

Copper, lead, zinc, and silver were generally processed with the ball mill and flotation. Flotation was still a popular method of producing ore concentrates in the 1980s and was then the main method used in the Coeur d'Alenes (Hudson et al. 1981:159).

Production of gold, silver, lead, copper, and zinc in the Coeur d'Alene mining region quickly became part of large corporate businesses. The costs of buildings and machinery needed for the processing of the difficult to extract ores meant large amounts of money from investors.

Timber

Industry

After the turn of the century a modern, large-scale timber industry developed in Idaho when a shortage of white pine in the Great Lake states led to the exploration of logging in northern Idaho. With the decline of eastern forests and diminishing stands of white pine in New England and the Great Lake states as a result of clearing forests for settlement, the nation looked elsewhere for timber. Timber cruisers were sent to the woods of North Idaho and found forests with a large percentage of high quality white pine and an endless supply of western red cedar which could be used for poles, pilings, shingles, and lumber. Rivers existed which could be used for hydroelectric power, as well as navigated by steamboats and tugboats, while bays protected log storage. The area also had access to a transcontinental railroad. A ready market existed as wood products were needed by cattle and wheat ranches west of the Rockies and agricultural farms east of the Cascades. The Coeur d'Alene mining district needed timbers for underground operations and new railroads needed rails. Soon loggers migrated to the timber country. "After the miners had made their rush for what was *in* the hills, homesteaders and timber barons made a rush for what was *on* the hills" (Crowell and Asleson 1980:128). "Idaho logging started in the far north and gradually moved south...The Sandpoint mills peaked around 1910, and the industry shifted its attention to the Lake Coeur d'Alene region, then to the St. Joe Valley, and finally to the Clearwater Valley (Schwantes 1991:104).

Between 1898 and 1914, Idaho's timber production tripled, with the industry thriving in the state's ten northern counties. In 1910 there were seventy-two active sawmills in Kootenai, Benewah, and Shoshone counties alone. Production increased from 350 million board feet in 1904 to 1,100 million in 1925. At the turn of the nineteenth century, approximately 700 persons were engaged in logging and sawmilling in Idaho. By 1910 that number had increased to more than 2,500, and would continue to climb to approximately 5,500 by 1920 (Schwantes 1991:104).

Lumber production, rising in the 1920s, reached its highest point in 1926, when the ten counties of north Idaho produced 950,000,000 board feet of timber. In 1932, it dipped to 200,000,000 board feet. During the Depression there was a decrease in demand for lumber and between 1930 and 1933, nearly 50 percent of the woods workers in north Idaho were laid off (Dahlgren and Kincaid 1996:37). The Bonners Ferry operation was one of the first to fall, in 1926. By the early 1930s struggling companies such as Rutledge, Potlatch, and Clearwater Lumber merged to form Potlatch Forests, Inc. becoming the large Weyerhaeuser-associated company of north Idaho (Arrington 1994:125; Hudson et al. 1981:210).

The state's lumber industry did not capture a large share of the national market until the war demands of 1942 and the postwar expansion after 1946 (Beal and Wells 1959:198). "In fact, as late as 1940 fire still harvested more Idaho timber than the lumber companies" (Schwantes 1991:105). During the Second World War Idaho's lumber industry met with an unlimited demand for its forest products (Beal and Wells 1959:198). By this time, most of the small companies in north Idaho had become part of Potlatch (Schwantes 1991:106). A boost to the industry came during World War II when the demand for lumber increased. The construction of the Farragut Naval Training Station at Lake Pend Oreille created a large need for lumber there (Hudson et al. 1981:206). Modern logging began with World War II and a bustling war economy.

In 1949, Potlatch Forests, Inc. constructed the pulp plant in Lewiston and expanded sawmills in Idaho, Washington, and California with timberland holdings reaching 425,000 acres by 1952. By 1960 they had plants in twelve states and were participating in markets throughout the U.S. (Arrington 1994:125).

Lake Pend Oreille

In the early 1900s much of the timber lands in north Idaho were under federal management. Large tracts of land were also owned by the railroads as a result of federal land grants to the railroads as an incentive to build through sparsely populated areas. In 1901, the Northern Pacific sold 20,018.48 acres of land along the north side of Lake Pend Oreille to the Humbird Lumber Company (Hudson et al. 1981:205). In addition to sales by railroad companies, timber lands in the national forests were opened to harvest by the federal government as part of the management of natural resources. Soon, large lumber companies had constructed mills in Bonners Ferry, Sandpoint, Hope, LaClede, Dover, Albeni Falls, and Priest River (Hudson et al. 1981:205). The Bonners Ferry Lumber Company organized in 1902 with a mill site, 13,000 acres of timberland, and water rights to the Kootenai River (Arrington 1994:498).

Priest River

"It was natural for the men of Priest River to turn to the forest. They had farmed some of the surrounding land; they had trapped and hunted the animals; now they went in search of the tall white pine and cedar. Men were attracted from distant places, and from about 1900 on the town began to flourish as a center for logging" (Estes 1961:32).

Thousands of lumber jacks labored in forests as sawyers, swampers, teamsters, and cooks; logging camps were numerous (Estes 1961:34-35). Skidways, chutes, and flumes, as well as sleigh, were used to move logs through the forest. A hundred million logs were handled by the Big Creek chute, alone. With the spring run offs, river drives were conducted down Lower West Branch, Upper West Branch, Kalispel Creek, Granite Creek, and Caribou Creek (Estes 1961:37-43).

Graham-Robinson, the earliest lumber mill in the area, was constructed in 1901. Others followed. The Priest River Company, also built in 1901, had a capacity to produce 100,000 red cedar shingles a day. The White Pine Lumber Company Ltd. was established in 1903 and cut between 75,000 and 100,000 feet of lumber per day turning out shingles, laths, and finished lumber. Over the years, many mills dotted the landscape of the Priest River area. The last log drive down Priest River was 1949 (Estes 1961:37-43).

Lake Coeur d'Alene/Coeur d'Alene River

The timber industry was the center of northern Idaho's economy for nearly 150 years. Mills sprang up in the Coeur d'Alene River valley with the mining industry and continued with the production of railroad ties. Coeur d'Alene, with its water and railroad access, became an important milling center and the lumber industry grew rapidly in this area. Its first sawmill was built by Saginaw Lumber Company in 1890, with a daily capacity of 50,000 board feet. By 1891 a shingle mill, sash and door factory had been added (Shaddock 1996:39). Edward Rutledge, an associate of Frederick Weyerhaeuser organized the Edward Rutledge Timber company in 1915 and built a sawmill in Coeur d'Alene (Hudson et al. 1981:209).

Throughout the Coeur d'Alene River drainage, logs were flumed down creeks to the river, and then held in a pond behind a series of splash dams. When there were enough logs in the river and enough water behind the dams the dams were opened, starting with the one farthest upstream. This began the log drive. Once the logs reached the main Coeur d'Alene River they were sorted at Dudley. This was done according to ownership brands stamped into the logs. They were then towed to their respective mills (Dahlgren and Kincaid 1996:42).

The Little North Fork of the Coeur d'Alene River drainage was a system of dams, logging camps, and flumes. By the turn of the century logging had become, in addition to mining, a major industry in the region. With transportation difficult in the deep woods,

flume logging was adopted as a means of getting timber to mills. The flume logging system utilized a combination of chutes, flumes, and dams to transport logs from the upper reaches of the Little North Fork over 100 miles to mills on Lake Coeur d'Alene (Kauffman 1968:2). The first flume on the Little North Fork was constructed in the early 1920s at Copper Creek and flume logging lasted only a little over a decade, dying out in the early 1930s. "It is estimated that flume logging took 60-80 million board feet of timber down one flume alone" (Kauffman 1968:3).

St. Joe River

"Interest in the St. Joe picked up in the 1890s when Euroamericans began to exploit the timber resources. Up to this time there had been very little settlement of the St. Joe above the lower reaches. With increased logging, cities such as St. Joe and Ferrell were established. Log booms and landings lined the shores of the St. Joe River and sawmills opened to accommodate the timber industry. A road ran along the river, but the main channel of transport was the St. Joe itself. Steamships serviced daily the homesteads and small cities along the river. Before the Milwaukee Railroad was constructed, between 1908-1910, timber goods were floated down the tributaries and main channel of the St. Joe to river and lake sawmills. When finished the railroad began to service lumber camps and transported their logs downstream" (Hudson 1975:10-11).

The land on the St. Joe was covered with white pine and the Marble Creek area in the St. Joe Valley became important for the lumber industry. The first sawmill was built in St. Maries in 1887 to meet the demand for lumber to replace original log cabins. In 1889 another mill was built at Rose Lake and St. Maries had its first shingle mill at the mouth of the St. Maries River. Most logs cut on the St. Joe were taken to a mill at Coeur d'Alene or Post Falls. By 1892, some seven million board feet had been cut on the lower St. Joe and sent to mills. With railroad construction, came the need for railroad ties--- 2500 ties per mile or ten million ties for a transcontinental line. From 1908-1914 mills opened in the area just for the purpose of providing ties (Crowell and Asleson 1980:128-129).

Five splash dams were built on Marble Creek, several on Slate Creek, and one on Fishhook. Before the logs arrived at the sorting gap near St. Joe City, they were branded on the end with a sledgehammer, each owner having a distinguishing mark (Crowell and Asleson 1980:130-132). Each spring the run off moved forty million board feet of logs down the St. Joe River alone. The logs were stored and sorted in the lower valleys, then moved to various mills (Crowell and Asleson 1980:129)

In 1913 a twenty-ton steam donkey arrived on Marble Creek. Eventually seven or eight were used on Marble Creek. The steam donkeys, and their cables, could efficiently log 100,000 board feet of lumber without the log jams of the river drives. In the 1920s, railroad logging began with the construction of several railroad logging spurs in the area (Crowell and Asleson 1980:133).

Logging

The logging methods of moving logs from forests to mills varied over time and were influenced by terrain, accessibility of timber land, and size of logging operations.

Railroads, rafts, flumes, chutes, aerial tramways, and trucks were used to transport the felled and cut logs (Bryant 1923:34-35). "Chronologically, the general trend was a movement from the use of horses, steam donkeys, chutes, flumes with log drives, then railroads toward the increasing mechanization of logging and the introduction of the tractor, bulldozer, and truck. In many areas, earlier use of horses, chutes, and log drives persisted until the middle of the twentieth century, never having been replaced by railroads. In other areas, the use of the railroad in logging took root immediately, but with expense and difficulty of access, soon gave way to truck logging" (Hudson et al. 1981:195). A number of combinations of methods could be used. "Horse logging could coincide with railroad logging, flumes could be used for either movement of logs or transport of logs, steam donkeys moved logs for log drives and railroad transport" (Hudson et al. 1981:195).

Starting about 1907, until the Depression, the big river log drives utilized the Kootenai, Pack, Priest, Coeur d'Alene and St. Joe rivers (Crowell and Asleson 1980:129). With flume logging, trees were first cut by a team of sawyers and de-limbed. The logs were then sent to a wooden chute or sledged by horse team to a landing—a flat spot to dump logs into the flume. From the landing, the logs moved down the flume and into the river. Dams were used to build water up and then opened when the right amount of logs and water were on hand. Speed of the logs moving down the flumes ranged from 6 to 30 miles per hour (Kauffman 1968:4).

During the log drives, streams were first cleared of natural log jams and large rocks. Then splash dams were built to impound the water and logs. The area for the splash dam was dug out so that thick timber could line the bottom of the dam. Logs thirty feet apart and parallel to the river were set, and then crossed with more logs sloped to relieve pressure on the dam. Two high walls and a gate were built. Gates were closed until the water had built up behind the dam (Crowell and Asleson 1980:130-132).

Logs were transported down hill to the rivers with the use of chutes on small tributaries and flumes on major streams. Chutes were built of logs and flumes were constructed with lumber and filled with water. Once the logs began heading downriver, bateaus or swiftwater boats, were used, carrying a dozen men guiding piles of logs (Crowell and Asleson 1980:130-132). "Winding through the forests of north Idaho are hundreds of miles of rotten logs spiked to wooden cross ties. These structures, called log chutes, were once the most important element of north Idaho's transportation system for the logging industry" (Sims 1983:1).

Log chutes were in use in the far western U.S. by the late 1850s. They were used extensively by themselves or in conjunction with other log transport methods of horses, steam donkeys, railroads, flumes, wagons, sleights, and caterpillars. With the 1930s came improvements in roads and equipment, and by 1940 no log chutes were being used in the Idaho Panhandle (Sims 1983:3-4).

On the Little North Fork of the Coeur d'Alene, splash dams were built the entire length of the tributary with log chutes or flumes constructed on the side streams. Logging railroads were also built up many of the water courses of the Little North Fork (Rabe and Flaherty 1974:30).

In the vicinity of Priest Lake, logs were cut and transported to mills via a system of splash dams and flumes. Priest Lake, Upper Priest Lake, and Priest River became well known for the log drives that took place until the 1940s. The large companies also employed narrow gauge railroads to transport logs. These railroads ended at the river where the logs were floated downstream to the mills (Hudson et al. 1981:205).

Camps were usually located close to logging operations, one camp near a dam and one near a landing (Kauffman 1968:4). At the height of the early twentieth century lumber industry logging in the Northwest was undertaken year round and was considered highly specialized requiring a large number of skilled men, among whom were found natives, as well as Swedes, Norwegians, and other foreigners (Bryant 1923:34-35).

Fire of 1910

The fire that raged through the northern forests of Idaho in the summer of 1910, destroying timber, property, human lives, stretched from the foothills of the Rockies on the east, over the Bitterroot divide, to the Palouse on the Idaho-Washington line. Two and a half million acres, a total of 4,000 square miles, burned (Crowell and Asleson 1980:92).

The fire was a culmination of many separate fires burning in the northern Rocky Mountains that summer. A storm on July 15 ignited more than 3,000 fires, "making 1910 officially one of the worst fire seasons on record and one of the driest summers known to the Forest Service in northern Idaho" (Crowell and Asleson 1980:77). In mid-August high winds from the southwest fanned isolated blazes and "within three days the fire had traveled more than 100 miles from approximately Clearwater county, Idaho, northeasterly across the Bitter Root mountain divide into Montana and on into Canada, by which time rains brought the fire to a halt" (Greenough 1947:26).

An estimated five and a half billion board feet burned on Forest Service land, a total of nine billion when including private ownership. "The amount of wood that had been destroyed would have lasted all the United States for the next fifteen years, built over 50,000 five-room houses, kept mills running in the Coeur d'Alenes for 25 years, or built enough homes for the largest city in the four affected states. The greatest loss of any of the forests was on the St. Joe, particularly on Big Creek, the North Fork of the St. Joe,

and the Little North Fork of the Clearwater” (Crowell and Asleson 1980:92). “When everything stopped smoldering, it was discovered that all the little settlements and construction camps from St. Joe City to Taft had been destroyed except for Marble Creek and Avery...Four ranger stations had been burned down. The St. Joe River and all its tributaries were clogged with ashes, soot, and thousands of dead fish apparently boiled alive. Twelve years later St. Joe ridge was still ankle deep in ashes from the fire’s vicious path” (Crowell and Asleson 1980:91). The Fire of 1910 also destroyed a large part of the forest surrounding Priest River (Estes 1961:53). Property loss was estimated at \$20 million and included: Wallace, \$1 million; Coeur d’Alene Forest, \$250,000; railroads, \$3 million, settlers in three states, \$750,000; and timber lost, \$15 million (Crowell and Asleson 1980:92).

For two decades after the 1910 fire, activities of the Forest Service Rangers were geared toward the summer fire season and miles and miles of trails were constructed (Crowell and Asleson 1980:107). Communication was improved, lookouts built, trees planted.

Settlement

Homesteads

“Federal legislators passed a number of laws in the nineteenth century governing the disposition of public lands. Although the political motivation behind these laws contained many subtleties, Congress hoped to promote agriculture by giving would-be farmers access to land, leading to settlement of the West” (Miss 1994:132).

Idaho's agricultural development has been linked closely with other aspects of its history. Missionaries in the Coeur d’Alene area farmed grains and vegetables as part of their mission work. During mining rushes great demand was created for vegetables and livestock. However, until railroads were available to connect farmers and stockmen with markets, agricultural remained limited. Agriculture did not come into its own until the decade of the 1880s with the completion of railroad lines through Idaho (Beal and Wells 1959:288-290).

Settlement was also enhanced and promoted by the railroad companies. The companies first promoted settlement during their initial construction when new towns were established along the lines. While originally established as railheads or supply points during railroad construction, these communities often continued to exist after the construction was completed. During the 1890s and early 1900s the railroad further influenced settlement when large tracts of their grant land were sold at extremely low prices. In addition to the low cost of the land, the railroads offered the transportation to the area. At the same time, timber companies began selling their agricultural lands (Hudson et al. 1981:217).

The Homestead Act of 1862

The Homestead Act of 1862 offered a settler 160 acres of public land for a nominal fee, after five years of residence. Any adult citizen, 21 years or older and head of household, could claim 160 acres of unappropriated public land. While unmarried women could apply for land, married women could apply only if they had become the head of the family due to the husband's desertion, incapacitation, or imprisonment. "Requirements of homesteading included the payment of a small fee when the preemption claim was filed, occupancy of the homestead for five years, cultivation of a certain number of acres, and construction of a house. Prior to filing the pre-emption claim, the piece of land had to be surveyed by the General Land Office" (Hudson et al. 1981:215). A homesteader could avoid the five-year residency by paying a preemption price of \$1.25 to \$2.40 per acre after living on the claim for six months (Miss 1994:134).

Two amendments were subsequently made to the Homestead Act. The Enlarged Homestead Act of 1909 allowed filing on up to 320 acres of non-irrigable land and the Three-Year Homestead Act of 1912 dropped residency on the land to just seven months a year for three years (Miss 1994:134).

