

AFFECTED ENVIRONMENT

WATER RESOURCES/FLOODPLAINS/WETLANDS

Surrounded by mountains, the broad Deer Lodge Valley is drained by the Clark Fork of the Columbia River. This river traverses the center of the park south to north. Johnson Creek runs through a portion of the ranch complex before joining the Clark Fork. Cottonwood Creek joins the Clark Fork at the park's southern boundary. The Kohrs-Manning ditch passes through the park paralleling the Clark Fork River to the east. This ditch carries water during the summer months. Irrigation west of the river is provided by a river pump and by the Westside Ditch Company. There is a natural spring between the railroad tracks that was used to water the lawn and garden of HS 1.

An analysis of floodplains of the Clark Fork River and related tributaries was conducted for the Federal Insurance Administration's National Flood Insurance Program. The 100-year flood elevation was identified as 4,500 feet above sea level. Part of the home ranch complex is in the 100-year floodplain, elevations in the home ranch range from 4,498 feet to 4,515 feet. The floodplain analysis also included areas between the 100-year flood and the 500-year flood. The National Flood Insurance Program identified the 500-year floodplain. This is displayed on the Flood Hazard/Wetlands map.

A small wetland of five to six acres, has been created by springs. This wetland is just south of the city of Deer Lodge sewage lagoons on the east side of the Clark Fork River. Specific locations of wetlands are illustrated on the Flood Hazard/Wetlands map.

Lands acquired in fee include water rights of the previous owner.

SOILS AND VEGETATION

Vegetation in the park reflects the diverse use of vegetation to support ranching operations. Thicket-woodlands occur along the bottomlands of the Clark Fork River. Paralleling this area are hay meadows, which rely on irrigation systems. Dry rangelands and dry farmlands are also located in several areas of the park.

The thicket-woodlands are mostly willows and shrubs. The hay meadows are seeded and irrigated pastures and are used for growing hay and grazing cattle. Most of the hay is used for the ranch's livestock operation. A small portion is sold each year. Dry rangelands are located on hilly and uneven terrain, with grasses as the predominant

vegetation. Dry farmlands are limited to about 135 acres. They have been used for cultivated intermediate wheat, but more recently have been used for grazing.

Soils adjacent to the Clark Fork River are mostly deep loams of the Anaconda series. These soils are favorable for irrigation and are subject to seasonal flooding. Lower bench soils east of the river are of the Beaverell series. They are generally deep and well drained with a gravelly loam surface and a clay loam to sandy clay loam substratum. Most of the bottomland soils and lower elevation lands west of the river are of the Teton View series, and are usually deep and poorly drained. Upland soils are shallow, with capabilities limited to grazing.

There are no prime or unique farmlands in the park.

WILDLIFE

Most wildlife in the park is associated with the Clark Fork River bottomlands or the western foothills, where there is less influence from humans. Ducks frequent the area and some migratory birds are occasionally seen. Over 100 types of birds, including magpies, ravens and robins, are common in the ranch. Several mammals, including gophers, coyotes, skunk, rabbit, muskrat, deer, fox, and beaver are frequently seen, especially near the Clark Fork River. Fish of the Clark Fork include brown trout, suckers, and rainbow trout. Most insects, reptiles, and amphibians are limited by the short summers and cool climate. However, mosquitoes, grasshoppers, and beetles do become a problem when populations are high. Cluster flies and shrews are abundant near the ranch house and are detrimental to museum objects.

THREATENED AND ENDANGERED SPECIES

On November 6, 1990, the National Park Service sent a memorandum to the U.S. Fish and Wildlife Service, requesting a summary of listed, proposed, and candidate threatened or endangered species that could be present in the park. A response from the U.S. Fish and Wildlife Service, dated November 21, 1990, stated there were no proposed species in the project area. Listed and Candidate species of concern include:

Listed Species

Expected Occurrence

Bald eagle (<i>Haliaeetus leucocephalus</i>)	Migrant, potential nesting.
Peregrine falcon (<i>Falco peregrinus</i>)	Migrant, potential nesting.

<u>Candidate Species</u>	<u>Expected Habitat</u>
Preble's shrew (<i>Sorex preblei</i>)	Sagebrush - grasslands.
Swainson's Hawk (<i>Buteo swainsoni</i>)	Grasslands - open woodlands.
Columbian sharptailed grouse (<i>Tympanuchus phasianellus columbianus</i>)	Sagebrush - grasslands.
Mountain clover (<i>Charadrius montanus</i>)	Shortgrass prairie, semi-arid grasslands.
Long-billed curlew (<i>Numenius americanus</i>)	Prairies, grassy meadows near water.
Sapphire rockcress (<i>Arabis fecunda</i>)	Steep sagebrush - grass slopes on calcareous soils.
Howell's gumweed (<i>Grindelia howellii</i>)	Pastures, grasslands, forest openings.

A survey for listed and candidate species was conducted by park personnel. No species were found.

