1998 ROCKY MOUNTAIN NATIONAL PARK SEASONAL HANDBOOK



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WELCOME TO ROCKY MOUNTAIN NATIONAL PARK

In 1915, Rocky Mountain National Park became the tenth of America's treasured national parks. It preserves one of the most scenic stretches of the southern Rocky Mountains. One-third of the Park is above treeline, where tundra predominates, a major reason the area was set aside as a national park early in the century, and why it was declared an International Biosphere Reserve by the United Nations in 1976.

With over 364 miles of trails, the Park is a favorite destination for hikers, horseback riders, cross-country skiers, and snowshoers. Backcountry adventure and general sightseeing are also very popular. Elk, deer, bighorn sheep, coyotes, moose, and 260 species of birds, among others, make wildlife watching a year-round favorite of park visitors.

With the 21st century quickly approaching, the Park's scenic beauty, relatively small size, and proximity to Colorado's heavily populated Front Range present the greatest challenge, balancing visitor use with resource protection. Named in 1988 as among America's top ten most threatened parks by the Wilderness Society, Rocky Mountain National Park has made a concerted effort to strengthen traditional partnerships and to forge new ones as a strategy to counter ongoing funding and staffing constraints.

The staff of Rocky Mountain National Park exhibits a remarkable degree of flexibility and openness to new ideas. A willingness to invest in automated data processing hardware and software has kept the Park current with new technology. As a result, *Rocky* has served as the field testing site for new computer and administrative initiatives because of its program capabilities, the professional competency of its staff, and an openness to try new things. Furthermore, the staff is willing to look beyond immediate needs to determine budgetary and staffing consequences of today's decisions. This receptiveness to look at the long-range effects of today's decisions makes Rocky Mountain National Park an exciting environment in which to test new ideas against the litmus of balancing visitor use against resource preservation.

It is an exciting time to be at *Rocky*! Initiatives are underway to implement employee futures, to improve employee housing, and to secure private sector funding through partnerships for improvements to our visitor services.

We hope it will be an exciting and rewarding time for you!

A. Durand Jones Superintendent

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ROCKY MOUNTAIN NATIONAL PARK AT THE THRESHOLD OF THE SECOND MILLENNIUM

At its inception in the late 19th century, the national park idea was an innovative and startling concept. It still is, and is considered by some observers as America's finest contribution to world culture. However, despite their popularity, the national parks find themselves at the doorstep to the second millennium with their future clouded by increasing visitation and the resultant impacts on resources (natural and manmade), the development of neighboring private lands, the vagaries of shifting political philosophies and policies, and continuing federal budgetary constraints.

When Yellowstone National Park, America's and the world's first national park, was established by Congress in 1872, our nation was still in its adolescence. A devastating civil war that almost irreparably rent the country in two had ended just seven years earlier, and the last spikes uniting the first transcontinental railroad had been driven a mere three years before.

With the exception of the industrial and financial centers along the eastern seaboard, San Francisco on the West Coast, and a few upcoming towns in the interior, such as Pittsburgh, Chicago, and St. Louis, America was still a primarily rural society with vast expanses of open land, particularly west of the Mississippi River. These lands had entered the Union, under federal ownership, with the Louisiana Purchase of 1803.

So in some ways, it was a relatively easy matter to set aside some of these vast government holdings in the west as national parks—that is, as long as the land wasn't good for anything else. Once satisfied that Yellowstone wasn't fit for homesteading, and timber and mining operations, Congress set aside the area as "a public park or pleasuring ground for the benefit and enjoyment of the people." The law establishing the Park also provided for the preservation of all timber, mineral deposits, natural curiosities, and wonders within the Park "in their natural condition." This legislation set in motion the almost mutually exclusive purposes of preservation and public enjoyment, still debated by those who support the national park concept and by those who see all public lands, including the national parks, as a major impediment to the attainment of the west's full economic potential.

Rocky Mountain National Park, the nation's tenth oldest national park, was established in 1915 by Congress as "... a public park for the benefit and enjoyment of the people of the United States ... with regulations being primarily aimed at the freest use of the said park for recreation purposes by the public and for the preservation of the natural conditions and scenic beauties thereof." The same dual mission was again espoused one year later when Congress established the National Park Service to "... promote and regulate the use of the Federal areas known as national parks, monuments, and reservations ..." and "... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will

leave them unimpaired for the enjoyment of future generations." During the ensuing years, a large body of laws and regulations evolved to provide the National Park Service with the necessary authorities to fulfill its mission.

In the closing days of the 19th century and up through World War II, fulfilling this mission was simpler for park managers than it is today. Although the boundaries of Rocky Mountain National Park and her sister parks in the west represented political boundaries rather than complete ecosystems, Park Service employees had the luxury of concentrating on what took place inside the parks, since little was going on outside the parks. The United States west of the Mississippi was still a land of open spaces.

But all that has changed. From Colorado's Front Range (Fort Collins in the north to Pueblo in the south), to Jackson, Wyoming and the Greater Yellowstone area, to communities around Glacier National Park, and to Las Vegas, Phoenix, Albuquerque, and Salt Lake City, once open lands are now the setting for tract housing, vacation homes, golf courses, resorts, and business sites. Now the parks can no longer be concerned with looking inwardly. They must be concerned with what is taking place on neighboring lands, for what occurs outside the parks directly influences what happens to the resources inside the parks.

At Rocky Mountain National Park, efforts have been underway since the early 1900s to develop closer ties with individual lands owners, homeowner associations, developers, and businesses in the gateway communities of Estes Park and Grand Lake so that the concerns of people both outside and inside the Park are known, understood, and reflected in area planning. The Park, through the good offices of a land use specialist on its staff, seeks to influence development on private lands in such a way as to make it sensitive to the area's natural setting.

Cooperating with realtors in the Estes Valley, the Park developed a brochure for new residents to heighten their awareness of those concerns unique to living next door to a national park—maintaining seasonal migration corridors for wildlife; using colors and housing materials that blend with the natural surroundings; etc. In addition, the Park, working with teams of neighboring private landowners, has produced practical guides for developing properties in such a way as to preserve the area's natural attributes. These efforts often equate to a longer and more complex process in achieving a consensus between the Park and its neighbors. However, in today's litigious society, cooperation in the early stages of planning is a far more efficient and economical approach than airing differences in a court of law.

The Park's concems over external impacts don't end with land development. Degradation of air quality resulting from urbanization, industry and mining from as far away as southern California and northern Mexico is of increasing concern. Air is not only affected, but so is water, from the deposition of nitrates and other chemicals in the Park's high country winter snowpack (the source of drinking and irrigation water). To meet its

Congressional mandates to protect such resources, Rocky Mountain National Park and other units of the National Park System will remain diligent in monitoring such impacts to natural resources, not only from the perspective of maintaining healthy park ecosystems, but also to assist neighboring jurisdictions in maintaining healthy natural environments for their citizens.

In addition, the Park is concerned with the impacts of increasing visitation on its natural and cultural resources (archeological and historical properties). Archeological surveys and historical studies are underway as a precursor to strategies for protecting and preserving these remnants of past human activity stretching from the late 1800s back to 12,000 years before present. Since the early 1970s, a permit system to regulate overnight backcountry camping has been in place to mitigate human impacts on vegetation and water resources. A shuttle bus system, also in place since the 1970s, allows more visitors to experience the breathtaking beauty of Bear Lake without having to pave over natural resources near the lake to accommodate these visitors' automobiles.

But continuing increases in the number of visitors to the Park and growing year-round use of the Park, in part due to the mushrooming population in Colorado's Front Range communities, will challenge the Park to devise more effective, yet evenhanded systems for controlling public access. From its first year (1915) when 13,000 people entered its gates, to the 1990s when over three million visitors are now the norm, the Park's growing popularity is both a blessing and a bane to park administrators and employees. Balancing visitor use with resource protection will continue as the Park's highest priority into the 21st century.

New ways of funding research and park operations also will continue to receive high priority. By the summer of 1999, the Park, in cooperation with private business, will have opened a much needed visitor center at the Fall River Entrance (Highway 34) on the Park's east side. The Park's friends group, the Rocky Mountain National Park Associates, and its cooperating association, the Rocky Mountain Nature Association, will be relied on increasingly to raise funds from the private sector to underwrite such projects as construction of fully-accessible trails, production of educational exhibits, and the undertaking of natural resources research projects, and historic prehistoric structures preservation and stabilization projects. Congress, with its authorization of the Recreation Fee Demonstration Project, from 1997 through 1999, is working with the National Park Service to devise ways in which a larger percentage of entrance and camping fees can remain at the Parks to reduce nagging maintenance backlogs—at Rocky Mountain National Park alone, this backlog is estimated to at \$54 million.

But most importantly, Rocky Mountain National Park and the National Park Service are committed to increasing public awareness of national parks as part of the legacy belonging to all Americans, and that we who wear the gray and green are but the caretakers of some of our country's most spectacular natural areas and significant historical sites that have contributed to our uniquely "American Experience." Our goal is to increase society's understanding of the need for all Americans to not only enjoy our national parks, but also to hand unimpaired this irreplaceable legacy to our children and to our children's children.

THE NATIONAL PARK SYSTEM

The National Park System of the United States, now in the early years of its second century, comprises over 375 areas in 49 states, the District of Columbia, Guam, Puerto Rico, Saipan, and the Virgin Islands. These areas are of such national significance as to justify special recognition and protection in accordance with various acts of Congress.

By the Act of March 1, 1872, Congress established Yellowstone National Park in the Territories of Montana and Wyoming "as a public park or pleasuring ground for the benefit and enjoyment of the people" and placed it "under exclusive control of the Secretary of the Interior." The founding of Yellowstone National Park began a worldwide national park movement. Today, more than 100 nations contain some 1,200 national parks or equivalent preserves.

In the year following the establishment of Yellowstone, the United States authorized additional national parks and monuments, most of them carved from the federal lands of the West. These were also administered by the Department of the Interior, while other monuments and natural and historic areas were administered as separate units by the War Department and the Forest Service in the Department of Agriculture. No single agency provided unified management of the varied federal parklands.

In an Act signed on August 25, 1916, Congress established in the Department of the Interior, the National Park Service to provide cohesive administration of such areas under the Department's jurisdiction. The Act says: "The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment for future generations."

An Executive Order in 1933 transferred 63 national monuments and military sites from the Forest Service and the War Department to the National Park Service. This action was a major step in the development of today's truly national system of parks, a system that includes areas of historical, as well as scenic, scientific, and recreational importance.

Congress declared in the General Authorities Act of 1970 "that the National Park System, which began with the establishment of Yellowstone National Park in 1872, has since grown to include superlative natural, historic, and recreation areas in every region . . . and that it is the purpose of this Act to include all such areas in the System . . ."

Additions to the National Park System are now generally made through Acts of Congress, and national parks can be created only through such acts. The President has authority, under the Antiquities Act of 1906 to proclaim national monuments on lands already under federal jurisdiction. The Secretary of the Interior is usually asked by Congress for her/his recommendations on proposed additions to the System. The Secretary is counseled by the National Park System Advisory Board, composed of private citizens, which advises him on possible additions to the System and policies for its management.

Areas added to the National Park System for their natural values are expanses or features of land or water of great scenic and scientific quality and are usually designated as national parks, monuments preserves, seashores, lakeshores, or riverways. Such areas contain one or more distinctive attributes such as forest, grassland, tundra, desert, estuary, or river systems; they may contain "windows" on the past for a view of geological history, imposing landforms such as mountains, mesas, thermal areas, and caverns, and they may be habitats of abundant or rare wildlife and plant life.

HISTORY OF ROCKY MOUNTAIN NATIONAL PARK

PARK PREHISTORY

Colorado, including Rocky Mountain National Park, has been the home to prehistoric Indians since at least 12,000 years ago at the end of the last Ice Age of the Pleistocene era.

All Native Americans, i.e., American Indians, are the descendants of all people who originally occupied western Asia (China/Siberia). Over 12,000 years ago, the first migrations took place from Siberia over the Bering Land Bridge and then through Alaska and Canada to the "lower 48."

Throughout prehistoric and early historic times, seasonal use by hunters and gatherers was the predominate lifestyle in the Park because of the harsh winters. Archeological sites in the Park reflect cultural relationships to both the Plains and the Great Basin, as well as indigenous peoples.

The earliest people identified archeologically in North America are known as the Paleo-Indians who hunted extinct big game such the woolly mammoth (Clovis culture) and a giant bison (Folsom culture). Although most Paleo-Indian sites in the region are concentrated in the Plains, projectile points, i.e., "arrowheads," reflecting Clovis (ca. 11,000 to 10,500 B.C.) and Folsom occupations (ca. 10,500 to 7,000 B.C.) have been collected from the Park indicating the presence of these peoples.

The Paleo-Indian period is followed by the Archaic period. Archaic peoples were generalized hunters of modern fauna, and gatherers of plant foods. They occupied the

entire state from about 7,000 B.C. until about A.D. 100. Several Archaic sites are known in the Park. Game drives in the Park above timberline consisted of long lines of rocks which were used to channel excited animals (most likely Big Horn Sheep) to an area where they could be dispatched. A very similar technique is known from the Plains where bison (sometimes in the hundreds) were driven over cliffs to their death.

Our knowledge of the Woodland peoples is known best from the Plains area from about A.D. 100 to 1250. However, sites of this time period are known in the Park. Woodland peoples used the bow and arrow and pottery which were derived from peoples in eastern Kansas and Nebraska.

HISTORIC NATIVE AMERICANS

People have been extensively using the mountains from at least 11,000 B.C. to sometime in the A.D. 1300s or 1400s. Although archeologists have a great difficulty in identifying cultural groups after this time, it is suspected that they very likely may have been the predecessors of the modern Ute Tribe.

The major inhabitants of the Park area in historic times were the Ute and Arapaho. Ute origins may have been in the Great Basin and/or the mountainous areas of the state; they may have been here for thousands of years. The Arapaho homeland was originally in Minnesota, and they migrated into Colorado by about 1790. Several oral histories from the Ute and Arapaho tell of their many battles in the area. No less than 36 place names in the Park are of Ute or Arapaho origin. By about 1880, the Ute had been moved to reservations in Colorado and Utah, and the Arapaho to Oklahoma and Wyoming.

WHAT DO YOU DO IF A VISITOR FINDS AN ARCHEOLOGICAL SITE?

The collecting and removing artifacts such as broken pottery, arrowheads, and other stone tools, or writing on rocks, destroys our heritage and makes it almost impossible to tell the story about the earliest inhabitants. Moreover, it is illegal to collect on federal and state lands. It is also illegal to collect archeological artifacts on private lands without permission of the landowner.

Rangers should obtain the artifacts from the visitor and record where they found it. Inform the Park Archeologist as soon as possible.

THE KAWUNEECHE VALLEY

The Colorado River District of the Park includes portions of Grand and Larimer counties and encompasses approximately half of the Park's 415 square miles. The Never Summer Mountains, added to Rocky Mountain National Park in 1929, rise 3,000 feet above the Kawuneeche Valley with elevations of peaks above 12,000 feet. Grand Lake, a rustic, tourist community located near the west entrance to the Park, provides food, lodging, and recreational services for the area.

The Big Thompson project, completed in the 1940's, diverts water from Grand Lake to Marys Lake on the east slope through the 13.1 mile Adams Tunnel. Now called the Three Lakes area, Grand Lake, Shadow Mountain, and Lake Granby border the Park and afford excellent boating and fishing opportunities to area visitors.

The Colorado River District of the Park receives twice the amount of precipitation of the east side of the Park. Most of the moisture comes in the form of snow which creates deep snowbanks and results in the closure of Trail Ridge Road during the winter months. Kawuneeche Valley wetlands provide excellent habitat for moose and otter, and elk and deer are commonly seen grazing in valley meadows. Historically, the Grand Lake area was a summer camp to the Ute and Arapaho, and later was settled by miners, homesteaders, dude ranchers, and recreational businesses.

The name Kawuneeche is derived from an Arapaho term meaning Valley of the Coyote. Indians hunted elk and deer and harvested other foods in and around the valley. Legends tell of warriors using trails to cross the mountains and attack their enemies.

Grand Lake gained its earliest prosperity as a supply and recreation center for the miners. It was during the 1870s that prospectors discovered traces of silver and gold in the upper North Fork Valley. When the mining boom faded, so did the local economy, including the short-lived mining town of Lulu City. Today, Lulu City is represented only by the remains of a few log cabins.

Robert L. "Squeaky Bob" Wheeler catered to those exploring the backcountry. He created a rustic resort along the Colorado River in 1907. No traces remain of his once famous "Hotel de Hardscrabble."

John and Sophia Holzwarth's Never Summer Ranch was established in the heart of the Kawuneeche Valley around 1917. With the completion of the Fall River Road in the 1920s, the ranch prospered. It became one of Colorado's premier dude ranches. The ranch is preserved as a unique historic site which can be visited. At one time, the Park provided living history at the ranch. The living history program was discontinued in 1983, even though people will still ask about it.

The Colorado River

The Colorado River is the sixth longest river in the nation. At its headwaters high in Rocky Mountain National Park, an adult can straddle its banks. Downstream, in the Grand Canyon, the river flows at up to 20 miles per hour and is sometimes over 300 feet wide and up to 40 feet deep.

The deep snows of the Rocky Mountains provide 75 percent of the Colorado River's average yearly flow. The runoff is controlled by 65 dams on the Colorado River and its tributaries.

The Grand Ditch

The Grand River Ditch is high to the west of the Kawuneeche Valley. This ditch is operated by the Water Supply and Storage Company of Fort Collins. The ditch was completed in 1932 and extends 14.3 miles. The Grand River Ditch is constructed on a two percent grade running to the north along the Never Summer Range. This ditch crosses the Continental Divide. The water collected by this ditch is diverted to Longdraw Reservoir and then released downstream to the Poudre River. Average delivery of water from this ditch annually is about 20,000 acre feet.

An interesting sidelight is the fact that the larger portion of this ditch is within Rocky Mountain National Park. The construction of this system was started before Rocky Mountain National Park was established.

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ESTES VALLEY

The Naming Of Longs Peak

One of the first government sponsored explorers to visit the area was Major Stephen H. Long. As leader of the Yellowstone Expedition, a fact-finding mission about the west, Major Long and his party first saw the Rocky Mountains on June 30, 1820. They spoke of their incredible admiration for an impressive peak towering above the rest of the mountains in this area. Later, that peak would be named after the expedition leader, "Longs Peak."

Gold was discovered in Colorado in 1859. Although most of the gold mining actually occurred south of what we now know as Rocky Mountain National Park, one settler did wander into the area. Joel Estes claimed the large, beautiful meadow area, known to early westerners as a "park." He built a cabin along Fish Creek where he and his family lived from 1860 to 1866.

In 1864, William Byers, owner and editor of the Rocky Mountain News, came to the Estes Valley with the intention of climbing Longs Peak. Although the group was unable to climb

the peak, Byers did write an article about his trip, calling the area Estes Park in honor of his host. The name stuck.

In 1866, the Estes family sold their land for a yoke of oxen and left Estes Park for a warmer climate, and other settlers, ranchers, loggers, hotel owners and tourists ventured into the area. Their diverse influences began to change and mold the area from a wilderness area to a resort community.

VISITORS FROM OTHER LANDS

World traveler, Isabella Bird, who was born in Yorkshire England in 1831, visited Estes Park in 1873. One of the interesting characters she met during her travels in the area was Rocky Mountain Jim, a mountain hermit. He invited Ms. Bird to climb Longs Peak with him, an experience she writes of quite eloquently in her book A Lady's Life in the Rocky Mountains.

Another visitor to Rocky Mountain was the fourth Earl of Dunraven and Earl of Mount. Originally from Ireland, he was born in 1841. He first visited the area on a hunting trip in 1872. Dunraven decided that he wanted to make Estes Park his own hunting preserve. Using false entries in the homestead records, he quickly took control of a large area of land in the Estes Park area. In 1877, he opened a hotel for his friends and guests. F.O. Stanley bought the Dunraven property in 1907, and the hotel burned in 1911. The Earl of Dunraven is still remembered in the names of Dunraven Glade and Mount Dunraven.

THE FATHER OF ROCKY MOUNTAIN NATIONAL PARK

The establishment of Rocky Mountain National Park is historically linked with the name of one man, Enos Mills, so called "father" of the Park and a famous naturalist. His enthusiasm, writing, and lectures laid the groundwork which ultimately led to legislation in 1915 setting aside this beautiful area for the use and enjoyment of the people of the United States and guests from other countries.

Enos Mills was born near Fort Scott, Kansas in 1870. He first came to Colorado at the age of 14 and worked as a cowboy near Fort Collins. He later became a mountain guide at Carlyle Lamb's Ranch near Longs Peak. In 1885, Enos Mills made a homestead claim east of Longs Peak and built a cabin.

During a trip Mills took to California, he became acquainted with John Muir, who urged him to become more vocal concerning his feeling for conservation of the Rocky Mountain area. Mills began writing conservation-based articles for magazines and newspapers, as well as guiding people up Longs Peak. Over time Enos Mills wrote and published sixteen books, ranging from The Story of Estes Park to Wildlife in the Rockies. In 1902, Mills bought the Lamb ranch, and he spent his summers running the Longs Peak Inn until he died in 1922. During the winter Mills worked as a "Snow Observer" for the Colorado Irrigation Department. He traveled around the country telling of his life in the mountains. Mills also spent quite a bit of time working on his books and articles.

In 1909, Enos Mills, F.O. Stanley, and a number of other concerned businessmen became interested in protecting the wildemess beauty of the area. Their idea expanded from a game refuge to the creation of a national park. The first bill designed to set aside the area as a national park was presented to Congress on February 6, 1913. After several revisions and a few compromises, the legislation passed through Congress, and on January 26, 1915, President Woodrow Wilson signed the bill into law, Rocky Mountain National Park was created.

THE LEGISLATIVE BEGINNINGS OF ROCKY MOUNTAIN NATIONAL PARK

The Act of January 26, 1915 (38 Stat. 798) establishing Rocky Mountain National Park states that the Park is:

"... hereby reserved and withdrawn from settlement, occupancy, or disposal under the laws of the United Sates, and said area is dedicated and set apart as a public park for the benefit and enjoyment of the people of the United States ... with regulation being primarily aimed at the freest use of the said park for recreational purposes by the public and for the preservation of the natural conditions and scenic beauties thereof."

In 1909, Enos Mills, who led the campaign for a national park in the Estes Park area, described the resources that prompted the establishment of Rocky Mountain National Park.

"Around Estes Park, Colorado, are mountain scenes of exceptional beauty and grandeur. In this territory, is Longs Peak and one of the most rugged sections of the Continental Divide of the Rockies. The region is almost entirely above the altitude of 7,500 feet, and in it are forests, streams, waterfalls, snowy peaks, great canyons, glaciers, scores of species of wild birds, and more than a thousand varieties of wildflowers."

The alpine tundra and the rugged mountains of the Front Range still form the most significant part of Rocky Mountain National Park. The natural ecosystems, with their associated flora and fauna, from elevations of 7,800 to 14,255 feet, are also of particular significance. Because of this significance, the natural ecosystems of Rocky Mountain National Park have received international recognition through their inclusion as a Biosphere Reserve, a part of the UNESCO program on "Man and the Biosphere."

Also of significance to the Park are a number of historical places and structures. These relate to settlement and development of the Park and include the William Allen White Cabin, the Never Summer Ranch, Old Fall River Road, and Trail Ridge Road. Ninety-eight historic structures and historic districts have been included or are eligible for inclusion on the National Register of Historic Places. Although a complete archeological survey of the Park has not been made, over 92 archeological sites have been identified.

The Park's natural and cultural resources are even more significant because of nearby Front Range metropolitan areas. This is why our task of "preserving" is so difficult, yet so important. Rocky Mountain National Park hosts 3 million visitors annually, each with a different reason for being here.

The management of Rocky Mountain National Park is also guided by the legislation that created the National Park Service in 1916. In a crucial phrase, the purpose of the Parks is summarized:

"... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The people of the United States, then, speaking through Congress, gave us a tough assignment, to PRESERVE the wild charms of a rugged section of the Continental Divide for the ENJOYMENT and RECREATION of the people of the United States. It is a great challenge for all employees. We must understand the significance of Rocky's unique resources, resource management objectives, and safety concerns. We need to know how to help park visitors. We all share an equal responsibility in achieving a common goal, conservation and "wise use" of this national park.

HISTORY OF THE NATIONAL PARK SERVICE UNIFORM

The first park rangers were cavalry men who patrolled the Parks. They were easily identified by early visitors from their military type uniforms. The uniform has been a part of the National Park Service since the early years, and the visitors today can still quickly recognize a ranger by the uniform.

In 1911, Major W.R. Logan required the first summer uniform to be worn by National Park employees. It consisted of a jacket, Army wool shirt, riding trousers, leggings, and a felt "campaign" hat. In 1914, Mark Daniels, General Superintendent, appointed W.B. Lewis of Yosemite as Chairman of a special Uniform Committee which, in 1919, prescribed the uniform worn until 1946. It consisted of the stiff brim "campaign" hat, blouse, riding breeches, and riding boots, with a variety of kinds and colors of shirts. Prior to 1935 everyone, including Washington Office officials, wore the uniform. In 1941, the riding breeches and boots were traded in for trousers and shoes. The uniform has remained essentially the same since 1941 except for minor changes in the styles, standardizing the colors of the shirts and trousers, and authorizing special uniforms for certain activities or climate conditions.

Originally, the few women park rangers wore traditional uniforms identical to the men's. By the 1960s, the women's dress suit consisted of the skirt, jacket, white blouse, and "pill box" style cap. The early 1970s resulted in a totally different look for women with the tan and white or green polyester outfits. Since then, these have been phased out and the women's "traditional" uniform has come back into use.

In the late 1950s and early 1960s, maintenance crews began wearing a uniform. Traditional colors were maintained, but the design and style reflected a typical, functional work uniform.

Rocky Mountain National Park has always maintained a high standard of uniform dress in accordance with the very best traditions of the National Park Service. It is important that the uniform be worn in a manner that continues this tradition of excellence, as well as displaying a "uniform image" complimentary to the mission of this park and the functional aspects of the Park environment.

WILDERNESS

... to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.

... A wilderness... is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. The Wilderness Act, 1964

The National Park Service will manage wilderness areas for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness. Management will include the protection of these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness. Public purposes of wilderness will include recreation, scenic preservation, scientific study, education, conservation, and historical use.

NPS Management Policy

Today the National Wilderness Preservation System contains more than 100 million acres of Congressionally designated wilderness. Since 1994, wilderness has made up 51.56 percent of all NPS lands. More than half of the NPS land base is designated wilderness. Today, 44 NPS areas together contain 43,079,219 acres of designated wilderness and another 31 areas have proposed wilderness.

