# MOUNT MCKINLEY NATIONAL PARK

Alaska

## Contents

								Page		Page
GLACIERS								3	Park Road	14
MOUNTAIN	1	CLIN	IBI	NG			•	5	TRAILS	15
CLIMATE						•			How To Reach the Park .	
PLANTLIFE		•		-	•			5	ACCOMMODATIONS	15
WILDLIFE								6	CAMPGROUNDS	15
MAMMALS							•		MISSION 66	
Birds .	•							12	Administration	15
Fishing	•		•	×	•		•	13	Help Us Protect This Park	

### Historic Events

- 1896 W. A. Dickey, impressed by the mountain while on a prospecting trip, estimated its height at 20,000 feet. Through a magazine article he later kindled the imagination of the world, and gave the mountain its name—Mount McKinley.
- 1902 Alfred H. Brooks and D. L. Raeburn of the U. S. Geological Survey studied the geology of the Alaska Range and were the first white men to set foot upon the slopes of Mount McKinley.
- 1903 Judge James Wickersham of Fairbanks led the first, but unsuccessful, attempt to reach the summit. The sheer north face, the route he chose, has never been conquered.
- 1905 Discovery of placer gold along the Kantishma River brought several thousand hopeful prospectors and miners to the area north of Wonder Lake.
- 1906 Charles Sheldon, noted hunter-naturalist, visited the McKinley area to study Dall sheep. He believed that the outstanding wilderness wonders of the area should be protected. Working unrelentingly toward that goal, he was the prime mover in having Mount McKinley established as a National Park.
- 1910 Alaskan sourdoughs William Taylor and Pete Anderson pioneered the "Muldrow Glacier Route" and made the first successful ascent of Mount McKinley's north peak.
- 1913 First party under Archdeacon Hudson Stuck and Harry Karstens reached summit of south peak of the mountain.
- 1917 Mount McKinley established as a National Park by act of Congress.
- 1932 The Lindley-Liek party was the first to climb both the north and south peaks.
- 1934 First ascent made of both peaks of Mount Foraker by C. S. Houston, Dr. T. G. Brown, and G. C. Waterston.
- 1942 Both peaks of Mount McKinley reached by seven members of the Army Test Expedition, who lived on the glaciers and on the mountain while testing winter equipment and supplies.
- 1947 Mrs. Washburn, wife of group leader Bradford Washburn, was first woman to reach the top of Mount McKinley. This ascent was part of "Operation White Tower," organized for scientific observations and for motion-picture recording of a climbing group.
- 1957 Denali Highway completed, linking park road to Alaskan road system, and permitting automobile access to the park.

# Mount McKinley NATIONAL PARK

Season-June 1 to September 15

MOUNT MCKINLEY NATIONAL PARK in south-central Alaska covers more than 3,000 square miles of wilderness. Sheathed in ice and snow, winter and summer, mighty Mount McKinley is the principal scenic feature of the park. Denali, "The High One," was the name given by the Indian to this impressive mountain, North America's highest peak. Majestically the mountain thrusts its snow-covered head high into the clouds, reaching a height of 20,320 feet. Mc-Kinley is crowned by two peaks. The South Peak, the true summit, is 2 miles distant from the neighboring North Peak which rises to an elevation of 19,470 feet.

Although there are but few really high mountains in the Alaska Range, many peaks near Mount McKinley are impressive. Mount Foraker, with an elevation of 17,395 feet; Mount Silverthorne, 13,170 feet; and Mount Russell, rising to 11,500 feet, add their mass and beauty to the wild mountain scene.

#### Glaciers

For tens of thousands of years glaciers have sculptured the mountains of the

Alaska Range. Jagged spires, knifesharp ridges, and broad U-shaped valleys are all results of glaciation. During the Ice Age, called the Pleistocene Epoch, glaciers advanced and retreated, met and remet in the lowlands filling and overflowing many of the valleys with large rivers of ice. Often these ice masses were hundreds of feet thick. Huge polished boulders, carried many miles by ice, are now found high on ridges and mark the level of these early glaciers.