AIR QUALITY

The Montana State Air Quality Bureau states that Grant-Kohrs Ranch is within a Class II airshed. Current monitoring indicates standards for this class are now being met. Unlike many mountain valleys, the Deer Lodge Valley is wide enough that inversions are not a significant problem, and overall conditions are good.

There appear to be no industrial sources of air pollution. Minor pollution occurs in the fall from timber slash and agricultural burning and from occasional burning at a sawmill south of the town. Spring pollution sources include road dust and agricultural burning and occasional burning from a sawmill south of Deer Lodge. During the winter months the major pollutant is residential fuelwood burning.

HISTORIC AND ETHNOGRAPHIC RESOURCES

The first documented settler on the Grant-Kohrs Ranch site was John Francis Grant, whose fur trade upbringing led to trade with emigrants on the Oregon Trail at Fort Hall, Idaho. This led into the acquisition of livestock, which evolved into ranching. He established the ranch in 1862. In 1866 Grant sold the ranch and its assets to Carsten Conrad Kohrs. Kohrs and his half-brother, John Bielenberg, made it the operations base of a range cattle empire extending, by the 1890s, over several states, with land holdings of about 30,000 acres in the Deer Lodge Valley alone. He also owned nearly one million

acres (in fee and by water rights) and grazed over ten million acres of public land, mainly in eastern Montana. Kohrs and Bielenberg, the Pioneer Cattle Company, were instrumental in upgrading the quality of range cattle, with the introduction of Shorthorn and Hereford bloodlines into the herds. Even the catastrophic losses of stock, which hit the industry in the unusually severe winter of 1886-1887, represented only a minor setback to their operation. Kohrs became prominent in the cattle industry and participated in territorial and state politics. In 1868 Conrad Kohrs married Augusta Kruse. After Conrad and Augusta Kohrs moved to Helena, Montana, in 1899-1900, Bielenberg continued ranching operations at Deer Lodge, but with homesteading encroaching on the open range and their fortunes made and secure, the partnership began winding down operations. When the two men died (Kohrs in 1920 and Bielenberg in 1922), Augusta Kohrs cared for the 1,000 or so remaining acres of the home ranch, which was officially operated and controlled by a corporation, the Kohrs Company. Augusta died in 1945.

In 1932, Kohrs' grandson, Conrad Kohrs Warren, was employed as a foreman, and a new phase of expansion began. In 1934 Warren moved into the house, east of the railroad tracks, which had been a wedding gift to him and his wife, Nell Warren, from Augusta Kohrs. He bought the holdings of the Kohrs Company in 1940, and the ranch became known for its registered Hereford cattle and Belgian horses. In 1952, Warren moved the operations east of the railroad tracks to the upper bench of the ranch. The registered Herefords were dispersed in 1958, but ranching continued under Warren's direction with a commercial herd, even after purchase by the National Park Foundation in 1970. In 1980, Warren began leasing his remaining lands to local ranchers, until the 1988 purchase by the NPS. It was Warren and his wife who recognized the importance of the site, and through their efforts, it was preserved intact. When the NPS purchased the acreage and buildings at the center of the property from the National Park Foundation in 1972, they acquired a site changed only slightly from its origins as the headquarters for an open-range ranching operation.

At present, the park includes 90 historic structures. The earliest structures date from the 1860s and the most recent from the 1950s. The site was acquired with much of its furnishings, many personal artifacts, horse-drawn vehicles, business and financial records dating back to the 1860s. Ranch tools and equipment representing nearly all periods of the ranch's human occupation are represented.

Table 5 illustrates historic structures and buildings and their conditions. The condition rating assessment is as follows:

Excellent (E)	Like new	Poor (P)	Failure of systems/materials
Good (G)	Intact, needs no repair	Obsolete (O)	Beyond Rehabilitation
Fair (F)	Signs of wear		

Table 5 **Historic Structure Status**

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
1/Ranch house/G	Log Frame/Brick	Grant Kohrs Warren	Built 1862-1865 Addition 1889-1890 Maintenance 1940s Reroofed 1973-1974 Climate controls 1975 Paint 1975 Walkways altered 1975 Exterior maintenance 1976 Ceiling altered rm 214 1976 Paint 5 rooms 1976 Wiring 1977 Alterations/maint 1979 Stabilization-ceiling 1982 Rehab shutters 1983 Repair/rehab/maintenance 1984 Repair/rehab 1985 Rehab/paint 6 rooms 1987 Repair/rehab 1990	Basement - Curatorial Storage 1st Floor - House museum 2nd Floor - Work space and storage
2/Bunkhouse Row/G	Log Frame	Grant Kohrs Kohrs Warren	Begun circa 1860 Additions 1860s-1890s Shortened 1907 Altered 1933 Repairs 1976 Maintenance 1977 & 1979 Reroof/wiring 1982 Maintenance 1984-1987 Altered 1988 Maintenance 1989-1990	Furnished museum spaces and vehicle storage
3/Garage-Blacksmith Shop/G	Frame	Warren	Built 1935 Wiring 1976 Altered/reroof/maint. 1977 Altered/rehab 1981 Repairs 1986 Altered 1991	Public rest rooms, blacksmith demonstrations, offices, paint and custodial supply storage, AV program
4/Coal Shed/E	Frame	Kohrs	Built 1915 Reroofed 1974 Install electrical mains 1976 Maintenance 1977 Rehab 1988	Displayed building and ranch electrical mains
5/Ice House/G	Log Frame	Kohrs KHP Warren	Built circa 1870 Built 1912 Altered 1935 Reroofed 1975 Painted 1976 Maintenance 1978-1979 Rehabilitation 1980	Basement - Curatorial storage 1st floor - furnished museum space