Over 90 percent of Rocky is recommended as Wildemess. The Wildemess recommendation for Rocky Mountain National Park was submitted to Congress on June 13, 1974 by President Nixon. The proposal consisted of 239,835 acres to be designated as immediate wildemess, and 5169 acres to be managed as potential wildemess additions. No official action was taken on the recommendation. Since that time, modifications have taken place due to changes in land ownership, changes in the place of diversion or storage for water rights and boundary adjustments.

As a result of boundary adjustments in 1980, a 2,917 acre portion of the Indian Peaks Wildemess Area in Arapaho National Forest (on our south boundary) was transferred to the Park. At present, this is the only designated Wildemess in the Park. Several unsuccessful attempts have been made since 1974 to obtain designated status for the original recommendation. The latest being in 1997. The Park is committed to continue pursuit of official designation in the coming years.

By law, the Park is required to manage recommended wilderness as if it were designated wilderness until such time Congress acts on the recommendation. In the spring of 1996, a Wilderness Interdisciplinary Team was formed. The task of the team is to develop a Wilderness and Backcountry Management Plan to guide the Park in managing the wilderness resource in Rocky Mountain National Park. Once complete, the plan will enable preservation of natural conditions and scenic beauties while allowing for the enjoyment of the wilderness by park visitors.

FIRE MANAGEMENT

Fire has been an integral part of the Rocky Mountain ecosystem throughout the evolution of its vegetative complex. Lightning was the primary source of fire before man learned to control the combustion process. It is now recognized that the presence or absence of fire within Rocky Mountain National Park habitats is one of the significant ecological factors contributing to the perpetuation of plants, animals, and the total ecological system.

Based on the primary objective of protection of life and property, combined with the goal of perpetuating native plant communities and natural fire regimes, the Park is divided into two fire management zones. The "Wildland Fire Suppression Zone" is composed of developed areas in the Park, all park lands which adjoin private land, and a majority of the eastern slope of the Front Range. All ignitions, either human or lightning-caused, are suppressed using the safest and most effective methods.

The "Wildland Fire Use Zone" is composed of park areas where historic fire suppression has not altered forest composition, structure, or fuel loads. This area includes most lands in the northern area of the Park and areas above 11,000 feet elevation. Natural (lightning-caused) ignitions within this zone are to be managed in order to achieve resource benefits, provided that certain parameters are met. The management response

to these fires will range from monitoring to active perimeter control strategies. All humancaused ignitions in this zone will be suppressed.

Wildland fires in the suppression zone are suppressed using qualified firefighters. Supervisors of seasonal employees will determine who is selected to attend the Basic Fire School. Firefighters may be dispatched to help suppress wildfires within the Park, in the surrounding National Forest or anywhere within the United States. Each fire crew is comprised of 20 firefighters from the National Park Service, the National Forest Service and state and county employees. The crews may be required to fight fires for a three-week period.

The Act of January 26, 1915 (38 STAT. 798), establishing Rocky Mountain National Park, stated in part that the purpose of the Park was "... for the preservation of the natural conditions and scenic beauty thereof." It is, therefore, one of the primary goals of management of Rocky Mountain National Park to recognize and manage wildland fire as a natural ecological factor (USDI, 1982).

The fire management plan, approved in July of 1992, outlines the management decisions and activities necessary to meet this objective. Management of fire will be done carefully to ensure that the natural process of fire and its benefits can continue in the ecosystem while still reflecting the complex character of the Park boundary and presence of surrounding communities.

The pattern of natural fire incidence in Rocky Mountain National Park is typical of the Central Rocky Mountain Region. There are a relatively small number of natural fire starts and a smaller number of large fires. These rare, episodic large fires are responsible for the great proportion of biological work performed by fire.

Research on historic fires concentrates heavily on the period between settlement (ca. 1860) and park establishment, 1915, with both fire scars and written accounts available (Skinner and Laven, 1982). With the advent of organized fire protection in the Park, roughly 1929, the frequency and size of fires has plummeted. On the average, the Park experiences a few small fires a year; a large fire occurs parkwide about every 20 years, or on a local frequency of 100-300 years.

Mountain pine beetle infestations reached epidemic levels in the region during the last decade. The epidemics killed ponderosa pine on the east side and lodgepole pine on the western slope. Various land managing agencies and adjacent communities have since coordinated efforts to control the infestations. Lagging the beetle infestation by five years in the cycle, is the spruce bud worm attack. This has defoliated huge tracts of spruce and fir, both inside and outside the Park. More recently, the Douglas fir beetle has infested weakened trees. Inside the Park, the infestation is considered a natural process, which has reached its present proportions partly due to the historical suppression of fire. Control efforts within the Park are limited to heavy public use areas and high value trees.

For more information concerning Rocky Mountain National Park's Fire Management Plan, see the <u>ENVIRONMENTAL ASSESSMENT ON THE FIRE MANAGEMENT PLAN FOR</u> <u>ROCKY MOUNTAIN NATIONAL PARK</u>.

THE ROLE OF FIRE IN ROCKY MOUNTAIN NATIONAL PARK

Fire has been an integral and natural part of Rocky Mountain National Park's ecosystem throughout time. It is now recognized that the presence or absence of fire within the Park is one of the significant ecological factors contributing to the perpetuation of plants, animals and the total ecological system. Historically, fires cycled in the ponderosa pine forests about every 15-20 years and about every 100-120 years in the lodgepole pine forests. With the exception of the Ouzel Fire in 1978, most fires in Rocky Mountain National Park have been suppressed shortly after ignition since the late 1800s. Prescribed burning is the application of fire by trained personnel in a predetermined area, used to restore ecosystems where natural fires might involve too much risk to life or property inside and on the boundary of the Park. Great care is taken to assure protection of life, property, as well as cultural and natural resources. A prescribed fire program has been implemented in the Park, with the primary goals of reduction of hazardous fuels, protection of values at risk, and restoration of the natural ecological role of fire. Several burns were completed in the fall of 1997, with many more projects planned for the future.

FIRE - A CHANGING FORCE

Fire is natural. As such, it is important to understand that nature uses a different sense of time than do humans. Our understanding of time consists of minutes and hours whereas nature follows a time frame of months and years. When you look at a forest after a fire, think in terms of geologic time for the regrowth process - of growing seasons. YES! The land will soon be green, and in time, there will be trees. Change is constant in the forest. Most importantly, change is vital in order to have a healthy, diverse forest here at Rocky Mountain National Park, and elsewhere.

HOW DO MOST FIRES START?

Except for a few fires started by a carelessly tossed cigarette or an unattended campfire, the few fires which do start here at Rocky begin with a lightning strike. Not all lightning strikes start a fire. Most do not. These fires have a variety of behaviors. Some lightning strikes or ignitions will smolder then extinguish. Others may bum more rapidly. Not all lightning strikes start a fire. Most do not. It is important to realize too, that not all fires burn in the same fashion. Rarely will a forest be completely devastated by a wildland fire. Because fire is a natural process, the plants and animals within a forest have, over time, adapted so that they can not only live with fire, but so they can actually benefit from the rejuvenating effects of fire.

IN THE ABSENCE OF FIRE

Imagine Rocky Mountain National Park without meadows or aspen trees. Where would the elk, mule deer, or bighom sheep feed in the early morning or evening? No longer would golden hillsides signal the approach of autumn. Without the cleansing and rejuvenating effects of fire, meadows would slowly disappear as trees out compete the flowers and grasses for moisture, sunlight, and important nutrients. Aspen trees, which are one of the first trees to appear after a fire, would also disappear. Aspen are shade intolerant. They are unable to survive if shaded by another tree such as ponderosa pine, spruce or fir. In time, even these larger trees would begin to weaken and die. These old forests would not be able to support the abundance of bird and mammal life we are so fond of seeing in the forests here in the Park. With a regular fire regime, the forests would naturally be thinned, becoming healthier and more diverse as the opportunities for more plant and animals to live in the newly created meadows and younger forests would be available.

EFFECTS OF FIRE

Looking at a burning forest, you might think the fire is destroying the forest. ACTUALLY, the fire is WORKING WITH the forest! As a fire burns in a forest, the opportunity for new growth is created, as well as new habitat or homes for animals. Nutrients tied up in dead or old trees return to the soil in the form of ash, a process very similar to fertilizing a garden. Meadows are created which provide food for mule deer and many other animals. Essentially, the forest is cleansed of old, perhaps diseased trees, which rejuvenates the soil, the forest and the animal life.

GEOLOGY OF ROCKY MOUNTAIN NATIONAL PARK

Some of the main attractions of Rocky Mountain National Park are its mountains and lovely glacial valleys. How did they get here?

The area occupied by Rocky Mountain National Park has been repeatedly uplifted and eroded. Most of its rocks are among the oldest in the United States. Although many mountaintops have been flattened by ancient erosion, recent glaciation has left steep scars, U-shaped valleys, lakes, and moraine deposits.

The Park's oldest rocks were produced when plate movements subjected sea sediments to intense pressure and heat. The resulting metamorphic rocks (schist and gneiss) are estimated to be 1.8 billion years old. Later, large intrusions of hot magma finally cooled about 1.4 million years ago to form a core of crystalline igneous rock (mostly granite).

During the long Paleozoic Era, the Park area was variously submerged, lifted up, and eroded.

Early in the Mesozoic Era, approximately 100 million years ago, dinosaurs roamed the shoreline of a shallow sea which extended from the Gulf of Mexico to the Arctic Ocean. Animal remains were deposited in layers of sand, silt and mud. The resulting sedimentary rock layers (including fossils) are now exposed in the foothills to the east of the Park.

Almost 70 million years ago, the Rocky Mountain Uplift began. Giant blocks of ancient crystalline rock, overlain by younger sedimentary rock, broke and were thrust upward. Even as the uplift occurred, streams started eroding away the sedimentary rock and washing new sediments to the east and west. When the sedimentary rocks were mostly gone, erosion continued leveling the ancient Precambrian rocks until only a few isolated remnants projected above the gently rolling landscape. The gentle slopes atop Trail Ridge and Flattop Mountain are remnants of this erosion surface.

During the Cenozoic Era, some faulting and regional up-warping lifted the Rocky Mountain Front Range as much as 5,000 feet to its present height. Some volcanic activity left young volcanic rock in contact with Precambrian rocks. The volcanic rocks are seen mostly on the Colorado River District of the Park. Differential movement along faults disrupted drainage patterns, resulting in higher mountains, waterfalls and large valley areas, such as Estes Park Valley.

Streams had established drainage patterns with V-shaped valleys cut into hard rock when the climate became cooler, perhaps 2 million years ago. In the higher valleys, snow changed to glacial ice which flowed down the valleys. Glacial erosion changed V-shaped valleys into U-shaped valleys. The converging rivers of ice flowed down into lower valleys where the ice warmed, melted, and dropped the debris it had scraped from the mountainsides above. Loose rock material carried by the ice was deposited along the sides, forming lateral moraines. At the ends of the glaciers, ice-carried rocks were dumped to form terminal moraines.

Although glaciers must have filled the high valleys and then melted at least four different times, only the latest two times left evidence which is still easy to find. During the latest time of major glaciation, glaciers from Forest Canyon, Spruce Canyon, Odessa Gorge and numerous tributary valleys all flowed together and melted in the area now called Moraine Park. This glacier deposited distinct lateral moraines along the south and north sides of Moraine Park and a terminal moraine against the small mountain (Eagle Cliff) to the east. Similar glaciers were melting in the areas now called Glacier Basin, Horseshoe Park and Kawuneeche Valley.

Today, steep semicircular scars (cirques), often containing snow, indicate the tops of U-shaped glaciated valleys. Chasm Lake, below the east face of Longs Peak, rests in the bottom of a cirque. A cirque on Sundance Mountain is easily seen from Trail Ridge Road and numerous cirques may be seen from Bear Lake Road. Glacial erosion also left scratches (striations), grooves and polished surfaces on some of the rocks.

The few small glaciers and snowfields now occupying the tops of glacial valleys are only hints of what the ice age was like. Andrews glacier shows evidence of downward movement, but it melts back noticeably during dry years, and global warming threatens to reduce the glaciers and snowfields even further.

The high mountaintops were not covered with glacial ice and a few of the lower valley areas of the Park escaped the effects of glaciation. The Twin Owls and Gem Lake Trail area has coarse-grained granite rounded into interesting shapes by millions of years of non-glacial erosion.

Outside the Park, water from melting glaciers helped carve canyons to the east. Hogback ridges were left near Loveland and Lyons by differential erosion of sedimentary rock tilting up against older crystalline rock of the mountains.

Rocky Mountain National Park occupies only a small part of the 200 mile-long Front Range of the Rocky Mountains, but the Park's mountaintops show the effects of ancient erosion and many of the valleys illustrate classic features of glaciation.

FLORA AND FAUNA COMMUNITIES OF ROCKY MOUNTAIN NATIONAL PARK

Because Rocky Mountain National Park encompasses parts of three different ecosystems (the Montane, the Subalpine and the Alpine), there is substantial variation in vegetative communities. Variation relates not only to elevation, but also to direction and amount of slope, drainage, moisture availability, exposure to wind, amount and type of soil, fire history and other factors.

The "boundaries" between ecosystems usually involve overlapping species and gradual transition rather than clear cut-off points, but each ecosystem has some plants which are most frequently found within its limits.

<u>The Montane Ecosystem</u> occurs at elevations between approximately 5,600 and 9,500 feet. Dry, south-facing slopes of the Montane often have open stands of large ponderosa pines. Spacing of ponderosa pines is somewhat related to available soil moisture. Grasses, other herbs and shrubs may grow between the widely spaced trees on dry slopes. As the pines become old, their bark changes from gray-brown to cinnamon-red, and the bark releases a pleasant fragrance when warmed by the sun. The long needles of ponderosa pines are attached to the stems in groups of two's and three's.

North-facing slopes of the Montane escape some of the sun's drying action, so their soils contain more available water. As a result, the trees grow closer together and competition for sunlight produces a tall, slender growth form. The trees may be a mixture of Douglas fir, lodgepole pine, ponderosa pine and an occasional Engelmann spruce. A few shade-tolerant plants grow on the floor of the forest.

Montane soils with high moisture content may support groves of quaking aspen, whose leaves turn golden-yellow in the autumn and whose whitish bark is easy to recognize. Along streams or the shores of lakes, other water-loving small trees may be found. These include various willows, mountain alder, and water birch with dark-colored bark. In a few places, blue spruce may grow near streams and sometimes hybridize with Engelmann spruce. Flat Montane valleys may frequently have water-logged soil and be unable to support growth of evergreen forests.

PLANTS AND ANIMALS OF THE MONTANE ECOSYSTEM

TREES:

SHRUBS:

antelope bitterbrush wax currant kinnikinnick big sage common juniper Rocky Mountain juniper holly grape

HERBACEOUS PLANTS:

ponderosa pine

quaking aspen

lodgepole pine

Douglas fir

mountain ball cactus daisy geranium blue grama gumweed june grass mariposa lily miner's candle dwarf mistletoe mountain muhly needle and thread grass locoweed whiskbroom parsley pasque flower penstemon sedge spike fescue sulphur flower wallflower

REPTILES:

western garter snake

BIRDS:

mountain bluebird westem bluebird mountain chickadee red crossbill American crow golden eagle Cassin's finch northem flicker northem goshawk Steller's jay tree swallow westem tanager house wren solitary vireo black-billed magpie common nighthawk pygmy nuthatch great homed owl raven American robin pine siskin Townsend's solitaire yellow-rump warbler woodpecker (downy and hairy) western wood pee wee

MAMMALS:

badger black bear bobcat chipmunk Nutta:l's cottontail coyote mule deer elk ground squirrel mountain lion otter yellow-bellied marmot deer mouse porcupine bighom sheep montane shrew skunk Abert's squirrel meadow vole weasel (long-tailed) bushy tailed woodrat moose

<u>The Subalpine Ecosystem</u> occupies elevations approximately between 9,000 and 11,000 feet. A typical subalpine forest may consist mostly of subalpine fir and Engelmann spruce. However, previously-burned areas may contain varying amounts, or even almost pure stands, of lodgepole pine. Lodgepole seedlings do well in sunlight, often abundant after fire, but once the forest is established, plant succession may result in increasing amounts of spruce and subalpine fir. Ground cover in a previously-burned forest area often includes two species of huckleberry. Limber pine, with flexible twigs and needles in groups of five, may also be a part of subalpine forests. In high, windblown areas, limber pines often grow into grotesque shapes. Engelmann spruce and subalpine fir, which grow straight and tall in the lower subalpine forests, become shorter and deformed nearer treeline. Even as the trunk grows upward, strong, cold, dry winds may destroy new growth on the windward side, leaving permanent growth only on the lee side of the trunk. Trees with branches on only one side are often called banner trees or flag trees.

At treeline, tree seedlings may germinate on the lee side of rocks and grow only as high as the rock provides wind protection. Further growth is more horizontal than vertical, and additional rooting may occur where branches contact the soil. The resulting prostrate growth of dense trees is called krummholz. Snow cover may protect krummholz trees during the winter, but branches higher than wind-shelters or snow cover are usually destroyed. Well-established krummholz trees may be several hundred to a thousand years old.

PLANTS AND ANIMALS OF THE SUBALPINE ECOSYSTEM

TREES:

SHRUBS:

subalpine fir Engelmann spruce Limber pine blueberry (Vaccinium) cinquefoil wax currant elder Wood's rose

HERBACEOUS PLANTS:

amica Colorado Blue Columbine fairy slipper gentian lousewort needle-grass pipsissewa sedge senecio sneezeweed twin-flower

BIRDS:

mountain chickadee brown creeper red crossbill Cassin's finch olive-sided flycatcher pine grosbeak blue grouse gray jay Steller's jay dark-eyed junco northem goshawk ruby crowned kinglet Clark's nutcracker white breasted nuthatch common raven Williamson's sapsucker pine siskin Townsend's solitaire hermit thrush yellow-rump warbler woodpecker (hairy and three-toed) MAMMALS:

ground squirrel snowshoe hare black bear mountain lion bobcat vellow-bellied marmot chipmunk pine marten Nuttall's cottontail deer mouse covote porcupine mule deer shrew elk chickaree long-tailed weasel meadow vole bushy-tailed woodrat golden mantled ground squirrel

<u>The Alpine Ecosystem</u> starting at elevations from 11,000 to 11,500 feet, depending on exposure, is an area of extremes. Strong, frequent winds and cold temperatures help limit what plants can grow there. Most alpine plants are perennials. Many plants are dwarfed, but their few blossoms may be full-sized. Cushion plants, looking like ground-hugging clumps of moss, escape the strong winds blowing a few inches above them. Cushion plants may also have long taproots extending deep into the rocky soil. Many flowering plants of the tundra have dense hairs on stems and leaves to provide wind protection or red-colored pigments capable of converting the sun's light rays into heat. Some plants take two or more years to form flower buds, which survive the winter below the surface and then open and produce fruit with seeds in the few weeks of summer.

Where tundra soil is well-developed, grasses and sedges are common. Non-flowering lichens cling to rocks and soil. Their enclosed algal cells can photosynthesize at any temperature above 320F, and the outer fungal layers can absorb more than their own weight in water.

The adaptations for survival of drying winds and cold may make tundra vegetation seem very hardy, but in some respects the tundra is very fragile. Repeated footsteps often destroy tundra plants, leaving exposed soil to blow away, and recovery may take hundreds of years.

PLANTS AND ANIMALS OF THE ALPINE ECOSYSTEM

SHRUBS: willow

GRASSES AND GRASS-LIKE PLANTS:

alpine blue grass skyline blue grass tufted hair grass kobresia Pyrennian sedge alpine timothy spike trisetum spreading wheatgrass spike wood-rush

FORBS:

alpine avens alpine bistort American bistort pygmy bitterroot snow buttercup dwarf clover Parry's clover one-headed daisy black-headed daisy elephantella alpine forget-me-not arctic gentian king's crown

BIRDS:

prairie falcon rosy finch horned lark water pipit

MAMMALS:

badger bobcat chipmunk coyote mule deer elk long tailed weasel red fox bighorn sheep ground squirrel queen's crown marsh marigold green mertensia Rydbergia alpine paintbrush alpine phlox moss pink alpine sandwort saxifrage sky pilot alpine sorrel alpine wallflower

white-tailed ptarmigan common raven white-crowned sparrow

snowshoe hare mountain lion yellow-bellied marmot pine marten deer mouse pika pocket gopher vole bushy-tailed woodrat

WILDFLOWERS OF ROCKY MOUNTAIN NATIONAL PARK

With elevations ranging from 7,840 feet at Park Headquarters to 14,255 feet on the summit of Longs Peak, Rocky Mountain National Park has a great diversity of wildflowers. Over 1,000 different plant species can be found in the Park. As early as April, while crosscountry skiers are still following trails over 10 feet of snow, the easter-daisy may be found blooming on dry south-facing slopes. By early June the magnificent flower displays of summer will have just begun. Wild iris and westem wallflower will be blooming in the lower meadows and the delicate orchid, the fairy slipper, may be found in the ponderosa pine forests.

Spring in the high mountains occurs while it is summer at lower elevations. One of the most beautiful flowers in Rocky Mountain National Park, the lavender pasqueflower, begins to bloom in May in the Montane life zone. By July, the large gold-centered blossoms of the pasqueflower may be just emerging from snow banks in the alpine, when the blossoms at lower elevations have all turned to conspicuous plumed seed clusters.

Many flowers, such as the pasqueflower or the yellow shrubby cinquefoil, which live in all three life zones, may bloom over a 2 or 3 month period. In any south-facing slope and open meadow, with their intense solar radiation and thinner snow pack, flowers will bloom earlier than the cold shady environments found on north-facing slopes.

Rocky Mountain National Park serves as a sanctuary for many different plant communities. Protected from logging, grazing, mining, and other disruptive activities, these plants are guaranteed a wild environment in which to thrive. The yellow lady slipper orchid and the woodlily, with its impressive orange flowers, have been eliminated over large areas of their range. These rare flowers depend upon the National Park for their survival. In order to complete this protection and to ensure that everyone has an opportunity to see the beautiful wildflowers of Rocky Mountain National Park, it has been necessary to make picking wildflowers illegal. Efforts are also being made to control small invasions of several exotic weed species, such as Canadian thistle and leafy spurge, which threaten native plant populations.

Although wildflowers can be found in great profusion in many areas of the Park, many of the Park's flowering plants are restricted to a particular life zone and to a particular habitat within that life zone. The occurrence of so many different habitat types adds to the richness of the Rocky Mountain National Park flora. The presence of moisture is one of the most important factors affecting plant distribution. In the shallow waters of Cub and Nymph Lakes, the yellow pondlily opens its large floating yellow blossoms in July. The brilliant magenta flowers of the Parry primrose give off a pungent aroma which will tell you that a subalpine stream is nearby. The yellow monkeyflower is another beautiful flower which grows only at water's edge.

The extensive melting snowbanks of the high mountains provide ample water for many moisture loving plants. The snow buttercup, the largest and showiest buttercup of Rocky Mountain National Park, thrives at the edge of these alpine snowbanks and has even been found blooming beneath 12 feet of snow.

The riparian environments near many of the Park's creeks and rivers are home to dense stands of wildflowers. Chiming bells, arrowleaf ragwort, and monkshood will provide waist high masses of blue, yellow, and purple flowers in these moist places. As the forests open up into lush meadows, unusual stalks of small reddish-purple flowers resembling miniature elephant heads make their appearance. Often occurring in great numbers, these blossoms of elephantella usually wam of wet shoes for anyone walking among them. Among the willows, alder, and river birch of riparian habitats, is the cowparsnip. This large, coarse-leaved plant with an umbel of small white flowers, grows in great abundance. This tall conspicuous plant resembling Queen Anne's lace is a favored food of elk, and its roots and young stems were eaten by the early Indian inhabitants of the Colorado Rocky Mountains. Unfortunately several extremely poisonous plants resembling cowparsnip are also found in the mountains and present a real threat to anyone trying wild foods outside of National Park boundaries. It is illegal to pick and consume the non-fruit parts of plants in the Park.

The drier sites in Rocky Mountain National Park provide their own rich displays of wildflowers. Out in the dry montane meadows, occasionally growing among the big sagebrush, are the yellow flowers of mountain gumweed, sulfur flower, silvery cinquefoil, and yellow stonecrop. Wild geraniums may cover dry rocky slopes with their pink flowers and the early yellow flowers of the hollygrape occur in dry montane forests.

The tubular flowers of Indian paintbrush, horsemint, and tall one-sided penstemon have co-evolved with the long bills of hummingbirds and the specialized anatomy of butterflies and bees. Hummingbirds and many insects depend upon the flowers for nectar and the flowers depend upon the birds and insects for pollination. Indian paintbrush, occurring as both red and yellow species, is parasitic and sends its roots out to steal nutrients from the roots of other plants.

As July comes and the summer reaches its peak, wildflowers are found everywhere. The exquisite mariposa lily graces the montane meadows, and the brilliant yellow flowers of avalanche lilies are often found in great numbers in moist subalpine meadows in Wild Basin or on the Colorado River District of the Park. Another flower of exceptional beauty is the shooting star. With its stamens sticking straight out and its petal lobes reflexed backwards, this delicate and distinctive flower is found abundantly in some wet montane meadows.

Many people look forward to seeing the Colorado columbine when they visit Rocky Mountain National Park. The Colorado columbine, with blue and white flowers from two to three inches across, is unmistakable in its home among subalpine rock slides. Many of the Park's trails climb into the subalpine and traverse areas where the Colorado columbine grows abundantly. As the state flower of Colorado, the columbine receives legal protection. Although originally abundant in the Rocky Mountains, the Colorado columbine has been overexploited by people picking flowers or digging up plants. It deserves all the protection Rocky Mountain National Park can give it.

Probably the most interesting wildflower show in Rocky Mountain National Park occurs in the alpine tundra. Although this world above 11,000 feet is generally too harsh for trees, there are many small flowering plants which have become well adapted to the extreme growing conditions. On a late July day any visit to the alpine tundra should reveal a multitude of different plants in bloom. The tundra is often carpeted with a brilliant mosaic of wildflowers.

Because of the extremely short growing season, the alpine tundra usually reaches its flowering peak before the lower elevation subalpine meadows and forests. One of the earliest, smallest and brightest flowers of the tundra, the electric blue alpine forget-me-not, also has a fragrance as delightful to the nose as its color is to the eye. The color of these tiny flowers is further enhanced by their habit of growing in very tight clumps with the petals of one flower touching the petals of its neighbor.