Timber and Stone Act of 1878

The Timber and Stone Act of 1878 originally applied to lands in California, Nevada, Washington, and Oregon, but by 1892 covered all public lands. The Act allowed any citizen to claim up to 160 acres of timber land at \$2.50 per acre. The land had to be certified unfit for agriculture and the timber and minerals could only be for personal use, not speculation (Miss 1994:134). The objective of the act was to provide timber and stone resources for mining and domestic use. The act was specifically aimed at miners, but benefited settlers by granting each claimant 160 or less acres for \$2.50 an acre. The nonagricultural land, however, was usually remote with poor access and difficult to support oneself on a claim (Hudson et al. 1981:216). The bulk of settlers on the St. Joe filed under the Timber and Stone Act of 1878 (Crowell and Asleson 1980:21).

Forest Homestead Act of 1906

In 1891, the government placed large portions of land within the public domain into forest reserves, established to protect and manage forest resources. Though agricultural land was not intended to be part of the forests, such land was often located within the boundaries of the newly formed reserves. In 1906 the Forest Homestead Act required the government to survey and list the agricultural lands within the reserves. After the survey, these could be homesteaded. The claimant filed up to 160 acres, paid a per acre filing fee, occupied the claim for several years, cultivated the land, and constructed a house and outbuildings on the property (Hudson et al. 1981:217), receiving a title after five years of

residence. "Properties entered under the Forest Homestead Act of 1906 were often referred to as June 11 claims, after the date of the legislation" (Miss 1994:134). With the Forest Homestead Act of 1906 additional homesteaders filed along the St. Joe on land in the newly created forest reserves. The country was settled rapidly with houses situated about a mile apart (Crowell and Asleson 1980:21).

Prior to the discovery of rich mineral deposits on the South Fork of the Coeur d'Alene River, the lower Coeur d'Alene River Valley was settled by a few homesteaders. With the influx of miners into the area others settled in the vicinity to supply agricultural products and lumber for the mining industry. The Coeur d'Alene River Valley was a fertile farming area but many of the farmers who settled the area had to clear the logs off the land before they could farm. Many made their living by making and selling hand-hewn railroad ties. They were known as "stump ranchers." Mills were built along the lower Coeur d'Alene River to process the logs and many communities were established in the area (Dahlgren and Kincaid 1996:17-22).

An influx of settlers into the St. Joe Valley was accelerated from 1897 to 1910 by a growing interest in the timber resources of the area (Scott 1967:46). The valley riverbank lands were made up of partly open meadow and grass lands with scattered patches of brush and small deciduous trees. These lands were settled first, but as the population grew, the "fringes of the settlement were gradually pushed back up the creek bottoms and canyons and extended to include the bench-lands on either side of the stream" (Scott 1967:46). Others settled in the backcountry, building small, crude log structures and supplementing their diets with fish, deer, berries, and produce from vegetable gardens (Crowell and Asleson 1980:25). The era of homesteaders of the upper St. Joe was brief, but a patchwork of land ownership exists marking the areas of success. Where homesteading was unsuccessful the cabins have collapsed and the small clearings have become undistinguishable (Crowell and Asleson 1980:30).

Towns

Many activities encouraged settlement and the growth of towns in north Idaho. While the fur trade was early an early activity it was limited in area. Similarly, mission, road building, and military activities, while present, were limited in scope. Many settlements and towns began first with the discovery of precious minerals on the South Fork of the Coeur d'Alene River, grew to support the mining industry there, and later the timber industry of the Coeur d'Alene, St. Joe and Priest Lake river drainages. The arrival of railroads to the area, the availability of land for homesteading, and the selling of surplus reservation land for settlement encouraged further growth. Historically, some main areas of settlement included the South Fork of the Coeur d'Alene River; Lake Coeur d'Alene and the Coeur d'Alene River; the St. Joe River; Lake Pend Oreille; and the Priest Lake, Priest River, and Kootenai River area.

South Fork of the Coeur d'Alene River

Mullan

Mullan was established on the South Fork of the Coeur d'Alene River, along Mullan Road, first as a way station, then, in 1884, as a camp near the gold, silver, and lead mines. The town was platted in 1888 and named for John Mullan (Boone 1988:265). The Northern Pacific arrived in 1891 with a line through to Wallace (Conley 1982:494). Two historic mines are located nearby, the Lucky Friday and the Morning (Derig 1996:336).

Murray

When gold was discovered on Prichard Creek in the Coeur d'Alene mining area in 1884, Murray was laid out (Boone 1988:266), and emerged as the major placer center for 5000 prospectors. Other Prichard Creek settlements of Prichard and Eagle City were also established. Murray's importance diminished when the mining industry shifted to lead-silver lodes. Between 1918 and 1926 a Yukon Gold Company dredging operation left six to ten feet piles of gravel lining the river when the company dredged up gravel 25 feet deep to extract gold. Two businesses remain in Murray--a restaurant and museum and the Bedroom Goldmine Bar (Conley 1982:489, Derig 1996:323-324).

Wardner

Founded in 1885 as Kentuck, this settlement was renamed Wardner by post office officials to commemorate Jim Wardner who was boosting the community and the Bunker Hill and Sullivan mine. Attracted to the area by the goldstrike at Murray, Jim Wardner promoted the Bunker Hill and Sullivan mine and sold corner lots in the community. A fire in 1890 burned half of the town's Main Street. In 1891 the town of Wardner had nineteen saloons and the mining payroll amounted to \$100,000 a month. Another fire swept through the town in 1893, burning eighty buildings (Conley 1982:473).

Wallace

Shoshone County seat

Located on the South Fork of the Coeur d'Alene River at the confluence of Canyon, Placer, and Ninemile creeks (Boone 1988:389), Wallace was headquarters for the mining supply business of the Coeur d'Alene mining region. "Colonel W. R. Wallace settled here in 1884, staked out the Oreonogo-Hecla mine, and platted the townsite a mile away" (Derig 1996:327). A fire destroyed the entire business district in the summer of 1890, and the town was rebuilt. In the path of the 1910 fire, one-third of the town was burned at the eastern end with the loss of nearly 100 buildings (Conley 1982:483; Derig 1996:334).

In 1890, Shoshone County was most heavily populated county in Idaho, and Wallace was the third largest town in the state with a population of 2,000. Wallace was a financial center for mine owners and managers who built stylish homes and substantial downtown buildings. The entire town has been placed on the National Register of Historic Places (Derig 1996:327).

Kellogg

Located on the South Fork of the Coeur d'Alene River at its confluence with Milo Creek, Kellogg was virtually a company town for Bunker Hill. Originally called Jackass, Milo, and finally Kellogg, in honor of Noah Kellogg, the discoverer of the Bunker Hill lode, the town was laid out in 1886 and incorporated in 1913. The community was entirely dependent on mining and, eventually, on the Bunker Hill Company (Conley 1982:470).

The Bunker Hill and Sullivan mine of Kellogg eventually consisted of 150 miles of tunnels and shafts, as well as a zinc plant and a smelter to process silver. "For years this mining and metallurgical complex was the lifeblood of the valley. Gulf Resources and Chemical Plant purchased the Bunker Hill holdings in 1968, but in 1981 it closed the whole operation with a loss of 2,100 jobs. At this time the facility was providing 20 percent of the nation's lead and zinc and 25 percent of its silver. The silver mine reopened in 1988 and operated for four additional years. By the time the last closure came in 1992, Kellogg had moved on to a new way of life" (Derig 1996:326). Today, Kellogg is the location of the Silver Mountain Ski Resort.

Osburn

On the South Fork of Coeur d'Alene River, Osburn was the site of a construction camp for Mullan Road and eventually abandoned. Bill Osborne later built a trading post here and the town was platted when the Union Pacific Railroad came through (Boone 1988:278). In 1980, the Consolidated Silver Venture concentrator, copper-silver mine and mill, was operated in Osburn by Hecla Mining Company (Conley 1982:479).

Pinehurst

Pinehurst was a mining village established in the 1880s (Boone 1988:296) on the South Fork of the Coeur d'Alene. It marks the entrance to the Coeur d'Alene valley (Conley 1982:457).

Lake Coeur d'Alene and The Coeur d' Alene River

Coeur d'Alene

Kootenai County Seat

Located on the north shore of Lake Coeur d'Alene and near the Chilco Mountains, Coeur d'Alene is, today, the largest city in Idaho, north of Lewiston.

As early as 1842 missionaries visited the area and between 1859 and 1861 builders of the Mullan Road passed through during construction (Conley 1982:437-438). In 1877, General Sherman came west over the Mullan Road looking for possible sites to establish posts for his troops. He chose a strategic spot on the north shore of Lake Coeur d'Alene, at the head of the Spokane River, and recommended to Congress that a military post be established here. Congress set aside 999 acres for a military reservation. "Camp Coeur d'Alene was pitched in April, 1878, and became Fort Coeur d'Alene a year later (Conley 1882:439). Eventually, the post was known as Fort Sherman. Four military companies

were usually stationed here with a total of 250 men. By 1883 the establishment had a company barracks building, officers quarters, a chapel, library, bakery, blacksmith, carpenter and plumber shops, two ice houses, a recreation hall, and stables for 100 head of stock. Settlers around the fort provided services and supplies (Conley 1982:438-439).

A team-powered circular sawmill was hauled in to produce the lumber for more than fifty buildings (Conley 1982:438). The sternwheel steamer, the *Amelia Wheaton*, was constructed in 1880 with the use of the Fort Sherman sawmill and was used as a patrol and supply launch on the lake (Conley 1882:439). When prospectors arrived in the Coeur d'Alene region they were transported from Fort Sherman by the *Amelia* to the Old Mission Landing at Cataldo. From here they packed over Jackass Trail to the new mining towns of Eagle City and Murray (Derig 1996:313). "The steamships *General Sherman* and *Coeur d'Alene* soon joined the *Amelia Wheaton* on the lake. And a profitable business it was, with each trip across the lake netting \$1,000 or more. Miners plunked down \$10 apiece for standing room only, and freight was proportionately high" (Derig 1996:314).

Before the gold boom dimmed, the fabled Bunker Hill and Sullivan silver/lead deposit was discovered at Kellogg and Lake Coeur d'Alene became a highway to the mines, bringing supplies in and ore out. "In 1886 the Northern Pacific Railroad Company entered the picture, building a narrow-gauge track from the mines down to the landing at Cataldo and adding a fleet of steamers to carry the ore across the lake to Coeur d'Alene. Here it connected with Spokane and national markets" (Derig 1996:314). Through the early years of the mining industry water traffic on Lake Coeur d'Alene connected with the railroad traffic (Conley 1982:440). By 1887 the community of Coeur d'Alene was incorporated (Derig 1996:313) and nearly a thousand people had moved to the area (Conley 1982:438-439).

The timber industry flourished in the Coeur d'Alene area as well. Around the lake and along the tributaries of the Coeur d'Alene, St. Joe, and St. Maries rivers were 15 billion feet of salable timber--white pine, yellow pine, fir, and tamarack and the lake became a "magnificent millpond" (Derig 1996:314).

Logging and mining remained important to the Coeur d'Alene economy for decades and continue in importance today (Derig 1996:314). Tourism also quickly became an important industry for Coeur d'Alene. At the turn of the century, passengers arrived by rail by the thousands for holiday excursions across the lake (Conley 1982:440). On Sundays 900 to 1000 tourists could arrive in Coeur d'Alene for recreational lake and river excursions (Derig 1996:314). The Coeur d'Alene Resort, a sixty-million-dollar resort, is, today, one of the most powerful tourist magnets in northern Idaho (Schwantes 1991:229).

Cataldo

Cataldo was the second location of the Sacred Heart Mission of the Coeur d'Alenes, established here in the late 1840s. In 1877 the site was abandoned as the mission was once again moved. In the 1880s, Cataldo became a terminus for steamboats traveling up the Coeur d' Alene River with miners, supplies, and equipment enroute to the mines. Farmers would hail the steamboats to stop and sell their potatoes and cabbage to the mining community. From Cataldo the railroad carried passengers back and forth, to and from the mines. "Metal ore was loaded on the narrow gauge line at Kellogg and transferred to boats at the Old Mission. The boats then carried the ore to Coeur d'Alene where it was loaded and shipped by rail again to a smelter in Montana" (Rabe and Flaherty 1974:63).

Harrison

Located on the east side of Lake Coeur 'Alene, Harrison was once a lumbering center for the Coeur D'Alene mining district. Situated eleven miles north of St. Maries and just south of the mouth of the Coeur d'Alene River the location was ideal for a sawmill, and several were built.

When Harrison was homesteaded in 1891 a store was built to serve the mining and timber industries. Logs were floated downstream to Harrison where 20 sawmills, box factories, and shingle mills lined the waterfront. Sixteen saloons sprang up for miners, lumberjacks, and drifters looking for work. Harrison became a main port for steamers. "Upriver traffic to the Old Mission Landing kept a steady supply of freight and loggers passing through town" (Derig 1996:318). A fire in 1917 nearly destroyed the town, which was not rebuilt. "Today, like many lake areas in Idaho tourism grew and Harrison's biggest event, attended by a few thousand, is the Old Timer's Picnic" (Shadduck 1996:228).

Rose Lake

Primarily a company town, the economy of Rose Lake was based on the lumber industry. However, with the fertile flood plain of the Coeur d'Alene, farming was also prevalent in the area and contributed to the economy. By 1912 Rose Lake had a population of two hundred, and by 1916 Rose Lake boasted five hundred residents (Dahlgren and Kincaid 1996:22). The town was the location of operations of the Rose Lake Lumber Company and also on the Oregon, Washington Railway and Navigation line (Dahlgren and Kincaid 1996:30).

St. Joe River

St. Maries

Benewah County Seat

At the confluence of the St. Joe and St. Maries rivers, was the location of Father DeSmet's first Sacred Heart Mission in 1842, which was abandoned in 1846 after severe spring flooding. St. Maries was established here in 1887 and a sawmill was built to supply merchants and miners in Coeur d'Alene, as well as the new settlers of the St. Joe

Valley. Platted in 1889, St. Maries prospered, and with the growth of logging, grew to have a population of several hundred by 1910 (Crowell and Asleson 1989:17). With the coming of the railroad and the establishment of freight and passenger service from Lake Coeur d'Alene by the St. Joe River, a modern town sprang up (Boone 1988:357).

The St. Maries River flowed through the largest single stand of white pine in the world and large amounts of pine, cedar, and fir grew along the St. Joe River. Because of the rivers, no mill needed to be built in the back country. Logs could be floated down any number of streams to the main rivers, then on to Lake Coeur d'Alene. "Every year for forty years, beginning about 1910, the Weyerhaeuser combine (later Potlatch Corporation) and smaller outfits poured millions of board feet downstream to mills at St. Maries, Harrison, Coeur d'Alene, and a dozen lesser spots" (Derig 1996:308).

St. Joe

St. Joe was the head of steamboat navigation on the St. Joe River, sixteen miles above St. Maries and 60 miles from Coeur d'Alene (Shadduck 1996:249-250). Established as a lumber town, a sawmill was opened and in 1892 it was estimated that seven million feet of logs, ten thousand cedar telegraph poles, and one thousand posts were produced at the mill (Shadduck 1996:249-250). The mill cut ties for the railroad and soon a railroad depot was built and a hospital and school established (Conley 1982:19). By 1907 the Chicago, Milwaukee, St. Paul and Pacific Railroad ran through the valley of St. Joe on to St. Maries, then to Bovill where it connected with the Washington, Idaho, and Montana line making a transcontinental connection with the Great Northern at Palouse, Washington (Derig 1996:309).

St. Joe was also, early on, a popular vacation site, with natural camping grounds, good fishing, and boats available up the swift waters and creeks (Shadduck 1996:249-250).

Avery

Avery was first homesteaded in 1894 where the North Fork of the St. Joe meets the St. Joe (Crowell and Asleson 1980:31). In 1905, it became the location of the first Forest Service station in the area. By 1910, a settlement of nearly 80 Japanese railroad workers was located at Avery and Japanese remained part of the town's population until the 1950s (Crowell and Asleson 1980:32-34). Avery was a major railroad installation and supplied a variety of goods and services to its residents as well as to Forest Service personnel, prospectors, trappers, and loggers throughout the countryside (Crowell and Asleson 1980:40). Avery's population peaked in 1917 at 1100. Today, the majority of Avery residents are Forest Service personnel (Crowell and Asleson 1980:51).

Lake Pend Oreille

Pend Oreille City

Pend Oreille City was established in 1866, on the south end of Lake Pend Oreille at Buttonhook Bay, to provide a more efficient route to the Wild Horse Creek mines in

British Columbia and the Last Chance Gulch mines near Montana. Miners rushed to both locations, gathering at the foot of the lake to buy supplies. The first steamboat on Lake Pend Oreille, *Mary Moody*, transported passengers, livestock, and supplies from Pend Oreille City, then called Steamboat Landing, to major points on the northeast side of the lake (Balbi and Hackbarth 2003, Hackbarth 2003). The settlement also served as a connection point via an overland stage eight miles to the Northern Pacific Railroad station at Athol (Dahlgren and Kincaid 1996:87). Now the area is part of Farragut State Park and little remains (Balbi and Hackbarth 2003; Hackbarth 2003).

Bayview

Located four miles from Pend Oreille City, Bayview was settled by homesteaders coming to the area for logging in the 1880s and 1890s. Limestone was mined in 1881 along North and South Gold Creek and the limestone industry dominated the area until the early 1900s. In 1887 the Spokane Lime Company began operation, and then, in 1900, the Washington Brick and Lime Company acquired claims in Bayview. With a great demand for building materials in Spokane, the Washington Brick and Lime Company became the second largest lime plant in the west. Four lime kilns were built in 1904 and another after 1911. The limestone was quarried from the adjacent hillside. Chunks of rock were placed in the top of the kiln, alternated with wood, and then set on fire. The resulting combustion chemically altered the materials and burned lime was extracted through doors at the base of the kiln. Before the railroad arrived, the lime was shipped in barrels on steamboats to Hope then transferred to the Northern Pacific Railroad (Balbi and Hackbarth 2003; Hackbarth 2003).