GENERAL MANAGEMENT PLAN/EIS/DCP - GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
5/Ice House/G (continued)			Maint 1982,1985,1987 Altered 1988	
6/Granary-Roller Mill/G	Frame	Warren	Built 1935 Reroofed 1976-1977 Repainted 1978 Repair/rehab 1979 & 1983	Maintenance tool and supply storage, grain bins not used
7/Draft Horse Barn/G	Log/Frame	Kohrs	Built circa 1870 Rehab 1976 Repair/alter 1978 Rehab 1983 Repair 1986	Active horse barn and storage of usable horse tack
8/Privy (Roosevelt Building)/G	Frame	Warren	Built 1934 Repair/reroof/paint 1983	Displayed building
9/Dairy/G	Frame	Warren	Built 1932 NPS Altered 1975 Rehab 1975 Paint/reroof 1977 Rehab 1985	Maintenance workshop
10/Oxen Barn/G	Log	Kohrs	Built circa 1870 Stabilized 1978 Rehab/rebuild 1981 Rehab 1985	Displayed building
11/Horse Barn/G	Post and Pole	Bielenberg	Built circa 1880 Maintenance 1976 Rehab 1982 Maintenance 1983 Reroof/rehab/paint 1984 Rehab/maintenance 1985 Maint 1987, 1989, 1991	Displayed building, Active horse barn, 2 stalls of 9 used for spring calving
12/Machine Shed/G	Frame	Kohrs	Built circa 1890 Moved 1907 Rehab/reroof 1981 Paint 1984	Curatorial storage
13/Cow Shed/G	Frame	Kohrs	Built 1908-1909 Rehab/reroof 1981 Painted 1984 Rehab 1985	Curatorial, interpretive, and maintenance storage
14/Stallion Barn/G	Log	Kohrs	Built circa 1880 Repair 1975 Reroof 1976 Moved/foundation 1977-1978 Maintenance 1979 Maintenance/rehab 1982 Maint 1985,1987,1989,1991	Displayed building, sometimes used to isolate a horse or cow and calf

Affected Environment

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
15/Thoroughbred Barn/G	Frame	Kohrs Warren Warren	Built circa 1885 Maintenance 1941 Addition 1954 Painted 1975 NPS Altered 1976 Wired 1977 Repair/paint 1979 Foundation 1988 Rehab 1990	Displays museum vehicles
16/Stallion Barn/F (Leeds-Lion)	Log	Kohrs	Built circa 1885 Maintenance 1976, 1979 Rehab/reroof 1980 Rehab/foundation/maint 1982 Maint 1985, 1987, 1989, 1991	Displayed building, sometimes used to isolate a horse and cow and calf
17/Buggy Shed/F	Post and Pole	Kohrs Kohrs	Built circa 1890 Moved 1907 Maintenance 1976 Rehab/reroof 1977 Repair 1978 Rehab 1979 Maint 1979, 1982, 1985, 1987, 1989, 1991	Curatorial display, curatorial and interpretive storage
18/Granary/F	Frame	Kohrs	Built circa 1890 Reroofed, painted 1975 Repair 1984-1985	Curatorial storage
19/Stallion Barn/F	Log/Frame	Kohrs Kohrs	Built circa 1880 Addition circa 1890 Altered circa 1928 Foundation, rehab, maint 1978 Wood floor 1979 Maintenance 1982 Rehab/maintenance 1989	Curatorial storage
20/Privy/F	Frame	Kohrs	Built circa 1900 Reroof 1975 Maint, paint 1978/1980	Displayed building
21/Brooding House/F	Frame	Warren	Built 1935 Wire 1976 Painted/temp. roof 1977 Rehab 1980 Reroof 1982 Paint/upgrade electric 1988	Housing fowl and feed storage
22/Chicken House/F	Frame	Warren	Built 1935 Alter/wire 1976 Temp. roof/paint 1977 Rehab 1979 Upgrade electric 1981 Reroof 1982 Rehab 1985 Upgrade electric/paint 1988	Housing Fowl