The low growth habit of alpine forget-me-nots and most other alpine tundra plants is a successful adaptation to high winds and cold temperatures. Mats and rosettes of plants rise barely an inch or two from the ground where they are protected in their own isolated microclimate. Wind in the tundra seems almost constant. It occasionally reaches speeds over 100 mph. When the wind is howling around your ears, down at ground level where the plants grow it can be surprisingly calm. Moss campion, a plant which grows in tundra areas around the world, forms dense cushions that can hold heat from the sun and diminish the effect of the drying winds. The leaves of moss campion and other tundra plants are usually reduced in size, covered with a waxy layer or dense hairs, and densely bunched together as further protection from the elements.

Almost all of the alpine tundra plants are slow growing perennials. It may take 5 years before a cushion of moss campion reaches half an inch in diameter. Moss campion is one of the fast growing tundra plants which colonizes the bare ground left behind by pocket gophers. The largest flower on the tundra, the yellow Rydbergia, can take many years before it has grown large enough and stored up enough energy in its roots to flower. After flowering and setting seed, Rydbergia usually dies. The dense mat of hairs covering Rydbergia has given this member of the sunflower family its other common name, old-man-of-the-mountain. This covering of hairs helps protect the plant from moisture loss and traps the sun's heat, acting like a miniature green house. The flower heads of Rydbergia usually point to the east, away from the prevailing wind. Unlike most other plants of the alpine tundra, Rydbergia is endemic to the Rocky Mountains.

The arctic gentian is one of the last plants to bloom in the alpine tundra. This large beautiful pale yellow flower signals the end of summer in the tundra. The other species of gentian are blue or purple in color and with their flowering also bring on the close of the flowering season. By late August, the meadows at lower elevations appear to be dominated by many members of the sunflower family: the tansy aster, many species of daisy and aster, dwarf sunflower, and black-eyed susan. Berries have begun to form and then ripen: chokecherries, currants, raspberries, and elderberries. Soon the last sunflowers and gentians will have come and gone, the aspen leaves will have turned a golden yellow, and night air in the high mountains will feel like winter.

BIRDS OF ROCKY MOUNTAIN NATIONAL PARK

Rocky Mountain National Park is blessed with a great diversity of bird life. Over 250 species of birds have been seen in the Park. Encompassing the three major life zones and plant communities ranging from willow carrs to spruce-fir forests, the Park offers a great variety of habitats to support this avian diversity. Whether looking at diminutive hummingbirds or golden eagles with 6-foot wing spans, the bird watcher can be assured of a visual feast.

Spring is signaled by the arrival of thousands of migratory birds, either traveling through on their way north, or ending their long journeys in Rocky Mountain National Park. Early arriving yellow-rumped warblers occasionally can be seen in the spruce-fir forests when the snow is still 5-feet deep on the ground. Many of the warblers, vireos, flycatchers, and swallows have flown from their winter homes in the endangered and disappearing tropical rainforests of Central and South America. The Swainson's thrush, a bird with a beautiful flutelike song, returns to our forests from as far as the Amazon River basin each spring.

Soon after their arrival, male birds begin establishing their territories and filling the meadows and forests with their songs. The dawn chorus in May and June delights the ear just as the vision of a western tanager or mountain bluebird delights the eye. It becomes a challenge to separate the winnowing of snipe and the booming of common nighthawks from the songs of robins, warbling vireos, song sparrows, yellow warblers, and olive-sided flycatchers.

By June, many female birds have chosen mates and have built their nests. In a reversal of the normal pattern in the bird world, male spotted sandpipers incubate the female's eggs while the female leaves and searches for another mate. Mallards paddle among the sedges of mountain lakes and streams, and northern goshawks cruise among the aspens in search of unwary songbirds. Yellow-bellied sapsuckers drum on trees, and the air is alive with the flights of swallows. Horned larks, water pipits, and rosy finches find sheltered places on the alpine tundra to build their ground-level nests.

As summer progresses, the tiny spider-web-lined nests of broad- tailed hummingbirds are home to a couple of white pea-sized eggs. Soon nests are full of hatchlings and female birds are exceptionally busy feeding their voracious young. Green-tailed towhees scurry among the bitterbrush and choke cherry bushes in search of insects. A young robin can eat up to 14 feet of earthworms in a single day, while parent birds may feed their young hundreds of times daily. The mountain summer provides only a few short months for birds to raise their young.

In September, aspen groves turn golden and the montane meadows resound with the bugling of elk. The birds are traveling south again in search of the insects and nectar which the cold winters of the Rocky Mountains fail to provide. The days shorten, an early snow covers the highest mountains, and the night air makes campers appreciate the insulating qualities of the down feathers in their sleeping bags. Flights of red-tailed and ferruginous hawks, kestrels, and Cooper's hawks pass overhead. The last sharp-shinned hawks are seen chasing the last Wilson's warblers through the willows.

With the coming of winter, mixed flocks of resident birds are found traveling together through the coniferous forest. Mountain chickadees, dark-eyed juncos, and pygmy nuthatches will suddenly break the silence of a winter day with their twittering and foraging among the snow laden branches of ponderosa pines. Brown creepers may join these flocks and can be seen climbing in spirals up tree trunks in search of insects in the tree bark. Townsend's solitaires establish winter territories and defend their supplies of berries and juniper cones. Using their crossed mandibles, red crossbills pry open pine and spruce cones and extract the seeds with their tongues.

While crosscountry skiing along a trail through the forest, you may be followed by a common raven, with its strange gurgling voice and haunting "caw," or a gray jay. The three-toed woodpecker flies through the trees. By feeding on spruce bark beetles and other insects, woodpeckers help control the epidemics of these insects and maintain a state of natural balance within the forest ecosystem.

As spring returns, the rhythmic drumming of hairy and downy woodpeckers can be heard over long distances. This drumming, which they produce by striking their bills against hollow trees, is the song of the woodpecker, serving to attract mates and defend territories. Soon the forests of Rocky Mountain National Park will again fill with bird song.

PEREGRINE FALCONS

This fastest of all birds, the peregrine falcon, represents a great success story for wildlife conservation. With a ban on DDT usage and the help of an active reintroduction program, peregrines have come back from the edge of extinction. The program has involved raising chicks in captivity and returning them to the wild, then reintroducing the peregrine falcons into Rocky Mountain National Park during the 1980's. Rocky Mountain National Park was the first park to "hack" birds into the wild beginning in 1978. Because of the program's success - nesting peregrines have been found in the Park - the Park's hacking program was discontinued in 1991. The birds will continue to be monitored. A

hunter of great agility and speed, the peregrine falcon nests on high mountain cliffs and swoops down in a 200-mph vertical dive called a "stoop" to capture its prey. Through an active program of seasonal area closures, the Park is protecting the critical habitat of these magnificent birds, as well as other birds of prey. Climbing closures can be found in the Lump Ridge area from April to mid-July.

WHITE-TAILED PTARMIGAN

While walking among the rocks and ground-hugging plants of the alpine tundra, you may be startled by a white-tailed ptarmigan suddenly running or flying away from you. This chicken-sized bird with its coat of speckled feathers is very well camouflaged. The only bird in Rocky Mountain National Park that lives year-round in the alpine tundra, the white-tailed ptarmigan changes to a plumage of pure white feathers in the winter to blend in with the snow. As part of its winter plumage, ptarmigan develop a dense covering of modified feathers on their feet. These feathers not only provide insulation against the extreme cold, but also serve as effective snowshoes. Some of the ptarmigan along Trail Ridge may be marked with colored leg bands, which has been an ongoing monitoring project for the past 26 years.

AMERICAN DIPPER

Perhaps the most interesting bird in Rocky Mountain National Park, the American dipper or water ouzel has a specialized feeding niche. Confined to fast flowing mountain streams, American dippers depend upon the same aquatic insects that are eaten by trout. In order to catch these small insects among the slippery underwater rocks, American dippers not only walk completely submerged on the bottoms of fast flowing streams but also can use their wings to swim underwater. This unusual song bird has oversized oil glands for waterproofing its feathers and a third eyelid for underwater vision. The American dipper will often build its oven-shaped nest using moss and place it directly behind a waterfall. Ouzel Falls in Wild Basin, the Colorado River and Adams Falls are good places to see this unique bird.

CLARK'S NUTCRACKER

The long, sharp bill of the Clark's nutcracker is designed as an efficient tool for removing the seeds from pine cones. In Rocky Mountain National Park the seeds of the limber pine, a tree of exposed wind-swept ridges, are the favored food. Equipped with a special pouch under its tongue, this striking member of the jay family can carry up to an ounce of seeds in its mouth. During the late summer and early fall, the Clark's nutcracker will store thousands of seeds by burying them in food caches on south- facing slopes and ridge tops. Experiments have shown that these birds have a good spatial memory of their food cache locations. However, the successful reproduction of many limber pine trees has resulted from forgotten and unrecovered seed caches being "planted" at just the right depth in favorable locations. The limber pine and the Clark's nutcracker provide an

example of the co-evolution of plant and animal species. The Clark's nutcracker has evolved a bill designed for the removal of pine seeds and the limber pine has evolved cones and seeds suitable for removal and caching. Hundreds of food cacnes allow the Clark's nutcracker to begin breeding as early as February in the high mountains of Rocky Mountain National Park. During the busy summer season, this bird is commonly observed at viewpoints begging for handouts. Past research shows the birds alter their natural foraging patterns during the busy winter season, but resume normal feeding patterns in the summer when visitation drops off.

JAYS

In addition to the Clark's nutcracker, there are several other members of the jay family in Rocky Mountain National Park. The Steller's jay and the gray jay are notorious beggars who haven't learned to "just say no." Unfortunately their begging behavior and the willingness of park visitors to feed the birds and other animals threaten these animals with malnutrition, epidemic disease, loss of foraging ability, and possible death. The Steller's jay is a close relative of the eastem blue jay, which it replaces in the westem United States. A conspicuous crest, white eye marks, and dark blue plumage make the Steller's jay easy to identify. In company with the Steller's jay, the gray jay or camp robber depends on the seeds of pine trees and other conifers during the winter. In the summer these aggressive jays have been known to feed on the eggs of other birds. The gray jay is a truly northern bird, nesting and over-wintering in the boreal forests north of the Arctic Circle as well as in the high subalpine forests of Rocky Mountain National Park. The black- billed magpie is another conspicuous member of the jay family. This large, boldly marked bird with its black and white plumage and long iridescent blue-green tail seems almost tropical in its splendor. The magpie is one of only three North American land birds with a tail longer than its body; the other two are south-western flycatchers. Seen flying among the meadows and ponderosa pines of the Park's montane zone, black-billed magpies often assemble into small gregarious flocks during the winter.

BROAD-TAILED HUMMINGBIRD

A remarkably small bird, the broad-tailed hummingbird is the only nesting hummingbird in the Park. Hummingbirds have the highest metabolic rate of any warm blooded animal. In order to maintain this rate, they have to consume their body weight in nectar each day. At night hummingbirds may go torpid and lower their body temperatures as much as 500F in order to conserve energy. While hovering, the wings of the hummingbird are a blur, beating the air at up to 80 strokes per second. Powerful breast muscles and an extremely mobile shoulder joint allow the broad-tailed hummingbird to hover motionless in the air and drink the nectar of the summer flowers.

Male broad-tailed hummingbirds perform spectacular mating flights, diving from over 50 feet and using air rushing through slots in their outer wing feathers to create a shrill, buzzing whistle. In the late summer, broad-tails are joined by the rust colored rufous

hummingbirds which migrate through Rocky Mountain National Park in great numbers. If you wear a piece of red clothing, a hummingbird may suddenly fly to within inches of you. Then it will fly away after realizing that you are not a giant red flower.

MOUNTAIN BLUEBIRD

The electric blue of a mountain bluebird, seen through binoculars in good light, is an experience never forgotten. The blue color of the mountain bluebird is not caused by a pigment but results from the scattering of light by very minute particles found in the feathers. During the fall migration, mountain bluebirds can occasionally be seen in great numbers as they pass through the Park.

One of the hole-nesting birds in Rocky Mountain National Park, the mountain bluebird depends upon the abandoned nests of woodpeckers for a nesting site. Often found in the soft wood of aspens, these woodpecker holes are also important to house wrens, tree swallows and other wildlife.

In nature all things are connected. If aspen groves vanish, mountain bluebirds will be deprived of nesting cavities. A wintering population of elk in Rocky Mountain National Park feeds on the bark of aspens. This damage to the aspen bark is contributing to the loss of some lower elevation aspen groves. Wolves used to be the natural predators of elk but were extirpated from Colorado many years ago. The absence of wolves therefore may be connected to a loss of mountain bluebird nesting cavities. Biologists are only beginning to unravel some of the many interrelationships among the plants and animals in the natural environment of Rocky Mountain National Park.

MAMMALS OF ROCKY MOUNTAIN NATIONAL PARK

Rocky Mountain National Park offers a variety of habitats rich in animal species. They are scattered throughout the three major ecosystems and the myriad of minor ecosystems which are in the Park. In the Park are: 260 species of birds, 66 species of mammals, 11 species of fish, and 5 species of amphibians.

ELK

There are approximately 3,200 elk in the greater Estes Valley herd. During the summer, most may reside in the Park in the sub-alpine and alpine meadows. In winter, about 1,500 elk can be found within the Park in the sub-alpine and montane meadows as snow drives them down to lower elevations. The elk population in the Park may be close to its carrying capacity due to past elimination of predators, mild winters as well as shrinking ranges from increased land development. Elk are grazers, preferring grasses and sedges, but will eat woody plants in the winter, such as aspen bark and ponderosa pine needles. They are crepuscular, feeding primarily at dusk and dawn, but continuing throughout the night. During the day they often rest in timbered areas. Two of their

favorite winter meadows include Horseshoe Park and Moraine Park. Elk mating season, or rut, begins in mid-September and continues through late October. Bull elk bugle at this time in eerie notes to challenge other males, attract females, and relieve stress. The strongest bulls will collect the largest harems of cow elk, but they will constantly be challenged by other bulls. During this time, the bulls rarely feed, and the long rut takes its toll on the health and vigor of these animals. Their antlers are shed in late winter. Elk weigh from 500 to 700 pounds.

MULE DEER

Also crepuscular, but more likely to be seen during the day than the elk, mule deer prefer to browse on shrubs such as bitterbrush and big sage throughout the year, and will add conifers to their diet in winter. They can be found in every ecosystem in the Park, and are often seen along meadow edges from park roads. Antlers are shed in late winter. Mule deer are common in the Park and they weigh from 150 to 300 pounds.

BIGHORN SHEEP

The symbol of Rocky Mountain National Park is the bighorn sheep, a diurnal animal, feeding from dawn to dusk. This grazing animal is found in forest, meadow, and brush up into tundra in the summer. Summer lambing occurs on tundra meadows of the Mummy and Never Summer Mountains, including Specimen Mountain. They also can be found near Sheep Lakes in Horseshoe Park from May to July, licking the minerals from the mud around the lakes. The native herds overwinter at treeline grazing on areas blown free of snow. They will occasionally come down to the mineral licks in Horseshoe Park. Bighom sheep weigh from 150 to 400 pounds, and their horns are never shed, unlike the antlers of elk and mule deer.

COYOTE

Common throughout the Park, this versatile predator has been increasing its range since the demise of the wolf. Coyotes will eat almost anything, with their carnivorous needs met mainly by rabbits and rodents in the summer, and carrion in the winter. In the winter they are often seen in the larger meadows of the lower elevations, hunting for mice or rabbits. Because of their bushy winter coat, visitors often mistake them for wolves, even though the weight of the animal is only about 40 pounds. Their haunting howls can often be heard in the evening.

BLACK BEAR

There are probably no more than 30-35 black bear in the Park. Increasing use and development outside the Park have pushed these animals into higher, and less productive food areas, causing the bears to develop at a much slower rate. Fire suppression has diminished their habitat. A good-sized bear here may weigh only 150

pounds. Sad to say, this population may become extinct. It is taking much longer for these bears to reach reproductive maturity than normal. Very few of these bears become a nuisance, most prefer to run the other way. Black bears come in several color phases - black to blond - but they are all the same species.

MOUNTAIN LION

Rocky has a very healthy population of these large cats, although at this time no cougar count has yet been done. Their primary food is deer, but they also will take elk, bighom, and any other animal they can catch. They can be found anywhere in the Park that has rimrock with good brush cover, but are primarily montane animals. Secretive, stealthy, and mostly nocturnal, few people get to glimpse this animal. They are aware of us long before we can get near. Cougars weigh around 150 to 200 pounds and are most often sighted in winter in the early moming hours.

BOBCAT

Another secretive cat, the bobcat is also common, and favors the montane and subalpine forest, where it stalks its favorite meal of snowshoe hare. Other rabbits, rodents, and birds of similar size or smaller are also hunted, primarily at night. Bobcats can weigh up to 25 pounds. Bobcats are often mistaken for the lynx which is decidedly larger. The lynx may be extirpated from the Park. Its present status is unknown.

WEASEL (LONG-TAILED)

A sleek, fast hunter with a healthy appetite, this 8 ounce camivore can bring down animals larger than itself, such as snowshoe hares, and will attack animals as small as mice. It is found in all habitats and ecosystems as long as there is some rocky cover. Its winter coat is pure white, with a black-tipped tail. Its close relative, the smaller short-tailed weasel, more commonly called ermine, is also white in the winter.

PINE MARTEN

Another relative of the weasel, the marten is an arboreal hunter, moving swiftly from tree to tree in the sub-alpine searching for birds and squirrels. In the alpine, birds and marmots are in its diet. It is crepuscular and noctumal, but is sometimes seen in fleeting glimpses between the trees. The marten weighs about 2 pounds.

BEAVER

Beaver are also crepuscular, and work in spurts throughout the night along many of the Park's streams and ponds. These herbivores cut aspens and willows for food, but build with conifers as well as the deciduous trees. Beaver are active through the winter, staying in their lodges until food is needed from their underwater "pantry." They weigh up

to 50 pounds and their color can vary from dark gold to a chocolate brown. They can be found along the Big Thompson River near the Cub Lake Trailhead and along the Fem Lake Trail, near Endovalley Picnic Area, near Glacier Creek Picnic Area and in the Kawuneeche Valley on the Colorado River District of the Park.

ABERT'S SQUIRREL

This squirrel is only found in the Rocky Mountains from southern Wyoming to Arizona. It comes in three color phases - grayish to black - and lives primarily in ponderosa pine forests. Its large tasseled ears set it apart from all other squirrels. It feeds primarily on ponderosa pine seeds, but also eats ponderosa buos, inner bark, berries, fungi and carrion. Its nest is composed of twigs and is placed in ponderosa pines where large branches meet the trunk of the tree. It is active throughout the winter, becoming dormant during the worst weather.

MARMOT

These rotund, colonial, diurnal rodents live to eat and sleep - especially sleep - because in the winter they hibernate. Weighing up to 10 pounds they feast through the summer on succulent greens. Found in any habitat in the Park with protective cover and herbs, the marmot eats to store up enough food to hibernate during the long winter.

GROUND SQUIRRELS

The golden mantled ground squirrel and Wyoming ground squirrel are much like the marmot in that they are true hibernators, and they are diumal. Both feed on seeds, nuts, berries, stems, leaves, insects and carrion. Often times you may see them on the roads eating their dead relatives, causing the demise of more ground squirrels. Golden mantled ground squirrels are found in the Park from the montane to the alpine ecosystem wherever there are rocks for cover. Wyoming ground squirrels can be found in montane and subalpine meadows.

CHIPMUNKS

Another group of hibernating rodents is the chipmunk. Chipmunks have striping on the face - ground squirrels have none. Diumal in activity, chipmunks are primarily seed eaters, but their diet is similar to the ground squirrels. Chipmunks require rocky areas for cover, and the three species here - Colorado, Least, and Uinta - are collectively found throughout the Park in all ecosystems.

ΡΙΚΑ

These small animals are not rodents; they are related to the rabbits and hares. All are in the lagomorph order, but pika are in a different family. Pika habitat includes tundra and montane down to 8,500 ft. where suitable rock slides exist for cover. The rock slide area must have enough space between rocks to allow the half pound pika passage along the rock corridors. The slide must be new enough to have no soil filling in between the rocks. The best pika habitat has talus interspersed with meadow. Pika are diumal and gather and feed on succulents. Starting in mid-July they begin their "haypiles," stacking grasses and greens to dry in the sun, then they store them under the rocks in dens for the winter. Pika do not hibemate. Summer food consists primarily of foliage and seeds, but also forbs, leaves, twigs and bark. They have little need for free water with this diet. Like other lagomorphs, pika produce two kinds of feces - hard and soft. Some of the soft feces are reingested. Pika can often be seen during the day on rocks on the tundra, squeaking their high-pitched "eek-eek" calls.

MAMMALS ONCE AT ROCKY

Since the tum of this century, timber wolf, lynx and wolverine have disappeared from Rocky Mountain National Park due to human pressures, hunting, trapping, and poisoning. This was all to make room for expanding settlement of the area. By the early 1920's, the grizzly bear had joined the ranks of the area's extirpated mammals. Because of the unpredictable nature of grizzlies, their large range and resource needs, they probably will not be reintroduced into the Park. Elk had become extirpated by 1900 due to market hunting, but over a three year period starting in 1913, 75 elk from the Yellowstone National Park herd were brought here. All of today's elk in the Park are from this original Yellowstone herd. Historically, elk and bighorn sheep migrated to the prairie's edge of the Front Range, but development along the canyons and into the Estes Park area stopped this. The traditional migration routes have been lost. A new herd of bighorn sheep was started in the Big Thompson Canyon by the Colorado Division of Wildlife, hoping that some of the migration route may be resumed, and taught to park sheep by inbreeding of the herds. In 1979, moose, the largest member of the deer family, was reintroduced to the Rand, Colorado area. Now the animals reside in the Kawuneeche Valley on the Colorado River District and occasionally are seen on the east side. Mountain goats are not native in Colorado, and will not be allowed to immigrate to the Park. The closest herd is found on Mt. Evans, west of Denver, but individual animals occasionally enter the Park. Wolf reintroduction occurred in Yellowstone National Park in 1995 and will maybe happen here at Rocky Mountain National Park someday. There may be enough range and food for wolves to survive at Rocky, but wolves do not recognize park boundaries, and will wander onto the adjacent private lands, causing concerns. Attitude and education will determine whether the howl of the wolf is to be heard once again in Rocky Mountain National Park. River otter and peregrine falcon have been reintroduced to the Park with the hopes of achieving their historic populations before western settlement. Wildlife researchers in the Park have developed specific policies to ensure the continued survival

of bighorn sheep, elk, deer and coyote as well as other animals within their Rocky Mountain National Park habitats.

During the winter of 1997/1998, a strategy for the re-establishment of lynx and wolverine was written by the Colorado Division of Wildlife, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and Rocky Mountain National Park. If enough appropriate habitat is found in Rocky Mountain National Park, the lynx and/or the wolverine may be re-introduced during the winter of 2000. Habitat consists of high elevation lodgepole pine and spruce/fir vegetation and a large of population of snowshoe hares for the lynx and lots of wide open space for the wolverine.

FEEDING MAMMALS

Many of the mammals discussed are charismatic. Visitors seem to be drawn more to these animals perhaps because of their visibility, accessibility, or mystique. Because of this draw, many people feel the need or desire to "get close" to nature by petting, touching, or feeding the Park's animals. If observed, this behavior should be gently, but firmly discouraged for a number of important reasons:

- 1. Feeding animals produces a dependence on unnatural foods which are not healthy for their overall survival in the wild.
 - Hibernating rodents may have a hard time surviving the winter on "junk food" fat buildup.
 - Animals which are fed are no longer wild.
 - Deer rely on the survival of the bacterial microfauna in their intestine to digest the natural plant fibers they eat. Regular diets of non-natural foods result in the death of the microfauna. This means the animal can no longer digest natural foods, and will starve to death.
 - Non-native foods, such as com, can gum up the intestinal tract of ungulates, preventing food digestion. The animal can literally starve to death with food still in the GI tract.
- 2. Wild animals can and will bite, scratch or kick well intentioned food givers.
- 3. Rodents can carry diseases such as rabies or bubonic plague.
- 4. Approaching wild animals can cause stress to the animals causing the animals to run and in extreme cases, make the animals susceptible to diseases i.e. in bighom sheep that may cause death.

5. Feeding some animals can cause artificially high population levels to build up. These can "crash" more easily than natural population changes.

DIVISIONS AT ROCKY MOUNTAIN NATIONAL PARK

THE ADMINISTRATIVE DIVISION

This Division is comprised of several branches: Finance/Budget; Human Resources; Information Management; Procurement/Property Office Services; and Radio/Telephone Communications.

The Administrative Officer (AO) is the Division Chief. The AO is responsible for assuring program accomplishment for all the branches in the Division, making sure they adhere to all the different and constantly changing regulations. The AO works directly with and for the Assistant Superintendent, as well as working with all other Division Chiefs.

Finance/Budget

The Finance Branch is responsible for balancing the Park's checkbook. This entails obligating funds, assuring checks and balances are in place, accounting for all park debits and credits, providing the System Support Office (SSO) and Washington Office with budget needs and requests for each fiscal year, and assisting all program managers with a monthly status of funds. The Park's operating budget is approximately \$8,000,000.

Human Resources

Human Resources is responsible for classification, employee benefits and relations, EO advisory, ethics, OWCP, pay administration, position management, processing, staffing, and training. The Park has approximately 129 permanent positions and hires from 250 to 300 seasonal employees. Employees are encouraged to contact the Human Resources Office if they have any questions regarding the above personnel issues.

Information Management

The Information Management Branch is responsible for the development of computer programs needed for park operations, for maintenance of the Park computer network, assistance to computer users and many other tasks related to computer use. Rocky Mountain has traditionally been a leader in the development of computer technology in park operations.

Procurement/Property/Office Services

This Branch is responsible for purchasing all the Park needs within its delegated authority. This includes everything from buying paper and pencils up to large construction

projects. It also includes running a warehouse supply operation, not only for Rocky, but handling selected items for all parks west of the Mississippi. They process payments for all supplies and materials coming into the Park, as well as maintaining records on all Government property located in the Park. Items include everything from chainsaws to snowplows. They also maintain the key and lock system for the Park. This Branch is responsible for all mail coming into or going out of the Park, coding and filing of all correspondence, and distribution of all other material coming into the Park. They maintain the copy machines and do mass amounts of mimeographing of handouts, maps, informational and other materials for all other divisions in the Park. They also maintain and issue badges as needed for all but the interpretive division.