Glaciers are still plentiful in Mount McKinley National Park. They are not remnants of the Ice Age, but valley glaciers resulting from today's climate. The greatest glaciers in the park are on the southern slope of the Alaska Range, which is exposed to the moisture-laden winds of the Pacific. These glaciers lie in the basin of the Yentna and Chulitna Rivers. With sources high in the mountains, they extend to the lowland valleys far beyond the southern boundaries of the park.

Many small valley glaciers may be viewed from the park road, but as the northern slope of the range receives relatively little moisture, only the highest mountains can support large north-

The National Park System, of which this park is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.



Caribou bull. Photo by Charles J. Ott.

flowing glaciers. Among these are the Herron Glacier, having its source in the snowfields of Mount Foraker; Peters Glacier, which encircles the northwest end of Mount McKinley; and the largest, Muldrow Glacier, fed by snows in the unsurveyed heart of the range, and extending nearly 35 miles from between the twin peaks of McKinley to within several miles of the park road.

The fronts of most of these glaciers are deeply buried by morainal debris rocks that have been carried by ice and dropped as the glacier melts. Lakes may be found on these moraines resting only a few feet above solid ice. The fronts of the larger glaciers may be completely covered by vegetation, and many animals find their homes there. This was true of the Muldrow Glacier, but during the winter of 1956 large waves of ice descended on the inactive front and thrust up towering spires of ice right to its toe. Impressive views of the Muldrow Glacier and this recent spectacular activity await you at the Eielson Visitor Center.

#### Mountain Climbing

Mount McKinley, North America's highest peak, with its abruptly rising icy slopes, is a bold challenge to mountain climbers. Because of the hazards, you must obtain the superintendent's permission to attempt an ascent. Skill in the techniques of ice climbing must be demonstrated, because treacherous, crevassscarred glaciers must be crossed, and avalanches of snow, rock, and ice are constant dangers.

Only by careful planning and organization can the rigorous conditions of high altitude and subzero cold be conquered. Even the best prepared parties may be defeated by prolonged blizzards.

#### Climate

The climate in Mount McKinley National Park is typical of subarctic Alaska. Daylight lasts for more than 18 hours a day in summer. Most of the annual precipitation of about 15 inches falls as rain during the summer and as snow on the higher mountains. As cool, cloudy weather predominates in summer, warm clothing is a "must."

Chill nights of late August bring out the flaming yellows and reds of the alder, dwarf birch, cottonwood, willow, and aspen. By mid-September the first snows of winter may block the low passes of the park road. Soon the park is stilled under a soft blanket of snow, broken only by dark-green patches of spruce. Winter nights are long and cold, but are enlivened by the ever-changing moods of playful northern lights.

#### Plantlife

Only plants that are adapted to the harsh climate of the subarctic can survive in Mount McKinley National Park. In addition to long, bitter cold winters, large areas of the park are underlain with beds of permafrost—ground that has been frozen for thousands of years. Only the few inches of topsoil that thaw during the summer supports plantlife. Trees, unable to sink taproots into the frozen earth, are restricted to permafrostfree areas, or must rely on spreading, lateral roots for support.

White spruce with somber green foliage and tawny cones is well adapted to the cold environment, and is the commonest tree in the park. Scattered spruce forests are found along the major rivers, and extend up the more sheltered slopes to timberline at about 3,000 feet.

At lower elevations, a few cottonwoods grow on old river bars, or where permafrost is not present. Here, too, are thickets of aspen, willow, and graceful white birch. In low, boggy meadows the stunted, twisted black spruce grows.

*Tundra.* Above the river valleys the spruce forests give way abruptly to vast stretches of tundra—treeless permafrost terrain of the arctic. Mount McKinley National Park contains two types of alpine tundra—the "wet tundra" of shrubby plants at lower elevations, and "dry tundra" of mat-like plants covering the windswept ridges.

The tundra is truly the home of the willow. More than 30 types are found growing in the park. In sheltered locations, some of them may reach the heights of small trees, but most are hardy shrubs of the open tundra. Several species of willows, in order to escape the rigors of climate, hide their tortuous woody stems underground, thrusting only the catkins of their flowers and a few leathery leaves to the surface.

Another prominent shrub of the tundra is dwarf birch, a dull green in summer but flaming scarlet and orange at the touch of frost.



A Dall sheep.