GENERAL MANAGEMENT PLAN/EIS/DCP - GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
23/Granary/P	Metal	Kohrs Warren	Built 1910 Moved 1935 Maint 1975, 1978, 1982, 1985, 1986, 1991	Not used
24/Stock Shelter/F	Frame	Warren	Built 1933 Rehab/reroof 1983 Paint 1984, 1986 Maintenance 1990 Paint 1991	Shelter for livestock
25/Stock Shelter/P-O	Frame	Warren	Built 1934 Building collapsed 1991	Not used
26/Hay Storage/P-O	Frame	Warren	Built 1934	Not used
27/Stock Shelter/F	Frame	Warren	Built 1933 Rehab/reroof 1983 Paint 1984 Repaint roof 1986, 1991	Winter shelter for calves
28/Feed Storage House/F	Frame	Warren	Built 1933 Paint 1977 Rehab 1978, 1979 Reroof 1980 Rehab/repair 1983	Feed storage
29/Stock Shelter/F	Frame	Warren	Built 1933 Rehab/reroof 1983 Paint 1984 Repaint roof 1986 Repair 1990 Repaint roof 1991	Livestock shelter
30/Horse Barn/F	Frame	Kohrs	Built circa 1880 Foundation/repair/ rehab/paint 1979 Reroof 1983	Displayed building, sometimes used for protecting small quantities of hay
31/Feed Storage House/P	Frame	Warren	Built 1932 Paint 1977 Roofed 1980 Rehab 1983 Alter 1986	Feed storage
32/Stock Shelter/F	Frame	Warren	Built 1934 Rehab/reroof/paint 1984 Maintenance/paint 1989 Paint roof 1991	Livestock shelter
33/Stock Shelter/F	Frame	Warren	Built 1932 Rehab/reroof/paint 1984 Maintenance/paint 1986 Maintenance 1990 Paint roof 1991	Livestock shelter

Affected Environment

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
34/Storage Shed/P	Frame	Warren	Built circa 1930 Moved 1934 Maintenance 1978 Rehab/paint 1991	Displayed structure
35/Cattle Foot Bath/P	Frame	Warren	Built 1935	Displayed structure
36/Feed Rack/F	Pole	Warren	Built circa 1930 Rehab 1983	Displayed structure
37/Feed Rack/F	Pole		Built 1907 Rehab 1983	Used on occasion
38/Feed Rack/F	Pole		Built 1907 Rehab 1983	Used on occasion
39/Manure Pit/F	Concrete	Warren	Built 1932 Cleaned/covered 1981	Covered for safety reasons
40/Beef Hoist/F	Pole	Kohrs	Built circa 1880 Rehab/paint 1982 Paint 1990	Displayed structure
41/Squeeze Chute/F	Frame	Warren	Built circa 1930 Rehab 1983 Paint 1984 Repair 1989	Used to work cattle
42/Feed Rack/F	Pole		Built circa 1900 Rehab 1975	Used on occasion
43/Feed Rack/F	Pole	Warren	Built 1942 Rehab 1983	Used on occasion
44/Feed Rack/F	Pole	Warren	Built 1942 Rehab 1983	Used on occasion
45/Feed Bunks/P	Frame/Pipe	Warren	Built 1932 Rehab 1991	Not used
46/Feed Bunks/P	Frame/Pipe	Warren	Built 1932 Rehab 1991	Not used
47/Squeeze Chute/P	Frame	Warren	Built 1933 Rehab/paint 1984	Not used
48/Feed Bunks/F	Frame	Warren	Built 1933 Rehab/paint 1987	Used to bunker calves/winter hay
49/Feed Bunks/F	Frame	Warren	Built 1933 Rehab/paint 1987	Displayed structure
50/Flume, Active/G	Frame	Kohrs-Manning	Built 1947	Conveys irrigation water Maintained by ditch company