Communications

This Branch spends the majority of its time maintaining the Park radio system. When time allows, they also do limited work on telephones, traffic counters, and work on other electronic equipment.

As you can see, the Administrative Division serves. They hire, fire, buy, sell, process, assist, balance the budget and try to give you the tools to communicate. If you need help in any of these areas, don't hesitate to contact the appropriate office.

THE INTERPRETIVE DIVISION

Interpretation can best be defined in the words of Freeman Tilden, in <u>Interpreting Our</u> <u>Heritage</u>: "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information."

The Interpretive Division in Rocky Mountain National Park is mandated to provide educational activities that assist the visitor in understanding the problems and issues of management and resource values, as well as promoting safety consciousness, enjoyment and respect for the Park. There are three basic objectives for interpretive programs in areas administered by the National Park Service:

- To foster public understanding and appreciation of the National Parks and their significant cultural, natural, and recreational values and through this understanding, support preserving them.
- To encourage and facilitate appropriate, safe, and minimum impact use of the Parks.
- To promote public understanding and acceptance of the Service's policies and programs.

Interpretive activities are provided on a daily basis during the summer months. The programs include brief talks, nature walks, half day hikes, and evening campfire programs which describe the natural and cultural resources found in Rocky Mountain National Park. Ranger-led activities are free. Schedules are available in the summer edition of the Park's newspaper High Country Headlines.

The division also provides the cultural resources and museum collection support for the Park. A full-time archeologist works to document culturally significant sites ranging from game drives used for thousands of years to buildings constructed only a few decades ago. He also serves as liaison to the Ute and Arapahoe tribes. A history covering use of the Park area by these native people is currently being prepared.

Information Office

A part of the Division of Interpretation, the Information Office provides answers to thousands of letters and telephone inquiries each year. In 1997, over 31,000 telephone inquiries were handled and more than 11,000 information packets were mailed out by its staff and volunteers.

The Information Office is responsible for distributing park brochures and site bulletins and for working with Harpers Ferry Center and the Rocky Mountain Nature Association to keep inventories of these materials current and the supply adequate. It also assists all park divisions with special events.

Special projects for the division include:

- A. Continue wayside exhibit construction efforts to complete the Park's wayside exhibit plan. These exhibits, 108 in all, made of full color porcelain enamel, will be installed at various points of interest throughout the Park by the end of the summer. Fee demonstration funds and assistance from the Rocky Mountain Nature Association will also contribute to completing the project.
- B. The division is involved in planning for the new Fall River Visitor Center expected to open in 1999. Work is also preceding on a complete remodeling of McLaren Hall which will provide interpretive offices, library space, and a training area.

RESOURCE PROTECTION AND VISITOR MANAGEMENT DIVISION

Also known as the Ranger Division, this staff manages several specific programs which provide for "Resource Protection" and "Visitor Management."

These primary work areas are:

Entrance Stations

If you are lucky enough to work in the "gates" this year, consider yourself a very important person! Quite often, the only contact a visitor may have with a park employee is at the entrance gate. As such, the quality of that contact is extremely important for the professional image of the National Park Service, as well as helping visitors enjoy the Park.

Recreation Fee Demonstration Program

You will be hearing a lot about the "Recreational Fee Demonstration Program," now in its second year. This is a three-year pilot program for the National Park Service. Approximately 100 of the Service's 375 park units will be participating. Those parks will be allowed to retain up to 80 percent of the additional fee revenue collected. In Rocky Mountain National Park, this is estimated to be between 5 and 6 million dollars. Last year, the program generated an additional \$1.2 million for the Park to utilize for many infrastructure projects such as trail work, historic structure preservation, campground amphitheaters, wayside exhibits, and replacement of vault toilets. In addition, some resource management projects and visitor services will be funded.

In Rocky, the additional revenue will come primarily from an increase in entrance fees from \$5 to \$10 for a single entry visit (vehicle) and individual increase from \$3 to \$5. The Park's annual pass has been raised from \$15 to \$20 and the Golden Eagle Passport from \$25 to \$50.

Backcountry Office

Requiring a permit to camp ovemight in the backcountry provides a means to manage visitor use. Trip planning, using designated sites, and gaining good information helps visitors enjoy the Park and reduces their impact on the Park resource. Over the last five years, the Park has averaged 9,000 permits each year and 50,000 user nights per year. Visitor use has steadily increased since the mid 1980's. The permitting process is computerized for efficiency. There is an administrative charge of \$15 for each backcountry permit issued. This revenue is allowed to be kept in the Park to pay for seasonal staffing and computer upgrades.

Communications Center

All of the Park's communication systems - radio, telephone and pager, are managed through the "Comm Center," also known as "Dispatch." The Comm Center is considered the nerve center of the Park, providing dispatch services for all park visitors and employees, 365 days a year. These services include ambulances, helicopters, snowplows, fire trucks, tow trucks, locksmiths, AAA and emergency message delivery. The Comm Center is also the storage facility for all criminal justice records.

Campgrounds

As required by the new contract with Biosphere, NPS employees will manage the reservation system, thus increasing the uniformed presence in the campground.

There are five primary frontcountry campgrounds in the Park with 589 total sites. In Moraine Park and Glacier Basin, campsites are reserved through the Biosphere reservation system from Memorial Day to Labor Day Weekend. Campsites are \$14 per night. Aspenglen, Timber Creek and Longs Peak campgrounds are operated on a first come, first served basis and are \$12 per night.

Visitor Transportation System (VTS)

This free shuttle system transports over 140,000 visitors around the Bear Lake corridor each year, one of the more congested areas in the Park.

Patrol Operations

At the heart of the historic trust between park visitors and national parks is the Park ranger. With over three million visitors to the Park each year, the patrol staff is involved with many aspects of visitor management, which includes search and/or rescue, law enforcement, emergency medical services, backcountry patrol, and traffic control. In providing visitor management, the ranger staff accumulated an average of 3,000 hours in overtime last year. Approximately 2,000 hours is for search or rescue activity during the summer months alone.

Rocky Mountain National Park is an extremely busy, complicated work environment. The Ranger Division is but one spoke in the wheel of productive, responsible park management. Quality visitor service and protection of the Park resources are admirable goals for ensuring the long term integrity of our national park.

An event that will involve many in the division and park is "Ride the Rockies." This bicycle event involving over 2,000 cyclists will pass through the Park on Monday, June 22 traveling from Estes Park to Granby, Colorado.

Recognition

Last year, the Chief Ranger created the "Jack Moomaw Award" for seasonals. This nonmonetary award recognizes excellence in the art of rangering. Any seasonal employee in the division can be nominated. Criteria to be judged are 1) appearance, 2) attitude and 3) skills. The award is presented in early February.

RESOURCES MANAGEMENT AND RESEARCH DIVISION

All divisions participate in resources management at Rocky Mountain National Park. Naturalists inform visitors of the delicate balance of natural systems, and the danger of loving the Park to death. Maintenance provides facilities and services that enable visitors to use the Park, minimizing individual impacts to the area. Rangers enforce the regulations that protect the resources. Administration provides the human and physical resources to get all of these jobs done.

The Resources Management and Research Division at Rocky Mountain National Park is responsible for mitigating previous human interruptions of park ecosystems, and preventing or minimizing future disturbances. Our involvement in major projects begins at an early planning stage with assessments of potential environmental impacts, and can continue through final stages with site restoration, as needed and appropriate.

When impacts result from prior human disturbances, restoration plans are developed by the Natural Resources Specialist, reviewed by the Resource Council and approved by the Superintendent. Restoration plans are then implemented by the resources crew, with specialized assistance from other divisions, as appropriate and available.

<u>Hydrologist</u>

The Hydrologist is responsible for the protection of water resources. The current focus is addressing legal and permitting aspects of water rights and providing support to the Department of Justice to secure Federal Reserved Rights for the Park west of the Continental Divide. Additional duties also include addressing the commercial scenic overflight issue and serving as Research Administrator.

The Land Use Specialist

The Land Use Specialist primarily deals with land use issues external to the Park. This person attends planning meetings to represent the Park and to suggest changes in development plans to minimize adverse impacts to park resources. This person is also responsible for the land protection plan. A major focus is conducting a study on related lands on the boundary of the Park.

The Natural Resources Specialist

The Natural Resources Specialist is responsible for the vegetation restoration program which involves the greenhouse/nursery, environmental compliance, air quality protection, the resources management plan, raptor research and monitoring. He is the liaison between maintenance and resource management.

The Management Biologist

The Management Biologist is primarily responsible for wildlife management and has a current focus of elk management.

The Fire Management Staff

The Fire Management Staff is responsible for determining fire danger, maintaining fire equipment and supplies, conducing fire training, assigning resources to fire incidents, implementing the Fire Management Plan, monitoring prescribed fires, conducting prescribed burns, and planning fuel reduction. The Park has a standing commitment of nine firefighters to the local interagency type II crew. The Alpine Interagency Hotshot Crew, composed of 20 individuals, is primarily responsible for wildland fire suppression. When not assigned to a wildfire, the crew is involved in other projects, including prescribed burns, hazard fuel reduction, and trails maintenance to name a few.

The Resources Crew

The Resources Crew is made up of one permanent supervisory biological technician and seasonal forestry technicians, bio technicians, laborers, motor vehicle operators, physical science aides, and VIPS. Responsibilities of the Resources Crew include: identifying and mitigating hazardous trees in front-country areas; controlling alien plants; collecting elk research data; constructing and maintaining buck-and-rail fences; monitoring wildlife populations; monitoring water and air quality; reducing hazardous fuel concentrations; monitoring and controlling wildland fires; implementing restoration plans and monitoring recovery of disturbed areas. Most of the crew is funded for specific projects. The Supervisory Biological Science Technician is responsible for all Resources Crew activities.

The Geographic Information Specialist

The Geographic Information Specialist coordinates the use of the Geographic Information System and analyzes and develops data and spatial information in support of resources management and research activities. He also is the focal point for the storage of natural resources data and information. The National Biological Survey is a new agency within the Department of Interior with a special relationship to Rocky Mountain National Park. Three principal investigators, assigned to the Rocky Mountain National Park Field Station, are conducting research in the Park. This includes projects on global climate change, ungulate management, and long term ecological research at the Loch Vale Watershed.

THE FACILITY MANAGEMENT DIVISION

Rocky's Facility Management Division is responsible for the operation and maintenance of roads, trails, buildings, housing units. and utility systems. The division is also responsible for managing and maintaining the Park's vehicle and equipment fleet. Beyond the routine operation and maintenance functions, engineering support, helicopter operations, facilities inventories, energy use monitoring, mapping, surveying, rehabilitation, and new construction are also Facility Management Division responsibilities.

All of these activities are performed to make the visitor's experience safe and enjoyable and employees as comfortable as possible.

Management and Professional Support

The Management and Professional Support Program at Rocky Mountain National Park is responsible for the development and maintenance of a full scale, parkwide maintenance management and technical assistance program. This program must be responsive to the needs of the visitor and employee, as well as assure protection of cultural and natural resources, yet is to operate within the constraints of existing laws, regulations, rules, and policies.

The maintenance management team consists of a Division Chief, Assistant Division Chief, budget and clerical staff, as well as a Facility Management Specialist dealing with special programs. The professional support staff consists of a Supervisory General Engineer, Architect, Landscape Architect, and seasonal technician depending on workload.

A wide variety of maintenance management functions fall under this program including overall division management, programming, health and safety, long range planning, facilities maintenance, repair, rehabilitation and construction, and a myriad of special projects and programs. Workload is extremely heavy at times and does not fluctuate as much from summer to winter as it has in the past. Deferred maintenance, as well as the lack of any preventive maintenance program, is exacerbating the deterioration of facilities, a multi-million dollar physical plant.

Support staff deal with planning, comprehensive design, contract document preparation, estimating, project proposal presentations, surveying drafting, updating building files,

contract administration, maintaining drawing files and a technical library. Park staff and management are provided with technical, professional guidance on park development, rehabilitation, and construction projects.

<u>Roads</u>

The Roads Program at Rocky Mountain National Park includes full scale responsibility for maintenance, repairs, rehabilitation, and construction of the Park road system and related structures and appurtenances. The program is responsive to the needs of the visitor while remaining sensitive to park resources.

The Park road system consists of 110 miles of primary (paved) and 28 miles of secondary (unpaved) road, 22 bridges, 700+ culvert and drainage structures, 21.5 miles of curb and gutter, 123,400 square feet of stone retaining wall/guardrail, and 2,000+ road signs (informational and regulatory).

Basic functions include snowplowing and ice control, installation and removal of snow poles, brushing roadsides, cleaning ditches and culverts, grading roads, cleaning roadside litter, hauling and stockpiling material, and opening roads in the spring. The workforce primarily consists of heavy equipment operators, motor vehicle operators, and laborers. Workload is extremely heavy at times due to seasonality, unpredictable snowfall, etc. Complexity is increased due to elevation, distance from sources, and extreme weather. Much of the equipment is specialized requiring highly skilled employees, attention to safety, and a dependency on returning seasonals. Work is extremely varied covering everything from plowing needs to overlay of asphalt surfaces.

This program also covers the reconstruction of historic rock retaining walls and guardrails, as well as the construction of new walls.

<u>Trails</u>

The Trails Program in Rocky Mountain National Park includes responsibility for maintenance, repairs, rehabilitation, and construction of the Park trail system and related structures and appurtenances. The program is responsive to the needs of the Park visitor while remaining sensitive to park resources.

The Park trail system consists of 360 miles of maintained trail (3 1/2 miles paved), 116 trail bridges, 4,000 feet of bog bridges, 51,200 square feet of retaining wall, 6,700 log checks and other drains, 3,000 backcountry signs, and 16 head of stock.

Basic functions include opening of trails in the spring and routine maintenance which includes drainage and tread repair, replacing and repairing signs and bridges, repairing and constructing boardwalk and rock and log retaining walls, care of stock, installing interpretive signage, supervising volunteer crews, and trail obliteration. The workforce

primarily consists of work leaders and laborers. Physical labor is intensive and can be extreme due to elevation, exposure conditions, and use of the trail system by over 1,000,000 visitors annually. Livery operations accelerate deterioration in some locations. There is a dependency on returning seasonals because of their skill and dedication to hard work. This program has a lot of variety, covering sign making to horse packing and trail reconstruction to clearing snow from trails at 12,000 feet.

Buildings and Utilities

The Buildings and Utilities Program in Rocky Mountain National Park includes full scale responsibility for maintenance, repairs, rehabilitation, and construction of buildings (administration, housing, public use) and the maintenance, repair, rehabilitation and construction of utility systems (water, sewer, power, gas, telephone). The program is responsible to the needs of the visitor and employee, while remaining sensitive to park resources.

The building inventory consists of 144 housing units (93 seasonal), 59 public buildings and 74 administrative buildings. There are 26 water systems (20 seasonal), 180 septic tanks, 11 miles of sewer line, 19 miles of water line, and 17 miles of primary electrical distribution lines.

Basic functions include activating and deactivating water systems, operating and testing water systems, repairing electrical distribution lines and devices, servicing HVAC equipment, activating and deactivating seasonal buildings, painting, plumbing repairs, custodial work, general buildings maintenance, roofing, garbage collection and disposal, masonry, and pumping sewage. Workload is extremely heavy at times due to age and condition, as well as seasonality and climate. The work is fairly common to the building trades, as well as unique due to historic structure, outdated equipment and extreme weather conditions. Buildings and utilities is the most complex of all branches within maintenance requiring a very diverse staff with flexibility and resourcefulness.

Fleet Maintenance

The Fleet Maintenance Program in Rocky Mountain National Park includes a completely self-contained vehicle, heavy equipment, and small engine maintenance and repair operation that performs everything from preventive maintenance to complete overhauls. The program is responsible for responding to the needs of the employees which indirectly affects visitor services and resource protection.

The Park's fleet includes 180 vehicles (cars, pickup trucks, scooters), 65 pieces of heavy equipment, and 200 pieces of small engine equipment.

Basic functions include routine service (gas, oil, tires, tune-ups), engine overhauls, machinist work, body work, welding, mounting devices and equipment, painting, cleaning,

preparing new vehicles for service, fabrication of parts, running and parts operation, and tracking all maintenance and operation costs. The workforce consists of mechanics, both heavy equipment and automotive. Work can be trying at times, due to the age and condition of some equipment requiring retooling or on-site manufacturing of parts due to unavailability or obsolescence. Electronics and diagnostic monitoring are getting more sophisticated each year requiring training and changes in equipment. Several pieces of equipment are complex, such as the rotary snowplows and oversize plow trucks. They take a lot of special attention and care to protect a several hundred thousand dollar investment. The fleet has grown in size causing increased workload and reduced attention per item.

Auto Shop Operations/Seasonal Requirements

Driver and Operator responsibilities:

The driver shall be responsible for the following:

Read owner's manual and watch video on ABS brakes. Check outside vehicle: Tire condition and pressure. Windshield wipers, glass, mirrors, lights, and body. Check under the hood: Fluid levels - oils, ps, atf, windshield wash, and brake fluid if visible plastic master cylinder. Belts and hoses. Check inside the vehicle: Service due stickers, seat belts. Fire extinguisher, first aid kit and date kit in glove box.

The driver should know the type of fluid, where to get fluids, and should report any items used or needing attention. The driver will schedule all preventive maintenance in advance. The driver should immediately, upon recognition, report any problems, breakdowns, or concerns to the auto shop.

Please stop by and meet and familiarize yourself with shop personnel.

OTHER IMPORTANT OFFICES AT ROCKY MOUNTAIN NATIONAL PARK

ROCKY MOUNTAIN NATIONAL PARK LIBRARY

The Interpretive Division maintains a research library for use by park staff. The library will be located in McLaren Hall. All permanent staff members, their immediate families, and all adult seasonal personnel are welcome to use the resources found in the library. A librarian is on duty Tuesday mornings from 9:00 a.m. to 1:00 p.m. throughout the year.

During the summer, arrangements can be made to use the library at other times by contacting any permanent Interpreter.

With the approval of the Chief Park Interpreter, or the librarian, other people may use the library on an appointment basis or by coming by when the librarian is on duty. This includes seminar students and researchers.

Library users outside the Park family are not allowed to check out books and materials from the library without special permission on a case-by-case basis. Most of the materials can be checked out of the library for the time period of two weeks, although there are some non-circulating materials in the library as well. Further information concerning this process is available in the library or may be obtained by contacting the Interpretive Division.

MUSEUM

The Park has about 20,000 objects in its museum collection, of which only about 700 are on exhibit in such places as the Moraine Park Museum, Never Summer Ranch, Kawuneeche Visitor Center, Alpine Visitor Center, and Park Headquarters. Few of the objects in storage are of exhibit quality, but they represent parts of the cultural and natural history of the Park. Each of these objects is cataloged and stored according to procedures and policies. Starting in 1988, the Park's collection has undergone computerization, which was completed in March, 1990.

The purpose of the museum is to help develop better understanding and interpretation of the Park by saving representative elements of the Park's cultural and natural history.

Access to the museum collection is necessarily limited. Specifically, access is restricted to those who are doing legitimate research, exhibit planning and production, and some educational groups. Park employees may visit the museum storage area, by appointment, to acquaint themselves with its general contents.

Object loan is generally restricted to cases of long-term exhibits. Uses that are consumptive, such as an interpretive "show and tell" program, are generally not permitted by policy. For this reason, the interpreters use a special collection of their own for their programs; this collection is not a part of the museum collection.

The taking of anything from the Park by visitors or employees is prohibited by regulations. The collection of archeological, historical, or biological objects anywhere in the Park is strongly discouraged, and it can only be done under the authority of an approved Collection Permit. Any objects turned in by park visitors must be documented with as much information as possible - who, what, where, and when. Objects without this information are of little or no value, but we, as employees, are obligated by law to take

custody of the objects nonetheless. If in doubt, contact the Park's museum, or ask your supervisor, for advice on what to do.

CONCESSIONS

There are a variety of commercial services, commonly referred to as Concessions, which are authorized to operate within the Park. The only services whose facilities are located within the Park are the Trail Ridge Store, Hi Country Stables (with livery stables at Moraine Park and Sprague Lake) and wood sellers who operate in each of the developed frontcountry campgrounds. Additional services provided within the Park include guiding services for hiking, backpacking, technical rock climbing, cross country skiing, photography, bicycling and fishing. Fourteen liveries of various sizes are located outside the Park near the boundary and are authorized to conduct guided rides on park trails.

Park management is always interested in any comments, both positive and negative, that our employees and/or visitors have regarding the service provided by one of the authorized companies. Comments or questions should be directed to the Management Assistant.

THE VOLUNTEERS IN PARKS (VIP) PROGRAM

Rocky Mountain National Park is one of the many National Parks in the United States that has more than 3 million visitors each year. This large number of visitors, combined with decreasing funds, leaves the Park with the challenge of too much to do - and not enough people to do it! Over the years, Rocky Mountain National Park has developed an extensive "Volunteers In Parks" program to supplement the work force at the Park. As one of the largest volunteer programs in the Park Service, RMNP had 1,565 volunteers in Fiscal Year1998. These volunteers worked a total of 72,321 hours, for a monetary value of approximately \$928,000. The volunteers are of all different ages and come from all areas of the country and the world. So what do these volunteers do in the Park? Read below for a description of the many volunteer opportunities available at Rocky Mountain National Park.

The Bighorn Brigade is a group of volunteers who work during late spring and early summer to educate the public about the Bighorn Sheep population in Rocky Mountain National Park. In addition, they are responsible for managing traffic to allow the Bighorns to safely cross the road to Sheep Lakes. Without the Bighorn Brigade, the sheep would be frightened away from the Sheep Lakes area by the traffic and many visitors would never have the chance to see this precious symbol of the Park.

Interpretation Division:

The Elk and Bugle Corps is another group of volunteers working to educate the public about the wildlife of Rocky Mountain National Park. This group is out in the fall during the Elk mating season. They

answer questions and keep the public from approaching the Elk during this vital mating time.

In addition to the Bighorn Brigade and the Elk Bugle Corps, the Interpretation division has volunteers to help educate the public in numerous other positions, programs, hikes, and talks. One group, called the ChowBusters, talks to visitors about why they should not feed the wildlife. Another group, called the TrailTailers, helps Interpretive Rangers with a nature hikes. Other Interpretation volunteers work in the Information Office answering phone calls, and in the Visitor Centers giving information and answering auestions. Finally. some VIPs work with schoolchildren in Environmental Education, develop slides, work in the slide room, just to name a few.

Resource Management Division: Volunteers also work in the Resource Management division - the jobs in this area are very diverse. The greenhouse and nursery are run almost entirely by volunteers. Volunteers collect seeds for propagation, control alien plant species, and overall protect the genetic diversity of plant species in the Park. In addition, there are a rainbow of researchers studying everything from butterflies to birds to land and water.

- Facility Management Division: Volunteers also work in the Facility Management Division. Their duties include painting buildings and picnic tables, cleaning trash on the sides of the road, and working on trails, just to name a few. Visitors don't often comment on how well-maintained Rocky Mountain National Park is, but if this work was not done by employees and volunteers - the difference would be quite noticeable. Maintenance is very important - everyone's visit is made more enjoyable because these volunteers keep the Park clean and beautiful.
- Ranger Division: One group of volunteers that visitors are likely to encounter are the ones who work for the Ranger Division at the Visitor Information Stations. These Information Stations can be in Ranger Stations or small kiosks in various locations throughout the Park. Information Station Volunteers can be faced with

every possible question imaginable....they have to know Rocky Mountain National Park and be ready for anything.

Campground Hosts have a very unique job...it is a combination of maintenance, information, fee collection, and helping the rangers with enforcement of park rules. They are often the first on the scene when there is an accident or a visitor medical attention. They commit to living in a campsite for the entire season and take on a great deal of responsibility.

In the Backcountry Office, the Ranger division uses volunteers to assist in giving out backcountry permits, instructing campers on regulations, and making sure that campers are prepared for the extreme weather and altitude changes that exist in the Rocky Mountains.

Organized Groups: Group projects bring large numbers of volunteers from all over the country to do projects for a day, a weekend, or even a week. Groups that work at Rocky Mountain National Park can be from churches, schools, environmental organizations, youth groups, family reunions, Girl Scouts, Boy Scouts, Cub Scouts, and many others. They work on a variety of projects including trail work, campground cleanup and rehabilitation, alien plant control, and backcountry work.

Other duties that volunteers have been know to do are: photography, administrative work, calligraphy, sewing, hosting foreign visitors, giving astronomy programs, and almost anything else imaginable!

An NPS employee can serve as a VIP within the Service as long as the duties he or she performs as a volunteer are not the same type of duties for which he or she is paid. Anyone interested in participating in the volunteer program can contact the VIP Coordinator.

THE FEDERAL MAGISTRATE

The Federal Magistrate, of the United States District Court, for the District of Colorado, provides judgments and rulings on criminal law as well as issuing warrants when necessary. Court is scheduled at the U.S. Courthouse in Denver.

ROCKY MOUNTAIN NATURE ASSOCIATION (RMNA)

The Rocky Mountain Nature Association was created on July 8, 1931 to support the educational, scientific, and resource management programs of Rocky Mountain National Park. Over the years, its assistance has been extended to other areas administered by the National Park Service, the U.S. Forest Service, Colorado State Parks, and the U.S. Fish and Wildlife Service.

Activities of the Nature Association normally support agency educational or research objectives that could not otherwise be provided by regular government funding. The Association's most visible services include the publication and sale of educational material. Sales outlets are provided at visitor centers and museums. The association also offers free brochures and pamphlets.

Profits generated from the sale of educational publications provide financial support for educational and research activities. Often these profits are used to develop the educational material needed to explain natural features. Frequently, such specialized subject matter cannot be developed and distributed economically by commercial publishers.

The Nature Association is one of 66 cooperating associations involved with the National Park System nationwide. Most cooperating associations share the same educational mission, assisting the traveling public in its understanding, enjoyment, and appreciation of our natural heritage and recreational lands. In some instances, these associations serve only a single park or forest. More often, the association assists a number of areas or agencies within a geographic region.

Areas currently served by the Rocky Mountain Nature Association include:

Rocky Mountain National Park (NPS) Florissant Fossil Beds National Monument (NPS) USDA Forest Service in Colorado and Wyoming Colorado State Park City of Colorado Springs Town of Eagle Bureau of Land Management Congress has repeatedly recognized the necessity for associations in furthering national park educational programs. The 1920 Appropriations Act (P.L. 66-246) authorized the Secretary of the Interior to accept lands, buildings, and other property, and "monies which may be donated for the purpose of the national park and monument system." In 1935, the Historic Sites Act (P.L. 922) broadened National Park Service cooperative opportunities by emphasizing historic sites.