The town of Bayview eventually had 27 blocks of streets and avenues with a store, homes, and other buildings located above the kilns along Limekiln Road (Balbi and Hackbarth 2003, Hackbarth 2003). "Due to its close proximity to Spokane and the railroad Bayview soon became a favorite tourist spot and shipping and distribution point for the mines and quarries located at the south end of Lake Pend Oreille" (Dahlgren and Kincaid 1996:87). Two years after the lime kilns and quarries ceased operation Farragut Naval Training Station was opened here (Dahlgren and Kincaid 1996:87). Today, the Bayview lime complex is part of the National Register of Historic Places as an historic lime and cement district (Balbi and Hackbarth 2003; Hackbarth 2003).

Lakeview and Chloride

Lakeview and Chloride, four miles from Lakeview, were boom towns when miners flocked to the area in the late 1800s looking for gold, silver, and other metals. The first mining claim, for limestone, was established between North and South Gold creeks in 1881 and by 1900 the town of Lakeview boasted a population of 1000 people with 15 saloons. Chloride grew to 3000 with 17 saloons (Balbi and Hackbarth 2003). "Supplies, passengers and mail made their way to Lakeview by way of steamboats which connected with the Northern Pacific Railroad at Hope and at the transfer point at Steamboat Landing [Pend Oreille City] for the eight-mile stage line trip to the Northern Pacific Railroad

depot at Athol" (Dahlgren and Kincaid 1996:88). The International Portland Cement Company built a rock crushing plant north of Lakeview in 1912. By 1920 two plants were in operation with 100 men processing 500 tons of limestone per day. The plants closed in the early 1930s (Balbi and Hackbarth 2003).

Sandpoint

Bonner County seat

The Euroamerican settlement of Sandpoint, located on the north shore of Lake Pend Oreille, dates to 1880, when Robert Weeks opened the first general store. Growth was slow until the arrival of the Great Northern and Northern Pacific railroads. The post office was established in 1895 and the townsite of Sandpoint was platted in 1898 when a Great Northern Railroad telegrapher subdivided his homestead along Sand Creek (Conley 1982:664-665).

Between 1880 and 1906, three major railroads were constructed through the town and, with links to the outside world and access to white pine, yellow pine, fir, and tamarack, the lumber industry grew rapidly. At the turn of the century Sandpoint's major industries were the logging and milling of the area's forests and Lake Pend Oreille provided an ideal place for log storage (Conley 1982:664-665). In 1901 the Humbird Lumber Company, a Weyerhaeuser subsidiary, arrived in Sandpoint and became the largest shipper of cedar, used for telegraph, telephone, and light poles, in the Northwest. Today, Sandpoint is a summer and winter recreational retreat (Boone 1988:330; Conley 1982:664-665; Derig 1996:339).

Clark Fork

Six miles west of the Idaho-Montana border, the Clark Fork site was used by fur trappers as early as 1809 (Boone 1988:80). The community of Clark Fork grew after 1892, when the Northern Pacific Railroad constructed a siding here. The settlement furnished railroad ties and other building materials from the dense stands of timber that surrounded it. Lead-silver mines were active here from 1913-1941 and a fifty-ton concentrator was once in operation. From 24 million pounds of lead and one million ounces of silver came nearly \$2.5 million (Conley 1982:687). The silver and lead mines were productive into the 1950s (Derig 1996:343).

Hope

The settlement of Hope began in 1882 with construction of the Northern Pacific Railroad. A post office was established in 1887, the town was platted 1896, and then incorporated 1903 (Boone 1988:183). Many of the Chinese who worked on the railroad settled at Hope (Derig 1996:341).

Athol

Located in the northern region of the Rathdrum Prairie, Athol was the location of a Northern Pacific Railroad station established in 1882 and a center for a vast agricultural economy. Athol grew as lands were logged off and farms and orchards developed. The

Athol Lumber Company operated here from 1903 to 1912. The opening of Farragut Naval Station temporarily boosted the community's economy after the effects of the Depression (Dahlgren and Kincaid 1996:105, 108).

Priest Lake, Priest River, and Kootenai River

Priest River

With the completion of the Great Northern Railroad in the area in the early 1890s, the town of Priest River was settled at the lower end of Priest Lake (Boone 1988:305).

As the Great Northern was being built away from Priest River, both east and west, there was a great demand for railroad ties and Priest River became a center for the production of ties. The Great Northern paid ten cents for a #2 tie and twelve cents for a #1 tie piled on the railroad right of way. Tie makers would go up river, cut ties, float them down, and pile them along side of the track. The Great Northern Railroad completed its route through area in 1891-1892 (Estes 1961:12-17).

Men were attracted from distant places to Priest River and, from about 1900 on, the town began to flourish as a center for logging (Estes 1961:32). Italian laborers for the railroad arrived, worked, and stayed to settle in and around Priest River (Estes 1961:12-17). By 1918 Priest River had five saloons, two dry goods stores, four grocery stores, four hotels, two or three restaurants, two or three livery barns, and four barber shops with 2600 lumberjacks working in the area (Estes 1961:57). Until the Depression of the 1930s, millions of feet of white pine, ponderosa, and cedar logs from the slopes of Priest Lake were rafted down Priest River to Lake Pend Oreille, and then on to Newport, Washington (Boone 1988:305; Conley 1982:4).

Bonnors Ferry

Boundary County seat

Located on the Kootenai River, about 30 miles from the Canadian border, in the Kootenai River Valley, Bonnors Ferry, along with Seneacquoteen, served as a supply point and ferry crossing on the Wild Horse Trail during the 1860s (Hudson et al. 1981:224). The Wildhorse Trail from Seneacquoteen crossed the river here. The discovery of gold on Wild Horse Creek in British Columbia in 1863 brought thousands of prospectors travelling along the route from Walla Walla. Edwin L. Bonner established a ferry for a seven-mile stretch of the river and charged \$1.50 for loaded pack animals and \$0.50 for foot traffic (Conley 1982:668). The coming of the Great Northern Railroad in the 1890s brought miners, loggers, and settlers to the area and the town was incorporated in 1895. The Bonnors Ferry Lumber Company began operations in 1904, but a number of difficulties made exporting logs nearly impossible. When the mill closed in 1926, the company had never made a profit (Boone 1988:44-45; Conley 1982:668-670).

Seneacquotteen

Along with Bonners Ferry, Seneacquotteen served as a supply point and ferry crossing on the Wild Horse Trail during the 1860s. Located on the south side of the Pend Oreille River, eight miles east of Priest River, at the mouth of Hoodoo Creek, Seneacquotteen was "for a half-century, one of the best-known settlements in Idaho" (Conley 1982:4). Indians camped here while following the trail from the Spokane River, over the Rathdrum Prairie, to this ford. The trail continued northward to the Kootnai River where it crossed near today's location of Bonners Ferry. The North West Fur Company trappers used the trail beginning in 1810. The International Boundary survey party had a base camp at Seneacquotteen. When the gold rush to British Columbia brought mining traffic through the area, the route was called the Wild Horse Trail (Conley 1982:4). Later, Seneacquotteen served as a supply point and headquarters for the Northern Pacific Railroad construction and was the site for the construction of the *Mary Moody*, a commissioned U.S. government mail carrier (Hudson et al. 1981:224).

Porthill

On the international boundary, Porthill was established as one of two ports of entry in 1893 (Boone 1988:301). After completion of a railroad line in 1899 for carrying lumber from Bonners Ferry to Porthill, Porthill served as the connecting point for the Kootenay Railway and Navigation Company, Ltd. and the Canadian Pacific (Bilger 1969:55). Silver was discovered in the Porthill area in 1913 (Glenn nd). Six miles from Porthill, the Idaho Continental mine, the richest discovery in Boundary County, produced 850,000 ounces of silver and 44 million pounds of lead between 1915 and 1924 for the Bunker Hill and Sullivan Company, shipping ore concentrate to the Wallace-Kellog area for smelting. Production slowed during the 1920s and continued intermittently through the 1930s to the present (Conley 1982:1, Hudson et al. 1981:170). Other mines in the area of Porthill added \$1 million worth of production from 1940 to 1950 (Conley 1982:1). Eastport, east of Porthill, was the other port of entry on the international border and was a point of connection between the Spokane International Railway Company and the Canadian Pacific Railway (Bilger 1969:63).

Ethnic Heritage

A number of immigrants arrived in Idaho in the late nineteenth and early twentieth centuries to work in the mining, railroad, and logging industries. Still, in the 1980 census, Idaho remained the "whitest" state west of the Mississippi River, with three thousand blacks, six thousand Asians, and ten thousand American Indians (Schwantes 1991:229).

Chinese

From the beginning of the 1849 California gold rush, until the Chinese Exclusion Act of 1882, over 300,000 Chinese immigrated to the United States. Many of these individuals were unskilled laborers from the rural areas of Chinese provinces and arrived in Idaho first, as miners, and then, as railroad laborers (Thernstrom 1980:218). By 1870 over one quarter of Idaho Territory's population was Chinese, the highest percent of Chinese in

any state or territory (Mercier and Simon-Smolinski 1990:8). The 4,274 Chinese in Idaho worked as miners, packers, cooks, domestics, merchants, doctors, launderers, and gardeners; sixty percent of all miners at this time were Chinese (Arrington 1994:266).

While Chinese miners participated in the gold rushes of the Clearwater and Salmon rivers, extreme local protest and opposition resulted in a complete absence of Chinese miners in the Coeur d'Alene mining district. Not until the construction of railroads across the panhandle of Idaho was there a Chinese presence in this part of the state.

Many Chinese worked for the Northern Pacific and Great Northern railroads. Between 1879 and 1883 gangs of Chinese workmen were employed by the Northern Pacific on the line from Wallula on the Columbia River to Lake Pend Oreille and Clarks Fork and on to Montana (Wegars 1991:184). More than 4,000 workers, mostly Chinese, helped build this portion of the Northern Pacific (Mercier and Simon-Smolinski 1990:17).

One Northern Pacific labor camp was located at Cabinet Landing on the south side of Clarks Fork in Bonner County where Chinese lived in tents and worked in gangs of 50 to 100 individuals for several months. Some stayed, or later returned, to nearby communities of Hope and Clark Fork (Mercier and Simon-Smolinski 1990:17; Wegars 1991:188). Small numbers of Chinese also settled in Cocolalla and Sandpoint (Wegars 1991:201).

The Great Northern Railway, reaching Bonners Ferry from Sandpoint in 1892, also employed Chinese laborers and Bonners Ferry's Chinese population numbered about fifty discharged railroad employees by mid-1892 (Wegars 1991:204). "During the period 1880 through 1910 Chinese people lived in a number of towns in northern Idaho. There they ran laundries, were cooks, grew and sold vegetables, and provided a variety of other services that contributed to the local economy (Wegars 1991:225). These towns included Bonners Ferry, Sandpoint, Coeur d'Alene, Rathdrum, Hope, and Clark Fork (Wegars 1991:225).

The Chinese Exclusion Act of 1882 prohibited additional Chinese laborers from entering the United States for ten years. The Geary Act of 1892 extended the exclusion law for another decade and required that laborers already in the country obtain certificates of residence. Ten years later, 1902, the exclusion law was extended for yet another ten years. Six decades of exclusion curtailed Chinese immigration to the United States. The exclusion acts were repealed in 1943 (Thernstrom 1980:220-226).

Scandinavians

Swedish immigrants to the United States by the end of the nineteenth century were rural laborers, mostly single men and women, from towns and industrial areas from an over populated Sweden. In the 1890s, over 200,000 Swedes arrived in the United States to take advantage of economic opportunities (Thernstrom 1980:971-972).

Between 1820 and 1975, over 855,000 Norwegians emigrated to the United States. By the 1880s and 1890s, many second generation Norwegian farmers, craftsmen, and laborers moved from Midwest settlements to the coastal areas of the Pacific Northwest. "They were soon followed by new waves of immigrants directly from Norway, more and more of whom were from towns and cities. They were not land-hungry peasants but laborers and craftsmen" (Thernstrom 1980:753-754).

By 1900, one quarter of the ethnic/foreign population of Idaho was Scandinavians who had moved to Idaho to participate in the mining and logging industries, and then settling in the towns of Coeur d'Alene, Wallace, Bonners Ferry, and Sandpoint (Arrington 1994:271). Scandinavian populations were high in Idaho's northern counties of Bonners Ferry, Clearwater, Kootenai, Shoshone, and Latah (Mercier and Simon-Smolinski 1990:20). Here they helped build the railroads down the St. Joe Valley for the Chicago, Milwaukee, and St. Paul and formed an important work force in logging throughout northern Idaho. During World War I many worked in north Idaho mines with increasing numbers of immigrant workers employed in the Kellogg and Wallace mines (Mercier and Simon-Smolinski 1990:5-13).

Germans

During the latter half of the nineteenth century, and for much of the period between 1923 and 1963, annual arrivals from Germany outnumbered those from any other single country. "Between 1850 and 1900, Germans were never less than a quarter of all the foreign-born in the United States, and between 1880 and 1920 they were the largest single element among first-generation immigrants...As late as 1950 the Germans were more numerous than any other group of first- and second-generation Americans and thereafter were second only to Italians" (Thernstrom 1980:406).

In Idaho, German immigrants joined the mining rush in the Coeur d'Alene district during the late 1880s and many stayed to settle in the Bonners Ferry area. Others arrived when Indian reservation land was sold for settlement (Arrington 1994:274).

During World War II a population of 850 Germans were held as prisoners of war at Farragut Naval Training Station on Lake Pend Oreille where they worked as gardeners and maintenance men (Arrington 1994:82).

Italians

Between 1899 and 1920, 2,284,601 Italians arrived in the United States. Many were men between the ages of 16 and 45 who planned to work at any possible job, save money, and then return home. About half of those arriving in the United States also left and returned to Italy (Thernstrom 1980:545).

Italians coming to Idaho between 1890 and 1920 arrived to mine, farm, ranch, construct railroads, and start businesses. By the late 1800s Italians could be found in almost every mining camp in Idaho, particularly in the northern Idaho counties of Shoshone, Kootenai, Bonner, and Latah. The largest proportion of Italians who came to Idaho worked for the railroads and nearly every town with rail service had Italians living in the community. Some left after a few years, some stayed. In the 1890s Priest River had a community of Italian pioneers known as "the Italian Settlement" (Mercier and Simon-Smolinski 1990:4-9). By 1900, 779 Italians had moved to the state and by 1910, 2,627 had settled in Kellogg, Wallace, Bonners Ferry, and Mullan (Arrington 1994:276; Mercier and Simon-Smolinski 1990:3). With World War I, and an increase in immigration, groups of Italians worked in the mining areas of Kellogg and Wallace (Mercier and Simon-Smolinski 1990:4).

Japanese

Most of the Japanese immigrants to the United States in the late nineteenth and early twentieth centuries came by way of Hawaii to California. With the Chinese Exclusion Act of 1882 eliminating the Chinese as a vital source of cheap labor, Japanese laborers began working on the railroads, in canneries, and in the logging, mining, fishing, meatpacking, and salt-refining industries. Between 1891 and 1924 Japanese immigrants to the United States numbered 295,820 (Thernstrom 1980:562-563).

In Idaho most of the early Japanese immigrants found work on the railroads. North Idaho's three transcontinental railroads employed Japanese because of their dependability. Large concentrations of Japanese laborers were reported in Bonners Ferry, Cocolalla and Seneaqueoten, Harrison, Mission, Naples, Post Falls, Priest River, and Sandpoint. In 1909, about 200 Japanese and Italians settled in St. Maries (Mercier and Simon-Smolinski 1990:57-58).

The Depression

Idaho was one of the states most affected by the Great Depression of the 1930s. The three main economic supports of Idahoans had been agriculture, mining, and lumbering. With the substantial incentives of high prices and patriotic urgings during World War I, each of these activities was greatly expanded: new land was opened, mines were reopened, and forests were extensively exploited. "No sooner had this expansion taken place than the war ended, and with no planned withdrawal the result was catastrophic" (Arrington 1969:3). Idaho did not recover from the 1921 economic depression and, by the 1930s, the income of average Idahoans dropped by 49.3 percent. Prices for Idaho's wheat, cattle, sheep, and sugar beets declined dramatically and there was virtually no demand for lumber. The total production of mineral products declined to the lowest in the twentieth century; from \$32 million in 1929 to less than \$10 million in 1933 (Arrington 1969:4).

When relief programs were organized under the New Deal, Idaho ranked eighth of the forty-eight states in expenditures by agencies. The agencies included the Rural Electrification Administration, Civilian Conservation Corps, Civil Works Administration, Federal Emergency Relief, Reconstruction Finance Corporation, and Works Progress Administration. Within these agencies were offered unemployment relief, agricultural loans and benefits, programs for youth, social welfare assistance, works programs, and lending programs.

From 1933 to 1939, Idaho received, from federal agencies, grants of \$209 million and loans of \$112 million, for a total federal assistance of \$321 million (Arrington 1969:3,7). Through the Depression, Works programs (Public Roads, Public Works, and Work Projects administrations) and Youth Programs (Civilian Conservation Corps, Indian Civilian Conservation Corps, and National Youth Administration) had significant impacts on the state. Idaho workers constructed educational buildings, airports, public buildings, sewer systems for several dozen cities, municipal waterworks for other cities, and hundreds of athletic fields, fairgrounds, and parks throughout the state. The Civilian Conservation Corps provided healthful and productive outdoor labor for almost 20,000 sons of poor families, while the National Youth Administration provided part-time employment for some 5,000 needy school and college students (Arrington 1969:8).

Works Programs

Public Roads Administration

The Public Roads Administration was a road building program organized to provide employment and also to build integrated systems of state highways and secondary roads. Through this program, federal funds were available for the elimination of railroad grade-crossing hazards, the reconditioning of feeder or secondary roads, and the improvement of main trunk highways. In Idaho, from 1933 through 1939, work was completed on 1,650 miles of roads. Total federal expenditures were \$15 million for highways and \$2 million for grade crossings (Arrington 1994:64).