Although the tundra environment is harsh, its plants do not lack in beauty, and their blooms, often delicate, may be enjoyed throughout the summer. In early June, mountain azalea, cushion pink, forget-me-not, alpine spring beauty, and windflower follow the retreating snows. Diminutive dryas with oak-shaped evergreen leaves form dense mats on the tundra and send up creamy white flowers, contrasting sharply with the dainty bell-shaped flowers of stubby cassiope heath. Blue lupine borders the park road, and the white, pink, and blue flowers of native peas may completely cover large gravel bars.

As summer advances, fireweed, asters, and the yellow, roselike flowers of the shrubby cinquefoil are ever present. The vivid blues of larkspur and monkshood enrich the tundra scene, while Alaska cotton waves gaily in the summer breeze along roadside ditches and borders of tundra ponds.

Complementing the hundreds of flowering plants found in Mount McKinley National Park are many lichens and mosses. They add their varied, often subtle hues of green, yellow, and red to the landscape. They, too, are important members of both the tundra and spruce forest communities; some, such as the caribou lichens, are important wildlife foods. Mosses have a special role to play in the far north; their deep springy beds help to conserve water and insulate the frozen soil from the warming rays of the sun.

#### Wildlife

Mount McKinley National Park is a true wilderness; it is the home of many native animals whose habits have been little affected by man. Animals, like plants, must be well adjusted to the northern climate. Their mobility allows them to accomplish this task in various ways. Some, such as most birds and the bats, spend only the warm summers within the park. Several avoid the cold by hibernating during the long winter; others grow thicker fur or feather coats, and layers of cold-resistant fat; and some spend much of the winter in burrows and nests deep beneath an insulating blanket of snow.

Insects, found in phenomenal numbers during the summer, must also avoid the subzero temperatures of winter. Some seek protection under the bark of trees, in the ground, or in cracks in the rocks, and pass the winter as adults; others exist only as cold-resistant eggs, and do not develop until they are warmed by the spring sun. No snakes or turtles and only one species of frog have been able to endure the climate of Mount McKinley.

#### Mammals

Dall sheep. The animal which most typifies the mountains of Alaska, and perhaps the first to come to mind when Mount McKinley National Park is mentioned, is the white Dall sheep. Related to the Rocky Mountain bighorn, the Dall sheep differs not only in color but in its smaller size and the slender, more gracefully curved horns of the rams. Both ewes and rams have horns but those of the females are small and almost goat-like.

During the winter, Dall sheep roam in fairly large bands on the low mountains, called the Outside Range, north of the park road. Snowfall is lighter on the Outside Range and there are a number of windswept ridges where sheep may find food. Not only is this their winter home, but here mating takes place in late November, and here the young are born during early May. Lambing grounds, used year after year, are in sheltered nooks protected by overhanging cliffs. Though soon able to follow their mothers, the lambs spend the first few weeks of their lives close to the rocks for protection against enemies. By June they dare to venture out on the grassy slopes where they may be seen scampering about in playful bands under the ever-watchful eyes of the ewes.

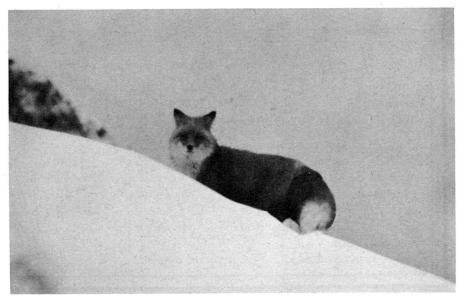
In June, sheep leave their winter quarters and cross the intermountain valley to spend the summer widely scattered in the lower mountains of the main Alaska Range. The spring and autumn migrations are critical events in the lives of the Dall sheep. They may spend uncertain hours, even days, scanning the valley below; once under way, however, the sheep usually travel with haste to the protective hills across the valley.