The need for advancing educational and scientific programs was recognized in 1946 (P.L. 79-633), authorizing the Secretary of the Interior to permit "cooperation with ... nonprofit scientific and historical societies engaged in educational work in the various parks and monuments." Authority regarding cooperative agreements was broadened in 1953 and again in 1970. In 1977, a specific and formal relationship was established between the National Park Service and the associations with an official Memorandum of Agreement. The agreement defines the authorization of both parties and is the foundation for policies and standards and provides guidelines for the associations' operations.

The Superintendent of Rocky Mountain National Park serves as a member of the Nature Association Board, ex officio, and acts as an advisor on the nature of the agency and association relationship. The Superintendent, in concert with the Chief Park Interpreter and Association Executive Director, approves all items to be sold at Rocky Mountain National Park. Agency liaisons at each area served by the Nature Association serve a similar function.

The Nature Association has an active membership of 2,500 comprised of individuals, families, and corporations. The Association offers its members educational seminars, newsletters, and a 15 percent discount on the purchase of publications. Membership and business meetings are held annually.

In 1986, RMNA founded a special fund raising and charitable organization known as the Rocky Mountain National Park Associates. Since 1986, the Associates have completed the following projects:

- 1. Construction of the Kawuneeche Visitor Center (KVC).
- 2. Design and construction of the KVC educational exhibits.
- 3. Design and construction of the Moraine Park Museum exhibits.
- 4. Design and construction of the Lily Lake Visitor Center exhibits.
- 5. Assisted with the purchase of the Lily Lake property.
- 6. Construction of the Lily Lake Accessible Trail.
- 7. Construction of the Bear Lake Accessible Trail.
- 8. Educational exhibits along the Beaver Ponds Boardwalk.
- 9. Construction of the Coyote Valley Accessible Trail.
- 10. Assisted with development of the concept plan for the proposed Fall River Visitor Center.
- 11. Construction of a greenhouse.
- 12. Renovation of eight historical structures.
- 13. Creation of two endowed fellowships.

*** SURVIVAL TIPS FOR SUMMER SEASONALS ***

FEDERAL EMPLOYEES COMPENSATION ACT (FECA)

YOU SHOULD FOLLOW THE PROCEDURES OUTLINED BELOW IF YOU ARE INJURED ON THE JOB:

IMMEDIATELY REPORT ANY ON-THE-JOB INJURY to your supervisor (even if your injury is minor).

OBTAIN A TREATMENT AUTHORIZATION FORM (CA-16) **before** you go for medical treatment. Except for emergency care, your agency may not issue this authorization retroactively. Your supervisor will help you complete **FORM CA-1**, which will be sent to our Human Resources Office. Our Personnel Assistant will process your injury claim.

You may choose the physician you wish to see, but you **must** obtain OWCP approval to change physicians, except where your physician has referred (get it in writing) you to another doctor. Prior approval from OWCP for non-emergency surgery is required. The term "physician" includes surgeons, podiatrists, dentists, clinical psychologists, optometrists, osteopathic practitioners, and chiropractors within FECA. The service of chiropractors may be reimbursed only for treatment consisting of manual manipulation of the spine to correct a subluxation as demonstrated by X-ray.

Please contact our Personnel Assistant if you will be seeing your attending physician for a second time so that any necessary forms can be issued prior to your visit. Our Personnel Assistant can also make the doctor's appointment for you. All forms issued should be directed back to our Human Resources Office (mention this to the Medical Receptionist too). Our Personnel Assistant will then send the completed original forms under a cover letter to OWCP. Copies will be kept in your individual case file.

EMPLOYEE ASSISTANCE PROGRAM

Rocky Mountain National Park strongly supports the Employee Assistance Program (EAP) as a valuable resource for its employees and their immediate families. The EAP is a confidential assessment, counseling, and referral program staffed by professional counselors who are trained in areas such as psychology, social work, and counseling. The types of services available include an assessment of the problem, short term counseling, referral to community and private resources, and follow up counseling. Sometimes problems can be dealt with in just a few sessions, others may require a referral to a community agency or a private therapist. EAP counselors offer confidential counseling which is free of charge (up to three visits). The only costs involved would be those of any private practitioners or agencies to whom you may be referred and then only

if you choose to avail yourself of this service. The EAP counselor will work with you to find the most appropriate and cost-effective means for dealing with problems.

All park employees have access to EAP services. If you do not already know how to get in touch with the EAP services, contact our Human Resources Office. Remember, if you are experiencing the following types of problems, the sooner you contact the EAP, the sooner you can correct them.

- * Relationship concerns
- * Loss or grief
- * Alcohol/drug problems
- * Depression
- * Parenting issues
- * Stress
- * Job-related concerns
- * Communication difficulties

Call 1-800-523-5668 to schedule an appointment (TDD for the deaf or hearing impaired: 1-800-882-7610).

PAYROLL SCHEDULE

The payroll schedule for the current year (Exhibit A) will help you know when to expect your first pay check.

This year, the leave year is divided into 26 pay periods of two weeks each. Work performed during each pay period is reported to the Timekeeper of your division at the end of the pay period. Processing through the Central Payroll System for all Federal employees takes 10 days. Your check should reach you no later than Thursday of the second week following the end of the pay period.

Confused? Follow this example while looking at the payroll schedule:

If you begin work on May 24, the work performed during pay period 12 will be transmitted to Central Payroll on June 8. You can expect your check for pay period 12 on or about June 18.

Your first check will probably be routed to you through our Payroll Coordinator who will contact you or your Timekeeper as soon as it is received. The Debt Collection Improvement Act of 1996, signed by the President on April 26, 1996, established Direct Deposit as a permanent provision for the pay of all new Federal hires (i.e., newly hired Federal employees, transfers from other agencies, or those rehired after a break in Federal service). Therefore, you must designate the financial institution to which you desire your pay deposited by completing an SF 1198A or signing up for EMPLOYEE

EXPRESS as soon as possible after your entrance on duty date. You will receive information regarding EMPLOYEE EXPRESS once you enter on duty. If your check does not arrive at your financial institution, you should contact the Park's Payroll Coordinator.

LEAVE AND EARNINGS STATEMENT

Your Leave and Earnings (L&E) Statement will be mailed to the address listed on your Request For Official Correspondence Address form every two weeks. A sample of the L&E Statement along with a detailed description of each field is attached (Exhibit B). The employee is responsible for verification of pay, deductions, and leave. Contact your Timekeeper with any pay/leave questions or problems. At the present time your Timekeeper does not receive a copy of your L&E Statement, so if you have any questions, please be sure to bring your L&E Statement with you.

DEFINITIONS OF OVERTIME, SUNDAY PREMIUM, HOLIDAY PAY, ETC.

Your tour of duty are the hours of a day (daily tour of duty) and the days of an administrative workweek (weekly tour of duty) that are scheduled in advance and during which an employee is required to perform work on a regularly recurring basis.

Overtime - For employees not on an approved alternative work schedule, overtime hours are hours of work officially ordered or approved in excess of 40 hours in an administrative workweek, or in excess of 8 hours in a day. This includes regular overtime authorized under Title 5 for both exempt and nonexempt employees, as well as travel overtime for exempt employees where the travel meets the requirements for overtime entitlement under Title 5 (the travel involves the performance of work while traveling, is carried out under arduous conditions, or results from an event that could not be administratively scheduled or controlled). Overtime pay is 1-1/2 times your hourly rate.

Sunday Premium - Premium pay at a rate equal to 25 percent of the employee's basic rate of pay for each hour of Sunday work which is **not** overtime work and which does not exceed eight hours (10 hours for a compressed work schedule) for each regularly scheduled tour of duty beginning or ending on a Sunday. The Treasury and General Government Appropriations Act of 1998 provides for a permanent restriction on the payment of Sunday premium pay for all employees governmentwide who are paid from appropriated funds and who do not actually perform work on Sunday, including General Schedule and prevailing rate (wage) employees. This provision has the effect of prohibiting the payment of Sunday premium pay to employees during any period when no work is performed, including holidays and periods of paid leave, excused absence with pay, compensatory time off, credit hours, or time off as an incentive or performance award.

Holiday pay - If an employee works during hours that correspond to his or her normal tour of duty, he or she is entitled to receive holiday premium pay which is equal to his or

her rate of basic pay. If the employee works in excess of eight hours on the holiday, or if a full-time employee works during hours which do not correspond with his or her normal tour, the employee is entitled to receive the regular overtime rate of pay for hours worked in excess of eight hours in a day or 40 hours in a week. Employees required to work on a holiday are entitled to a minimum of two hours of holiday pay.

Night Differential - A General Schedule (GS) employee is entitled to a night pay differential amounting to 10 percent of his/her basic rate of pay when scheduled regularly for nightwork between the hours of 6 p.m. and 6 a.m.

Shift Work - A differential is paid to Wage Grade (WG) employees who work the second shift when the majority of hours occurs between 3 p.m. and midnight.

LEAVE

You will receive a Notification Of Personnel Action (SF-50) when you enter on duty or shortly thereafter. If it reflects that you have a seasonal appointment of 90 calendar days or longer (Item No. 5.B. Nature of Action), you are eligible to earn annual leave. You are eligible to earn sick leave as soon as you enter on duty. The usual rate of accrual is one hour of annual leave and one hour of sick leave for every 20 hours you work. Long-time seasonals earn a slightly higher rate of annual leave, but the sick leave earning rate stays the same regardless of length of service.

Annual leave is designed to give you vacation periods for rest and relaxation and to provide time off for your personal business or family needs. Your annual leave must be scheduled and approved in **advance** by your supervisor. Leave is a privilege, not a right, and your supervisor may have to deny the request if your services are required during the time period requested, or if you have not followed the prescribed leave procedures.

If you do not use all of your annual leave during the season, you will be issued a Lump Sum Annual Leave check after you terminate at the end of the season. The payment will be the number of annual leave hours to your credit multiplied by your hourly salary. Lump sum leave payments will be automatically generated in the second pay period following the pay period of separation. However, due to the large number of employees terminating Servicewide at the end of the season, delays are not uncommon.

Sick leave is to be used in those cases when you are ill or otherwise incapacitated for work. You must report (call in) personally within the timeframe set by your supervisor. Failure to follow this rule **may** result in your being charged Absent Without Leave (AWOL) and is possible cause for disciplinary action or even removal from your job. If you need to use sick leave for a doctor/dental appointment, the leave request should be approved **in advance** by your supervisor. If abuse of sick leave is suspected, your supervisor has the authority to request medical documentation from you for every sick leave instance,

whether it is one hour, one day, one week, etc. Failure to provide this requested documentation may also result in a charge of AWOL, and possible removal from your job.

Sick leave hours not used carry over from year to year. There is no time limitation on the recredit of sick leave. If you have sick leave to your credit when you enter on duty, and it has not shown up on your **third L&E** Statement, notify your Timekeeper so that he/she can track it down for you.

Family Friendly Leave Act - Under the FFLA, sick leave may be used to provide care for a family member as a result of the family member's physical or mental illness; injury; pregnancy; childbirth; or medical, dental, or optical examination or treatment. Sick leave may also be used to make arrangements as a result of the death of a family member or to attend the funeral of a family member as well as for adoption-related purposes.

Voluntary Leave Transfer Program - If you have a medical emergency and have exhausted your annual and sick leave, the leave transfer program allows other employees to donate their annual leave to you.

Family and Medical Leave Act - The FMLA provides certain Federal employees with entitlement to a total of 12 administrative workweeks of **unpaid** leave during any 12-month period for certain family and medical needs.

PLEASE CONTACT OUR HUMAN RESOURCES OFFICE FOR SPECIFIC INFORMATION ON THE FAMILY FRIENDLY LEAVE ACT, VOLUNTARY LEAVE TRANSFER PROGRAM, OR THE FAMILY AND MEDICAL LEAVE ACT.

All employees must complete an Application For Leave (SF-71) form for both annual and sick leave. This form is available from your supervisor or Timekeeper.

PERFORMANCE EVALUATIONS

At the beginning of the season, your supervisor will provide you with a copy of your Employee Performance Plan and Results Report. Employees are responsible for: 1) assuring that they have a clear understanding of their supervisor's expectations and requesting clarification if necessary; 2) managing their performance to achieve critical results and bringing to their supervisor's attention circumstances that may affect achievement of critical results; 3) wherever possible, seeking performance feedback from their supervisor; 4) participating in discussions of their performance; and 5) taking action to improve aspects of their performance identified as needing improvement. An employee who is dissatisfied with a rating of record may request reconsideration of the rating by a higher level or other appropriate management official who was not directly involved in the rating. Your supervisor will evaluate your performance and provide you with a copy of the rating of record at the end of the season.

END OF SEASON CHECKOUT

You will be given an Employee Checkout form to complete at the end of the season. Checkout procedures should be followed so that you may be cleared of any responsibility for government property in your possession. You will be billed for lost or damaged property for which you are responsible. YOUR FINAL PAY CHECK MAY BE DELAYED UNTIL THE EMPLOYEE CHECKOUT FORM HAS BEEN PROPERLY COMPLETED.

RE-EMPLOYMENT

Re-employment procedures vary slightly from year to year. Either you will be notified of proper procedures for applying for jobs for the next season at the time of your seasonal evaluation, or instructions will be mailed to the forwarding address listed on your Employment Checkout form. As a general rule, an employee is only eligible for rehire consideration to the same **or lower graded** position from which he/she held the previous season(s). Therefore, if you are interested in being considered for a **higher** graded or different position, for example, Park Ranger, GS-025-04, **to** a Park Ranger, GS-025-05, **OR** a Park Ranger, GS-025-04, to a Biological Science Technician, GS-404-04, you must apply for that position if and when the positions are advertised. If you have any questions regarding this issue, please contact our Human Resources Office **before** you leave at the end of the season.

All eligible rehire candidates are considered along with applicants listed on registers issued from the Seasonal Employment Unit in Washington, as well as applicants listed on registers issued by our Human Resources Office for a variety of seasonal positions.

Your supervisor will provide you with a copy of the Reappointment Application For Seasonal Employment Positions form at the time of your seasonal evaluation. This application is **only** to be used for reapplying to the Park in which you worked the previous season. It is not to be used when applying to a different park or for a different position. Return the form directly to this park by January 15 for consideration for next year's employment to the same position or lower graded position. **REMEMBER** if you wish to be considered for a different position, you must apply for that position if and when the position is advertised. We have had more than one unhappy employee who we were unable to consider for higher graded positions simply because he/she failed to apply. We don't want **YOU** to join the ranks of unhappy employees next year!

INCOME TAX RETURNS

You must file Federal and State income tax returns as required by instructions of the Internal Revenue Service. This is necessary to satisfy your tax liability or to obtain a refund of tax withheld from your salary. Your Form W-2 showing your earnings and withholdings will be mailed to you shortly after the first of the year. The address listed on

your Request For Official Correspondence Address form will be used for mailing your W-2 forms.

PREVENTION OF SEXUAL HARASSMENT

It is the policy of the National Park Service to adhere to Federal guidelines relating to sexual harassment. We, as Federal employees, have the responsibility for maintaining high standards of conduct in the workplace; therefore, sexual harassment has no place and will not be tolerated or condoned at Rocky Mountain National Park. Every effort should be made by managers, supervisors, and employees to ensure that all employees work in an environment free from sexual harassment. Federal agencies are given specific instructions for developing action plans to prevent sexual harassment. Violations of sexual harassment are cognizable under Title VII, and remedial action can be required by the courts.

SEXUAL HARASSMENT IS DELIBERATE OR REPEATED UNSOLICITED VERBAL COMMENTS, GESTURES, OR PHYSICAL CONTACT OF A SEXUAL NATURE WHICH ARE UNWELCOME.

WHAT TO DO IF YOU ARE SEXUALLY HARASSED

- 1. Recognize that you have a right to work in an harassment free environment. Listen to your "gut" to determine if you are uncomfortable with the behavior. Don't make excuses for the person doing the behavior, i.e., that's how he is, she is harmless, or he does it to everyone, and no one else seems to mind.
- 2. Decide what <u>specific</u> behavior is unwelcome, i.e., sexual jokes, touching your hair, calling you "honey."
- 3. Determine what you want to have happen, i.e., stop telling me your sexual jokes, stop touching my hair, call me by my first name instead of "honey."
- 4. Tell the person, with a coworker present if you are uncomfortable by yourself, that you want their behavior to stop. BE SPECIFIC.

<u>Example</u>: "Steve, I want you to <u>stop calling me honey</u>. I want you to <u>call me by my</u> first name, Patricia."

5. If the person won't take you seriously or won't listen to you, you may want to use the "broken record" technique: (Repeat statement in response to the harasser's comments: "Steve, I want you to stop...")

- 6. You can also write a letter to the harasser. Include the following:
 - * The specific behavior that is unwelcome
 - * When and where it happened
 - * How you feel when someone does the behavior
 - * That you want the behavior to stop or change
 - * That you will take further action if behavior you object to continues
 - * Date of the letter
 - * Your signature

Make a copy of the letter and give it to the harasser in front of a witness.

- 7. Also, keep evidence of any unwelcome cards, letters, gifts from the harasser.
- 8. **IMPORTANT!** If you are uncomfortable confronting the harasser directly, or if you try these techniques and the behavior continues, then you must <u>immediately notify</u> one or more of the following: your supervisor, the next highest manager, our Personnel Officer, or one of our Equal Opportunity Counselors.

All of these individuals are trained to receive your concern, and handle it properly. However, only an Equal Opportunity Counselor can counsel an official complaint of discrimination and must be contacted within 45 days of the incident(s). The National Park Service takes sexual harassment very seriously, and wants to know about it so steps can be taken to see that the behavior doesn't continue. It will do everything possible to protect you from retaliation.

9. When you report sexual harassment done to you, here are some questions you will be asked.

* WHAT

What specifically did the alleged harasser do that was unwelcome?

How did you respond to that behavior? Did you tell the person you wanted the unwelcome behavior to stop?

* WHEN AND WHERE

When did this behavior occur (date/time)? Where did it take place?

Has it occurred before?

Did you document these incidents?

* <u>WHO</u>

Who was involved?

Were there any witnesses? Give names.

Remember: IF YOU PERMIT IT, YOU ARE PROMOTING IT! The person who is doing the unwelcome behavior may not know that his or her behavior is unwelcome. Sexually harassing behavior seldom stops by itself. It usually becomes more sexual in nature when it continues unchecked.

The various laws do not intend in any way to interfere with normal interpersonal relationships. The key to whether or not sexual harassment is present is how the action is perceived by the recipient. If the recipient makes a clear statement that the action is unwelcome and the harasser fails to discontinue any further such action, a complaint may be filed.

Park management is responsible for ensuring that bulletin boards are posted with the pictures, names, telephone numbers, and work locations of EO Counselors, Special Emphasis Program Coordinators, and EO Committee Members. These bulletin boards are located in Park Headquarters, the Maintenance Office, and the Colorado River District Office.

GRIEVANCES

A grievance procedure is used to review any matter of concern or dissatisfaction to an employee which is subject to the control of management and for which the employee seeks personal relief. If you have a complaint or grievance concerning your job or working conditions, you should first discuss it with your supervisor. If the matter involves your supervisor, the concern may be taken to the next higher level. You need to clarify that a grievance is being presented. Please contact our Personnel Officer for further information on filing a grievance.

USE OF GOVERNMENT PROPERTY

Some examples of inappropriate uses of government property are:

<u>Government Telephones & Computers</u> - You may not directly or indirectly use or allow the use of government property for other than officially-approved activities at any time, whether on or off duty. This includes long distance calls charged to the government which are not required for official business; messages on cc:Mail which are frivolous or inappropriate; or the use of government computers for games, preparation of personal letters, employment applications, or grievance documentation or preparation. The use of government telephones is allowed for calls such as making a doctor's appointment, checking on your child, or other personal business that must be done during working hours. However, the frequency and length of these calls should be limited, and care should be taken not to abuse the privilege.

<u>Office Equipment</u> - Copy machines, typewriters, and fax machines are to be used for official business only.

<u>Government Vehicles</u> - Government vehicles are **not** to be driven without a valid state driver's license. Government vehicles are to be driven only on official business. You must lock your vehicle when you are not in it, and any equipment should be placed so that it is not visible to someone looking in the windows. If accountable property is stolen or damaged, a Board of Survey will investigate to determine liability. If the loss is through an employee's negligence, the employee may be billed for the cost to replace the item(s). Misuse examples have included employees deviating from a direct route to conduct personal business or to shop, using a vehicle for transporting family members without authorization, or driving a vehicle to their personal residence without authorization.

Important: A Certificate of Loss/Damage to Government Property form **must** be filled out and turned in at the warehouse within three days.

<u>Keys</u> - Keys that are issued to you must be carefully safe-guarded. If they are lost, whoever finds them will have access to unauthorized areas. You should **immediately** report to your supervisor if your keys are missing or misplaced. (See note above concerning the Certificate of Loss/Damage.)

<u>Supplies</u> - General office supplies and work materials are available and may be obtained at your work station or from your supervisor. Government supplies and materials are to be used only for job-related duties. Items are **not** to be taken home for personal use.

EQUAL OPPORTUNITY

Equal Opportunity (EO) is the law of the land. It is the right of all people to be protected from discrimination in employment regardless of race, color, religion, sex, sexual orientation, national origin, age, or mental or physical handicap. As Congress, the courts, and successive Administrations have protected and enhanced the rights of a changing American people, civil rights laws and executive orders have changed how the National Park Service sees and performs its mission. In order to assist in these efforts, we, like all other Federal agencies, have established a formal, focused program for equal opportunity.

EQUAL OPPORTUNITY COMMITTEE

The EO Committee is made up of representatives from each division. The main role of the EO Committee is to advise the Superintendent on the progress and problem areas of the EO Program, particularly the affirmative employment program, recruitment, and training. The committee evaluates efforts toward achieving EO program objectives and makes recommendations for any changes and improvements in the Park's affirmative employment plan.

SPECIAL EMPHASIS PROGRAM MANAGERS

The Special Emphasis Program is part of the governmentwide effort to ensure equal opportunity for women and minorities in Federal employment. The goals of the Special Emphasis Program Managers are to achieve and maintain a distribution of women and minorities in the National Park Service workforce, which reflects the civilian labor force representation in each occupation, at each grade level and in all levels of authority. The thrust of the program is the development and enhancement of career opportunities for minorities and women.

In Rocky Mountain National Park, there are two coordinators: the Federal Women's Program Manager and the Hispanic Employment Program Manager. These positions are collateral duties performed by members of the permanent staff who have an interest in the programs.

EO COUNSELORS

There are four counselors in Rocky Mountain National park who are appointed by the Superintendent. These counselors receive special training to enable them to hear individual complaints of discrimination based on race, color, religion, sex, sexual orientation, national origin, age, or physical or mental handicap. The counselor works closely with the EO Office in Denver while making an inquiry into the matter brought to her/his attention for the principle purpose of obtaining a mutually satisfactory resolution of the matter. Any employee may contact an EO Counselor to ask questions, discuss concerns, or file a complaint of discrimination.

PERSONNEL OFFICER

The Personnel Officer at Rocky Mountain National Park serves as an Advisor to the EO Committee. In addition, she/he may be contacted regarding discrimination complaints, sexual harassment complaints, grievance procedures, and observations of perceived unethical practices.

HOUSING

A limited number of government housing units are available for rent and may be offered by your supervisor when the initial job offer is made. You are <u>not required</u> to live in government housing, and we denot thave sufficient housing for all seasonal employees. If housing is offered, considerable is taken to meet your minimum housing needs and to achieve maximum utilization. Space available. Approximately one-half of our seasonal staff must acquire its own sign in the local communities.

Bi-weekly rental rates include all utilities except for telephone and cable TV, where available. Rent will be deducted from your pay check, but it is your responsibility to check your Leave and Earnings Statement to insure that deductions are correct. Questions or problems with rental deductions should be addressed to the Housing Officer at extension 208.

Housing units consist of apartments, efficiency units, houses/cabins, or dormitory space. All quarters have cooking facilities, bathrooms with hot/cold running water, and are adequately furnished for seasonal occupancy. You must provide your own linens, towels, cooking utensils and any other personal equipment such as telephones, TVs, etc. that you desire. Most housing has very little storage space so you should plan to bring only enough personal property to meet your minimum needs for the season.

Single employees are usually offered shared quarters in apartments or houses assigned to several single employees of the same sex. Employees requesting family housing will be offered private units sufficient to meet the needs of their family whenever available.

Housing may be occupied <u>no more than two days</u> before your first day of work; however, the Park cannot <u>guarantee</u> the availability of any particular unit due to uncertainties of weather early in the season. Check with your supervisor on the availability of your housing, keys, and park passes well before you arrive. If you arrive during non-business hours or on a weekend without making some prior arrangements with your supervisor, you may have to wait until the next business day to move into your quarters.

Occupying government housing requires that you abide by certain policies and restrictions that are specified in the Park's <u>Housing Management Plan</u>:

PETS. Seasonal employees <u>must</u> obtain prior approval from their Supervisor to keep pets within the Park. Depending on your duty station and the housing available, permission to keep a pet may be granted or denied based on the specific situation. **Pets are NOT permitted in housing shared with other employees who are not part of your family unit**! If you are approved to bring a pet, you must complete a <u>RESIDENT PET REGISTRATION/PERMI</u>, which is available from your supervisor. Employees who arrive with (or acquire) a pet without prior approval will not be allowed to occupy park housing.

OVERNIGHT GUESTS. Government housing units are to be occupied ONLY by registered occupants consisting of employees and family members listed on the Housing Request Form submitted to the Housing Office by your supervisor. Occasional overnight guests MAY be permitted in private/family units, but are NOT allowed in shared housing. Numerous motel and campground accommodations are available in the local communities for your out-of-town visitors.

QUIET HOURS. Quiet hours are in effect from 10:00 p.m. to 6:00 a.m. in the apartments and dormitories and any other housing area where units are in close proximity. In addition, all occupants should keep in mind that many employees work irregular schedules which require them to sleep during daytime hours. Repeated excessive noise which disturbs others may result in eviction from government housing.

<u>CHECK-IN AND CHECK-OUT OF QUARTERS</u>. Your supervisor should have your quarters check-in packet, including keys, available when you arrive and will check you into your quarters. The <u>Inspection Form</u> and <u>Housing Agreement</u> included in the packet must be signed and returned to the Housing Office within three days of your arrival so that correct rental information can be transmitted to the Central Payroll Office.

Quarters must be maintained in a clean, orderly condition by occupants, and all units are subject to periodic inspections by authorized personnel (i.e. supervisors, Facility Management staff, Safety Officer, Housing Officer). Occupants who do not comply with common standards of sanitation, as determined by these officials, will not be allowed to occupy government housing.