Public Works Administration

The Public Works Administration was another program established to stimulate industry and provide employment by making funds available for construction costs. Funds were provided for streets and highways, sewers and waterworks, administrative and school buildings, flood control and reclamation, and improvements on federal lands. The Forest Service received funds, \$5.6 million, for the construction of forest highways, roads, and physical improvements in Idaho's national forests as a means to stimulate the state's tourism (Arrington 1994:64-65).

Works Progress Administration

The Works Progress Administration (WPA) (changed to Works Projects Administration in 1939) was a work-relief program where projects were planned and sponsored by the areas in which they took place. In 1939, 8,574 individuals in Idaho were working on such projects. "Among the major accomplishments of the WPA in Idaho were the construction of 125 public buildings and the modernization and improvement of 90 others, including 43 schools. In addition 1,484 miles of highways, roads, and streets in the state were extended or improved. The WPA also constructed and/or repaired more than 1,800 culverts and 400 bridges" (Arrington 1994:66).

"The Works Progress Administration employed hundreds of local men in various projects which improved recreational opportunities in northern Idaho. Crews in Coeur d'Alene leveled an abandoned mill on the shore of the lake, converting the land into the county fairgrounds complete with racetrack, bleachers, and buildings. They also built a yacht basin with sixty boat slops, improved hiking trails on Tubbs Hill, and constructed a community center. WPA labor built a community hall in Sandpoint as well, although the primary project there centered on the beach. While the local taxpayers approved a \$17,000 bond to purchase equipment, the WPA contributed \$61,000 of labor to dredge the beach...In addition, crews built docks, a roadway, and a bathhouse" (Renk 1992:142-143).

Youth Programs

Civilian Conservation Corps

In the early 1930s a large number of young people were without work and the nation's natural resources were suffering from several generations of extensive use. The 800,000,000 acres of the nation's timber resources had been reduced to only 100,000,000 acres of virgin timber. Furthermore, forest destruction had caused increasing problems of soil erosion (Salmond 1967:4). On April 5, 1933, President Franklin Roosevelt established the Civilian Conservation Corps (CCC), designed to create labor opportunities for the unemployed youth and to conserve the nation's dwindling natural resources. "The goal was to conserve young men physically and psychologically, but also to conserve the nation's natural resources" (Arrington 1994:56). The dual nature of the CCC was the conservation of land and forests, and the conservation of the young men who served in the program. The CCC would employ young people and they would protect and improve the forests (Austin 1983:13).

The CCC also had an educational component. Vocational and academic courses were offered ranging from wood chopping to philosophy and world history (Salmond 1967:53). Auto mechanics, as well as recreational classes, such as photography and leather craft, were also offered. The educational component was added to the program to provide both a high-school education and specific job-related skills (Morton-Keithley 1998:14).

North Idaho was part of the Ninth Corps Area of the CCC which was headquartered in San Francisco. More specifically, this area was part of the Ft. George Wright District headquartered in Spokane. The boundary of this district extended from the Canadian border to just south of Moscow, Idaho (Hudson et al. 1981:251).

Enrollees

The men of the CCC were 18-25 years of age with families on the public relief rolls (Salmond 1967:30). To join, they had to be physically fit; unemployed; unmarried, with dependents; and willing to allot \$22 to \$25 of their \$30 per month wages to their dependents. At the end of six years of the program, the number of individuals with experience in CCC camps reached 2,500,000 (Merrill 1981:11).

In Idaho, by September 30, 1937 the aggregate number of Idaho men employed by the CCC was 28,074, while the number of individuals who worked in Idaho regardless of the state of origin was 86,775 (Merrill 1981:124). During the years of CCC work, Idaho averaged less than 2500 enrollees per year from within the state—just over 20,000. About one third of the total number of people employed in and by the CCC in Idaho was drawn from within the state; most of the enrollees who worked in the region were from New York, New England, Pennsylvania, New Jersey, Kentucky, Tennessee, and the Middle West (Austin 1983:14). Camps established in a state depended upon the number of enrollees from that state and the number of projects which a state had readily available. Since there were not enough projects in the east to take care of all the eastern men, many eastern youths were sent west (Merrill 1981:15).

Camps

The number of buildings constructed within a CCC camp varied from one state to another, though each camp usually consisted of four or five barrack buildings, one hundred feet long by twenty feet wide, along with a mess hall, a recreation hall, administration buildings, officers' quarters, a hospital, a garage, and often a schoolhouse (Salmond 1967:136). Other buildings might include a small garage, tool shed, and machine shop (Merrill 1981:16). The buildings usually lay in an approximate "U" shape around an open space which was either planted to grass or cleared for sports purposes (Salmond 1967:136)

In early camps, the buildings were solidly constructed, usually of cedar, and could not be dismantled easily once the camp had finished its project. In 1936 a change was made and all future CCC camps were to be of a pre-cut portable variety, of standard design, easily dismantled at the end of a work project, ready to be transported and set up wherever a new camp was authorized. Camps became standardized, with each having four barracks buildings, a mess hall, schoolhouse, bath houses, one latrine block, and officers' and service buildings. "Though the camp buildings henceforth conformed to a standard plan, the way they were situated depended on the type of country in which the camp was located. There were about fifty ways that the basic functional plan could be altered, depending on the particular contours of the terrain" (Salmond 1967:136).

Between the barracks the enrollees constructed gravel paths and on the grounds they built rustic gates and railings, planted trees, and added swimming pools, outdoor amphitheaters, fishponds, or flower gardens (Salmond 1967:137).

Side (or spike) camps were small subcamps set apart from the main site. These were in locations where there was too much travel time to and from the main camp (Merrill 1981:16). "Without such camps, much work, peripheral to the main project but important nevertheless, could not have been undertaken because of the distances involved" (Salmond 1967:46).

Idaho had more camps than any other state, except California, and ranked second in per capita expenditure for the CCC. By December of 1940, 87 CCC camps had been established throughout the north Idaho counties of Benewah, Bonner, Boundary, Clearwater, Kootenai, Latah, and Shoshone (Hudson et al. 1981:Appendix E).

About 1000 men lived in camps up and down the St. Joe Valley. CCC camps were located at Bond Creek (St. Joe City), Falls Creek, Big Creek (Herrick), Spring Creek, Marble Creek, Hoyt Flat, Avery, Tin Can Flat, and Conrad's Crossing with spike camps at Bathtub, Bird Creek, Turner Flat, and Roundtop. Each camp had between 120 and 500 men. Most of the men were from New York, New Jersey, and Arkansas (Crowell and Asleson 1980:118-119).

Projects

The Civil Conservation Corps worked for Bureaus and Offices of the Department of the Interior which included the National Park Service, Office of Indian Affairs, Bureau of Land Reclamation, General Land Office, and the Grazing Service (Merrill 1981:28).

Within the Department of Agriculture, the U.S. Forest Service, with National Forests, Experiment Stations, and State and Private Forests; and the Soil Conservation Service, were major employers of the CCC (Merrill 1981:32).

The CCC was known as "Roosevelt's Tree Army" and about 75 per cent of all CCC camps worked on projects administered by the Department of Agriculture. Of these, more than half were located in national, state, or private forests, under the direction of the United States Forest Service and can be divided into two broad categories: forest protection and forest improvement (Salmond 1967:121).

Forest protection included the fighting or prevention of forest fires. "Tangible accomplishments of the Corps in the field of fire prevention were the construction of roads, trails, telephone lines, and lookout towers which facilitated communication between fire-fighting units and enabled men, supplies, and equipment to be transported faster" (Salmond 1967:121). Other forest protection work included prevention of disease and insects. The CCC helped control the severity of blister rust in white pine regions,

pulling by hand, currants, gooseberry bushes, and other plants which were alternate hosts of the disease that spread between trees (Salmond 1967:122). The Idaho CCC enrollees pulled several hundred thousand acres of currant and gooseberry bushes fighting white pine blister rust (Merrill 1981:125). The bark beetle, destroying more than five billion feet of standing timber annually, was deterred when CCC enrollees cut down infected trees (Salmond 1967:122).

One of most important of forest improvement projects undertaken by the CCC was reforestation. Other projects included the construction of roads and trails, which opened up areas to timber utilization, and numerous structural additions such as warehouses, garages, overnight cabins, shelters, tool houses, and storage boxes contributing to the efficiency of forest management. Hundreds of new campgrounds were established in public forests (Salmond 1967:123).

The CCC also improved grazing land by planting grass on thousands of acres, digging new water holes, building storage dams for stocking water, and constructing fences and bridges. For the Soil Conservation Corps, the CCC developed and improved erosion control techniques, worked with private landowners, and demonstrated practical methods of soil conservation. Bureau of Reclamation Department projects included irrigation projects, especially dam and canal construction (Salmond 1967:124-125).

Idaho's abundant forests ranked it second among all of the states in CCC programs with an expenditure of \$57 million (Arrington 1994:57). By September 30, 1937, the work accomplished in the state by the CCC included (Merrill 1981:124-125):

236	lookout houses and towers built
91	impounding and large diversion dams constructed
3,034 miles	telephone lines
28,614,000	trees planted
484,149 days	fighting forest fires
641,464 acres	tree and plant disease and insect pest control
4,049,971 acres	rodent and predatory animal control

“Although most of their work in northern Idaho focused on blister rust control, road building, replanting, and fire prevention, some crews also worked to improve recreational facilities. Camp F-142, located at Kalispell Bay on Priest Lake, instituted a five-year program early in 1935 which included extensive work on the campground and construction of an access road along the lakeshore” (Renk 1992:144).

In October of 1934, 200 CCC enrollees moved into Idaho's Heyburn State Park and began a park improvement program. “Their stint at Heyburn was scheduled to end in six months but stretched into several years, and the project scope expanded to include picnic and camping areas, water and sanitation facilities, and rock park buildings” (Renk 1992:143). Over seven years, with several hundred thousand dollars, and working at

three major sites in the park, the CCC enrollees built fire circles, boat landing slips, swimming rafts, bathhouses, seats along the lake shore, picnic grounds and tables, parking areas, community kitchens, toilet facilities, two caretakers' houses, a lodge, campsites with fireplaces, roads, and water systems (Austin 1983:15). The work was carried out under direction of the National Park Service's San Francisco office. The restrooms and the lodge at Rocky Point are still in use (Merrill 1981:125).

In the St. Joe Valley the CCC work projects provided much needed roads and bridges, including a road from Avery to St. Maries and Fishhook Tunnel. "In addition to fire control work, the Corps was responsible for major road-building projects, and because of that, it probably had more of an impact than any other single agency in the history of the St. Joe" (Crowell and Asleson 1980:118). The entire Red Ives campground was built by the CCC and the road connecting Avery and Red Ives was completed in 1938 (Crowell and Asleson 1980:118-119).

The need for the CCC began to decrease with the recovery of the economy and the onset of World War II. In June of 1942 the Civilian Conservation Corps program came to an end.

"Between 1991 and 1995, the Idaho Oral History Center made a concerted effort to conduct interviews with former CCC enrollees and staff members who served in Idaho...At the same time, the Society's Library and Archives collected a large number of written reminiscences, photographs, and camp newsletters and yearbooks relating to the CCC experience in Idaho" (Morton-Keithley 1998:14). In addition, a set of CCC photographs at the Idaho State Historical Society, taken by Dale Walden as he visited camps as an auditor for the Boise District of the CCC, show what regular and "spike" camps looked like—inside and out (Austin 1983:17).

Indian Civilian Conservation Corps

On April 14, 1933, the program of the CCC was extended to American Indians, and their reservations, where programs were designed to accomplish physical improvement and natural resource development. The Office of Indian Affairs in the Department of the Interior selected the men and administered the work. Few camps were established as most enrollees were married and allowed to work from their homes. A unique feature of the Indian program was the participation of the tribal council in the administration with a wide latitude in the selection of work projects (Salmond 1967:31).

"The work programs were designed primarily by Indian leaders on the reservations in the interest of improving their land, water, and forests. The enrollees constructed telephone lines, fire breaks, truck trails, vehicle bridges, horse trails, reservoirs, springs and wells, and range fences, and worked on erosion control and grasshopper and rodent

eradication—all on the reservations. The young men were also required to spend ten hours per week in educational and vocational training: arts and crafts, farm and home carpentry, range and livestock management, health, masonry, and poultry raising” (Arrington 1994:58).

Work on the reservations is considered one of the most successful aspects of the CCC program (Salmond 1967:34). By the end of the CCC program, 88,349 had participated in numerous projects undertaken on a portion of the 50 million acres of Indian lands on over 200 reservations in 23 states (Merrill 1981:31; Salmond 1967:34). In Idaho, from 1933 to 1942, 1,038 Indians were employed by the Indian CCC (Arrington 1994:58).

National Youth Administration

The National Youth Administration (NYA) was established in June 1935 by executive order and continued into the war period. The NYA focused on education funding and a total of 5,000 Idaho youths from 16 to 24 were employed on NYA work programs. Students whose families could not pay their school expenses were eligible. The NYA granted money to schools and colleges to provide students with work to cover their necessary expenses (Arrington 1994:59).

World Wars

World War I

"Unlike the neighboring states of Oregon and Washington, Idaho did not develop large-scale industries as a result of World War I. Instead, the Gem State contributed mainly the traditional products of its fields, forests, and mines and some twenty thousand of its young people for military duty" (Schwantes 1991:184). The three main economic supports of Idahoans had been agriculture, mining, and lumbering. With the substantial incentives of high prices and patriotic urgings during World War I, each of these activities was greatly expanded: new land was opened, mines were reopened, and forests were extensively exploited (Arrington 1969:3). Idahoans produced food for troops and wool for clothes. Forests supplied white pine for aircraft construction and mines provided lead and other vital minerals (Schwantes 1991:185).

World War II

Idaho's contribution to the Second World War was similar to that of the first: raw materials of food, timber, and metal (Schwantes 1991:214). "Idaho supplied beef, mutton, pork, turkey, chicken, eggs, and huge quantities of potatoes, beans, peas, onions, sweet corn, and carrots; apples, prunes, peaches, and cherries; milk, cheese, and butter. Idaho lumber was used to build military bases, ships, airplanes, boxes, and crates. During 1942, mills at Potlatch, Coeur d'Alene and Lewiston produced 427 million board feet of lumber principally Idaho white pine and yellow (ponderosa) pine, for the war effort. Idaho lead was used in making bullets and batteries, zinc was used in making brass

cartridge cases, and mercury exploded the percussion caps. Idaho antimony contributed metal ingredients in every tire. Idaho silver helped make silver alloy bearings...” (Arrington 1994:81).

Approximately 39,000 young men and 818 young women from Idaho served in the Army and Air Corps while 21,115 Idahoans joined the Navy, Marine Corps, and Coast Guard (Arrington 1994:80). Throughout the Pacific Northwest there was a redistribution of population with major moves into the industrial urban areas of Oregon and Washington where the war effort was continued in shipyards, plants producing airplanes, and facilities for manufacturing wartime chemical, aluminum, steel, and other products. The movement of people into the armed forces and to the boom areas contributed to stationary or declining populations in agricultural areas east of the Cascades. Idaho lost 15,000 residents between 1940 and 1945, while Oregon gained nearly 200,000 new residents and Washington’s population increased by 533,000 (Schwantes 1986:6-7).

In north Idaho, the U.S. Navy established Farragut Naval Base on Lake Pend Oreille. When Idaho was selected for two major, and about sixteen minor, German and Italian prisoner-of-war camps, Farragut became the location of a German prisoner of war camp (Arrington 1994:82; Busco and Alder 1971). The War Location Authority established ten relocation camps for Japanese in the United States, among them, southern Idaho’s Minidoka Relocation Center at Hunt, Idaho, near Twin Falls (Sims 1978). In addition, the Immigration and Naturalization Service (INS) established detention facilities for “enemy aliens” of Japanese ancestry, one of which was located near Kooskia, Idaho (Wegars 2001, 2002).

Farragut Naval Base

As part of its defense preparations for World War II, “the U.S. Navy acquired land near Buttonhook and Scenic bays on the southern end of Lake Pend Oreille, consolidated its holdings through condemnation, and constructed Farragut Naval Base” (Arrington 1994:78). Twenty five miles from Coeur d’Alene, the Lake’s massive size and depth made it suitable for submarine research and training (Derig 1996:337). The base became the largest inland naval base in the world with a capacity to handle 30,000 recruits at a time (Schwantes 1991:215). “During the war, Farragut Naval Base was called “Idaho’s largest city” (Brosnan 1948:373). The base operated in 1942-1943 as a naval training center and was used as a “boot camp” for preliminary instruction of naval enrollees. The base covered 4,050 acres and had 771 buildings (Brosnan 1948:373).

Construction of Farragut began in April of 1942, when 22,000 men were assigned to the base. “The navy built Farragut Village to house about two thousand civilian workers and their families. It had 115 buildings including apartments and dormitories, a five-hundred-seat auditorium for showing movies and holding church services, a school with grades one through eight, a dispensary, infirmary, beauty and barber shop, telephone exchange, post office and telegraph office and cafeteria” (Dahlgren and Kincaid 1996:95). Workers

proceeded to spend 10-hours each day, thirteen out of fourteen days, to build six camps at Farragut that would each house, feed, and train 5,000 men. The camp buildings surrounded a drill field in an oval layout. When completed, the base held twenty-two two-story barracks, a central mess hall, two dispensaries, recreation facilities, and store buildings, an indoor rifle range, and a drill hall with six basketball courts and a 75-foot square swimming pool (Arrington 1994:79; Loftus 1989:18-19).

Four months after construction began, the first naval personnel arrived and within six months six training camps were opened: Camp Bennion, Camp Ward, Camp Waldron, Camp Hill, Camp Scott, and Camp Peterson. Within fifteen months, approximately 300,000 sailors had passed through basic training (Arrington 1994:78-79; Loftus 1989:19).