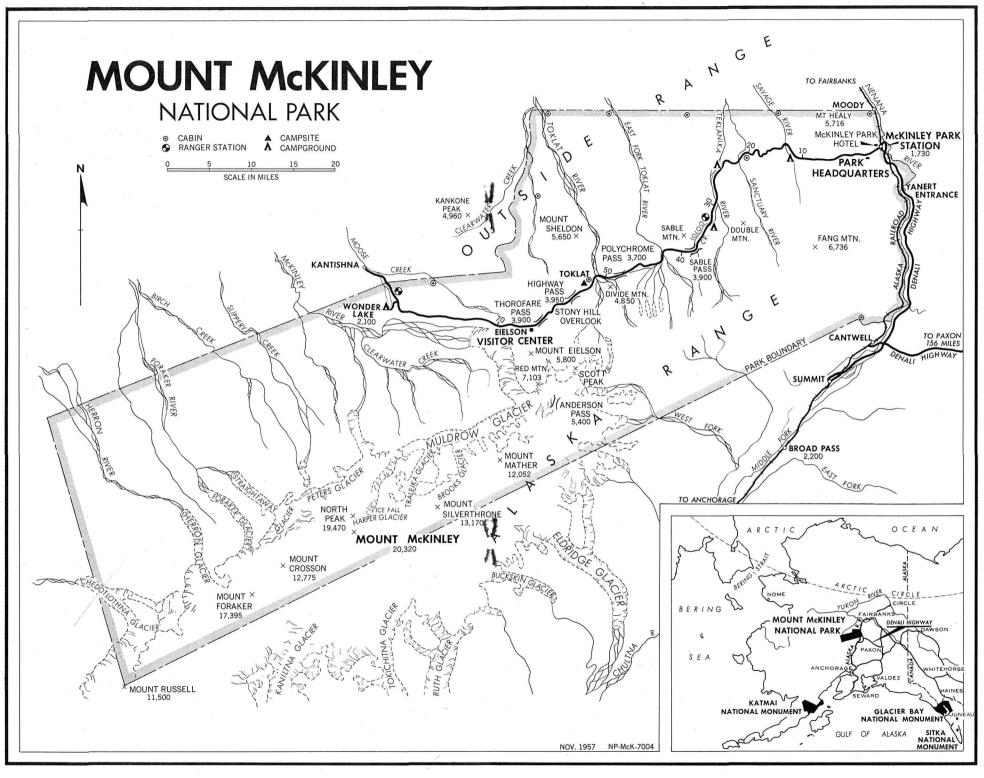
One of the best places to view Dall sheep during the summer is on the mountain slopes bordering Igloo Creek.

*Caribou.* Depending to a large extent on the herd for protection from their

7

#### Red fox.





enemies, the barren ground caribou are the nomads of the north. They are constantly on the move. Briefly stopping to graze, they follow the ancient trails of their ancestors in search of fresh feeding grounds. Primarily the barren ground caribou are animals of the tundra, but their wanderings may take them high into mountains and through deep spruce forests.

Caribou differ from other members of the deer family in that both bulls and cows have antlers. The antlers curve backward and upward, and those of the bulls have prominent shovel-like brow tines. The cows are somewhat smaller than the bulls. Their color in spring is grayish-brown, but as autumn approaches, the dark-brown pelage with a contrasting white cape becomes evident.

Caribou live throughout the arctic and subarctic lands of North America and Europe. The European caribou is the smaller, and has been almost completely domesticated by man; they are the reindeer of Santa Claus fame.

You may see small bands of caribou grazing on the hillsides and in the intermountain valley of the park in June. During the first week of July, herds numbering in the thousands may move through the park to their summer ranges. In the vicinity of Wonder Lake, caribou are nearly always present.

Moose. The largest member of the deer family, and the largest animal of Mount McKinley National Park, is the Alaska moose. Bulls weighing nearly three-quarters of a ton and with tremendous palmate antlers, which may have a spread of more than 5 feet, are, indeed impressive creatures.

Moose are shy animals of the forest, and prefer the solitude of spruce forests to the open tundra. However, during the summer, they may wander far out onto the tundra in search of food. The twigs, bark, flower catkins, and leaves of willows provide the bulk of their diet. Moose will sometimes take to the water of tundra ponds to escape the summer heat and the annoyance of biting insects. They vary their diet of willows by feeding on submerged and floating waterplants.

The moose, with a muscular overhanging muzzle, low hindquarters, and high shoulders, may appear to us as grotesque, but it is well suited to its environment. High shoulders and long neck allow it to reach the highest willow shoots; long legs carry it with ease over the dense shrubby growth and through the deep snows of winter.