GENERAL MANAGEMENT PLAN/EIS/DCP - GRANT-KOHR'S RANCH NATIONAL HISTORIC SITE

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
51/Flume, Inactive/O	Frame	Kohrs-Manning	Built 1947 Removed by NPS 1976	NPS Demolished 1976
52/Feed Bunks/F	Frame/Pipe	Warren	Built 1932 Rehab/paint 1987	Displayed structure
53/Squeeze Chute/P	Frame	Warren	Built 1934 Rehab 1984	Not used
54/Bridge/O	Frame	Warren	Built circa 1930 Removed by NPS 1976	NPS Demolished 1976
55/Bridge/F	Frame	Warren	Built circa 1930 Rehab 1982	Used by Warren
56/Railroad/P	Rails/Ties	CM St.P & PRP	Built 1907 Maintenance 1986 Repair 1990	Displayed structure
57/Siphon/P	Concrete	Kohrs	Built circa 1883	Inactive
58/Warren Residence/G	Stone/Frame	Warren	Built 1934, alt 1941	Occupied by Warren
59/Chicken Coop/P	Frame	Warren	Built 1940	Used by Warren
60/Boathouse/na	Frame	Warren	Built circa 1950 - 1960	Used by Warren
61/Residence Garage/na	Frame	Warren	Built 1934	Used by Warren
62/Barn/G	Concrete/Frame	Warren	Built 1952	Used by Warren
63/Barn/G	Concrete/Frame	Warren	Built 1952	Used by Warren
64/Red Barn/F	Concrete/Frame	Warren	Built post - 1952 Repair 1989 Maintenance 1990	NPS storage and fire truck
65/Metal Barn/F	Concrete/Metal	Warren	Built post - 1952	Maintenance facility
66/Scale House/G	Concrete/Frame	Warren	Built post - 1952 Machinery to museum 1975 Rehab/paint 1982	Scale house
67/Squeeze Chute/P	Post/Frame	Warren	Built post - 1952	Not used
68/Feed Rack/P	Pole/Frame	Warren	Built post - 1952	Not used
69/Loading Chute/F	Frame	Warren	Built post - 1952	Not used
70/Cow Shed/G	Frame/Metal	Warren	Built post - 1952	Not used
71/Cow Shed/G	Frame/Metal	Warren	Built post - 1952	Not used
72/Cow Shed/P	Frame/Metal	Warren	Built post - 1952	Not used

Historic Structure/ Building Number/Condition	Materials	Builder	Dates	Current Use
73/Cow Shed/P	Frame/Metal	Warren	Built post - 1952	Not used
74/Cow Shed/F	Frame/Metal	Warren	Built post - 1952	Not used
75/Cow Shed/F	Frame/Metal	Warren	Built post - 1952	Not used
76/Cow Shed/P	Frame/Metal	Warren	Built post - 1952	Not used
77/Cow Shed/P	Frame/Metal	Warren	Built post - 1952	Not used
78/Feed House/F	Frame	Warren	Built post - 1952	Not used
79/Feed House/G	Frame	Warren	Built post - 1952	Not used
80/Feed House/P	Frame	Warren	Built post - 1952	Not used
81/Feed House/P	Frame	Warren	Built post - 1952	Not used
82/Feed House/P	Frame	Warren	Built post - 1952	Not used
83/Feed House/P	Frame	Warren	Built post - 1952	Not used
84/Feed House/G	Frame	Warren	Built post - 1952	Not used
85/Pump House/O	Frame	Warren	Built circa 1950	Not used
86/Pump House/F	Frame	Warren	Built circa 1960	Houses irrigation pump
87/Pump House/F	Concrete	Warren	Built circa 1960	Houses irrigation pump
88/Pump House/F	Frame	Warren	Built 1952	Pump for Warren residence
89/Clark Fork Bridge/G	Log	Warren	Built circa 1930 Pilings driven 1977 Rehab 1982	Used river bridge
90/Slough Bridge/G	Log	Warren	Built circa 1930 Rehab 1982	Used log and plank bridge

In addition to the above, the ranch contains 26 miles of various fencing, including jack leg, wood post and wire, steel post and wire, and wood post and wood rail. Fencing is generally in fair to poor condition. There are in excess of 100 gates, including frame, log, pole and wire, and steel. Gates are in good to poor condition. Livestock watering on the Warren complex is provided by nine electrically heated troughs, both steel and concrete.

There are more than 18,000 cataloged objects. It is estimated that the total collection size is 23,000 objects. There is a cataloguing backlog of about 3,300 objects. The collection

is estimated to contain 3,700 archeological, with a few ethnographic objects, 240 biological specimens, 1,600 archival items, and 16,500 cultural objects.

The archeological objects include 36 prehistoric lithics from the surveyed archeological sites and historical artifacts from in and around the main ranch complex structures and dump excavation between the ranch house and ice house. This collection is essentially ranch debris and includes fragments of glass, metals, metal objects, and remnants from the butchering of animals.

About 25 of the objects could be classified as ethnographic. These include such items as a Hawaiian War Club, a bow and arrows, a wolf robe, a tomahawk, two Navajo rugs, and assorted fragments of items found under the ranch house. Most of the items were acquired as curiosities by Kohrs family members in very limited interaction with eastern Montana Indian tribes, or as souvenir items on trips in the early 20th century. Except for the wolf robe, once owned by John Grant, and an arrow found under the ranch house, the items have little cultural affiliation with Indian tribes that once occupied the Deer Lodge Valley, even though Grant had married into at least the Bannock Tribe. Regarding other ethnographic resources, there is an autobiography by John Grant in the park collection that recounts some aspects of life in the Deer Lodge Valley, while the Kohrs records contain no mention of interaction with American Indian populations. There are no known ethnographic sites within the park.

About 98 percent of the museum collection is specific to the ranch. General condition of the collection is good, although some objects are deteriorating and many need conservation treatment. The museum collection contains objects dating from the 1860s to the 1970s. Included are ranch equipment, building furnishings, horse-drawn and motorized vehicles and equipment, personal gear, archeological material, archival material, and an architectural collection. About 10 percent of the collection is on display. Much of the collection is of value for research.