The last recruit of the Farragut Naval Base graduated in March 1945 (Conley 1982:291). The base was decommissioned in June, 1946. In October of that year, Farragut College and Technical Institute was established at the base, with fifty faculty members, to relieve the shortage of higher educational facilities for veterans. The college continued to 1949 (Arrington 1994:79; Brosnan 1948:373). In 1950 the area was declared surplus and materials and equipment were sold through the General Services Administration. The Idaho Fish and Game Department then assumed control of the site and it became the Farragut Wildlife Management Area (Glans 1992).

In 1965 the naval base was designated as Farragut State Park (Arrington 1994:79). On March 9, 1966 the Idaho Department of Parks, now Department of Parks and Recreation, took control of the area (Glans 1992:np). Today, Farragut State Park has facilities for picnicking, camping, swimming, boating, fishing, bicycling, snowmobiling, and Frisbee golf. The park has also been the location every September, for nearly two decades, of the Farragut Naval Training Station Annual Reunion Celebration.

Although Farragut was decommissioned, the Navy has not abandoned Lake Pend Oreille. Secret naval research on a 90-foot prototype of the Seawolf submarine continues at nearby Bayview. Four barges anchored off Bayview are naval property and support the David W. Taylor Research Center, which tests small, electronically controlled submarines. Lake Pend Oreille's over 1,000 ft. depth and landlocked security make it ideal for such testing (Conley 1982:292; Loftus 1989:19).

Farragut Prisoner of War Camp

The 1929 treaty of the Geneva Convention, signed by forty-seven nations, provided that "prisoners of war should receive humane treatment, protection of their persons, adequate housing and food, intellectual and physical diversion, and the right to elect spokesmen. Signatory nations agreed not to employ prisoners of war in military work or in the production of war materials, but they were allowed to require the men to work in other

vocations. The Geneva conventions further stipulated that prisoners be interned away from combat areas. During World War II the American continent offered the advantage of remoteness where captured soldiers could be guarded with minimal effort" (Busco and Alder 1971:56).

The Geneva Convention further prescribed that prisoners of war would be lodged in buildings or barracks; would receive food equal in quantity and quality to that of the U.S. troops; would have all necessary medical and hospital treatment; and could organize sports activities and educational programs (Busco and Alder 1971:57-61).

The United States government used prisoners to alleviate the acute labor shortage on the home front with 141 base camps and 313 dependent branches in the nation (Busco and Alder 1971:71, 57). Idaho was well suited for internment sites because of its inland location, agricultural economy, and remoteness from industrial areas. Nine base camps and 21 branches were located in Utah and Idaho. The greatest number of prisoners at any one time in the United States was 425,806. Of these, nearly 12,000 men were allocated to base camps in Idaho and Utah (Busco and Alder 1971:57).

Idaho had been selected for two major German and Italian prisoner-of-war camps and sixteen base camps. One large camp was located at Farragut Naval Base; the other was at Rupert. "Branch camps were located at Rexburg, Sugar City, Rigby, Idaho Falls, Shelley, Blackfoot, Thomas, Fort Hall, Pocatello Army Air Force Base, Preston, Franklin, Filer, Marsing, Payette, Upper Deer Flat, and Wilder" (Arrington 1994:82-83).

Approximately 850 German prisoners of war were allocated to north Idaho's Farragut Naval Base where they were employed as gardeners and maintenance men (Arrington 1994:82). At Farragut, as at other camps, the prisoner-of-war food was to be equal in quantity and quality to that given U.S. troops in the field and hospital and medical treatment was provided at the Farragut base hospital (Arrington 1994:83). At the end of the war, prisoners were sent home in accordance with the War Department plans for every prisoner to be returned to his own country (Busco and Alder 1971:71).

Resource Preservation and Management

Natural Resources

At the end of the nineteenth century a conservation movement began to emerge in the United States which resulted in a shift in Federal land management priorities marked by the creation of the first national forests, wildlife refuges, and parks. Recognizing the resource values of federal lands, Congress sought new policies withdrawing these lands from settlement and setting them aside for public ownership.

In Idaho, nearly all of the major mountain ranges are public domain. Lands of the National Forest Service (NFS) and the Bureau of Land Management (BLM), plus other federal land holdings, make up 65 percent of the state--second only to Nevada in

percentage of public land among the western states in the lower 48 states. The U.S. Forest Service manages 20,353,874 acres of 53 million total acres--more than a third. Another 12,113,193 acres are controlled by the BLM, and 2.5 million acres are divided up among other federal agencies (Wuerthner 1986:6).

Forest Lands

Early in the 1890s an awareness of the growing scarcity of timber resources, especially in the eastern states, resulted in legislation for federal control of forest lands—"a policy of permanent reservation in federal ownership of substantial areas of public land" (Clawson 1971:17). The Forest Reserve Act of 1891 permitted the President to set aside forest lands in any state or territory, at any time, as public reserve, closed to cutting and other uses. "The passage of the Forest Reserves Act of 1891 provided the first comprehensive vehicle by which wilderness could be initially protected" (Robinson 1975:155).

The first forest created under the new act in 1891 was the Yellowstone Park Timberland Reserve. In 1896 President Cleveland set aside seventeen forest areas throughout the United States as "Forest Reserves" (Brosnan 1948:112). The following year, Cleveland set aside the Priest River Forest Reserve, creating the first public forest lands in northeastern Washington and northern Idaho (Hudson et al. 1980:237).

When Theodore Roosevelt became president in 1901, he brought with him a philosophy of conservation which was to provide the greatest good for the greatest number for the longest time. This philosophy called for developing public lands in a manner that promoted the best and highest use of resources (Muhn and Stuart 1988:29).

In 1905 the National Forest Service was established as a branch of the United States Department of Agriculture for the administration and management of the forest reserves. For the next five years, substantial withdrawals of forest land were made and by 1910 the acreage of national forests was about as large as today (Clawson 1971:17-18). In 1907 these reserves became National Forests. Much of Idaho's national forest land was created by Theodore Roosevelt with an interest in preserving the west (Arrington 1994:148-150).

Nearly 40% of Idaho is national forest land (Fisher 1983:17). Idaho has more than 21 million acres of forest land and today, Idaho's national forests include the Bitterroot, Boise, Caribou, Clearwater, Nez Perce, Idaho Panhandle:Coer d'Alene-Kaniksu-St. Joe, Payette, Salmon-Challis, Sawtooth, and Targhee (State of Idaho 2001-2002). "Under the direction of the Forest Service, the goal is multiple use of Idaho's forest resources, with sustained yields of wood, water, forage, wildlife, and recreation" (Arrington 1994:148-150). Recreational developments within the National Forests present opportunities for camping, hunting, fishing, hiking, and winter sports and trail systems and camp sites have been extensively developed by the Forest Service.

Wilderness/Recreation Areas

“Idaho is home to the largest wilderness area and the most miles of wild rivers of any of the lower 48 states” (London and Powell 1994:xi). Thousands of acres in Idaho have been set aside as primitive, recreation, and wilderness areas.

Primitive Area Act of 1931

In 1931, the Primitive Area Act was passed for the purpose of conserving the primitive conditions of the environment and making it possible for people to detach themselves from the strain of modern living. The primitive areas, with the building of roads and permanent camps prohibited, would offer opportunities for physical, mental, and spiritual recreation. In Idaho, one and a quarter million acres of the southern watershed of the Salmon River was designated as a primitive area. Other primitive areas created were the Sawtooth and the Selway-Bitterroot (Beal and Wells 1959:379-380).

National Recreation Area Act of 1962

Congress passed the National Recreation Area Act in 1962 to help preserve and expand outdoor recreation opportunities throughout the nation (Arrington 1994:150). Idaho’s Recreation areas are the Sawtooth National Recreation Area and Hells Canyon National Recreation Area (London and Powell 1994:54-56).

National Wilderness Act of 1964

The 1964 National Wilderness Act set aside undeveloped federal land so that selected areas would remain unaffected by humanity. These lands could be visited, but not settled. The Wilderness Act defines wilderness as an area of undeveloped federal land, usually 5,000 acres or more, in a substantially natural condition. The wilderness area is without permanent improvements or human habitation, and has outstanding opportunities for solitude or a primitive and unconfined type of recreation (State of Idaho 2001-2002). Lands with wilderness status are withdrawn from timber harvesting, road building, other commercial activities, and other uses not compatible with the wilderness (Robinson 1975:159). The wilderness regions set aside might contain ecological, biological, scenic, or historical features and values (Arrington 1994:152).

The Selway-Bitterroot Wilderness Area was established in 1964 (London and Powell 1994:43). Three additional wilderness areas were created in Idaho in the 1970s: Sawtooth Wilderness Area (1972), Hells Canyon Wilderness Area (1976), and Gospel Hump Wilderness Area (1978). In 1980, the River of No Return Wilderness Area became the largest wilderness area in the lower 48 states and in 1984, became known as the Frank Church-River of No Return Wilderness Area (United States Department of Agriculture 1989:np).

Wild and Scenic Rivers Act of 1968

With the passage of the Wild and Scenic Rivers Act in 1968 came the preservation of the country’s spectacular free-flowing rivers. The Act permitted State Legislatures and the

U.S. Congress to designate certain rivers wild and scenic. Rivers could be deemed wild and scenic because of their remarkable scenery, recreational opportunities, geology, fish and wildlife, history, or cultural significance in their natural free-flowing condition (Arrington 1994:153).

Wild rivers are those rivers, or sections of rivers, free of impoundment and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and water unpolluted. Scenic rivers are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. Recreation rivers are defined as those rivers, or sections of rivers, that are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundment or diversion in the past (Idaho Department of Parks and Recreation 1977).

In Idaho, nine rivers have been designated as Wild and Scenic: the St. Joe, Lochsa, Selway, Middle Fork of the Clearwater, Main Salmon, Middle Fork of the Salmon, Rapid, West Fork of the Rapid, and part of the Snake.

The St. Joe River has 27 miles designated as Wild: from St. Joe Lake downstream to Spruce Tree Campground. From Spruce Tree Campground, 40 miles downstream to the confluence with the North Fork of the St. Joe, the river is designated Recreational (State of Idaho 2001-2002).

National Environmental Policy Act of 1969

In addition to wilderness and recreation areas established by federal legislation in the 1960s, the strength of the environmental movement was reflected in the National Environmental Policy Act of 1969. Signed by President Nixon on January 1, 1970, the National Environmental Policy Act (NEPA) "recognized that federal actions had impacts on the environment and required that they be analyzed before management decisions were made. The act established protection of the environment as a national goal and encouraged federal agencies to set up environmental education programs" (Muhn and Stuart 1988:158). The National Environmental Policy Act made protection of the environment a national priority by requiring all federal agencies to assess the impacts of their actions on the surroundings and to mitigate adverse effects (Arrington 1994:153). It required federal agencies to consider potential impacts from proposed major actions (Muhn and Stuart 1988:162).

State Parks

A state park system was established in Idaho in 1965 and, since that time, more than twenty parks have been established and are administered by the Idaho Department of Parks and Recreation (Arrington 1994:154). The parks department was charged with the "conservation and protection of certain areas of outstanding beauty, unusual geological

formation, historical setting and places closely related to early Idaho development, as well as recreation areas that are worthy and considered necessary for health, comfort and contentment of the people" (Woods 1991:57).

Idaho's first park, and the first park of the Pacific Northwest, was Heyburn State Park in north Idaho established in 1908 with over 7,800 acres set aside for public use. Additional state parks created in north and central Idaho include: Priest Lake, Round Lake, Farragut, Old Mission, Mowry, Mary Minerva McCroskey, Dworshak, Hells Gate, Winchester Lake, Packer John, and Ponderosa. Those within the vicinity of the BLM's Coeur d'Alene Field Office include Priest Lake, Round Lake, Farragut, Heyburn, Old Mission, Mowry, and Mary Minerva McCroskey.

Priest Lake State Park

Idaho's northernmost state park is Priest Lake State Park near Bonners Ferry. The park is situated on the least developed of north Idaho's major lakes and includes 26,000 acres extending 25 miles in length, offering picnicking, camping, swimming, boating, and hiking. Historically, Indians fished at the mouth of Indian Creek, gold prospectors moved through the area in the 1800s, a movie company filmed on location here in the 1920s, and a Diamond Match Company floating logging camp was in existence during the 1940s and 1950s (Loftus 1989:5-11).

During the winter months of 1921-1922, Nell Shipman, silent screen actress, writer, and producer, built a movie camp she named "Lionhead Lodge" on the south side of Mosquito Bay on Priest Lake. "For the following four years, the Lodge served as her headquarters, home, and office. Shelters were built for members of her crew, as well as for her two dog teams several horses, and pens for zoo animals" (Simpson 1981:197). Shipman's *Grubstake* was filmed in Minnehaha Studio in Spokane and at Priest Lake in 1922. In 1923, a series of short films, *Little Dramas of the Big Places*, were produced at Priest Lake. Two, of the original several, have survived: *The Light on Lookout* and *The Trail of the North Wind*. Shipman left Priest Lake bankrupt and her animals were relocated to the San Diego Zoo (Peters 1976; Shipman 1987).

Round Lake State Park

Just off US 95 ten miles south of Sandpoint, Round Lake State Park's visitor center was built in 1926 (Loftus 1989:12-15) and today the park contains 53 campsites, boat ramp, docks, rest rooms (London and Powell 1994:21) and offers hiking, bird watching, camping, and boating around the glacier made lake (Loftus 1989:12-13).

Farragut State Park

Twenty five miles north of Coeur d'Alene, on the southern tip of Lake Pend Oreille, is the 2,700 acre preserve of Farragut State Park with facilities for swimming, boating, fishing, bicycling, snowmobiling, and Frisbee golf. In 1942 this area was chosen as the site for the Farragut Naval Training Center and became the largest city in Idaho at the time. The camp was decommissioned in June 1946. After the camp closed, Farragut College and

Technical Institute was established at the site, closing in 1949 (Conley 1982:291). The area was then declared surplus and materials and equipment were sold through the General Services Administration. In 1950 the area became the Farragut Wildlife Management Area under the Idaho Fish and Game Department (Glans 1992:np). In 1964 the state legislature converted the 2,733 acres to Farragut State Park (Conley 1982:291).

Mowry State Park

Located on the western shore of Lake Coeur d'Alene, the 300-acre Mowry State Park is mainly accessed from the waters of Lake Coeur d'Alene with facilities for hiking, picnicking, camping, canoeing, and boating (Loftus 1989:28-31).

Old Mission State Park

At Cataldo, 27 miles east of Coeur d'Alene, this eighteen-acre park was established in 1975 and is the location of the Cataldo Mission of the Sacred Heart, one of Idaho's eight Registered National Landmarks, and the oldest building standing in Idaho. Completed in 1854, the mission served the Coeur d'Alene Indians and travelers through the area until 1877. By 1924 the church building had fallen into disuse and disrepair and the Jesuit Order deeded the property to the Diocese of Boise. In the early 1970s preservation work on the Mission was one the first projects of the Idaho Bicentennial Commission (Conley 1982:457).

Heyburn State Park

Idaho's first state park, Heyburn State Park, between Plummer and St. Maries, has 5,505 acres of land and 2,333 acres of water with three separate lakes--Chatcolet, Round, and Benewah (Conley 1982:44). First established in 1908 by Idaho Senator Weldon Heyburn to preserve the land from fragmentation by multiple owners, many of the park facilities were constructed in the 1930s by enrollees of the Civilian Conservation Corps (Loftus 1989:33-37).

Mary Minerva McCroskey Memorial State Reserve

Maintained as a primitive park of nearly 6,000 acres of unpopulated and undeveloped land, Mary Minerva McCroskey Memorial State Reserve, is located 27 miles north of Moscow. The land was donated in 1955 by Virgil McCroskey in memory of his mother and the park offers a near-wilderness experience with bird watching, picnicking, and hiking (Loftus 1989:38-41).

Cultural Resources

Beginning early in the twentieth century, along with an increased awareness of conserving and protecting natural resources, was a desire to preserve and protect cultural resources. The decades of the 1960s and 1970s brought a heightened awareness of the nation's cultural resources.

Antiquities Act of 1906

In 1906, the Antiquities Act became the means to "preserve and protect prehistoric, historic, and scientifically significant sites on public lands and to create national monuments" (Arrington 1994:150). With the Antiquities Act, any "historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest" were to be designated as national monuments. President Theodore Roosevelt created the first national monument that year. Ten years later, 35 natural and prehistoric sites had been set aside, ranging from one-half acre to nearly 300,000 acres (Muhn and Stuart 1988:31).

In north Idaho, the Nez Perce National Historical Park was created under the Antiquities Act. Authorized by Congress in 1965, the Nez Perce National Historical Park originally comprised 24 sites, four administered by the National Park Service and the remainder by State, tribal, local, or other federal agencies. The sites are found throughout an area covering some 12,000 square miles. "In an innovative partnership of federal and state agencies and private parties, the Nez Perce National Historical Park protects twenty-four notable areas in north central Idaho that retrace the history of the Nez Perce Indians, the Lewis and Clark Expedition, and other events in early Idaho history" (Arrington 1994:150). Since its creation the park has grown to include additional historic sites in Montana, Oregon, and Washington.

Idaho State Historical Society

The Idaho State Historical Society was established as a state agency by Idaho's Ninth Legislature in 1907. The Society's mission was "to educate through the identification, preservation, and interpretation of Idaho's cultural heritage" (Idaho State Historical Society 2004).

Since 1971, the State Historic Preservation Office (SHPO) has been a division of the Idaho State Historical Society with a staff of professional resource managers including State Historic Preservation Officer, the Deputy SHPO, Grants Manager, Architectural Historian, Historic Preservation Planner, Staff Archaeologist/Education Coordinator, Curator of Archaeology, Archaeological Sites and Collections Coordinator, and Historic Sites Registrar. The SHPO program has six major areas of operation and includes the National Register of Historic Places program, State Historic and Archaeological Sites Inventories, Certified Local Government grants management, Preservation Planning, Tax Incentives, and Federal Historic Preservation Project Review (Idaho State Historical Society 2004).