Toklat Grizzly Bear. "Toklat," perhaps a name once given by the Indians to the Alaska Range, means "home of the waters." Today the term still brings to mind the rugged mountains and their swift glacial streams, but for most people, "Toklat" refers to the Toklat grizzly the tremendous bear of Mount McKinley National Park.

Grizzlies may be encountered almost anywhere in the park. They roam through the spruce forests, aspen thickets, and over the bare mountain slopes, but their preferred home is on the open tundra. It is here that the grizzly finds sufficient food to support its hundreds of pounds of restless energy.

In the choice of food, the Toklat grizzly is an opportunist. Its diet consists of both plants and animals. Carrion, perhaps, is the principal source of animal food. The bear may help itself to the carefully prepared food caches of other animals such as the wolf, coyote, fox, or even man. Many hours may be spent in pursuit of mice, parka squirrels, and marmots, or in stalking cautious Dall sheep and caribou. But these hunts usually prove fruitless and animal matter merely supplements the bear's main diet of plants.

In the spring you have a good chance of seeing the Toklat grizzly digging on the wide gravel bars, or rolling back square yards of tundra in search of succulent roots. During early summer, its diet consists primarily of green plants such as grasses and horsetails. By the middle of July, berries begin to ripen, and the blueberry, crowberry, rabbitberry, and alpine bearberry help sustain the bear until it seeks the shelter of its winter den in October.

The young—single cubs, twins, or, rarely, triplets—are born during the period of winter rest. The mother will care for the cubs during their first 2 years, until the urge to mate is once again upon her.

The Toklat grizzlies vary in color from individual to individual. Most of them are light brown, or even sunbleached to a straw-color during the early summer, but as autumn approaches, they grow new dark coats. One of the best places to see the Toklat is at Sable Pass. To avoid disturbing the bears and causing them to leave this wilderness scene, it has been necessary to restrict all activity in the Sable Pass area to the park road.

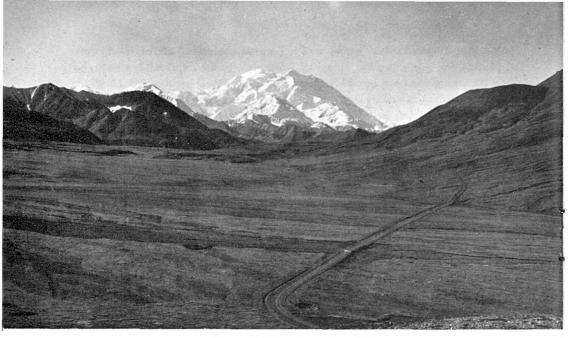
Some Other Mammals. The varying hare, or snowshoe rabbit, hides from its many enemies by changing its dullbrown summer coat to snow-white in winter. Snowshoe rabbits are cyclic animals, having periods of high populations followed by years of scarcity. During the "boom" rabbit years, Canada lynx, coyote, fox, and owls are also plentiful, but during "crash" years they must find other sources of food, or perish.

In the park you will have excellent opportunities to see hoary marmots and pikas in the rockslide areas; parka squirrels and red fox on the tundra; as well as beaver and porcupine in the aspen and willow thickets along the streams and ponds at lower elevations. Even the rare wolverine and timber wolf which so carefully avoid man, are occasionally seen along the park road.

Surfbird.



10



Mount McKinley from Stony Hill.

In all, 35 species of mammals varying in size from the petite shrews to the huge moose inhabit Mount McKinley National Park.

#### Birds

Very few birds are content to endure the wintry blasts of Mount McKinley. Notable among the exceptions are the ptarmigan, magpie, Canada jay, and chickadee. These birds not only are adapted to the cold climate but can vary their diet with the seasons.

With the coming of spring, the tundra once more resounds with the songs and calls of nesting birds. The scene is truly a cosmopolitan one—not only do birds arrive from the southern parts of North America, but from far distant lands as well.

The long-tailed jaeger annually flies across the Pacific from its winter home on islands near Japan; from Hawaii comes the golden plover; while Asia sends the European wheatear. Nesting on the tundra is crowded during June; often nesting birds will have a scant few square yards of territory. Many of the tundra birds make little attempt to hide themselves, and rely on natural camouflage to conceal their eggs and nests. Some birds, however, are noted for their elusive habits. The surfbird, for instance, is a master of concealment.