At the end of your season, you will be allowed to occupy housing <u>no more than two days</u> after your last day on duty. You will need to inform your supervisor of your plans to vacate your quarters so that check-out procedures can be scheduled in advance. Quarters must be left in a clean and ready-to-occupy condition when you vacate. Your supervisor should inspect the unit before you leave so that you can avoid being charged for damages or cleaning costs after you are gone. Quarters deductions cannot be deleted from the payroll system until your housing has passed the final inspection by the Housing Officer.

All personal items must be removed from the unit when you vacate including cleaning chemicals, unwanted items, etc. Storage of personal items on government property is prohibited, will be considered abandoned, and disposed of under C.F.R. 101-48.102.1.

LAUNDRY FACILITIES

There is a coin-operated laundry facility in the headquarters residential area on the east side of the Park. Commercial facilities are available in Estes Park, Grand Lake, and other communities.

TRANSPORTATION

A private means of transportation is very desirable and, for some duty assignments, is the only transportation available. The Park does not furnish transportation to and from housing to duty station. A bicycle would come in handy if nothing else is available.

LOST AND FOUND

All items found by park visitors or park employees must be turned in to Lost and Found in the Backcountry Office at Park Headquarters. Your supervisor will show you how to fill out Lost and Found reports which must accompany each item turned in. If the owner cannot be located within 60 days, the property is considered abandoned and must be disposed of in accordance with federal regulations. Park staff and relatives are not erigible to claim found/abandoned items. Any questions should be directed to the Backcountry Office at (970) 586-1242.

MAIL SERVICE

In order for you to receive mail delivery, you must:

- 1. Have checked with your supervisor before you arrive to obtain your correct mailing address. A list of summer quarters and their corresponding mailing addresses is available from:
 - a. Your supervisor
 - b. Post Office (located near McLaren Hall)
 - c. Mail and Files
- 2. Fill out a U.S. Post Office Forwarding Card with your old address and your "new" summer address as the "new" address. Be sure to include the date you wish to begin receiving mail here and return this card to the ESTES PARKOR GRAND LAKE POSTMASTER. You can drop this card in the mail or take it directly to the Estes Park or Grand Lake Post Office. YOU WILL NOT RECEIVE MAIL UNTIL THE ESTES PARK OR GRAND LAKE POST OFFICE RECEIVES YOUR CARD.

You also need to fill out a card when you leave so the Post Office can forward your mail. No matter where else you have filled out a card, you must fill out one when you arrive and when you leave for the Estes Park or Grand Lake Post Office. These

cards are available at: Warehouse, Mail and Files, Annex Post Office and Estes Park or Grand Lake Post Office.

- 3. The Estes Park and Grand Lake Post Offices delivers the mail to the Park. Delivery to most seasonal addresses is June 1 through September 30. Before and after this period, the mail will be delivered with the Park business mail and will get to you through the Park's mail system. Regardless of how you are receiving your mail, you need to use your authorized seasonal mailing address. DO NOT HAVE YOUR PERSONAL MAIL ADDRESSED IN CARE OF ROCKY MOUNTAIN NATIONAL PARK. If this occurs, your mail may be returned to sender or, in some cases, disposed of.
- 4. If your assigned mailing address is not satisfactory, a couple of options are available:
 - a. The Post Office (located near McLaren Hall) may have a FEW boxes available for use. These are issued on a first-come, first-serve basis after all seasonals who are assigned those boxes have been taken care of. See the Warehouse (Property) for more information.
 - b. Obtain a post office box at the Estes Park or Grand Lake Post Office. See them directly.
 - c. Have mailed in YOUR NAME, C/O GENERAL DELIVERY, ESTES PARK, COLORADO 80517, at the Estes Park Post Office or in YOUR NAME, C/O GENERAL DELIVERY, GRAND LAKE, COLORADO 80447, at the Grand Lake Post Office.
- 5. If you have any questions, contact the Mail and File Clerk (extension 212) or Ann Taylor with the Estes Park Post Office at 586-8817 or with the Grand Lake Post Office at 970-627-3340 between 8:00 a.m. and 10:00 a.m.

MEDICAL SERVICE

Estes Park has a full service hospital, as well as a number of doctors, dentists, and other specialists. Medical services are available in Grand Lake during the summer, but the nearest hospital is approximately 35 miles away in Kremmling, Colorado. Because of the isolation factor, you are strongly urged to take a Red Cross First Aid Course before reporting for duty.

For seasonal employees without health insurance, SALUD Family Health Centers offer quality health care in Estes Park. SALUD is a community supported non-profit health center. Patients may be eligible for an "ability to pay" discount based on family size and income. SALUD is located at 304 East Elkhorn, 586-9230.

UNIFORMS AND APPEARANCE

A uniform allowance is authorized for each employee required to wear a uniform. The purpose of the allowance is to help defrav the cost of your uniform; it is not intended to cover the total cost of all uniform items and/or maintenance required of the uniform. Prior to your entrance on duty, you should have received notification of the amount of your uniform allowance, ordering forms, and a copy of the Uniform Standards for the Park. Take pride in the Park Service uniform, and follow the Uniform Standards to ensure you are presenting a proper appearance to the visiting public. Badges and collar omaments must be returned at the end of the season. You may keep the name tags. You will be furnished with a copy of our appearance standards. These standards were established to ensure that all employees, as representatives of the National Park Service, represent an appearance acceptable to park visitors, and which is consistent with the dignity of the National Park Service. In addition to the Park standards, certain divisions have prescribed more stringent uniform and appearance standards, due to the nature of their assigned duties and responsibilities. If applicable, you will be provided with a copy of the individual division standards concerned. Uniforms are to be worn only on duty. They are never to be worn while off duty or conducting personal business in town. The Park has established a small cache of used uniform items, which will be utilized if employees have difficulty obtaining their uniform items. Contact the Housing Offices on the east side or the Administrative Support Assistant on the Colorado River District of the Park.

CONDUCT

You are expected to conduct yourself on or off the job in a manner which reflects favorably upon you and the National Park Service. Infractions of law or park rules or conduct which violate accepted standards of decency or social behavior are cause for disciplinary action, including removal. State and Federal law, as well as park regulations, apply within park boundaries. The legal age in Colorado for possession or use of alcoholic beverages is 21. The possession, sale or use of narcotics or drugs, including marijuana, is illegal. Violators will be prosecuted and are subject to removal. Speeding, reckless and/or careless driving are violations. All government vehicle accidents are to be reported immediately. Employees may not participate in protests or demonstrations, nor wear buttons, arm bands, or other insignia denoting support of such events during duty hours. Acceptability of such activity during non-duty hours depends upon its orderliness and conclusions about whether it is in conflict with the operations of the National Park Service or the Federal government.

CODE OF ETHICS FOR GOVERNMENT SERVICE

Authority of Public Law 96-303, unanimously passed by the Congress of the United States on June 27, 1980, and signed into law by the President on July 3, 1980.

ANY PERSON IN GOVERNMENT SERVICE SHOULD:

- 1. Put loyalty to the highest moral principles and to country above loyalty to persons, party, or Government department.
- 2. Uphold the Constitution, laws, and regulations of the United States and of all governments therein and never be a party to their evasion.
- 3. Give a full day's labor for a full day's pay; giving earnest effort and best thought to the performance of duties.
- 4. Seek to find and employ more efficient and economical ways of getting tasks accomplished.
- 5. Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never accept, for himself or herself or for family members, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of governmental duties.
- 6. Make no private promises of any kind binding upon the duties of office, since a Government employee has no private word which can be binding on public duty.
- 7. Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of governmental duties.
- 8. Never use any information gained confidentially in the performance of governmental duties as a means of making private profit.
- 9. Expose corruption wherever discovered.
- 10. Uphold these principles, ever conscious that public office is a public trust.

PROFESSIONALISM

Even though park visitors come in all shapes, sizes, interests and backgrounds, they all have one thing in common, they have come to Rocky Mountain National Park to see and enjoy the Park. We, as representatives of the National Park Service and as employees of Rocky Mountain National Park have an important job. YOUR contact with these visitors

may be the only contact they will have with a park representative and it will leave an impression. So be impressive! Here are some guidelines:

FRIENDLINESS AND SERVICE

Our job is to provide service in a friendly, tactful manner. Express sincere interest in each individual's request for information. Treat each question as if you are hearing it for the first time, even if it is the hundredth time you have answered it. This can be trying at times, so you will have to put yourself in the visitor's shoes. Imagine your first visit to a new, overwhelming area and your need for orientation, as well as tips on how to make the most of your visit.

APPEARANCE AND PREPAREDNESS

Be neat, presentable, smiling and readily available to tend to visitor needs. Most of all, <u>BE PREPARED FOR ANYTHING</u>, a grumpy tourist who cannot find a campsite, as well as a happy one; a complaint, as well as a compliment. Give the visitor your undivided attention. Never allow visitors to feel as though they are imposing upon you, while you stand talking to your friends, or eating in front of them.

STOREHOUSE OF INFORMATION

Know your park! Get out there and enjoy it! Familiarize yourself with the resources and share your knowledge and personal experiences with the visitor. If you do not know an answer, it is perfectly okay to say, "I don't know." But it is your responsibility to direct them to a source who does know the answer, then you find out the answer so you can be better prepared the next time.

EQUAL TREATMENT

Young, old, pretty, ugly, the first person of the day or the hundredth, each visitor deserves your time and attention equally, always with a smile, always courteous, always helpful. Listen to complaints with a sympathetic ear. Go out of your way to make each individual feel important and welcome.

CONFLICTS

Many visitors are not aware of all park regulations. As a Park Service employee, you may come across someone who is violating a regulation. Should this occur, and you feel comfortable talking to the person, take the time to explain why the rule exists, and why it is important to obey the regulations. People tend to comply if they know why a regulation was written. If you do not feel comfortable dealing with the situation, contact the Park dispatch office and they will notify a law enforcement ranger.

We really do make a difference! When a visitor is approached by a friendly, informed, smiling employee, he or she is very likely to respond in a pleasant, positive way. Our actions leave lasting impressions on the public. Our efforts can go a long way to assure their enjoyment and foster positive attitudes about Rocky Mountain National Park and the National Park Service.

EMERGENCY/INCIDENT REPORT TAKING

As a uniformed, official-looking employee of the Park (whether an interpretive, law enforcement or general ranger, a maintenance worker, a resource or trail crew member, or an administrator walking out of the headquarters building), you will undoubtedly be contacted at some time during the summer by a visitor wishing to report an emergency or some other incident. The type of information you gather from the person reporting the incident (the reporting party or RP) and the speed and efficiency with which you gather and disseminate the information to Park Dispatch, could mean the difference between life and death, or whether or not protection rangers are able to locate and contact someone who is violating park regulations.

Below are some basic guidelines for obtaining information from a reporting party. If you don't remember anything else from this list, learn, remember, and DO #1:

1. KEEP THE REPORTING PARTY WITH YOU

Too often, a report of an emergency or incident is received by dispatch with insufficient information about the occurrence, and the employee taking the report has allowed the reporting party to leave. By keeping the reporting party with you, any other needed information can be obtained from the source itself. If you allow the reporting party to leave, you may find yourself in the embarrassing situation of having to tell dispatch that you don't know the description of a vehicle or what type of injuries have been sustained.

If the reporting party refuses to stay, at least try to obtain the Recontact Information described below. If the reporting party refuses to stay AND refuses to provide you with Recontact Information, try to note the type of vehicle she/he drives away in (make, model, color, and license plate) and the direction the vehicle is traveling. Or, if no vehicle is involved (like a reporting party in the backcountry) get as good a description as you can of the RP, and the direction they are traveling. Notify dispatch immediately of this refusal so that protection personnel may locate and physically detain her/him, if necessary.

2. OBTAIN INITIAL INFORMATION FROM RP

- A. Type of Incident
- B. Location of Incident (use maps, try to get specifics)
- C. Involved Party Information
 - number of persons involved
 - age, sex, general physical description
 - last known medical condition/loss of consciousness? training, experience, equipment, trip plans, mental attitude (lost or injured in backcountry)
 - last known direction of travel
- D. Vehicle Information
 - MAKE, MODEL, COLOR (Chevy, station wagon, blue)
 - license plate (STATE and NUMBER)
 - last known direction of travel
- E. Assistance Rendered/Requested
 - Is someone on scene helping already? If so, what are they doing?
 - Is the involved party requesting assistance? If so, what type?
- F. Reporting Party Recontact Information (Let RP write this while you notify dispatch.)
 - name
 - LOCAL address and phone number (Moraine Park Campground site number?, Estes Park Holiday Inn?, Estes Park KOA?, etc.) and HOW LONG THEY MAY BE REACHED AT THIS LOCATION.
 - permanent address and phone number
 - vehicle information as in "D" above (in case they must be recontacted while traveling through the Park)

3. NOTIFY DISPATCH

Obviously, not all of this information will be needed for every incident report, but since you can't be sure WHAT information MAY be necessary for an efficient and effective response - KEEP THE REPORTING PARTY WITH YOU until you can find out!

Also, remember, you don't want to spend a long time getting every minute detail about the incident from the reporting party before notifying dispatch either; this could result in an unnecessarily delayed response.

EXAMPLE OF AN EMERGENCY/INCIDENT REPORT

- A. Two-vehicle motor vehicle accident (MVA) with injuries and road blockage.
- B. Approximately one mile east of Alpine Visitor Center. Adjacent to the Gore Range Overlook.
- C. Injured persons:
 - 10-year old boy, alert and oriented, no loss of consciousness, multiple lacerations to head and upper body, possible broken arm
 - 62-year old female, disoriented, possible loss of consciousness, complains of head and neck pain, other injuries unknown
- D. Vehicle Number 1 Oldsmobile, 2-door sedan, red, Florida license plate: ABC 123

Vehicle Number 2 Chevrolet, S-10 pickup truck, brown, Colorado license plate: CDE 345

E. One bystander EMT, one Registered Nurse, and other citizens providing emergency care.

Requesting full emergency response (ambulance, law enforcement, wrecker, fire suppression in case of fuel ignition).

F. John L. Doe Glacier Basin Campground, site number 21 through Monday, 6/16/97.
678 Tamarack Drive Small Town, Montana 406-91-1112
Ford, pickup truck, green, Montana license plate: 7TAA131 Eastbound, returning to Glacier Basin Campground for evening

Incident reports will vary substantially depending on the type and location of the incident, the reporting party, and the employee taking the information, however, all reports require some basic facts. Just remember, the only link you have with the emergency or other incident is the person reporting it. KEEP THE REPORTING PARTY WITH YOU until all necessary information has been obtained!

BASIC RADIO OPERATING PROCEDURES

VHF Radio system: basic 2 channel with channel guard

- Channel 1 for local short-to-moderate distance communications Use Ch. 1 for most transmissions.
- Channel 2 operates repeater system to cover a larger area. Use for long-range communications.

Repeater locations: East - Twin Sisters West - Red Mountain

Most radios have another channel - a "work" channel for communicating with coworke in the same local area, i.e. rescue operations, training, etc. Known as "Channel 5."

NOTE: Ch. 1 and Ch. 2 channel guards are <u>not</u> the same on the East and Colorad River District sides of the Park. East side personnel wanting to communicate with Colorado River District radio must switch to West 1 or West 2 in order to match up on the same frequencies as the Colorado River District. The same procedure applies f Colorado River District radios to communicate with East side radios on East 1 or East 2.

Park personnel are assigned radio call numbers to use instead of personal names. Us of last names is recommended only for major incidents utilizing the Incident Commar System. The Communications Center is called "ROMO." To call up a station, first ident the station being called using the radio call number, and then identify yourself (your rad call number).

EXAMPLE: "ROMO - 231" (this is 231 calling ROMO) "231 - ROMO" (this is ROMO calling 231)

Upon completion of a communication, sign off with your radio call number. Base station sign off with their assigned base station call sign.

Use "Clear Speech" language on the radio, that is, short, concise words and phrases convey the proper message. Do <u>not</u> use obscene language, slang, CB jargon or codes. <u>Plan</u> your message and <u>think</u> before transmitting to avoid rambling and too muddetail. Long transmissions should be broken at intervals to allow any emergency rad traffic to break in. Speak clearly in a normal tone of voice. It is not necessary to yell in the microphone.

At times when Dispatch requests "Essential Radio Traffic Only," radio communication then should be limited until the emergency is over or under control. Radio equipment is expensive and delicate. It should be treated with respect and care, avoid rough handling, dropping it, or exposure to heat or moisture. If the radio becomes immersed in water, DO NOT TRANSMIT. Bring it in to the Radio Shop immediately.

Dispatch airs a morning report daily at 0915-0930 with important announcements, road conditions, campground status, fire danger, weather forecasts, etc.

Remember, all radio communications are tape recorded in the Communications Center and there are many radios and scanners throughout the area. Please be professional on the air.

EXISTING FACILITIES AND SERVICES

While our goal is to preserve Rocky Mountain National Park in as natural a state as possible, it is necessary to provide various facilities to accommodate visitors' needs.

ROADS

There are visitors who still remember the days when Fall River Road was the only access to view the core of the Park. This precariously steep dirt road was completed in 1920. It winds its way up Fall River Canyon, over Fall River Pass to the Alpine Visitor Center. If you have driven the road, you can imagine the terror of two-way traffic and the difficulty of snow clearing before the advent of modern equipment and technology. For these reasons, and due to the increasing popularity of the Park, as evidenced by the hundreds of Model T's lined up and down the road, the decision was made to build Trail Ridge Road. When Trail Ridge Road officially opened in 1932, Fall River was turned into a one-way road up to the pass. It traditionally opens on the July 4th weekend and remains open until the first heavy snows in fall.

Trail Ridge Road is a 48-mile stretch of winding highway that bisects the Park over the tundra east to west, reaching 12,183 feet at its highest point. It connects the towns of Estes Park and Grand Lake, both of which offer the national park visitor a variety of accommodations and services.

Trail Ridge is usually open from Memorial Day Weekend through mid-October. It is not uncommon, however, to close higher portions of the road a day or two in the summer due to unexpected storms or flurries. In the wintertime, Trail Ridge Road remains partially open to Many Parks Curve on the east side and the Colorado River Trailhead on the Colorado River District. Drifts of 20-30 feet bury parts of the tundra.

A drive up the Old Fall River Road to Fall River Pass and back down Trail Ridge Road completes a popular scenic loop. Wayside exhibits and short nature trails invite visitors to explore along the way.

Bear Lake Road weaves south and west through spectacular glacial moraines and meadows. This 7-mile stretch of road leads to numerous trailheads, 2 major campgrounds, and a museum. It is extremely popular, because it provides easy access to numerous alpine lakes and spectacular scenery. The area is popular, so parking is often difficult in the summer. The Park offers a free shuttle bus which, takes people to Bear Lake from a parking lot across from Glacier Basin Campground. Along the way, there are also a number of bus stops.

CAMPING

The Park has five drive-in campgrounds. The campgrounds tend to be filled during the summer season. <u>Glacier Basin</u>, and <u>Moraine Park</u> are located along the scenic Bear Lake Road. These two campgrounds are on a nationwide reservation system. Reservations are required for use of these campgrounds from approximately Memorial Day Weekend through Labor Day. Reservations can be made in person at the Backcountry Office.

The three other campgrounds - <u>Aspenglen</u> (Fall River Entrance), <u>Longs Peak</u> (south - off Highway 7), and <u>Timber Creek</u> (west) are filled on a first-come first-served basis. The Park <u>does not</u> supply, hot water, showers or electrical hook-ups at any of the campgrounds. There is a 7 day limit for camping parkwide. Longs Peak Campground is tents only and the limit is 3 days. Firewood and ice are sold in the evenings in the campgrounds. During the summer months, National Park Service interpreters provide slide illustrated programs at each of the campgrounds (except for Longs Peak Campground) on a variety of topics.

VISITOR CENTERS AND PARK MUSEUM

There are four visitor centers and one museum in the Park.

PARK HEADQUARTERS VISITOR CENTER is located on Highway 36 just east of the Beaver Meadow Entrance. Information, an orientation film, and first aid are provided. Publications are for sale at the Bookcorner. During the summer months, slide illustrated programs are presented. Summer hours are 8 AM to 9 PM.

ALPINE VISITOR CENTER is located high along Trail Ridge Road at an elevation of 11,796 feet. Exhibits interpret the fragile tundra ecosystem and animals of the alpine tundra. Nature walks are conducted daily in the summer. A short trail, leading to a view of the surrounding peaks, lies just north of the Parking lot. There is a first aid room where assistance is available for visitors with high-altitude sickness. The hours vary. Please see the Park newspaper for further information.

The KAWUNEECHE VISITOR CENTER serves the Colorado River District year-round providing information and orientation to the Park's resources, as well as publication sales. It is tentatively scheduled to operate from 7 AM to 7 PM, mid-June through mid-August. An auditorium and exhibit area have recently been added.

The LILY LAKE VISITOR CENTER, located south of Estes Park on Highway 7 across the road from Lily Lake, is the newest visitor center in the Park. It was acquired from the Baldpate Estates by the Conservation Fund in 1991. Its hours are unknown at this time; please see the Park newspaper for further information.

In addition, there are two information kiosks operated daily during the high peak use of summer. <u>Sheep Lakes Information Station</u>, so called because of the bighorn sheep which frequent the area, is located in Horseshoe Park about 1 mile west of the Fall River Entrance (Highway 34). Interpretive talks are conducted daily. The <u>Bear Lake Information Station</u> is located just off the Parking lot at Bear Lake. Information about the area, especially hiking information, is available daily here.

MORAINE PARK MUSEUM, located on the Bear Lake Road, features extensive exhibits covering the Park's geology, climate, ecosystems, and human impacts. The facility also contains park information service, RMNA book sales, and temporary exhibits. This accessible facility is open daily May through October, 9 AM to 5 PM.

CONCESSIONS AND OTHER SERVICES

Concessions are the private business concerns which are authorized to provide services to visitors within the Park. They provide services at the request of the Park, pay fees to the Government, and operate in a business environment controlled to a great degree by the National Park Service. A decision to authorize a park concession is made following a determination that the services or facilities are necessary and appropriate for visitor use and enjoyment of the Park. Through the services and recreational opportunities they provide, concessioners enhance the experience for many park visitors. Therefore, the National Park Service and concession employees work closely together, toward the common goal of serving the visitor.

As a National Park Service employee, it is important to remember that we **DO NOT** give personal recommendations for places to eat, shop, rent equipment, etc. We **DO GIVE** information as to the many options which are available to the visitor. Also, as federal employees, we do not accept discounts or free merchandise, food, etc., if offered because of our employee status.

There are a variety of concessions found in the Park. These include:

- 1. The Trail Ridge Store complex is operated by Rocky Mountain Park Company under a concessions contract for the sales of food, beverages, merchandise and other services at Fall River Pass.
- 2. Colorado Mountain School provides climbing and mountaineering guide and instruction under a concession permit.
- 3. Silver Peaks Enterprise holds a concession permit to sell firewood bundles and ice to visitors in the eastside campgrounds.
- 4. Sun Valley Guest Lodge supplies firewood under a concession permit basis to Timber Creek Campground.
- 5. Hi Country Stables operates in Moraine Park and at Glacier Creek under a concession contract to provide livery services in these areas of the Park.
- 6. There are five companies under concession permits to provide guided, overnight backpacking trips. They are listed below:

Colorado Outward Bound School Overland Travel, Inc. Sundance Adventures The Road Less Traveled, Inc. Young Life Wildemess Travel

7. A number of liveries, guest ranches and camps located outside of the Park are authorized by concession permit to provide livery service within the Park. They are listed below:

Aspen Lodge and Guest Ranch Cheley Camp Lane Guest Ranch Meadow Mountain Ranch (Girl Scouts) Meeker Park Lodge National Park Village Livery/River Ranch Silver Lane Stables Sombrero Ranches Wild Basin Livery Wind River Ranch Winding River Resort Village Winding River Resort Village Campground YMCA of the Rockies

OTHER COMMERCIAL SERVICES

There are a number of area businesses which provide services to park visitors and operate from locations outside the Park under the authorization of an Incidental Business Permit (IBP). An IBP is a permit issued for a short term which establishes operating requirements, but does not provide the licensee with the rights and responsibilities of a concessioner. Examples of services authorized in this way include: sightseeing tours, photography workshops, fly-fishing instruction, bicycle touring. Form No. I-64, available in the information office, is a list of authorized commercial visitor services.

SAFETY TIPS

The following information is presented to serve as a reminder to the employees of Rocky Mountain National Park about some of the potential hazards and problems which may be encountered in this area. This is not meant to be a complete list of hazards, nor is it intended to present complete information about the hazards. Contact the Park Safety Officer for more information.

Because of the many types of terrain, elevation, variable and often severe weather, sheer numbers of visitors, and a variety of work performed, employees and visitors face a myriad of potential natural and manmade hazards. Everyone needs to exercise caution on and off duty to ensure that this year will be a safe and enjoyable one. Remember: THERE IS NO JOB OR TASK WHICH IS SO IMPORTANT THAT REQUIRED TIME AND RESOURCES CANNOT BE DEDICATED SO THAT IT MAY BE PERFORMED SAFELY. The following are some of the hazards which we can expect to encounter:

HYPOTHERMIA

Hypothermia is the lowering of the core body temperature. This is a serious and potentially fatal event, especially for those who are unprepared. Symptoms include drowsiness, loss of judgment or coordination, slurred speech and uncontrolled shivering. Outdoors, everyone should be prepared for sudden weather changes. Carry extra layers of protective clothing, wear a hat, drink plenty of water and snack on high carbohydrate food. A sunny, warm morning can quickly turn into a blustery, snowy, stormy afternoon.

LIGHTNING

Afternoon thunderstorms are frequent in the mountains. Trips above timberline should be planned so that you are down below treeline by early afternoon. When thunderstorms approach, avoid mountain tops, exposed areas, tall or lone trees, ponds or puddles. If lightning is nearby, refrain from transmitting on portable radios. If caught in the open when lightning is imminent, squat with hands on knees, keep your head low and wait for the storm to pass. If carrying a metal frame backpack, remove it and place it away from you. Lightning has caused several deaths recently and should not be taken lightly.

SPRING RUN-OFF, HIGH WATER

During the spring and early summer, the snow melting from the high country usually causes the streams and rivers to become swollen. Stream crossings, which are easily done later in the year, are perilous during high water conditions. Use care when crossing streams, use bridges where possible, extra travel upstream or downstream may be necessary in order to find a safer place to cross. Waist belts and straps of backpacks should be loosened when wading streams so that the backpack could easily be jettisoned, if you were to slip and fall into the water.