National Historic Preservation Act of 1966

With the National Historic Preservation Act of 1966 came the responsibility to protect prehistoric and historic properties of regional and local importance. At this time the National Register of Historic Places (NRHP) was created to recognize and document

buildings, structures, or places (historic or archaeological sites) of importance to history or prehistory. "Many Idaho properties, including homes, businesses, and historic structures have now been nominated by the Idaho State Historical Society and certified by the Park Service as National Register Sites" (Arrington 1994:153). Today, more than 900 Idaho properties are listed on the National Register (Idaho State Historical Society 2004).

North Idaho has three National Historic Landmarks: Cataldo Mission, the oldest surviving church in Pacific Northwest; Lolo Trail, the most difficult stretch of route traveled by Lewis and Clark; and Weippe Prairie, with three historic campsites of the Lewis and Clark Expedition (State of Idaho 2001-2002).

Executive Order 11593

In the early 1970s, most federal land managing agencies thought that the NHPA applied only to nonfederal cultural resources affected by federally aided construction such as highways, dams, and urban renewal projects. In 1971 President Nixon issued Executive Order 11593 and informed federal land-managing agencies that they too were obliged to protect cultural resources. Agencies were now required to inventory and evaluate all significant culture resources under their jurisdiction within two years, and protect them (Muhn and Stuart 1988:202).

Federal Land Policy and Management Act of 1976

In 1976 Congress passed the Federal Land Policy and Management Act (FLPMA), which "directed federal agencies to retain public lands under federal sponsorship and to provide for the multiple use and sustained-yield management of public lands and resources through land-use planning" (Arrington 1994:153). The FLPMA reemphasized the message of Executive Order 11593 naming cultural resources among the responsibilities of agencies and focusing on the role of inventory in planning and management (Muhn and Stuart 1988:203).

American Indian Religious Freedom Act of 1978

Other historically and archaeologically important legislation of the 1970s were the American Indian Religious Freedom Act of 1978 and the Archaeological Resources Protection Act of 1979. The American Indian Religious Freedom Act, established, as the policy of the United States, "to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including, but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."

Archaeological Resources Protection Act of 1979

The Archaeological Resources Protection Act (ARPA) prohibited trafficking and possession, in addition to unauthorized excavation and removal, of cultural items from federal land. Addressing dealers and collectors, as well as diggers, such offenses would now be felonies rather than misdemeanors as they had been under the Antiquities Act (Muhn and Stuart 1988:203).

Native American Graves Protection and Repatriation Act of 1990

A bill mandating an intensive and continuing interaction between archaeologists and tribal representatives was passed in 1990 as the Native American Graves Protection and Repatriation Act (NAGPRA) and had its heaviest impact on archaeologists working on federal or tribal lands (Thomas 2000:214). Signed into law P.L. 101-106 on November 16 by President George Bush, NAGPRA required all federal agencies, all museums which receive federal funding, and all universities, to conduct summaries and inventories of their collections for the purpose of identifying all Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, for the purpose of returning such remains and objects to Indian tribes for repatriation, permitting living Indians to exercise their traditional responsibilities toward the dead (Thomas 2000:214).

By 1993 all museums and universities receiving federal funds were to send a summary of Native American sacred and ceremonial objects and unassociated funerary items to Indian tribes potentially affiliated with those items. Two years later, the same institutions were required to file an inventory of Native American human remains and associated grave goods with culturally affiliated tribes (Thomas 2000:214).

The Bureau of Land Management

The Bureau of Land Management (BLM) is the nation's largest land manager with more than 450 million acres, two-thirds in Alaska, and nearly all the remainder in the eleven contiguous western states. Today's BLM was created in 1946, preceded by the General Land Office and the Grazing Service.

The General Land Office was established in 1812 by Congress as part of the Treasury Department to oversee the disposition of federal lands through exploration, survey, and settlement. "For the greater part of the nineteenth century, the General Land Office was the sole agency in charge of the federal lands and their disposition" (Clawson 1971:vii). The office was required to distribute and sell public lands as a source of revenue. In 1936 the General Land Office was reorganized and enlarged and was required to supervise the work of surveying offices (Clawson 1971:32). The number of land offices varied from year to year depending on the availability of public land. By the end of the nineteenth century a district office had been established in Spokane to handle the homestead and mining claims of the Inland Empire. An office was located in Coeur d'Alene for a time

in the late 1800s to assist miners and settlers in the area. There have been 360 District Land Offices established throughout the U.S. with the peak number of offices, 123, in 1890 (Hudson et al. 1981:254).

In 1934 the Taylor Grazing Act established the U. S. Grazing Service to manage the public rangelands. Under this act, grazing districts could be established by the Secretary of the Interior from vacant, unappropriated, and unreserved lands. The districts were established to manage grazing resources and limit the amount of grazing permitted on land to preserve productivity. These lands were under the jurisdiction of the General Land Office. The Division of Grazing was created within the office to administer grazing activities such as issuing licenses, conducting range surveys, and making range improvements (Clawson 1971:35).

The General Land Office and the Grazing Service were consolidated in 1946 into the Bureau of Land Management (BLM) within the Department of the Interior (Clawson 1971:38). Thirty years later, the BLM's unified legislative mandate was provided by the Federal Land Policy and Management Act (FLPMA) of 1976.

The FLPMA directed federal agencies to retain public lands under federal sponsorship and to provide for the multiple use and sustained-yield management of public lands and resources through land-use planning (Arrington 1994:153). Thus, a policy for management of BLM lands was established. BLM was granted a mission as FLPMA formally recognized what BLM had been doing for three decades: "managing the public lands under the principles of multiple use and sustained yield" (Muhn and Stuart 1988:158). Congress recognized the value of remaining public lands and declared that they would continue in public ownership. The newly created term "multiple use" management was defined as "management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people" (Bureau of Land Management 2003). The Act also granted BLM new authority and responsibilities, amended or repealed previous legislation, and prescribed specific management techniques (Muhn and Stuart 1988:158).

The BLM administers more than 270 million acres of public land, most in Alaska. "In managing these lands, BLM is guided by the principles of multiple use and sustained yield and a recognized need to protect and enhance the natural and human environment" (Muhn and Stuart 1988:xiii). The BLM owns timber, mineral, and grazing land. While revenues from grazing are only a small fraction of those from timber sales, and a tiny fraction of revenues from mineral leases, grazing has traditionally been the most widespread use of BLM lands. Outside of Alaska almost 90 percent of the BLM land is incorporated into grazing districts (Hudson et al. 1981:255). "The Bureau of Land Management administers 176 million acres of grazing land inside and outside grazing districts, sells about 1 billion board feet of timber annually from the forest lands it

manages, carries out environmental management programs, provides many and varied outdoor recreation areas to an increasing tide of visitors, issues noncompetitive and competitive oil, gas, and other mineral leases on public lands” (Clawson 1971:48).

Although the BLM is the major owner of land in the U.S., nearly all the lands are relatively poor in productive natural resources. Most of the BLM lands were public domain lands not reserved for national parks, forests, or other federal reserves such as wildlife refuges, military reservations, Indian reservations, reclamation lands. The best areas were either selected for reservation and withdrawal, or were homesteaded; what remains is land of limited economic value (Hudson et al. 1981:255). “Much of this land is mountainous or rough and broken, and much is arid or semiarid. The soils are usually thin, and sometimes easily erodable, as well...Although some of the land lies in large, unbroken tracts, it is more commonly in discontinuous areas as a result of the selective process of land disposal. Outside grazing districts, there are similar areas that are, by and large, even more splintered and scattered” (Clawson 1971:43).

Today, the BLM's task is to recognize the demands of public land users while addressing the needs of traditional user groups. “The American public values balanced use, conservation, environmental management, recreation, and tourism. Public lands are increasingly viewed from the perspective of the recreational opportunities they offer, their cultural resources, and--in an increasingly urban world--their vast open spaces. However, against this backdrop, the more traditional land uses of grazing, timber production, and mining are still in high demand...It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations” (Bureau of Land Management 2003).

In Idaho, the BLM manages 11.9 million acres of public land, most of which is concentrated in the southern part of the state. Every Idaho county contains some BLM-managed land, which accounts for 22 percent of the total Federal acreage within the state's borders (State of Idaho 2001-2002). The BLM's National Landscape Conservation System within Idaho includes:

National Conservation Area	1	(1.2 million acres)
Wilderness Study Areas	66	(1.7 million acres)
Wilderness Area	1	(802 acres)
National Historic Trails	4	(436 miles)
National Scenic Trails	1	(13 miles)

In the Coeur d'Alene Field Office Planning Area, 96,732 acres of land are managed by the BLM: Bonner County, 12,139 acres; Boundary County, 4,484 acres; Benewah County, 13,541 acres; Kootenai, 10,609 acres; and Shoshone, 55,959 acres (U.S. Department of the Interior 2004).

Cultural Resources

When Executive Order 11593 required agencies to inventory and evaluate all significant cultural resources under their jurisdiction, the BLM Service Center, expanding its ability to assist State Offices, added a historian and a second archaeologist to its staff. In 1974, when detailed National Historic Preservation regulations were published by the Advisory Council on Historic Preservation, BLM State Offices and a few Districts were staffed with cultural resource specialists by the end of the fiscal year (Muhn and Stuart 1988:202).

“Cultural specialists in the field were primarily responsible for inventories needed for land use plans or for proposed projects such as right-of-way applications, range improvements, mineral development, and other actions. Because locations were chosen for resource or engineering reasons, these new specialists visited places where archaeologists had never thought about going” (Muhn and Stuart 1988:202-203). As a result, archaeological and historic resources never before described or interpreted were discovered and it soon became evident that BLM lands held an abundance of cultural resources with an estimated 500,000 properties in 1977 (Muhn and Stuart 1988:203).

The message of Executive Order 11593 naming cultural resources among the BLM’s multiple use responsibilities and focusing on the role of inventory in planning and management was reemphasized by FLPMA in the mid-1970s and the Archaeological Resources Protection Act allowed BLM further authority to protect its cultural resources (Muhn and Stuart 1988:203). Determining how to manage the resources for the long term would come in the next decade.

“Prior to the 1980s, the idea of managing cultural resources in BLM was almost entirely tied to compliance with Section 106 of the National Historic Preservation Act and to assisting other BLM programs in fulfilling their objectives. As the Bureau’s compliance proficiency grew—the cultural resource program was able to focus on a more long-term, planning-based management model” (Muhn and Stuart 1988:251).

Program manuals adopted in 1978 emphasized that the cultural resources program, like other BLM resource management programs, “should be able to come out of a comprehensive land use planning process with cultural resource allocations and then manage the resources according to the allocations” (Muhn and Stuart 1988:251). By 1986 a new BLM planning guidance manual incorporated these concepts. BLM’s role in managing cultural resources for the public’s benefit was brought to heightened visibility with the opening of the Anasazi Heritage Center in 1988 (Muhn and Stuart 1988:251).

Recreation

During the 1970s recreation on public lands rose steadily with nearly 50 million visitor-use days each year. "By 1972, the Bureau hired an additional 20 outdoor recreation planners on the ground so that virtually all District Offices were staffed with these positions...By the mid-1970s, BLM was maintaining more than 400 developed recreation sites on the public lands, with an annual budget averaging \$5 million for recreation management, \$3 million for site maintenance, and \$1 million for recreation construction" (Muhn and Stuart 1988:203).

While recreational opportunities on BLM land continued to grow, BLM did not focus great attention on its recreation program through the early and mid-1980s. However, by the late 1980s, the recreation program began to assume a dominant role in the Bureau. "Several factors contributed to this increased emphasis, not the least of which was the President's Commission on Americans Outdoors, established by Ronald Reagan in 1986. Public meetings and subsequent report heightened the public's interest in America's recreation resources"(Muhn and Stuart 1988:253). BLM developed *Recreation 2000*, a long-term strategic plan for the management of outdoor recreation opportunities on public lands. "The plan presents an overview of BLM's recreation and wilderness programs and provides policy for future efforts, including visitor information and interpretation; resource protection and monitoring; land ownership and access adjustments; partnerships and volunteer programs; and facilities, permits, fees, and concessions" (Muhn and Stuart 1988:253-254).

Resource Management Plan

In 2004 the Coeur d'Alene Field Office began preparing a Resource Management Plan (RMP) to guide the management of the 96,732 acres of public land (United States Department of the Interior 2004). The plan, to be completed by 2007, will allow evolving management to reflect the changing needs of the planning area over the next 15 years. The RMP, a land use plan, will describe broad multiple-use guidance for managing the BLM's public lands as mandated by FLPMA. The RMP will:

"Establish goals and objectives for resource management and the measures needed to achieve those goals and objectives;

Identify lands that are open and available for certain uses, including any restrictions, and lands that are closed to certain uses; and

Provide comprehensive management direction for and/or allocate use of all resources" (United States Department of the Interior 2004).

The BLM has developed eight issue themes to aid in the development of the management plan, with public input, which include: vegetation management; fire management; management of habitat for wildlife and special status species; management of transportation, public access, and recreational opportunities; land tenure adjustments; availability and management of public lands for commercial uses; management of areas with special values; and tribal treaty rights and trust responsibilities (United States Department of the Interior 2004).

The RMP planning will provide BLM with the opportunity to collaborate with groups to develop a common vision for how the public lands should be protected and used as the BLM continues its mission to sustain health, diversity and productivity of the public lands for the use and enjoyment of present and future generations (United States Department of the Interior 2004).

Tourism and Recreation

In addition to agriculture, ranching, forestry, and mining, the industry of tourism has become an important part of Idaho's economy and, in some cases, has replaced jobs lost in woods, mills, and mines (Caldwell 1951:224; Renk 1992:iii).

By the 1880s, several conditions in the United States were in place to support a tourism boom. By the late nineteenth century, people revered the natural world around them and sought to rejuvenate themselves in its midst. Furthermore, leisure time had become an important value and increases in both time and money now allowed for holidays. With recently completed railroad lines crisscrossing the country, access was provided to many areas and hotels. Resorts soon sprang up to accommodate overnight travelers. "The American tourist had come of age and was ready to go, and the Pacific Northwest now beckoned" (Renk 1992:12).

The tourism boom benefited from the back to nature movement rooted in the late 1800s. The movement flowered in the first decades of the twentieth century and, as Americans became concerned with the demise of the frontier, Roosevelt sought to preserve the wilderness. Early twentieth century Progressives proposed that fresh air encouraged healthy physical activity, which would, in turn, foster sharp minds and high morals. Outdoor life also encouraged contemplation and closer contact with the spiritual world. "Improved physical and mental health was perhaps the most common reason for increasing contact with nature" (Renk 1992:59). Shorter work days allowed time to enjoy the out-of-doors and the expansion of railroads, then roads, throughout the country, made nature an accessible possibility.

Northern Idaho was a well known destination for regional tourists by the end of the nineteenth century. "The Idaho panhandle north of the rolling Palouse region had just what the potential visitors sought, and its natural beauty attracted those escaping the confines of the city. Rugged tree-clad mountains received heavy snowfall in the winter

months, giving rise to myriad rushing streams and rivers. These waters joined at lower elevations to form lakes that filled glacially scoured basins and valleys. The largest were Pend Oreille, Coeur d'Alene, and Priest Lakes; smaller ones included Hayden, Spirit, and Twin lakes" (Renk 1990:2). "The panhandle of northern Idaho is usually regarded as Idaho's 'lake country' because of the popularity as tourist attractions of three large lakes, Pend Oreille, Priest, and Coeur d'Alene, and some 50 smaller lakes" (Caldwell 1951:224).

In the late nineteenth century, railroads in northern Idaho combined with steamboat transportation along Lake Coeur d'Alene and the Sunday excursion was a popular draw, bringing thousands of visitors from Spokane every weekend to the Coeur d'Alene area. "Rail cars arriving in Coeur d'Alene parked on a six hundred foot dock extending into the lake, allowing passengers to leave the train easily and board waiting boats" (Renk 1992:46). The lake steamers pampered tourists with first-rate accommodations. Spacious cabins provided comfortable seating, and wide promenade decks allowed socially conscious guests to see and be seen" (Renk 1992:47). Small resorts could be found along the shores of Hayden Lake and Lake Coeur d'Alene. "Most resorts in the Inland Northwest were unpretentious and suited the region's long relationship with outdoor recreation. They frequently featured some combination of a small hotel, rental cabins, and camping facilities" (Renk 1992:56).

The remoteness of Priest Lake meant a full day trip from Spokane whereby the tourist took the Great Northern to Priest River, and then covered the last 25 miles by horse-drawn stage. The undeveloped lake was a popular destination for those seeking excellent opportunities for hunting and fishing (Renk 1992:80). Lake Pend Oreille was also a considerable distance for tourists from the city of Spokane. The arrival of the Coeur d'Alene and Pend Oreille Railway at Bayview in 1911 brought hundreds of visitors to Lake Pend Oreille. "Although Sunday outings to Lake Pend Oreille never approached Coeur d'Alene excursions in popularity, Spokane tourists did enjoy the one and a half hour trip to Bayview followed by a cruise aboard the Northern Navigation Company boats. Several resorts around the lake catered to tourists" (Renk 1992:83). "It was the trip up the famous 'shadowy St. Joe' River, however, that brought out the poetry in writers. While the Red Collar brochure described the glide up the river as a 'veritable trip through fairyland,' a visiting writer likened the effect of the still, reflection surface to 'a continuous moving picture show in the water as the boat moves along'" (Renk 1992:47-48).