Current emphasis of the collection management program includes control of pest populations, documentation/accountability, improvements in storage, and preventive maintenance. Conservation problems are increasing.

The second floor and basement of the ranch house are primarily used for storage of an approximately 16,500-object museum collection. It is substandard for museum storage. Seven other historic buildings are used to store remaining museum objects. Most staff have access to the museum collections. With the exception of the ranch house, buildings are not equipped with fire and intrusions alarms, fire suppression systems, or environmental controls.

ARCHEOLOGICAL RESOURCES

The park, including lands then held in easement, was inventoried in 1973 (Sharrock). Since that time, 1,600 acres have been added that will need to be inventoried. Known sites include four prehistoric and 11 historic archeological sites. In addition, there are several isolated occurrences of historic farm equipment around the park. Four aboriginal sites found included a tepee ring site, and three open sites or scatters of flakes and ground stone. The cultural affiliation of the aboriginal sites is unknown. Three are not eligible for the National Register of Historic Places and one's eligibility is unknown (see table following; Hartley 1989). Site 24PW1077 has not been evaluated and needs to be tested before a National Register evaluation can be made. This property is closest to the Ranch headquarters development and the site will be avoided during the planning of any activities in its vicinity. Within the 11-acre development zone is a historic cabin site that will also be avoided.

The surface around the ranch facilities has been extensively modified, and at least 12 areas with buried historic remains relating to the ranch operations are known to exist. Since 1973, monitoring and testing for projects around the home ranch buildings and main house revealed four important buried historical remains in builder's trenches (Brown 1975; Legard 1976; Sudderth 1985). Seven additional historic dumps are outside of the home ranch complex and have not been documented (Cheryl Clemmensen, personal communication, 1991). Other historic remains will be present and ground-disturbing activities will require monitoring.

Table 6

National Register Status for Sites

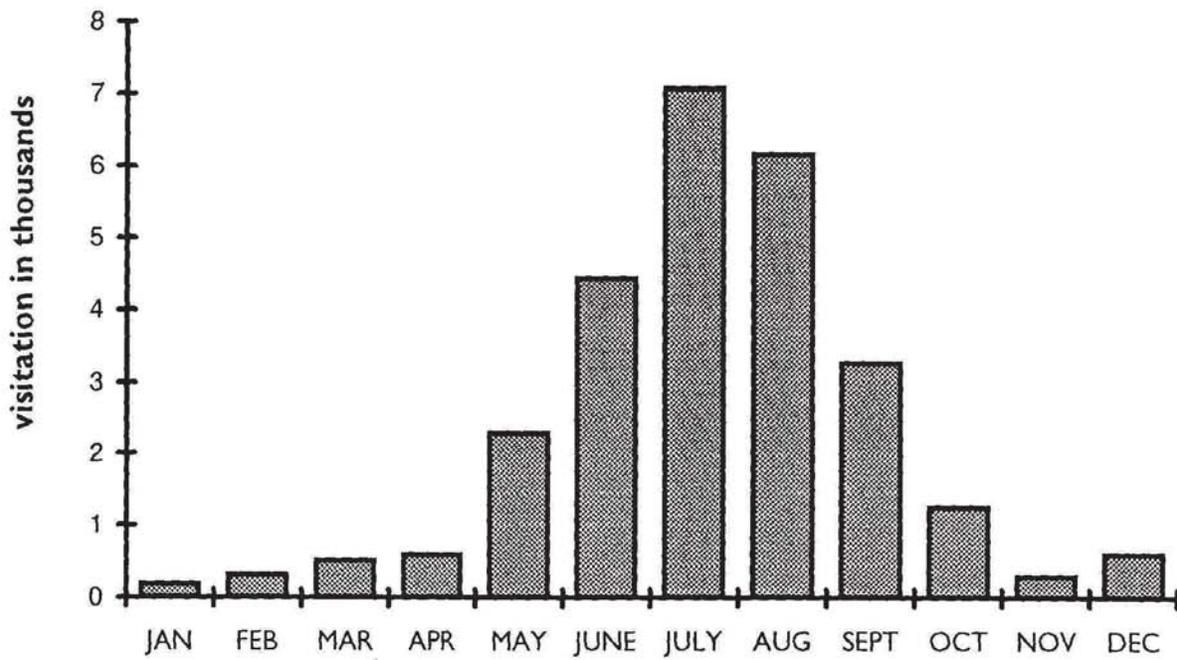
<u>Site</u>	<u>Eligible</u>	<u>Ineligible</u>	<u>Not Evaluated</u>	<u>SHPO Concurrence Date</u>
24PW1076		X		1/29/90
24PW1077			X	1/29/90
24PW1078		X		1/29/90
24PW1079		X		1/29/90
Historic debris in Clark Fork River at bridge			X	
Historic debris in willows west of Clark Fork River at bridge			X	
Historic debris far side of Cottonwood Creek			X	
Historic debris between ice house and bunkhouse			X	
Historic debris side of new wing of house			X	
Depression at chicken coop (outhouse?)			X	