GIARDIASIS

This is a protozoan disease of the upper small intestine. It is characterized by diarrha, cramps, and weight loss. Incubation is from 5 to 25 days. The disease is usually contracted by drinking water contaminated by giardia cysts. It may also be transmitted by person to person by fecal-oral routes. No one should drink water from the streams without first boiling the water or filtering the water through a filter which is rated for the removal giardia cysts. The large number of animals which can be carriers of the disease (elk, deer, beaver, etc.) in our park, make our streams especially susceptible to this disease. Treatment of surface water with disinfectants only (such as chlorine or iodine) is not considered to be effective because of the resistance of the cysts to these chemicals. Prescription medicines are available from your doctor for the treatment of giardiasis.

PLAGUE

Plague is endemic to the Park and there have been outbreaks here in the past. This disease is transmitted by fleas from infected rodents, especially ground sourcels. Employees and visitors should not handle dead animals, nor should they approach burrows where rodents live. Everyone should be on the lookout for animals which appear lethargic or are acting in a strange manner. Strange behavior, the sudden die offs, or the disappearance of an animal population should be reported to the Resource Management staff. Dead animals should be avoided, if possible, or if collected, they should be picked up using a plastic bag as a glove. Symptoms of bubonic plague include swollen lymph nodes and fever, usually developing 1 to 6 days after exposure. Pneumonic plague may develop as the lungs become infected and is especially dangerous because it may easily be spread by coughing. Untreated bubonic plague is fatal in about 50 percent of the cases.

COLORADO TICK FEVER

This disease is also endemic to the Park and may be carried by one-third of the tick population here. Symptoms include malaise and high fever. This disease may go into brief remission, followed by a second bout of fever lasting for several days. Fever will usually be evident 4 to 6 days after exposure. The longer a tick stays attached to a person, the greater likelihood for the transmission of any diseases which it may carry. Ticks should be removed carefully, making sure that all of the mouth parts are removed from the bite. Do not squeeze the tick with bare hands so hard as to rupture the tick or drive more toxins into your body.

ROCKY MOUNTAIN SPOTTED FEVER

This is another disease which is endemic to the Park and usually spread through the bite of an infected tick. It is less frequent than Colorado Tick Fever; however, untreated it is fatal in 15-20 percent of cases. High fever, malaise, headache, chills and muscle pain may persist for 2 to 3 weeks. The incubation period is usually 3 to 14 days. About 50 percent of the cases develop a rash of red spots starting on the palms of the hands or the soles of the feet.

HANTAVIRUS

No known cases of hantavirus have been reported in this area. However, this disease has killed several people in the southwest corner of Colorado. This disease is spread from the feces and urine of infected rodents, especially the deermouse. Deermice are prevalent in the Park and our populations do carry the disease Approximately 20 percent of the deermice tested positive for hantavirus in 1994. Avoid going into crawlspaces or areas where there is evidence of gross contamination of rodent feces. Buildings which have been closed for a long period of time represent a high hazard. Small amounts of droppings may be cleaned up after wetting down with a disinfectant spray (Lysol or diluted bleach). Consult the Interim Recommendations for Risk Reduction of Hantavirus Infection on questions concerning cleanup or disposal of rodents or feces, or contact Resource Management or the Safety Officer.

BLACK WIDOW SPIDERS

At least three employees have been bitten by these spiders in the past two years. Please use caution when entering dark spaces in or under buildings. Little used out buildings or basements are likely hiding places. Red "hour glass" markings on a black body distinguish this species. The bite may or may not be painful, afterwards, red swelling and possible numbness may be evident in the bite area. If spiders are spotted, please contact Resource Management.

BLOODBORNE PATHOGEN PROGRAM

Several diseases, including AIDS and Hepatitis B, can be transmitted through contaminated body fluids, usually blood. Any employee who is required by their job to give first aid is in this program. These employees and other employees who may come into contact with body fluids, such as custodians, will undergo training in the Bloodborne Pathogen Program. Universal precautions are the first line of defense when handling body fluids. Infectious disease control kits should be located in all vehicles. These kits contain various items, including latex gloves to protect you when handling potentially contaminated fluids, and disinfectant wipes to help disinfect your skin, if splashed.

Any employee who has or who may have been exposed to blood or body fluids while giving first aid or through other actions is covered by the Post-Exposure portion of the Bloodborne Pathogen Program. First, it is important to wash and disinfect the area of possible contamination. Supervisors all have post-exposure information packets. Contact your supervisor or the Park Emergency Medical Services Coordinator as soon as possible after exposure. After hours, go directly to the nearest medical facility for evaluation.

HORSE USE

All employees who desire to use stock during work must have supervisor's approval and complete a training program prior to using stock. Training will be conducted on the East Side by the Trails Foreman and on the Colorado River District by a ranger. All stock use should be cleared in advance through these individuals or authorized representatives. Serious injury may result from horse accidents. Use caution when riding, and follow all stock use requirements established by the respective district operations. Optional helmets for riders are available at the East Side barn.

DRIVING

Summertime brings increased numbers of tourists and an increase of activity everywhere in the Park. Be alert for bicyclists, slow moving vehicles, nervous drivers on Trail Ridge Road, and visitors stopped in the middle of the road. Observe speed limits, drive defensively, and remember that wearing seatbelts is mandatory. Weather conditions may be extreme: wind, rain, snow and hail are possible in any month. Several areas require special caution when driving: all entrance stations, AVC parking lot, Wild Basin Road, overlook areas, park headquarters, Bear Lake Road, and in the utility/ maintenance areas, especially around the Auto Shop on the East Side. Housing areas require special care because of the number of children playing there.

All accidents or vehicle damage must be reported to your supervisor immediately. Accidents need to be investigated by law enforcement staff, and normally vehicles should not be moved prior to the arrival of investigating officers. Your supervisor or the law enforcement personnel can advise as to the proper paperwork which needs to be

completed. Please see Office Order #13 for additional driving information. Also, **no smoking is permitted in government vehicles**.

VEHICLE MAINTENANCE

Keep abreast of vehicle maintenance. All operators are responsible for checking the tires, fuel, oil, and coolant levels. Interior owned vehicles are usually maintained by park staff. Please contact the Fleet Maintenance Foreman or the Colorado River District Maintenance Foreman to schedule maintenance. GSA vehicles are maintained at various locations outside of the Park; please contact the Auto Shop for questions concerning these vehicles. Oil and other fluids are available for any vehicle in either of the district maintenance facilities; contact shop personnel for proper procedures. Any vehicle which has been "red-tagged" shall not be operated by any employee. Contact respective shop foremen for information concerning the future use of these vehicles.

CHEMICALS

Many of the operations in the Park involve the use of some type of chemical. When ordering chemicals, especially new ones, contact the manufacturer for a Material Safety Data Sheet (MSDS) for information about the chemical. Do not order chemicals with highly hazardous or toxic components. Search for alternatives which can do the job and are less toxic. Chemical use which produces hazardous waste is often unnecessary and always expensive. MSDS forms are required for all chemical orders and must be forwarded to the Park Safety Officer.

Chemicals must be stored according to the requirements detailed in the MSDS. Flammables and hazardous wastes must be stored in approved, labeled containers in specific areas. All containers must be labeled with the chemical's name and manufacturer, as well as with appropriate hazard warning information. Unmarked containers are candidates for the hazardous waste program and may cost your operation many thousands of dollars to dispose of.

Consult your supervisor and the MSDS file for information on chemicals prior to use. If the chemical requires the use of a respirator or special protective clothing, these must be provided by the supervisor and wom when using this chemical. All employees who use respirators must be enrolled in the Respiratory Protection Program and are subject to the training, medical surveillance and fit testing requirements of that program. Chemicals which require the use of respirators and protective clothing should be avoided wherever possible. Please see the Park Hazard Communication Program or the Park Safety Officer for more information.

LOCKOUT/TAGOUT

There may be an occasion when you might want to use a piece of equipment or vehicle, but find that it is tagged with a message reading "Danger, Do Not Operate." There may also be some type of device locked into place which is designed to prevent the unintentional starting or energizing of the equipment. These tags or lockouts mean that some sort of maintenance or repair is being done or is needed before this equipment can be safely used. NO EMPLOYEE WILL ATTEMPT TO ENERGIZE, OPERATE OR CIRCUMVENT A LOCKING DEVICE ON ANY SYSTEM WHICH HAS BEEN LOCKED OR TAGGED OUT FOR MAINTENANCE. Any attempt to do so may seriously injure or kill the operator or maintenance person working on the equipment. If you have any questions concerning a particular piece of equipment, contact the appropriate shop foreman or the individual whose name is on the Do Not Use tag.

OPERATION OF EQUIPMENT

If you are unfamiliar with a piece of equipment, tool, etc., contact your supervisor prior to use of that equipment. Supervisors are responsible for training of the employees on all pieces of equipment which they are required to use. Assistance from another employee or some additional training may be required for safe operation. Asking for assistance hurts a lot less than smashing parts of your body.

OTHER PROGRAMS

Various programs involving safety and health are underway. Testing for lead based paint and asbestos continues for park quarters and buildings. Drinking water programs monitor for possible contaminants in drinking water systems. Contact the Park Safety Officer for information on special programs. Various outdoor recreational activities such as climbing, skiing, and boating involve special hazards; contact members of the SAR Committee for information these types of activities.

EMPLOYEE INJURIES OR DAMAGE TO GOVERNMENT PROPERTY

Damage to government property or injuries where medical treatment is necessary need to be reported to your supervisor **IMMEDIATELY**. There is also a great need to report close-calls, as this may help prevent possible future injuries. Various forms need to be filled out prior to medical treatment. Please refer to the Federal Employees Compensation Act (FECA) section for procedures that must be completed concerning any injury or incident. If these are not completed, workmen's compensation may be denied or delayed.

Emergency situations should be handled through park dispatch or by calling 911. Serious medical problems need to be taken care of right away; the appropriate paperwork can wait until after the emergency. Employee first aid stations are located in the Mail and

Files Room of headquarters, in the Auto Shop, and in the Colorado River District Maintenance Shop. Two additional stations are scheduled for the Buildings breakroom in Building 828 and for the Hidden Valley Education Center. There is also a station located at the Alpine Visitor Center. In many park areas, law enforcement rangers are the appropriate and fastest first responders, and should be contacted through dispatch for assistance. All employees are encouraged to have Basic First Aid and CPR; see your supervisor for possible training opportunities in these areas.

There are many different objectives and work forces involved in the operation of Rocky Mountain National Park; however, nothing is more important than the safety of the workers and visitors. It is possible to be effective, hardworking, and productive all in a safe manner. Have a great year, and make it a safe year.

For questions concerning safety or to report possible unsafe conditions, contact your supervisor, the Park Safety Officer, or any member of the Park Safety Committee.

HIKING TRAILS

Trailhead Difficulty (elevation)	Destination	Level of Use	Distance (one-way mileage)	Elevation Gain (feet)	Level
Bear Lake (9,475)	around lake	very heavy	0.5	20	easy
	Nymph Lake	heavy	0.5	225	fairly easy
	Dream Lake	heavy	1.1	425	moderate
	Emerald Lake	moderate	1.8	605	moderate
	Lake Haiyaha	moderate	2.1	745	moderate
	Bierstadt Lake	moderate	1.6	255	moderate
	Lake Helene	moderate	2.9	1,215	moderate
	Odessa Lake	moderate	4.1	1,215	moderate
	Flattop Mountain	fairly heavy	4.4	2,849	strenuous
Glacier Gorge Junction (9,240)	Alberta Falls	very heavy	0.6	160	easy
Junction (9,240)	Mills Lake	heavy	2.5	700	moderate
	Black Lake	moderate	4.7	1,380	strenuous
	The Loch	fairly heavy	2.7	940	moderate
	Sky Pond	moderate	4.6	1,660	strenuous
	Andrews Glacier	low	5.0	2,460	strenuous
Bierstadt Lake Trailhead (8,850)	Bierstadt Lake	moderate	1.4	566	moderate
Fern Lake Trailhead (8,155)	The Pool	moderate	1.7	245	fairly easy
(8,155)	Fern Falls	moderate	2.5	645	moderate
	Fern Lake	moderate	3.8	1,375	fairly hard
	Odessa Lake	moderate	4.9	1,865	strenuous
Cub Lake Trailhead (8,080)	Cub Lake	fairly heavy	2.3	540	moderate
Deer Ridge Junction (8,930)	Deer Mountain	moderate	3.0	1,083	moderate
Twin Owls Trailhead (7,940)	Gem Lake	moderate	1.8	910	moderate
Gem Lake Trailhead (7,740)	Gem Lake	moderate	2.0	1,090	moderate

Trailhead Difficulty (elevation)	Destination	Level of Use	Distance (one-way mileage)	Elevation Gain (feet)	Level
Lawn Lake Trailhead	Lake Ypsilon	low	4.5	2,180	strenuous
(8,540)	Lawn Lake	moderate	6.2	2,249	strenuous
Twin Sisters Trailhead (9,090)	Twin Sisters Peak	moderate	3.7	2,338	strenuous
Longs Peak Ranger Station (9,300)	Eugenia Mine	moderate	1.4	508	moderate
Station (9,500)	Chasm Lake	fairly heavy	4.2	2,360	strenuous
	Longs Peak	heavy	8.0	4,885	very difficult
Rock Cut (12,110)	Roger Toll Memorial	heavy	.5	200	moderate
Wild Basin Ranger Station (8,500)	Copeland Falls	heavy	.3	15	easy
Station (6,500)	Calypso Cascades	heavy	1.8	700	moderate
	Ouzel Lake	low	4.9	1,510	moderate
	Ouzel Falls	heavy	2.7	950	moderate
	Bluebird Lake	low	6.0	2,478	strenuous
	Thunder Lake	moderate	6.8	2,074	strenuous
	Lion Lake No. 1	low	7.0	2,565	strenuous
Finch Lake Trailhead	Finch Lake	low	4.5	1,442	moderate
(8,470)	Pear Lake	low	6.5	2,112	strenuous
Colorado River Trailhead (9,010)	Lulu City Site	moderate	3.1	300	moderate
North Inlet Trailhead	Cascade Falls	moderate	3.5	300	moderate
(8,540)	Lake Nokoni	low	9.9	2,240	strenuous
Timber Lake Trailhead (9,000)	Timber Lake	moderate	4.8	2,060	strenuous
East Inlet Trailhead	Adams Falls	heavy	0.3	79	easy
(8,391)	Lone Pine Lake	moderate	5.5	1,494	strenuous
	Lake Verna	low	6.9	1,809	strenuous
	Spirit Lake	low	7.75	1,899	strenuous
East Shore (8,367)	N. End Shadow Mtn.	moderate	5.2	87	easy
Tonahutu (8,437)	Granite Falls	moderate	5.4	1,403	moderate
Green Mtn (8,794)	Big Meadows	moderate	1.8	606	moderate
Onahu (8,780)	Green Mountain	low	8.0	1,140	moderate
Bowen/Baker (8,864)	Baker Pass	moderate	5.75	2,389	moderate

BACKCOUNTRY USE/LEAVE NO TRACE

A steady growth in the number of campers over the last decade has resulted in damage to some of the more popular backcountry spots. To protect the fragile resources of the Park, a camping permit system is in effect. The backcountry permit is a contract between the user and the National Park Service that they agree to treat the backcountry with respect and will take care of the backcountry/wildemess resource.

PLEASE HELP THE VISITOR TO KNOW AND OBEY THE PARK REGULATIONS. They are designed to maintain the quality of your National Park. Violators will be issued citations requiring an appearance before the U.S. Magistrate and/or a fine.

PERMIT

A permit is required for all overnight stays in the backcountry. THEY ARE GOOD ONLY AT THE LOCATION AND DATE LISTED ON THE PERMIT. The permits may be obtained in advance or upon arrival in the Park at the east or Colorado River District Park Headquarters and at some ranger stations in season. The number issued is limited. The permit tag issued to the party leader should be attached to his/her pack and must be shown to backcountry patrol personnel upon request. When camp is established, the tag is attached to the tent. A permit is also required for all over-night technical climbs. An administrative charge of \$15 is collected for each backcountry permit issued between May and October. Self registration, at no charge, is available November through April.

RESERVATIONS

Day of trip permits are available anytime in person year round. Advanced reservations by mail or in person are taken anytime after March 1 for a permit for the current calendar year. Telephone reservations may be made ONLY from March 1 to May 15 and beginning October 1 for a permit for the current calendar year by calling (970) 586-1242.

PERMITS NOT PICKED UP BY 10 AM ON THE FIRST DAY OF THE PLANNED BACKCOUNTRY STAY WILL BE CANCELED IN ENTIRETY AND SITES GIVEN TO OTHER BACKPACKERS IF THE BACKCOUNTRY OFFICE IS NOT NOTIFIED OF THE LATE ARRIVAL. ALTERATIONS OF THE INFORMATION REQUIRES THAT A DIFFERENT PERMIT BE ISSUED BEFORE THE PARTY ENTERS THE BACKCOUNTRY. Backcountry camping is limited to a total of seven nights between May and September and 14 additional nights between October and April, for a total of 21 days per calendar year.

CANCELLATIONS

If a permit is not going to be used, cancellation should be made by calling (970) 586-1242 or writing the Backcountry Office, so sites can be released to other campers. DEMAND EXCEEDS THE SITES AVAILABLE.

DESIGNATED CAMPSITES

A wooden sign with campsite name shows the direction to designated sites, all but one accessible by maintained park trails. Campers are required to set up camp in the within 15 feet of the metal arrowhead markers at individual sites. Individual site camping is limited to no more than seven people in a party. There is a three night limit at each campsite. These sites are located in areas that are more readily able to withstand the wear and tear of camping and may be changed from year to year to allow for restoration.

GROUP CAMPSITES

Groups consist of eight to 12 people. They must camp at special group sites which can withstand the impact of many people. Due to impacts caused by group interaction in and between sites (site spread, social trails, etc.), groups may not split up to camp in neighboring individual sites in the same camp area. Groups may split, but must camp in designated sites at least one mile apart.

CROSS-COUNTRY ZONES

These are areas available on a limited basis for backpackers familiar with orienteering and minimum impact, Leave No Trace hiking and camping skills. They are below treeline, have no developed campsites, no developed trails, no privies, and are not as accessible as areas in the Park near maintained trails. They are, therefore, less frequently traveled, and parties using the zones are advised to take with them some emergency supplies and a well stocked first aid kit. At least one person in the party should be skillful with map and compass. More hiking time should be allowed for these areas as dense forest, undergrowth, and downed wood can make travel difficult.

Choice of campsites is left to the party, but must be:

- within the cross-country zone boundaries
- at least 200 feet (70 adult steps) away from any water source
- out of sight and sound of any other party
- moved at least one mile each day
- in one zone no more than two nights
- limited to no more than seven people in a party
- stoves only.

SPECIAL USES

Please refer to the separate information sheets, available upon request, for the following special use of the backcountry.

- WINTER BACKCOUNTRY CAMPING, generally in effect October through April, depending on snow cover. PERMIT REQUIRED.
- TECHNICAL CLIMBING AND BIVOUACS, PERMIT REQUIRED FOR OVERNIGHT STAYS.
- HORSES AND LLAMAS, must remain on designated trails. Some trails closed to horse use. Must camp at designated stock sites.
- FISHING, Colorado fishing license is required. Many closures and catch-and-release areas.
- SPRAGUE LAKE CAMP, wheelchair-disabled backcountry campsite. Wheelchair privy.

LEAVE NO TRACE

With increased visitor use, both day and overnight, it is important to minimize our impacts and Leave No Trace of our visits into the backcountry.

Please learn, practice, and pass on Leave No Trace skills and ethics to those you come in contact with. The following Leave No Trace principles will help protect precious backcountry resources.

PLAN AHEAD AND PREPARE

- Know and obey the regulations and special concerns for the area you'll visit.
- Visit the backcountry in small parties. More people means more impact.
- Avoid popular areas during times of high use.
- Choose equipment and clothing in subdued colors.
- Repackage food into reusable containers.

CAMP AND TRAVEL ON DURABLE SURFACES

While traveling:

- Stay on designated trails and hike single file. Never shortcut switchbacks.
- When traveling crosscountry, choose the most durable surfaces available: rock, gravel, dry grasses or snow. Spread out so that you don't grind a path where one didn't exist before.
- When you stop to rest, be careful not to mash vegetation. Sit on rocks, logs, or in clearings.

At Camp:

- Be careful where you pitch your tent. Use the tent pad at the campsite, and camp in the camp area indicated on your permit.
- Restrict activities to the area where vegetation is compacted or absent.
- Use a large, plastic water container to collect water so you don't need to make frequent trips to the water sources.

PACK IT IN, PACK IT OUT

- Pack everything you bring into the backcountry back out.
- Protect wildlife, hang your food and scented items securely.
- Strain food scraps from wash water and pack them out.

PROPERLY DISPOSE OF WHAT YOU CAN'T PACK OUT:

- There are pit toilets at many backcountry sites. Use them.
- If there are no pit toilets nearby, urinate or defecate at least 200 feet (70 adult steps) from water, camp, or trails.
- Urinate in rocky places that won't be damaged by wildlife who dig for salts and minerals found in urine.
- Deposit human waste in catholes dug 6-8 inches deep. Carry a small garden trowel or lightweight scoop for digging. Cover and disguise the cathole when finished, or pack out solid waste.
- Use toilet paper sparingly and pack it out along with sanitary napkins, and tampons in an airtight container. Consider using natural toilet paper such as a smooth rock or soft pine cone.
- Wash your dishes and yourself at least 200 feet (70 adult steps) from water sources, and use small amounts, if any, of biodegradable soap. Scatter strained dish water.
- Inspect your campsite for trash and evidence or your stay. Pack out all trash: Yours and others'.

LEAVE WHAT YOU FIND

- Treat our natural heritage with respect. Leave plants, rocks, and historical artifacts as you find them.
- Good campsites are found, not made. Altering a site should not be necessary. Don't build structures or dig trenches.
- Let nature's sounds prevail. Speak softly and avoid making loud noises. Allow for others to enjoy the peace and solitude of being in the backcountry.

MINIMIZE USE AND IMPACT OF FIRES

- Campfires can cause lasting impacts to the backcountry. Always use a lightweight, portable stove for cooking. A campfire is a luxury, not a necessity.
- Enjoy the sounds and wonders of the darkness, or use a candle lantern instead of a fire.
- Where fires are permitted, use the metal fire grate. Don't scar large rocks by using them to enlarge the fire area.
- Gather dead and down sticks, no larger than an adult's wrist, from a wide area, and leave them in their natural form until you are ready to burn them. Scatter any unused sticks.
- Do not snap branches off live, dead, or downed trees.
- Put out campfires completely.
- Remove, and pack out, all unburned trash from the fire grate. Scatter the cold ashes over a large area well away from camp.

For information on Leave No Trace outdoor skills and ethics, contact the Backcountry Office or call 1-800-332-4100. It's easy to enjoy and protect the backcountry simultaneously.

ACCESSIBILITY IN THE PARK

FACILITIES

Visitor Centers have designated accessible parking spaces with ramps where necessary. Restrooms are accessible at the following areas: Park Headquarters/Visitor Center near Estes Park on U.S. 36; Kawuneeche Visitor Center near Grand Lake entrance on U.S. 34; Alpine Visitor center on top of Trail Ridge Road (summer only); Lily Lake Visitor Center (summer only). Comfort stations at the following points have accessible facilities: Rock Cut and Rainbow Curve. Campgrounds have at least one fully accessible restroom.

Accessible: Alpine Visitor Center, Fall River Pass Store, Moraine Park Museum, the lobby of the Headquarters building, Bear Lake Information Station, Lily Lake Visitor Center, and the lobby of the Kawuneeche Visitor Center.

The Headquarters building has information/sales counters, and a relief map. The lower floor has frequent showings of an orientation slide show and is accessible through the balcony on the upper floor, or by parking in the rear where there is a ramp.

INTERPRETATION

The Park has various trail guides, books and other literature concerning the natural and human history available in Braille and c., cassettes. Large print copies of some park literature are available on loan basis. On request, visitors can view a captioned version of

the Park's orientation film. A Telecommunication Device for the Deaf (TDD/TTY) is available at Park Headquarters. The phone number is (970) 586-1319. Inquire at the visitor centers for these sources of information.

Illustrated programs are given by interpreters at outdoor amphitheaters nightly in summer. Paved trails with easy grades lead to Glacier Basin and Moraine Park amphitheaters. A steep, paved trail leads to Timber Creek amphitheater. Similar programs are shown at the Headquarters auditorium. Sprague Lake picnic area is accessible, and a smooth path leads around Sprague Lake.

TRAILS

The Hidden Valley Beaver Ponds are accessible via a boardwalk designed to accommodate visitors in wheelchairs. This walkway winds in and around the world of the beaver, which is interpreted by signs located along the walkway. An undulating paved walk of 200 yards at 11,700 feet elevation, leads from the Parking area to Forest Canyon Overlook. The Coyote Valley Trail is hard packed, one mile, gravel, loop trail.

SCENIC TOURS

Several interpretive roadside signs can be read from a parked car or adjacent sidewalk on Trail Ridge Road. The Old Fall River Road is a motor nature trail and a self-guiding leaflet is available. Travel is westbound only and uphill. Some individuals in wheelchairs may need assistance and exertion at high altitudes can cause problems.

BACKCOUNTRY

Sprague Lake backcountry campsite provides a backcountry experience to visitors who are physically impaired/in wheelchairs. The campsite is 0.5 mile from the Sprague Lake picnic area on the Bear Lake Road. The trail is hardened and graded, but does have a number of small hills and curves. Those with upper body impairments or electric chairs may need assistance. Facilities include picnic tables, fire grates, and a vault toilet, which are fully accessible. Groups or individual parties (12 people maximum) must reserve the site in advance. Contact the Backcountry Office for reservation information, (970) 586-1242.

NEARBY

A medical clinic is in Granby, 14 miles (22.54 km) south of Grand Lake entrance. A hospital is located in Estes Park. Accessible restaurants and lodgings are located in these communities adjacent to the Park. Contact the Chamber of Commerce in Estes Park, (970) 586-4431 or in Grand Lake, CO 80447, (970) 627-3402.