In the first decades of the twentieth century, tourism changed with the widespread acceptance of the automobile and the increased improvements of roads and highways. The automobile made traditional recreational opportunities readily accessible for more area residents. With the automobile one could travel to a destination previously reached by railroad, or to new areas of interest. The automobile brought in large numbers of tourists from outside of the region for the first time. As a result, new facilities developed

to accommodate the increasing number of motoring tourists (Renk 1992:108). The municipal camps, free campgrounds for auto campers located in or near town, could now be found in most communities. The camps usually offered water, restrooms, electric lights, showers, a kitchen area, and laundry facilities (Renk 1992:122). Spokane's first tourist camp opened in the late 1910s and smaller towns in northern Idaho opened free tourist camps about the same time. "They included Bonners Ferry in the north; Priest River, Sandpoint, Hope, and Clark Fork in the Pend Oreille River Valley, Coeur d'Alene and Harrison on Lake Coeur d'Alene; and Kellogg, Wallace, and Mullan in the Silver Valley" (Renk 1992:125-126). In the 1920s, cabin camps became popular and attracted travelers who had previously camped beside the road. Tourist courts, with rows of cottages, soon followed (Renk 1992:129-130).

By the late 1920s, Priest Lake was attracting auto tourists with a choice of several hotels, a number of cabin camps, and free campgrounds scattered around the lake. Lake Pend Oreille had a tourist park at Sandpoint and the city attracted travelers with improvements of the city beach. New resorts opened on Lake Pend Oreille at Sandpoint and the Lake grew in popularity with Spokane auto tourists (Renk 1992:135). By the early 1950s thousands of Idaho anglers from areas as far south as Lewiston were fishing on Lake Pend Oreille every week during the summer (Caldwell 1951:232). Lake Coeur d'Alene continued to be a major tourist area and steamboat excursions remained popular (Renk 1992:137).

Along with auto tourism came road improvements and the construction of gas stations, motels, and restaurants along the highways. "As cars and roads improved, people traveled long distances, and the Inland Northwest welcomed its first crowds of cross-country travelers" (Renk 1992:150).

"Summer tourism in the Inland Northwest has been evolving since the early 1880s. Crowds have increased, drawing greater numbers from outside the region. Destinations have multiplied as transportation changed. Leisure time has become a necessity in people's lives. The framework and patterns in place by 1940 formed the basis for future development, and the strong tourism industry of the late twentieth century reflects more than one hundred years of growth and refinement" (Renk 1992:150-151).

"Tourism, however, was not seriously considered a major or profitable activity until figures proved its status as the state's third ranked industry in the 1960s. In one instance, preliminary results of a 1960 tourist survey indicated tourists in 1959 spent approximately \$120,000,000 in the state. This figure was compared with total sales of Potlatch Forest Incorporated (PFI), a large Idaho employer. In 1958, PFI sales totaled \$94,674,000. The economic realization of tourism, as well as the potential business to the state was unparalleled" (Woods 1991:39).

The travel industry was well established as one of Idaho's leading businesses by 1964. At this time, many towns, losing their industries of mining or logging, turned to tourism as a tool for economic recovery. Tourism also contributed to the growth of Idaho's parks system and the creation of the Idaho Department of Parks in 1965. The two pronged purpose of a state parks department would be to develop state parks in order to provide public recreational facilities for Idaho citizens *and* to induce tourism in the state for the purposes of benefiting the economy and providing income for businesses (Woods 1991:39-58).

By 1987 domestic travel expenditure in Idaho reached \$1.17 billion and jobs employed 18,700 people with a payroll of \$164.3 million (Idaho Division of Tourism Development 1991:6).

Today, the panhandle area continues to offer miles of rivers and vast lowland lakes for the sight-seeing tourist as well as for activities of camping, hiking, fishing, boating, and sailing. The St. Joe River is the highest navigable river in the world at an average of 2,200 feet in elevation, entering the southern tip of Coeur d'Alene Lake at Round and Chatcolet Lakes (London and Powell 1994:23). With part of the St. Joe designated as a Wild and Scenic River, and accessibility by road and trail, the river attracts whitewater runners and fishermen (United States Department of Agriculture 1989:np).

History Chronology

1805

Lewis and Clark's Corps of Discovery enters Nez Perce Country via the Lolo Trail.

1808

David Thompson of the North West Fur Company establishes trade with Flathead and Kootenai Indians.

1809

David Thompson erects a North West Fur Company post, Kullyspell (Kalispell) House on Lake Pend Oreille.

1812

General Land Office created.

1821

North West Company and Hudson's Bay Company merge. Idaho fur trade is reorganized with emphasis on Snake River country to the south.

1842

Father Nicholas Point selects site for Sacred Heart Mission among the Coeur d'Alene on the St. Joe River.

1846

Location of Sacred Heart Mission moves to Cataldo on the Coeur d'Alene River.

1853

Construction of Sacred Heart Mission Church at Cataldo completed.

1855

Treaty with Kootenai, Pend Oreille, and Flathead Indians at Hellgate, Montana.

1859

John Mullan begins construction of military road from Fort Walla Walla, across Idaho, to Fort Benton.

1860

Mullan Road completed, connecting the navigable waters of the Columbia and the Missouri.

1862

National Homestead Act opens the public domain to the free acquisition of 160 acres of land for homes.

1866

The *Mary Moody* is launched on Lake Pend Oreille.

1868

Burlingame Treaty between United States and China.

1870

First Idaho census reports population of 14, 999/.17 person per square mile.

1872

Congress establishes Yellowstone National Park with 31,500 acres reaching into Idaho.

1873

Coeur d'Alene Reservation created.

1877

New boundaries established for Coeur d'Alene Reservation.

Sacred Heart Mission begins move from Cataldo to De Smet.

1878

Sacred Heart Mission established at De Smet.

Congress creates military reservation on Lake Coeur d'Alene: named Camp Coeur d'Alene, Fort Coeur d'Alene, then Fort Sherman.

National Stone and Timber Act.

1880

Placer gold discovered in paying quantities in Coeur d'Alene country.

The *Amelia Wheaton* launched on Lake Coeur d'Alene by U. S. Army.

1881

Henry Villard, a Lake Pend d'Oreille steamer, launched.

1882

Chinese Exclusion Act.

1883

Northern Pacific Railway completes route across the Idaho panhandle.

Coeur d'Alene gold rush begins.

Eagle City founded.

1884

Murray is founded and replaces Eagle City as the center for the Coeur d'Alene gold rush.

Beginning of lead-silver operations in the Coeur d'Alenes with the discovery in May of the Tiger mine near Burke and the Polaris mine at Mullan.

Launching of the steamboat *Coeur d'Alene* near Fort Sherman opens the lake for freight and passenger service to the Coeur d'Alene mining area.

The Morning Mine is located at Mullan and becomes the deepest lead-silver operation anywhere.

1885

Bunker Hill and Sullivan mines at Wardner are discovered.

1887

Dawes Severalty Act.

Spokane Lime Company begins operation at Bayview.

1889

Moscow becomes location of the University of Idaho.

St. Maries platted.

1890

Idaho becomes the forty-third state in the Union.

1891

Forest Reserve Act.

1892

The Great Northern Railroad completed through Idaho.

University of Idaho opens.

Bonner's Ferry commences in connection with the Great Northern Railway through North Idaho.

1895

Allotment of Kootenai Indian land.

1896

Idaho leading state in the Union in lead production.

Hope platted.

1898

Sandpoint platted.

1900

Washington Brick and Lime Company at Bayview.

1905

Forest Service established to administer and manage forest reserves.

1906

Largest sawmill in the United States begins operation at Potlatch with a daily capacity of 750,000 feet.

Forest Homestead Act opens some national forests lands to homesteaders.

Antiquities Act passed, preserving and protecting prehistoric, historic, and scientifically significant sites on public lands and allowing the creation of National Monuments.

1907

Historical Society of Idaho formed to collect and preserve all things pertaining to the historical data of the State.

Forest Reserves renamed National Forests.

1908

Idaho's Heyburn State Park established as first state park in Pacific Northwest.

1909

Chicago, Milwaukee, and St. Paul Railroad completed through Idaho.

Allotment of Coeur d'Alene Reservation. Surplus land opened for settlement.

1910

Forest fire consumes one-sixth of northern Idaho's forests, destroying many communities.

1913

Idaho's State Highway Commission authorized.

1914

Kalispel Indian Reservation created.

1916

Good Roads Act.

1923

North South Highway opened.

1933

Civilian Conservation Corps created.

1934

Wheeler Howard Act.

U. S. Grazing Service created.

1942

Farragut Naval Base established on Lake Pend d'Oreille.

Civilian Conservation Corps program ends.

1943

Chinese Exclusion Act repealed.

1946

Indian Claims Commission created by Congress.

Bureau of Land Management created with consolidation of General Land Office and Grazing Service.

1962

National Recreation Area Act preserves and expands outdoor recreation opportunities.

1964

National Wilderness Act passed to set aside undeveloped federal land for visiting.

Selway-Bitterroot Wilderness Area established on 1 million acres.

1965

Idaho State Park system established with 21 parks.

Nez Perce National Historical Park created.

1966

National Historic Preservation Act designates protection of prehistoric and historic properties of regional and local importance.

1968

Wild and Scenic Rivers Act deems nine Idaho rivers as wild and scenic.

1969

National Environmental Policy Act.

1971

Executive Order 11593.

1976

Federal Land Policy and Management Act.

1978

American Indian Religious Freedom Act.

1979

Archaeological Resources Protection Act.

1981

Bunker Hill mine and smelter in Kellogg closes after 98 years of production.

1990

State of Idaho 100 years old and population is 1,006,749.

Native American Graves Protection and Repatriation Act (NAGPRA)

2004

BLM Coeur d'Alene Field Office begins preparation of Resource Management Plan (RMP) to guide management of 96,732 acres of public land.

CULTURAL RESOURCE INVESTIGATIONS

History of Archaeology: Major Investigations and Sites

Early cultural resource investigations in north Idaho were primarily surveys around reservoirs/water sources, especially along the Pend Oreille River and the Albeni Falls Reservoir (Gough and Boreson 1985:Table 1). Eventually, such investigations were oriented toward cultural resource management in upland areas of forested timber sales and land exchanges. While major excavations have been limited in the area, surveys have been extensive on federal lands as overviews, surveys, and reconnaissance projects have been completed.

Before 1950s

Documentation of archaeological sites in north Idaho occurred as early as the late 1880s when John B. Leiberg, a geologist engaged in surveying and assessing the forest areas of north Idaho in 1893, described petroglyphs on Lake Pend Oreille (Hudson et al. 1981:17).

It was nearly 20 years before another discussion of north Idaho archaeology appeared when H. J. Rust generally discussed cultural resources he had observed in the Lake Coeur d'Alene area. His finds were few and far between and usually consisted of broken and scattered materials. Of the observed resources, he wrote: "In summing up the evidence of prehistoric relics of this locality to date, it must be admitted that they are scarce, and of a character that throws but little light on the cultures of the earliest inhabitants of this region" (Rust 1912:46). "In conclusion I hope that in the near future, archaeological interest will be more in evidence in this part of the state and that something real interesting may turn up" (Rust 1912:48).

1950s

With the planned construction of a dam at Albeni Falls on the Pend Oreille River, five miles downstream from Priest River, an archaeological survey was conducted by two members of the River Basin Survey program from July 11 to July 18, 1950. The purpose of this work was to ascertain the extent of archeological, historical, and paleontological sites that would be inundated once the dam was completed and the reservoir was filled (Shiner 1950:1-2). High water, still persisting in July, covered all of the bank cuts and beaches and further difficulties were encountered in the form of cultivation and forests. "It has always been the policy of the survey parties to make extensive use of local informants. While the bulk of information is usually obtained by direct observation, it is often supplemented by questioning local residents who are familiar with the country and interested in archeology. In the case of Albeni Falls the reverse of this practice took place. The survey party visited and inspected all of the reservoir area which was not flooded but obtained nearly all of their information from local informants" (Shiner 1950:8). Thirteen sites were located, and five, with evidence of occupation and burials, were recommended for testing (Shiner 1950:8).

Other archaeological studies carried out in the 1950s were conducted by Tom Miller of North Idaho Junior College (1954, 1959). Beginning in 1950 and continuing until 1953, archaeological surveys were carried out in Kootenai County in one to five day projects during summer months with assistance of college students and local collectors. Most of the materials, over 3000 artifacts, were collected from the surfaces of 38 sites (Miller 1959:38, 46). Several burials inadvertently uncovered on the North Idaho College campus, at Rose Lake, Ross Point, and close to Cave Lake, were determined by Miller to range in time from the late prehistoric to the historic (Miller 1954:389-390).

During the summer of 1957 additional archaeological sites were identified in Kootenai County during a survey for the route of a pipeline from Coeur d'Alene to a smelter near Kellogg. The route passed through the Sacred Heart Mission. When it was determined that the route right-of-way in the area of the mission contained little evidence of aboriginal use, an effort was made to locate aboriginal occupations nearby. Two large camps were identified in the vicinity of the mission (Tuohy 1959). Tuohy discussed both the historic and prehistoric resources at the mission as revealing "a meeting place of history and archaeology in Idaho" (Tuohy 1958:27).

1960s

Very few archaeological investigations took place during the 1960s. An archaeological survey of Pacific Gas Transmission Company's Alberta to California pipeline was conducted (Mallory 1961) and a site, with four feet of midden, was identified in the vicinity of Riley Creek (Gough and Boreson 1985:5). Several years later, the Idaho State University Museum secured a grant from the American Philosophical Society to conduct an archaeological survey in north Idaho. Conducted between July 6 and August 26, 1966, the survey identified 67 new prehistoric sites from the Clearwater Valley to the Canadian border. Twenty sites were recorded in the Lake Pend Oreille area, including eight sites on the east shore Lake Pend Oreille between Sandpoint and the Clark Fork River. Twelve sites were found on the Pend Oreille River (Swanson 1968). The only other contribution during this decade was a paper written by Dr. Allan Smith (1966) describing Kalispel sites on Lake Pend Oreille and in the Clark Fork area. This discussion was based on Smith's fieldwork conducted in the 1930s (Hudson et al. 1981:17).

1970s

Most archaeological projects in north Idaho since the 1960s have been conducted by governmental agencies in-house or on a contract basis. The two major agencies involved with this work have been the U.S. Forest Service and the Bureau of Land Management. Many surveys conducted by the Forest Service archaeologists are on file at the Supervisor's office. Work performed by the BLM in Coeur d'Alene has been mostly carried out in-house. The work of both agencies has generally been confined to upland areas (Hudson et al. 1980:3). The Corps of Engineers, undertaking both in-house and contract work as well, has been involved with cultural resources primarily in the Albeni Falls Reservoir area. The first of numerous cultural resource contract projects were conducted during the 1970s.

Mario Delisio, and three others, conducted an archaeological survey between July 3 and July 7, 1974 of U. S. Army Corps of Engineers lands along Lake Pend Oreille and the Pend Oreille River. "The purpose of the survey was to provide the Corps with an inventory of sites so that these can be taken into account in their land use plans" (Delisio 1974:1). While no artifacts were found during the survey because of the heavy vegetation and lack of erosional surfaces which could expose them, a number of areas were reported as potentially important (Delisio 1974:5). Delisio recommended that test excavations be conducted at Strong's Island, Priest River Campground, Riley Creek Campground, Hoodoo Creek Campground, Oden Bay, Fisherman's Island, and Clark Fork River (Delisio 1974:6-7). This project was followed by a test excavation along the Pend Oreille River and was supervised by Richard "Duke" Snider of North Idaho College (unpublished) (Hudson et al 1981:18).

In the early 1970s, archaeologists returned to the Mission of the Sacred Heart and excavations were undertaken by the Department of Sociology/Anthropology of the University of Idaho as part of the Mission restoration project sponsored by the Idaho Bicentennial Commission (Fielder and Sprague 1974, Weaver 1976). Work was conducted to evaluate the archaeological potential of the site and provide the restoration architect with information concerning the foundation construction details. Additionally, excavations under the floor of the church would ascertain if damage would result from foundation stabilization procedures (Fielder and Sprague 1974).

The year of 1974 marked the beginning of cultural resource contracting by the Idaho Panhandle Forests (Hudson et al. 1981:18). During this time "archaeological overviews" were compiled for various forest lands (Hudson 1975; Renk and Roubicek 1975; Rice et al. 1974). With the passage of the National Historic Preservation Act a new philosophy emphasizing the preservation of cultural resources had become established. Executive Order 11593 required the identification and inventory of cultural resources located on diverse lands and over wide areas, the national forest overview was one means of accommodating this directive (Hudson 1975:14).

The National Forest overview was proposed to give direction and orientation to field reconnaissance and survey studies by identifying potential areas for finding cultural resources which would then serve as a mechanism for establishing priorities for the conduct of on-the-ground archaeological surveys. The main advantage of the forest overview would be that of identifying areas requiring different levels of survey intensity (Hudson 1975:16).

One objective of the overviews was to combine into one work all known archaeological and historical resources in or near a National Forest. The methods included a review of literature, interviews with Forest Service personnel and private citizens knowledgeable

about the cultural resources, and a records check of archaeological sites listed in the state inventory. One goal of the overviews was that the documents would be used as administrative guides in the management of cultural resources (Rice et al. 1974).

The first of these projects was an overview of the northern Idaho portion of Region 1, U.S. Forest Service (Rice et al. 1974). Types of sites were organized into four major groupings: prehistoric archaeological sites, Euroamerican historical sites, sites with both prehistoric and historic components, and ethnographic sites. For this overview, 828 sites were inventoried within four forests (Clearwater, Coeur d'Alene, Kaniksu, and St. Joe) and seven Idaho counties (Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, and Shoshone). Prehistoric sites included camps, pits, rockshelters, petroglyphs/pictographs, burials, and rock cairns, while historic sites included mining operations, buildings, trestles, camps/towns, steamboat landings, flumes/chutes, lime kilns, foundations, trails, and rock cairns. Sites were plotted on forest maps and it was evident they were located near water resources along the shorelines of lakes and rivers. "In part, this is because the areas away from the lake and river basins have never systematically been investigated. The only way to determine whether or not the majority of resources have been identified is to perform detailed on the ground surveys in selected areas" (Rice et al. 1974:24).