<u>Site</u>	<u>Eligible</u>	<u>Ineligible</u>	<u>Not Evaluated</u>	<u>SHPO Concurrence Date</u>
Warren dump north end of site			X	
Historic debris west end of far feedlot fence			X	
Homestead on west side of Clark's Fork River			X	
Hobo camp north of L-shaped barn and in wetland borrow			X	
Con Warren and Ole Berg dump (near 24PW1077)			X	
Tom Stuart Cabin foundation on 11-acre tract			X	

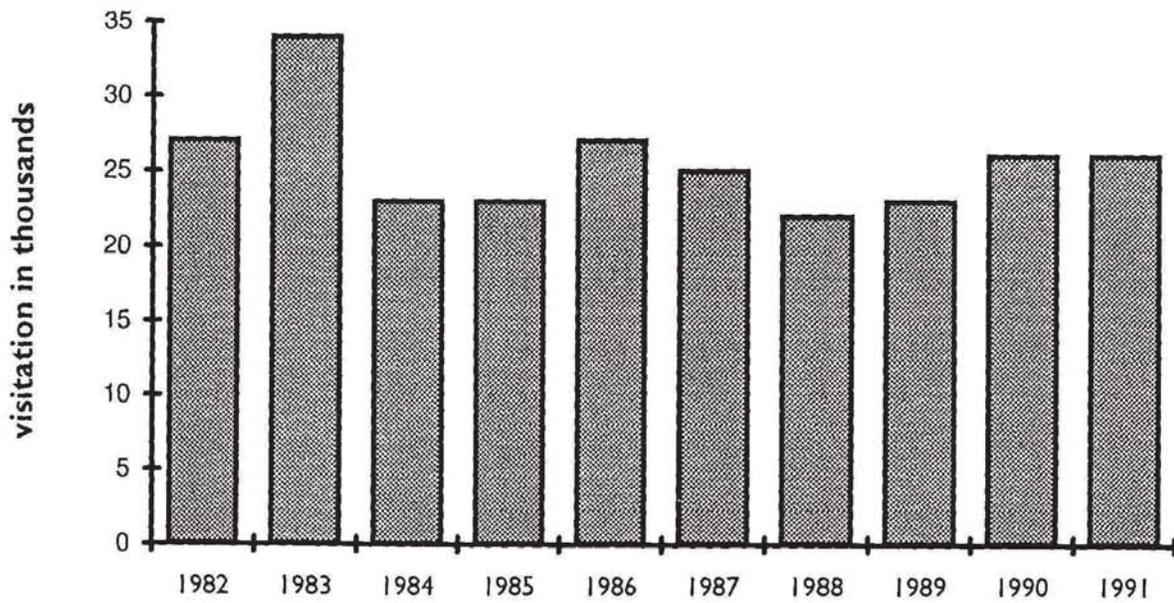
VISITOR USE

Visitation at Grant-Kohrs Ranch has increased from 19,949 in 1980 to 26,927 in 1991. Highest recorded visitation was 34,292 in 1983, when a railroad centennial was celebrated. About 67 percent of the park's visitation occurs during the summer season (June-August), and about 20 percent during shoulder seasons (May and September). The remaining 13 percent of use occurs from October through April. These visitation patterns are graphically displayed on the Ten-Year Annual Visitation and Monthly Visitation - 1991 illustrations.

The average visitor length-of-stay is 1.2 hours; there is no overnight use of the park. Thirty-three percent of use originates from residents in the local and regional area (residents who live within a day's drive of the park), 57 percent of use originates from national destinations, and 10 percent of use is international. For the most part, visitors



1991 Monthly Visitation



Annual Visitation
Grant-Kohrs Ranch National Historic Site

are on an extended trip or vacation and the park is one stop on their itineraries. Eight percent of visitors are travelling alone, 52 percent are with a peer group, 10 percent are on an organized tour, and 29 percent are in family groups.

The primary visitor activity is touring the historic ranch complex. Sixty-seven percent of visitors attend personally conducted or presented activities, such as the guided-tour of the ranch house, or the blacksmith shop demonstrations. Ninety-five percent of all visitors use some type of information, orientation, or personal services provided by the park. Interpretation is the essence of visitor enjoyment of Grant-Kohrs Ranch.

Accessibility for the disabled is minimal. There are handicapped spaces in the visitor contact station parking lot. Due to narrow stalls and other impediments, rest rooms adjacent to the contact station are not accessible, even though ramped. The contact station itself is ramped, although the interior is so small, a wheelchair would have difficulty maneuvering if the building were even somewhat crowded. The walkway from the contact station to the home ranch complex is paved, although its length and at least one steep grade makes its accessibility marginal, if not impossible. Disabled visitors are encouraged to enter the site by the north access to park nearer the home ranch complex.