FACTS AND FIGURES ABOUT ROCKY MOUNTAIN NATIONAL PARK

Established:	January 26, 1915 (10th oldest park)		
Acreage:	265,726		
Square Miles:	415		
Wildemess:	2,917 a. established; 235,668 additional acres proposed		
Land Acquisition:	Inholdings 2 66 owners, 74 parcels, 470.44 acres (0.2 percent of park's land and stater)		
Prec., itation:			
Aquatic Resources:	147 lakes, 50 lakes with fish, 1,151 acres, 539 acres with fish		
Wildlife Populations: Bighom Elk Deer Bear Coyote Moose	800 1,700 (winter), 4,000 (summer) 260 (winter), common (summer) 30 Common Common (Colorado River District) rare (Eastside)		
Campgrounds: Aspenglen Longs Peak Timber Cree Glacier Basir Moraine Park Organized gr	k 100 sites n 150 sites k 247 sites		
Backcountry Camps <u>East Side</u> Crosscountry zo Individual sites Group sites Accessible Sites Bivouac Zones	ones 9 zones/16 parties @ 7 campers = 112 109 sites @ 7 campers = 763 10 sites @ 12 campers = 120		

Colorado River District

Crosscountry zones	14 zones/32 parties @ 7 campers =	224
Individual sites	88 sites @ 7 campers =	616
Group sites	11 sites @ 12 campers =	132
	total campers	972

Trails: 364+ miles

Roads:

Paved	82 miles
Unpaved	28 miles
Total	110 miles

Fall River Road opened September 14, 1920 Trail Ridge Road opened July 16, 1932 -- 44.2 miles, Colorado River District border to east side border -- 11 miles above treeline

Picnic Areas:

East Side Sprague Lake Upper Beaver Meadows Endovalley Hollowell Park Hidden Valley Wild Basin	25 tables, fire grates 10 tables, fire grates 37 tables, fire grates 10 tables, fire grates 10 tables 8 tables, fire grates
Colorado River District	
Lake Irene	8 tables, fire grates
Timber Lake	8 tables, fire grates
Beaver Ponds	6 tables, fire grates
Beaver Creek	4 tables, fire grates
Colorado River	4 tables, fire grates
Kawuneeche	6 tables, fire grates
Harbison Meadows	4 tables, fire grates

Buildings:

	<u>East</u>	<u>West</u>
Employee Housing	113	40
Museums, Visitor Centers	5	1
Amphitheaters	4	1
Entrance Stations	2	1
Modern Comfort Stations	27	4

Mileages and elevations from the Headquarters Building:

willeages and elevations from the headquarte	sis building.		
		Elevation	Elevation
	Miles	In Feet	In Meters
Headquarters	0	7,800	2,364
Beaver Meadows Entrance Station	1.5	8,200	2,485
Deer Ridge Junction	4.5	8,937	2,708
Many Parks Curve	8.0	9,640	2,921
Rainbow Curve	12.0	10,829	3,281
Forest Canyon	15.0	11,716	3,550
Rock Cut	16.5	12,100	3,667
Lava Cliffs	19.6	12,000	3,636
High Point of Trail Ridge Road	21.5	12,183	3,692
Alpine Visitor Center	23.0	11,796	3,574
Milner Pass	27.0	10,758	3,260
Timber Creek Campground	34.0	8,900	2,697
Kawuneeche Visitor Center	46.0	8,500	2,576
Grand Lake	48.0	8,367	2,535
Granby	62.0	8,280	2,509
Moraine Park Campground	3.0	8,160	2,473
Hollowell Park	4.5	8,380	2,539
Glacier Basin Campground	6.0	8,500	2,576
Sprague Lake	7.0	8,710	2,639
Glacier Gorge Junction	9.0	9,240	2,800
Bear Lake	10.0	9,475	2,871
Aspenglen Campground	7.0	8,620	2,503
Beaver Point - Park's low point	1.0	7,630	2,312
Longs Peak Campground	11.0	9,500	2,879
		·	
Highest Elevation in Park:			
-			

Longs Peak

14,255 4,320

Other Facts:

<u>Alva B. Adams Tunnel</u> - 13 miles across, 9 feet in diameter. It drops 156 feet from its start in Grand Lake to where it ends at the East Portal in Estes Park. It was constructed from 1932 to 1944 as an irrigation project bringing water to the northern Front Range from west of the Divide.

<u>Fall River Road</u> - (one way) - Construction was started in 1913 and completed on September 14, 1920. The road is 9.4 miles long. Colorado state convicts were used as laborers.

<u>The Grand Ditch</u> - Construction was started in 1890 with Chinese labor and was finished in 1932. The ditch is 14.3 miles long with a two percent grade, and brings water across the Continental Divide to the Cache La Poudre River for irrigation purposes.

<u>Trail Ridge Road</u> - This route follows a path historically used by Native Americans. Construction was started on September 28, 1929, and it was dedicated on July 16, 1932. It is 45 miles long, with eight miles of road above 11,000 feet and three miles about 12,000 feet. The grade of the road does not exceed seven percent. The cost for the road was less than two million dollars.

<u>Inholdings</u> - When Rocky Mountain National Park was established in 1915, substantial portions of the Estes Valley, Kawuneeche Valley and Tahosa Valley were already developed. Many parcels of land in private ownership were included within the authorized park boundary at the time. Over the years, the Park has been able to acquire some, but not all, of the private parcels within its boundaries. Other private lands have been added to the Park as the authorized boundary has been expanded in some areas.

The Park does not actively regulate inholders. For the most part, they enjoy the same property rights as private landowners located outside park boundaries. As long as life, property, or park resources are not threatened, the Park does not intervene in inholder activities. Inholders are encouraged, but not required, to confer with the Park before undertaking any significant projects on their land.

As of January 1, 1998, there were 69 inholding parcels in the Park containing a total of 411 acres. This amounts to 0.15 percent of the total area of the Park. The Park continues to acquire inholdings from willing sellers. Since January 1, 1980, the Park has acquired 25 inholdings totaling 569 acres. These inholdings were acquired at a cost of \$2,858,175. In addition, in 1983, the Park acquired a scenic easement on the historic McGregor Ranch. The easement covers 1,221 acres of the ranch and was purchased at a cost of \$3,935,000.

A FINAL CONSIDERATION

Parks are for people--not just for the present generation, but for many generations into the future. Only with the conscientious efforts of all visitors and employees can we ensure the Park's protection for all time.

Each and every individual effort counts. So spread the word in your daily public contacts. There are countless opportunities to do this: discourage people from picking fragile alpine wildflowers, carving their names in living trees, littering, or taking home prehistoric artifacts found in the Park. Remind them gently that parks are special places, islands in time set aside to preserve the remaining wildness that flourished undisturbed long before our arrival.

With a concerted effort on your part, and on the part of everyone, we can gain the public understanding and support that will help make Rocky Mountain National Park all it can be.

PARK PHONE NUMBERS

Alpine Visitors Center Archeology/Cultural Resources Backcountry Office (BCO) Bear Lake Kiosk Bear Lake Transportation System Bighom Ranger Station Beaver Meadows Entrance Station Bookcomer @ Headquarters Visitor Center Buildings Maintenance Colorado River District:	unlisted cellular # ext. 332 ext. 242 or 586-1242 586-3764 586-4838 586-3014 ext. 247 ext. 289 or 586-1289 ext. 240
FAX Fire Cache Grand Lake Entrance Station KVC and Colorado River District Offices Never Summer Ranch Timber Creek Campground Pay phones:	627-3270 627-3062 627-3246 627-3471 or ext. 260 627-3652 627-3247
KVC Timber Creek Campground Dispatch FAX Fire Management Office	627-9919 627-9945 and 627-9904 ext. 203 or 586-1399 586-1310 ext. 237
Fall River Entrance Station Glacier Basin Campground Hidden Valley Ranger Station Housing Office Hydrologist	586-3737 586-3150 227-6366 ext. 208 ext 263
Information Desk - Headquarters Visitor Center Information (recorded) Information Services Interpretive Offices	ext. 223 586-1333 ext. 206 or 586-1206 224, 225, 226, 227, 302, 336, 358
Library Lily Lake Visitor Center Longs Peak Ranger Station Mail and Files Maintenance Office Mill Creek Ranger Station Moraine Park Campground Moraine Park Museum Nature Association Warehouse Personnel Police/Fire Emergency Public Information Officer SAR Cache Resource Management Office Roads Office R.O.C. (Ranger Operations Center) TDD (Hearing Impaired)	ext. 306 586-5128 586-4975 ext. 212 ext. 232 586-4707 586-2251 586-3777 586-0121 ext. 213 911 ext. 213 911 ext. 278 ext. 280 ext. 280 ext. 297 ext. 239 ext. 286 586-1319

Volunteer Coordinator Warehouse Water Laboratory Wild Basin Ranger Station Wildemess Coordinator	ext. 330 ext. 235 ext. 241 747-2867 ext. 244
Miscellaneous: Estes Park Chamber of Commerce Glacier Creek Stables HOSPITAL (Estes Park) Moraine Park Stables POISON CONTROL Trail Gazette USFS (Estes Park) USFS (Granby) Weather (Recorded) YMCA	586-4431/1-800-443-7837 586-3244 586-3352/2317 586-2327 1-800-332-3073 586-3356 498-2775 887-4100 586-9561 586-3341
Pay Phones: Aspenglen Campground Glacier Basin Campground Headquarters Visitor Center Laundry House Moraine Park Campground	586-9993 586-9887 and 586-9736 586-9856 586-9900 586-9995 and 586-9996
Emergency Telephones: Bear Lake Hidden Valley McGraw Ranch (Cow Creek Trailhead) Lawn Lake Trailhead Longs Peak Wild Basin	586-3764/Call Box Call Box 586-5351 586-3857/Call Box 586-4975 747-2867

ROCKY MOUNTAIN NATIONAL PARK

Estes Park, Colorado 80517 (970) 586-1399

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A. Durand (Randy) Jones	Superintendent	200				
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Karen Mendoza	Secretary	201				
Rick Nichols	Management Assistant	209				
Jane Lopez	Park Ranger (VIP Coordinator)	330				
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DIVISION OF FACILITY MANAGEMENT Ben Hawkins Chief or

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Thomas Mason	Automotive Mechanic	260
Ed Sinner	Maintenance Mechanic Supervisor	260
Thomas Moore	Maintenance Mechanic	260
Jim Capps	Supervisory Park Ranger	260
Bob Love	Supervisory Park Ranger	260
Jim Richardson	Park Ranger (Backcountry)	260
Vacant	Park Ranger (Frontcountry)	260
Debbie Mason	Maintenance Project Clerk	260
Curt Fladager	Supervisory Visitor Use Assistant	260
Doug McLean	Maintenance Worker	260
oug Grice	Engineering Equipment Operator	260

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Federal Women's Program Manager	Fran Dissinger	221
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EO COUNSELORS

Sharon Brubaker	203
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BIBLIOGRAPHY

ARCHEOLOGY/NATIVE AMERICANS

Benedict, James. <u>Game Drives of Rocky Mountain National Park</u>. Center for Mountain Archeology, Ward, CO, 1996.

Cassells, E. Steve. <u>The Archeology of Colorado</u>. Johnson Pub. Co., Boulder, CO 1988.

Crum, Sally. <u>People of the Red Earth</u>. Ancient City Press, Santa Fe, NM, 1995.

Hughes, Johnson Donald. American Indians in Colorado. Pruett Pub., 1977

Pettit, Jan. <u>Utes, The Mountain People</u>. Johnson Pub. Co., Boulder, CO, 1990.

Rippeteau, Bruce Estes. <u>A Colorado Book of the Dead: The Prehistoric Era</u>. Colorado Historical Society, 1979.

Trenholm, Virginia Cole. <u>The Arapahoes, Our People</u>. Norman: University of Oklahoma Press, 1986.

BIRDS

Gray, Mary Taylor. <u>Watchable Birds of the Rocky Mountains</u>. Mountain Press, Missoula, MT, 1992.

Seacrest, Betty and McNew, Delbert. <u>Rocky Mountain Birds</u>. Avery Publishing, Boulder, CO, 1993.

Waiver, Roland H. <u>Visitor Guide to Birds of the Rocky Mountain National</u> <u>Parks</u>. John Muir Publications, NM, 1993.

Wassink, Jan. <u>Birds of the Central Rockies</u>. Mountain Press Publications, MT, 1991.

BOTANY

Colorado Native Plant Society. <u>Rare Plants of Colorado</u>. Rocky Mountain Nature Association, 1989.

Craighead/Craighead/Davis. <u>Rocky Mountain Wildflowers - Peterson Field</u> <u>Guide</u>. Houghton Mifflin Co., Boston, 1963.

Dannen, Kent and Donna. <u>Rocky Mountain Wildflowers</u>. Tundra Pub., Estes Park, CO, 1981.

Little, Elbert L. <u>The Audubon Society Field Guide to North American Trees -</u> <u>Western Region</u>. Alfred A. Knopf, New York, 1988.

Mauseth, James D. <u>Plant Anatomy</u>. Benjamin/Cummings Pub., Menlo Park, CA, 1988.

Spellenberg, Richard. <u>The Audubon Society Field Guide to North American</u> <u>Wildflowers - Western Region</u>. Alfred A. Knopf, New York, 1988.

Weber, William A. <u>Rocky Mountain Flora</u>. Colorado Assoc. University Press, Boulder, CO, 19.3.

Willard, Beatrice E. and Michael Smithson. <u>Alpine Wildflowers of the Rocky</u> <u>Mountains</u>. RMNA

CHILDREN'S PROGRAMMING

Caduto, Michael J. and Joseph Bruchac. <u>Keepers of the Earth</u>. Fulcrum Press, Golden, CO, 1988.

Cornell, Joseph Bharat. Sharing Nature With Children. Ananda Pub., 1979.

Cottrell, William H. Jr. The Book of Fire. Montana Press, Missoula, 1989.

Lingelbach, Jenipher. <u>Hands-On Nature</u>. Vermont Institute of Natural Sciences, Woodstock, 1986.

Western Regional Environmental Ed. Council. <u>Project Wild Activity Guide</u>. (both elementary and secondary), 1986.

Holley, Dennis. <u>Animals Alive! An Ecological Guide to Animal Activities</u>. Roberts Rinehart, Boulder, CO, 1994.

CONSERVATION

Cohen, Michael P. The Pathless Way. University of Wisconsin Press, 1984.

Nash, Roderick, <u>Wilderness and the American Mind</u>. Yale University Press, New Haven, CT, 1982.

Sax, Joseph L. <u>Mountains Without Handrails: Reflections on the National</u> <u>Parks</u>. University of Michigan Press, Ann Arbor, 1980.

Wild, Peter. <u>Pioneer Conservationists of Western America</u>. Mountain Press Pub., Missoula, MT, 1979.

ECOLOGY

Mutel, Cornelia F. and John C. Emerick. <u>From Grassland to Glacier</u>. Johnson Pub. Co., Boulder, CO.

RMNP Natural History Handbook. Rinehart Publications, RMNA, 1995.

Willard, Beatrice E. and Ann E. Zwinger. <u>Land Above the Trees</u>. University of Arizona Press, Tucson, 1972.

Zwinger, Ann E. <u>Beyond the Aspen Grove</u>. University of Arizona Press, Tucson, 1981.

ENDANGERED SPECIES

Mech, L. David. <u>The Wolf: The Ecology and Behavior of An Endangered</u> <u>Species</u>. Natural History Press, Garden City, New York, 1970.

Murray, John A. <u>Wildlife in Peril: The Endangered Mammals of Colorado</u>. Rinehart, Inc., Pub., Boulder, CO, 1987.

USFWS, <u>A Summary of the Northern Rocky Mountain Wolf Recovery Plan</u>. 1990(?).

FAUNA, GENERAL

Cornett, Jim. <u>Wildlife of the Western Mountains</u>. Nature Trails Press, Palm Springs, CA, 1982.

Pyle, Michael J. <u>The Audubon Society Field Guide to North American</u> <u>Butterflies</u>. Alfred A. Knopf, New York, 1988.

FIRE ECOLOGY

de Golia, Jack. <u>Fire, The Story Behind the Scenery</u>. KC Pub., Las Vegas, Nevada, 1989.

Kozlowski, T.T. Fire and Ecosystems. Academic Press, New York, 1974.

Vuerthner, George. <u>Yellowstone and the Fires of Change</u>. Haggis House Pub., Salt Lake City, UT, 1988.

FLOWERS

Guennel, G.K. Guide to Colorado Wildflowers. Westcliff Publications, 1995.

GEOLOGY

Chesterman, Charles W. <u>The Audubon Society Field Guide to North</u> <u>American Rocks and Minerals</u>. Knopf, NY, 1989.

Chronic, Halka. Pages of Stone. The Mountaineers, 1984.

Dott, Robert H. Jr. and Roger L. Batten. <u>Evolution of the Earth</u>. McGraw Hill, New York, 1988.

Harris, Ann and Esther Tuttle. <u>Geology of National Parks</u>. Kendall/Hunt Pub., Dubuque, IA, 1990.

Rays, Omer B. Geology Along Trail Ridge Road. Falcon Press, RMNA, 1996.

Richmond, Gerald M. <u>Raising the Roof of the Rockies</u>. RMNA, Estes Park, CO, 1974.

GLOBAL ISSUES

Durrell, Lee. State of the Ark. Doubleday, New York, 1986.

Wilson, E.O. Biodiversity. National Academy Press, Washington, 1988.

HISTORY

Albright, Horace M. and Robert Cahn. <u>The Birth of the National Park Service</u>. Howe Brothers, Salt Lake City, 1985.

Arps, Louisa Ward and Elinor E. Kingery. <u>High Country Names</u>. RMNA, Estes Park, CO.

Bird, Isabella. <u>A Lady's Life in the Rocky Mountains</u>. University of Oklahoma Press, Sausalito, CA 1960.

Buchholtz, Curt. <u>Rocky Mountain National Park: A History</u>. Assoc. University Press, Boulder, CO, 1983.

Ise, John. <u>Our National Park Policy: A Critical History</u>. John Hopkins Press, Baltimore, MD, 1961.

Mills, Enos A. Early Estes Park. Big Mountain Press, 1963.

Moomaw, Jack. <u>Recollections of a Rocky Mountain Ranger</u>. Times-Call Pub., Longmont, CO, 1963.

Stauffer, Ruth. <u>This Was Estes Park: Historical Vignettes of the Early Days</u>. Estes Park Historical Museum, 1990.

Drummond, Alexander. <u>Enos Mills, Citizen of Nature</u>. University Press of Colorado, Niwot, CO, 1995.

Pederson, Henry F. Jr. <u>Those Castles of Wood</u>. 1993.

INTERPRETATION

Tilden, Freeman. <u>Interpreting Our Heritage</u>. University of North Carolina Press, Chapel Hill, NC, 1957.

MAMMALOGY

Armstrong, David M. <u>Rocky Mountain Mammals</u>. RMNA, Estes Park, CO, 1987.

Fitzgerald, James with Meany and Armstrong. <u>Mammals of Colorado</u>. Denver Museum of Natural History and University Press Colorado, 1996.

Ford, Barbara. <u>Black Bear: The Spirit of the Wilderness</u>. Houghton Mifflin Co., Boston, 1981.

Geist, Valerius. <u>Mule Deer Country</u>. Northwood Press, Minocqua, WI, 1990.

Geist, Valerius. <u>Elk Country</u>. Northwood Press, Minocqua, WI, 1991.

Geist, Valerius. Wild Sheep Country. Northwood Press, Minocqua, WI, 1993.

Lechleitner, R.R. <u>Wild Mammals of Colorado</u>. Pruett Pub., Boulder, CO, 1969.

Murie, Olaus J. <u>The Elk of North America</u>. Stackpole Co., Harrisburg, PA, 1951.

Rocky Mountain Elk Foundation. <u>Majesty</u>. Falcon Pres, MT, 1993.

Russo, Ron and Pam Olhausen. <u>Mammal Finder</u>. Nature Study Guide, Berkeley, CA, 1987.

Ryden, Hope. Bobcat Year. Lyons and Burford, New York, 1981.

Stevens, David. <u>The Mule eer and Elk of Rocky Mountain National Park.</u> RMNA, 1980.

Turbak, Gary. America's Great Cats. Northland Press, Flagstaff, AZ, 1986.

Turbak, Gary. Twilight Hunters. Palace Press, Singapore, 1988.

Wallmo, Olof C. <u>Mule and Black-tailed Deer of North America</u>. University of Nebraska Press, Lincoln, 1981.

Whitaker, John O. Jr. <u>The Audubon Society Field Guide to North American</u> <u>Mammals</u>. Alfred A. Knopf, New York, 1980.

ORNITHOLOGY

Holt, Harold R. and James A. Lane. <u>A Birder's Guide to Colorado</u>. ABA Sales, Colorado Springs, CO, 1988.

Johnsgard, Paul A. <u>Hawks, Eagles, and Falcons of North America</u>. Smithsonian Institute Press, Washington, 1990.

Udvardy, Midlos D.F. <u>The Audubon Society Field Guide to North American</u> <u>Birds-Western Region</u>. Alfred A. Knopf, New York, 1988.

WILDERNESS/LEAVE NO TRACE

Hendee, John C. <u>Wilderness Management</u>. North American Press, Golden, CO, 1990.

Leopold, Aldo. <u>A Sand Country Almanac</u>. Oxford University Press, New York, NY, 1949.

Hampton, Bruce, and Cole, David. <u>Soft Paths</u>. Stackpole Books, Mechanicsburg, PA, 1995.

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7-1979A (6-97) Bureau of Reclamation

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L. DEPARTMENT OF INTERIOR US FISH & WILDLIFE SERVICE 08 ORG-CDE 69999 699 4401 N. Fairfax Drive, Room 380 ARLINGTON VA 22203	B. LEAVE AND EARNINGS STATEMENT PAY PERIOD: C3 ENDING ATE: 95-01 PAGE 1 OF 1
C. NET PAY	<u>D.</u>
\$ 1085.43	SMITE, HARY D. IN/15/08/699
TO: BANK ABA #: 125837506	

EMPLOYEE IS RESPONSIBLE FOR VERIFICATION OF PAY. DEDUCTIONS AND LEAVE

CURRENT P/P		ADJUSTMENTS		TOTAL	<u>G</u>			
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<u>A. RETURN ADDRESS</u>. Identifies the return address for your bureau. All undeliverable LES' will be returned to this address for disposition.

<u>B. LES BOX</u>. Displays which pay period the LES covers and the ending date. Notifies the employee how many pages the LES spans. Each page will be mailed under separate cover with a maximum of three pages in three different envelopes.

C. NET PAY BOX. Displays the amount of the employee's net check and where the money was disbursed. All employees receive a LES even if there is no net pay. If the net pay displays all zeroes, and you should have received a payment, call the Payroll Hotline immediately. The 'TO:' signifies where the check was disbursed; BANK, HOME, OTHER, DESIGNATED AGENT, AGENCY. If 'BANK' or 'DESIGNATED AGENT' displays, then the bank number or designated agent code prints. If 'AGENCY' prints then no address was given for check disbursement, and the check was rerouted to the defaulted agency address. Contact the Payroll Hotline (303) 969-7732.

<u>D. NAME</u>. If the LES is mailed home or in bulk mail, then the mailing address will appear below the name. Otherwise department, bureau, sub-bureau, and block will display. This information should be given when making any inquiries.

LES BODY

The body is broken up into 8 distinct sections. 'Entitlements' and 'Deductions' sections provide a brief description of the employee's specific type of payment or deduction. Current pay period hours and amounts as well as prior pay period adjustments and year-to-date (YTD) totals print. Unless there is a specific entitlement or deduction this pay period, the type will not print. The exception to this is if there is YTD information that could be used in W-2 filing. This also applies to the sections, 'Agency Contributions,' 'Leave,' 'YTD Taxable Earnings,' and 'Savings Bonds.' The 'Basic Information' and 'Check Mailing address' sections will always display identifying information.

<u>E. ENTITLEMENTS</u>. For most employees, this section will display the current pay period regular hourly rate, number of hours, pay period gross amount and total YTD gross payments. All various types of payments will display separately. If there is a prior pay period adjustment, those hours and/or amounts will display under 'adjustments.' The sum of all entitlements will be contained in Gross Pay for both current and prior periods.

<u>F. DEDUCTIONS</u>. As with the 'Entitlements,' only if a specific deduction is made from gross pay will the deduction description, pay period amount and/or adjustment amount display. If no taxes are withheld, no tax information will display. If taxes are withheld, then the taxing authority, marital status, exemptions and extra amount withheld will print. The total YTD will not display for any deduction that will not impact W-2 filing. The total deductions is the sum of all current pay period amounts and sum of all adjustment amounts. The total YTD deductions will not display.

<u>G. BASIC INFORMATION</u>. The basic information contains critical and identifying data from an employee's master. This information should be reviewed by the employee for accuracy whenever there is a change made that could impact pay.

<u>H. YTD TAXABLE EARNINGS</u>. Includes all earnings that were subject to federal, state, or local taxes for the pay year. Examples of those earnings not included are nontaxable moving allowances, and tax deferred thrift deductions.

<u>I. SAVINGS BONDS</u>. If any employee has a bond, then the bond number will display. If a bond has been issued this pay period, then the purchase price of the bond will display. If there is a bond balance, then the balance will print.

J. AGENCY CONTRIBUTIONS. An amount or percentage will display here for all employee benefits to which the agency also contributes. The description, pay period amount, and YTD will print.

K. CHECK MAILING ADDRESS AND W-2 MAILING ADDRESS. If an employee's net payment is not electronically sent to a bank or a designated agent, as signified by 'BANK' or 'AGENT' in the net pay box, then the 'Check Mailing Address' will show where the net check was sent. The 'W-2 Mailing Address' area is the address where the employee has requested the W-2 to be mailed.

L. LEAVE. The leave section contains all the types of leave that the employee is entitled to. The employee's leave category displays the amount of hours that may be accrued in a pay period. Most common types of leave are 'ann' (annual), 'sick,' 'comp' (compensatory time), 'family,' 'time off,' 'restored.' The available leave is computed by adding the 'c/o' (carryover), 'adj' (prior pay period adjustment), 'accrd ytd' (accrued this leave year), 'adv' (advanced leave) and subtracting the 'used ytd' (used YTD). The amount of leave the employee has available is printed in 'bal avail.' The 'proj yr end' estimates the amount of annual leave that will be accrued from the current pay period through the end of the leave year. The 'max c/o' is the allowable amount the employee may carry from one leave year to the next, and the 'use/lose' is the number of hours that will be lost if the annual leave is not taken by the end of the leave applicable to the employee.

IID. REMARKS/MESSAGES SECTION

<u>M. MESSAGES</u>. All users will have the message displayed "CALL THE PAYROLL HOTLINE (303) 969-7732 WITH ANY PAY/LEAVE QUESTIONS OR PROBLEMS." It is the employee's responsibility to verify that all information on the LES is accurate.

The message section will provide any information that is relevant to the bureau or to the employee such as notification of compensatory time expiration.



DATE DUE				

DEMCO, INC. 38-2931