Two smaller projects (Hudson 1975; Renk and Roubieck 1975) also used the overview methodology of literature search, interviews, site file examination, and mapping of sites, as well as a study of land use patterns. Each overview sought to determine the relative potential of finding archaeological sites within a given area. "It is not a substitute for an archaeological reconnaissance, but allows for more systemic archaeological studies" (Hudson 1975:11). Within the St. Maries Planning Zone, 316 sites were identified, mainly historic (Hudson 1975:5). For the Sandpoint Planning Zone a total of 98 aboriginal sites and 150 Euroamerican sites were identified (Renk and Roubieck 1975:4-6). Results of research for the overviews suggested that the distribution of archaeological sites was predictable and that the distribution was related to land use patterns. The immediate objective of the overviews was to identify area requiring different levels of survey intensity, and the preliminary archaeological reconnaissance was suggested as the next logical step for documenting cultural resources (Renk and Roubieck 1975:8).

The forest overviews were followed by a number of projects involving archaeological reconnaissance for the Wild and Scenic River process (Marti 1976a, 1976b; Rice et al. 1977) for selected timber sale and land exchange parcels (Boreson 1977; Rice 1978; Hudson et al. 1979; Rice et al. 1977), and for specific city water planning facilities (Knudson and Stapp 1977; Knudson and Marti 1978).

Reconnaissance projects for the U.S. Forest Service provided inventories of culture resources so that inventoried sites could be considered in future planning. The reconnaissance of the St. Joe River for the Wild and Scenic Rivers process constituted the

“first opportunity to go beyond regional and forest overviews by providing for the field identification of sites and the corroboration of potential sites reported” (Rice et al. 1977:3). After preliminary literature reviews, on-the-ground inspection was conducted in the study area, and new sites were encountered, demonstrating that important cultural resources existed along the St. Joe River (Rice et al. 1977:25). Additional reconnaissance projects of the Idaho Panhandle Forests were conducted for timber sales and land exchanges. These sought to locate and record all indications of historic and prehistoric activities in the areas of land exchange. “The emphasis then, was upon locating all historic and prehistoric resources within these areas, recording them, and assessing their significance so appropriate action could be taken to further document and/or protect them” (Boreson 1977:4). Often the reconnaissance involved widely scattered timber sale areas and covered mountainous terrain with steep ridges and heavily forested lands. Sites recorded were predominately historic (Boreson 1977; Hudson et al. 1979; Rice 1978; Rice et al. 1977).

In 1976, the Idaho Panhandle National Forests began hiring summer archaeological technicians. Over the years, these individuals have surveyed thousands of acres and recorded numerous sites. This cultural resource work was briefly summarized (Sims 1980) with a manuscript documenting work in the area from the late 1800s to 1980. By the end of the 1970s, the Bureau of Land Management, Coeur d’Alene District, had conducted a number of surveys in north Idaho which had yielded historic and prehistoric sites (Hudson et al. 1981:19).

Test excavations were conducted for the U.S. Army Corps of Engineers on the north side of the Pend Oreille River at Riley Creek campground (10BR99) in 1979 by the University of Idaho. While most of the site had been lost to erosion, a small prehistoric component, probably a riverside camp, was found to retain its integrity and dated to over 1200 years ago (Knudson et al. 1979). The same year, test excavations were also conducted for the Corps on the Pend Oreille River just east of Priest River (10BR94) by Cultural Resource Consultants, Inc. The site was tested to assess impacts of the rise and fall of water levels of Albeni Falls Dam Reservoir on cultural resources. Two prehistoric components and an historic component were identified, with the earliest prehistoric component dating to pre-Mazama (Hudson et al. 1980).

1980s

Several extensive cultural resource overviews were prepared in the early 1980s, both for government agencies and private enterprises.

Cultural Resource Consultants, Inc. prepared a cultural resource overview for the Colville and Idaho Panhandle National Forests and the Bureau of Land Management-Spokane and Coeur d’Alene Districts focusing on the ethnography, history, and oral history of seven northern Idaho and three northeastern Washington counties. The major research emphasis was placed on the lands within the administrative boundaries of the two

agencies. The cultural resource narrative, based on historical themes, also presented discussions on environment and settlement patterns; oral history data was presented in a second volume (Hudson et al. 1981).

The Washington Archaeological Research Center prepared a cultural resource overview of a proposed transmission line from Libby Dam, Montana, to Rathdrum, Idaho, for the Bonneville Power Administration (Choquette and Holstine 1980). The overview presented background data and a partial survey of the project impact area within the Pend Oreille and Kootenai drainages of northern Idaho, and the Kootenai Valley of northwestern Montana. The final document represented the first major synthesis of geological, palaeoenvironmental, ethnolinguistic, and archaeological data for northern Idaho and northwestern Montana and contained a large amount of previously unpublished information (Choquette and Holstine 1980:1).

Work for the Bonneville Power Administration was continued through Eastern Washington University over several years. A final report (Gough 1984) provided information on cultural resources within the Bonneville Power's transmission line, from Albeni Falls in Idaho to Libby Dam in Montana, derived through eight phases of investigations involving survey and multi-phase testing by Archaeological and Historical Services. Thirteen sites were recorded in Idaho, 11 prehistoric and two historic. On the basis of typological and geological data, it was concluded that cultural components at the prehistoric sites spanned the last 10,000 years. Most were temporary camps or extraction locals. The historic sites reflected domestic, institutional, and commercial ventures associated with transportation routes and economically important resources (Gough 1984). More specifically, eight prehistoric sites were crossed by the transmission line between Sandpoint and Bonners Ferry. Six of these were situated on sandy deposits along McArthur Lake. Four additional prehistoric sites were located within the right-of-way on the route between Bonners Ferry and Troy. Several historic sites were also located within these segments (Gough 1984:17, 20). Testing revealed that the McArthur Lake sites represented temporary camping and resource exploitation of the area over a long period of prehistory (Gough 1984:317). As a result of information gained from the surveys and testing five cultural periods, or complexes, extending to 11,000 BP were proposed for this region (Chouquette 1984).

In a cooperative venture involving the Bonneville Power Administration, Washington Water Power Company, and the Department of Fish and Game, Eastern Washington conducted archaeological investigations at the Cabinet Landing Site (10BR413) on the Clark Fork River to sample the extensive late historic component represent an 1882 Northern Pacific Railroad camp. A prehistoric component was encountered in some areas of excavations, as well, with an occupation extending to 8000 BP (Landreth et al. 1985).

Several projects were conducted for the U.S. Army Corps of Engineers in the Albeni Falls Reservoir area at this time. A rock art reconnaissance recorded the seven known and reported rock art sites within in the northern and eastern areas of Lake Pend Oreille (Boreson and Peterson 1985). An archaeological reconnaissance of the public lands along the shoreline upstream from Albeni Falls Dam along the Pend Oreille River and around Lake Pend Oreille was conducted in April of 1985 during the winter/spring drawdown by Eastern Washington. The work was "a rapid on-the-ground inventory of cultural resources" along with description, mapping, and evaluation of the condition of the site. In addition, the project work sought to locate previously recorded sites and to evaluate the research potential of both new and previously known sites. Twenty seven sites were relocated and 22 new sites were discovered. Most of the 39 prehistoric sites were occupation sites with significant quantities of thermally altered rock, while the most common historic site was related to mining (Gough and Boreson 1985). The next spring, an archaeological reconnaissance of the privately owned shoreline in the Albeni Falls Project area was undertaken by Cultural Resource Consultants. Examining 140 miles of shoreline along the Pend Oreille River and on Lake Pend Oreille, 149 new sites were recorded, increasing the total number of known sites to 232. Most sites were located along the Pend Oreille River and were prehistoric or prehistoric with an historic component (Miss and Hudson 1986). The combined work of two seasons documented a nearly continuous distribution of cultural material along both shores of the Pend Oreille River above Albeni Falls Dam and a frequency of sites along the north shore of Lake Pend Oreille to the mouth of the Clark Fork River (Miss and Hudson 1987). "In an effort to obtain additional information about site content and location, a separate contract to examine and inventory local collections from the Albeni Falls Project Area was awarded to CRC. The goal was to acquire temporal, functional and locational information about sites" (Miss and Hudson 1987:1). Reconnaissance work continued in the Albeni Falls area (Miss 1989) bringing the number of prehistoric and historic sites recorded to over 400 (Miss 1990).

During a cultural resources survey of the Noxon-Pine Creek Transmission line from the Noxon Reservoir on the Clark Fork River in Montana to Pinehurst on the South Fork of the Coeur d'Alene River in Idaho, seventeen sites were located in Idaho. All the sites were historic and, most commonly logging or mining sites. The logging chute was the most common historic feature recorded and the logging sites were determined to date between 1900 and 1930 (Gough 1986).

Since 1980s

For the past twenty years, cultural resource investigations in the area of the Coeur d'Alene Field Office have been carried out within such agencies as Bureau of Indian Affairs, Bureau of Land Management, Idaho Department of Fish and Game, Idaho Department of Transportation/Idaho Transportation Department, Idaho Natural Resources Conservation Service, Idaho Panhandle Forests, and U.S. Army Corps of Engineers as well as the Coeur d'Alene Tribe and Kootenai Tribe and the Bonneville Power

Administration. Much of the work involves land exchanges, timber sales, and mining projects and the need to comply with legislative mandates. Resulting information of project locations, recorded sites, and compiled reports are on file at the Archaeological Survey of Idaho, Northern Repository, University of Idaho.

Extensive work has continued within the Albeni Falls Dam Project under the auspices of the U.S. Army Corps of Engineers, resulting in nearly 100 reports or documents (Lawr Salo: personal communication 22 April 2005). Many projects in north Idaho in the last twenty years have been conducted by Northwest Archaeological Associates, Inc. (Christian Miss: personal communication 22 April 2005) and Archaeological and Historical Services of Eastern Washington University has recently completed additional work at Riley Creek (10BR99) (Stan Gough: personal communication 22 April 2005).

Current Investigations

An archaeological survey by environmental consulting company Entrix Inc., for Avista Utilities, began recently on the southern end of Lake Coeur d'Alene and along the lower reaches of the Coeur d'Alene, St. Joe, and St. Maries rivers. "The work is part of a first-ever survey of prehistoric sites from the lower reaches of the rivers feeding into Lake Coeur d'Alene down the banks of the Spokane River all the way to Long Lake" (Hagengruber 2005). The investigation is part of Avista's requirements for obtaining a new federal permit to operate hydroelectric dams in the region. "Protection of the sites could play a role in how the company sets its lake levels for the next 30 to 50 years" (Hagengruber 2005). "Sites facing imminent destruction, either from erosion or looters, will be fully excavated..." (Hagengruber 2005).

Bureau of Land Management

Numerous cultural resource projects within the Coeur d'Alene and Cottonwood field offices have been undertaken since the 1970s to comply with federal regulations regarding the protection of significant cultural resources under Section 106 of the National Historic Preservation Act, the Antiquities Act of 1906, the National Environmental Policy Act of 1969, the Federal Land Policy and Management Act of 1976, and the Archaeological Resources Protection Act of 1979. Between 1976 and 2000, over 900 BLM survey projects were conducted to identify and record, from surface and exposed profile indications, all prehistoric and historic cultural resource sites within a specified and defined area on parcels of land ranging from less than an acre to 9,850 acres.

Projects have been undertaken within areas involving land transactions of parcel exchange; logging/timber operations involving access roads, helicopter landing sites, and skidding to harvest timber; mining operations necessitating construction of a repository for mine tailings; recreational improvements of roads and construction of parking areas and toilets; bridge and footing movement, construction, or replacement; weed eradication; and seeding rehabilitation following a range fire.

The background research for the BLM's cultural resource investigations involves the review of site files and the National Register, GLO plats, oral interviews, published literature, and reports of previous work in area.

Among the cultural resources that have been located during the investigations are: prehistoric sites with depressions, lithic scatters, cairns, burials, hunting blinds, middens, and quarries; mining sites with ditches, adits, prospects, tailings, and cairns; logging sites with flumes and pressure boxes; homestead sites with structures and dumps; ranching/grazing sites with cairns and stone sheep pen; transportation sites with trails, roads, trams, railroad grades and railroad camps; and communication sites with telephone poles and telephone pole trees.

**List of Major Publications of Investigations
in Coeur d'Alene Field Office Area**

Before 1950s

- 1912 A Brief Historical and Archaeological Sketch of Lake Coeur d'Alene, Kootenai County, Idaho. (Rust).

1950s

- 1950 Archeological Resources in the Albeni Falls Reservoir, Northern Idaho. Columbia Basin Project, River Basin Surveys, Smithsonian Institution (Shiner).
- 1954 Four Burials from the Coeur d'Alene Region, Idaho (Miller).
- 1958 Horseshoes and Handstones: The Meeting of History and Prehistory at the Old Mission of the Sacred Heart (Tuohy).
- 1959 Archaeological Survey of Kootenai County Northern Idaho (Miller).
- 1959 An Archaeological Survey of Several Natural Gas Pipeline Laterals in Washington and Idaho (Tuohy).

1960s

- 1961 An Archaeological Survey of Pacific Gas Transmission Company's Alberta to California Pipeline System: MP 108.0 to MP 722.0 (Mallory).
- 1966 Kalispel Sites in Northern Idaho: Pend Oreille River, Pend Oreille Lake, and Clark Fork Area (Smith).
- 1968 Archaeological Survey of Northern Idaho (Swanson).

1970s

- 1974 An Archaeological Survey of U.S. Army Corps of Engineer Lands on Lake Pend Oreille and Pend Oreille River (Delisio)
- 1974 Test Excavations at the Coeur d'Alene Mission of the Sacred Heart, Cataldo, Idaho, 1973 (Fielder and Sprague)
- 1976 A Preliminary Study of Archaeological Relationships at the Mission of the Sacred Heart of Jesus to the Coeur d'Alene Indians (Weaver).
- 1974 An Overview of Archeological Resources in Region One National Forests in Northern Idaho. Final Report: Salmon River to the Canadian Line (Rice et al.).

- 1975 An Archaeological Overview of the St. Maries Planning Zone, Idaho Panhandle National Forests (Hudson).
- 1975 An Archaeological Overview of the Sandpoint Planning Zone, Idaho Panhandle National Forests (Renk and Roubicek).
- 1976 An Archaeological Reconnaissance of the Priest Wild and Scenic River Study Area, Idaho Panhandle National Forests (Marti).
- 1976 An Archaeological Reconnaissance of the Moyie Wild and Scenic River Study Area, Idaho Panhandle National Forests (Marti).
- 1977 Final Report Archaeological Reconnaissance of Timber Sales and Land Exchanges in Idaho Panhandle National Forests 1975-1976 (Boreson).
- 1977 An Archaeological Reconnaissance of the St. Joe Wild and Scenic River Study Area, Idaho Panhandle National Forests (Rice et al.).
- 1977 Avery Water and Sewer District EPA Facility Plan (Knudson and Stapp).
- 1978 Results of an Archaeological Reconnaissance of Proposed Timber Sale Areas in Idaho Panhandle National Forests 1976-1978 (Rice).
- 1978 Cultural Resources Reconnaissance and Survey, Hayden Lake Waste-water Facilities Phase I, Spring 1977 (Knudson and Marti).
- 1979 Archaeological Test Investigation of the Riley Creek Recreation Area, Pend Oreille River Valley, Northern Idaho (Knudson et al.).
- 1979 A Final Report of Archaeological (Cultural Resource) Surveys for the Timber Sale Program on the Idaho Panhandle National Forests (Hudson et al.).
- 1980s**
- 1980 A Synopsis of USDA Forest Service cultural resource activities on the Idaho Panhandle National Forests before March 31, 1980 (Sims).
- 1980 Archaeological Test Excavations at 10-BR-94, Pend Oreille River Valley, Northern Idaho (Hudson et al.).
- 1980 A Cultural Resource Overview of the Bonneville Power Administration's Proposed Transmission Line from Libby Dam Montana to Rathdrum, Idaho (Choquette and Holstine).

- 1981 A Cultural Resource Overview for the Colville and Idaho Panhandle National Forests and the Bureau of Land Management-Spokane and Coeur d'Alene Districts (Hudson et al. 1981).
- 1982 An Archaeological and Historical Overview of the Bonneville Power Administration's Proposed Garrison-Spokane Transmission Line Corridor, Western Montana, Northern Idaho, and Eastern Washington (Choquette and Holstine).
- 1984 Cultural Resource Investigations of the Bonneville Power Administration's Libby Integration Project, Northern Idaho and Northwestern Montana (Gough).
- 1984 A Proposed Cultural Chronology for the Kootenai Region (Choquette).
- 1985 The Petroglyphs at Lake Pend Oreille, Bonner County, Northern Idaho (Boreson and Peterson).
- 1985 Archaeological Investigations at the Cabinet Landing Site (10BR413) Bonner County, Idaho (Landreth et al. 1985).
- 1985 A Cultural Reconnaissance on Federal Lands in the Albeni Falls Project Area, Northern Idaho (Gough and Boreson).
- 1986 Cultural Resources Reconnaissance of the Albeni Falls Project, Northern Idaho (Miss and Hudson).
- 1987 Cultural Resources Collection Analysis, Albeni Falls Project, Northern Idaho. (Miss and Hudson).
- 1986 A Cultural Resources Survey of the Noxon-Pine Creeek Transmission Line Project in Northwestern Montana and North Idaho (Gough).
- 1989 Cultural Resource Reconnaissance of Selected Areas, Albeni Falls, Bonner County, Idaho (Miss).
- 1990s**
- 1990 Cultural Resource Survey of Selected Areas, Albeni Falls Dam, Bonner County, Idaho (Miss)
- 2000s**
- Hagenruber, James
- 2005 Lake Coeur d'Alene Gives Up Its Prehistoric Secrets. *Lewiston Tribune*. 3 March: 3E. Lewiston.

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