The home ranch complex, however, no matter how it is approached, is technically not accessible. Dirt and loose gravel driveways and walkways, some rutted and potholed, make independent use from a wheelchair or with walking aids difficult. This is especially true near the main ranch house, as the primary walking tour route involves a fairly steep grade without any alternative access. The rest rooms in the garage in the lower yard are technically accessible, although routes to get there are not. In addition, most of the historic structures are inaccessible because of steps, high thresholds, dirt surfaces, narrow openings, and other obstacles. Problems for other disabilities include dim lighting and/or glare in most buildings, including the main ranch house. The first floor of the house is marginally accessible. Narrow doorways, carpets, dim lighting and other obstacles present barriers. The house tour itself is not signed or otherwise accessible to the hearing impaired. No provisions have been made for the visually impaired.

LANDOWNERSHIP

There are 1,498.38 acres within the boundaries of the park. Of this total 1,205.83 acres are owned in fee by the federal government and on 165.68 acres, the federal government owns scenic easements and a small (0.05 acres) access right-of-way. Non-federal lands in the boundary include 69.47 acres owned by the city of Deer Lodge for sewage lagoons and 57.45 acres owned by Union Pacific Railroad, which is leased to Burlington Northern,

who leases it to Montana Western. Conrad Warren retains a life estate on about 0.7 of an acre.

Outside and adjacent to the park's southern boundary, 120.00 acres are owned in fee by the federal government. This tract was purchased as an uneconomic remnant under authority of P.L. 91-646. A 0.75-acre waterline right-of-way near the southeast corner of the park's boundary, is also owned by the federal government.

SOCIOECONOMIC RESOURCES

Grant-Kohrs Ranch has a substantial impact on the Deer Lodge economy. Park-related federal expenditures in fiscal year 1991 totaled \$589,000. This resulted in total annual sales, considering indirect and induced multipliers, of about \$1,024,000. Sales benefits from park tourism results in direct sales of about \$72,000 annually, and when considering indirect and induced multipliers contributes nearly \$130,000 annually to the Deer Lodge economy. Total tax revenue gained as a result of NPS operations and tourism is nearly \$21,000 annually.

Deer Lodge offers all normal services from a clinic and hospital to 150 businesses, including motels, campgrounds, grocery, drug and dry goods stores, restaurants, beauty shops, and veterinarians. Service and gas stations are open 24 hours a day. USDA-Forest Service, state, and private campgrounds are nearby. Three major shopping centers and colleges are available in the area at Butte, Missoula, and Helena.

During the last 10 years, the population of Deer Lodge has decreased some 24 percent, from 4,023 to 3,376. During that same period, the population of Powell County decreased only one-half of a percent. There is an increased trend toward small "ranchettes" north and south of Deer Lodge.

MANAGEMENT AND OPERATIONS

Grant-Kohrs Ranch normally has a staffing level of 17 full-time equivalents. The annual operating budget has averaged about \$475,000. Nearly \$6,000 in entrance fees is collected each year and annual income from leases is about \$15,000.

Park administrative, management, and operational functions are scattered in various facilities in and outside of the park. Rented space in the city of Deer Lodge serves as the park administrative headquarters. Curatorial staff work from the second floor of the

historic ranch house. Some interpretive staff work in the small visitor contact station. Maintenance uses a number of historic structures in the ranch for a variety of purposes.

Current permanent staffing for the park is as follows:

<u>Number of positions</u>	<u>Position</u>
1	Superintendent
1	Supervisory Park Ranger
1	Maintenance Mechanic Foreman
1	Administrative Officer
1	Ranch Worker
1	Curator
4	Park Ranger
1	Maintenance Worker
1	Maintenance Mechanic
1	Museum Technician
1	Administrative Clerk
1	Secretary

Current seasonal staffing for the park is as follows:

<u>Number of Positions</u>	<u>Position</u>
4 - 5	Interpreters
1 - 2	Museum Aids
2 - 5	Laborers and Maintenance Workers

In addition to responsibilities for Grant-Kohrs Ranch, the superintendent is responsible for the overall administration and management of Big Hole National Battlefield. Grant-Kohrs Ranch provides administrative, curatorial, interpretive, and maintenance support.

OTHER FEDERAL AGENCIES

Federal agencies in the area include the Postal Service and bureaus within the Department of Agriculture. The Agricultural Stabilization and Conservation Office and Soil Conservation Service frequently provide assistance on land management matters. During the fire season, there is frequent contact with the USDA-Forest Service. Bonneville Power has power lines in the area.

The Clark Fork River Superfund site cuts down the long axis of the national historic site. Federal agencies involved, in addition to the NPS, include the USDA-Forest Service, Bureau of Land Management, Environmental Protection Agency, Fish and Wildlife Service, Department of the Interior Environmental Office, and Consolidated Salish Tribes (Bureau of Indian Affairs). State agencies include Fish, Wildlife and Parks, and Department of Health and Environmental Sciences.