As its name implies, the surfbird is a seashore bird. It lives on rocky ledges and islands unmindful of the salt spray. The surfbird winters from southern Alaska down along the west coast of North and South America as far as the Straits of Magellan. But in June they largely disappear from their coastal habitat. For nearly 150 years after they had been identified and named, the nesting grounds of the surfbird were unknown. It is now believed to nest high in the mountains of interior Alaska, in areas rarely visited by man. Only one active nest of the surfbird has ever been found, and that was in Mount McKinley National Park in 1926.

Another of the park's rarely seen shore birds is the wandering tattler. Only four nests of this shy and interesting bird have been found, all of them well concealed on gravel bars within Mount McKinley National Park. The dark slate-colored tattler is about the size of a killdeer, and blends well with its gray gravel-bar surroundings.

Ptarmigan are the grouse of the north. Three species live in Mount McKinley National Park. The most common, the willow ptarmigan prefers the low shrubby tundra areas. The rock ptarmigan, a little smaller than the willow ptarmigan, ranges from the open tundra bordering the rivers to the tops of high dry ridges. The third and smallest species, the white-tailed ptarmigan, nests near the heads of the valleys, high in the mountains. All three of these Arctic grouse are pure white in winter and brown in summer. Their feet are completely feathered allowing them to "snowshoe" over the deep snow. The spruce grouse with rusty-tipped tail feathers may be seen in the deep spruce forests.

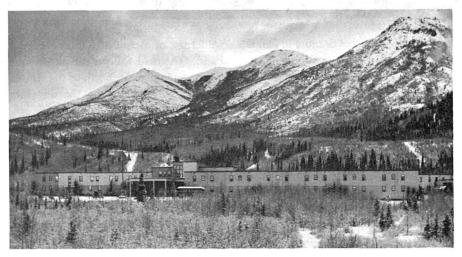
If you are a bird student, the abun-

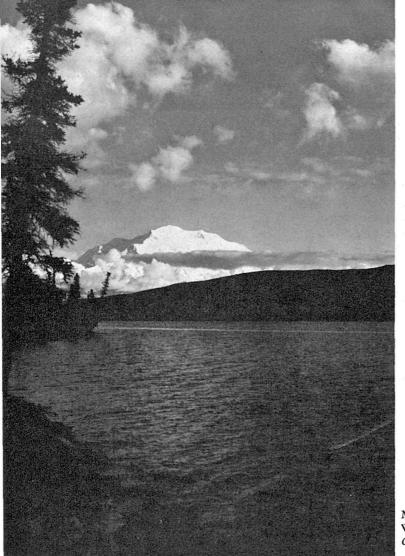
dance and variety (over 120 kinds) of nesting birds, as well as the rarity of some species, will be a special attraction for you. Look for ducks and other water birds that frequent the many lakes and ponds. Listen for the plaintive cry of the loon on Wonder Lake. Watch along the park road for the nests of gulls, terns, and plovers; and for the many songbirds that may be seen during a drive through the park. Of the latter, some that are common during the summer are the varied thrush, redpoll, white-crowned sparrow, tree sparrow, longspur, snow bunting, and many kinds of warblers. The golden eagle, as well as the gyrfalcon and several other hawks and owls, are common enough to give you a good chance of seeing them on your visit to the park.

#### Fishing

Most of the rivers of the park are fed by glaciers, and their waters contain glacial silts that render them unsuitable for fish. However, in the clear mountain streams the arctic grayling may be caught with artificial flies. Mackinaw trout,

McKinley Park Hotel.





Mount McKinley from Wonder Lake. Canns photo.

which attain 24 inches or more in length, are in the cold waters of Wonder Lake.

The daily creel limit is 2 Mackinaw and 10 grayling. A fishing license is not required in the park, but a Territorial license must be obtained to fish in waters outside park boundaries.

#### Park Road

Approximately 100 miles of improved gravel road carry you in reasonable comfort through the tundra and mountain wilderness of Mount McKinley National Park. The road follows the picturesque intermountain valley north of the Alaska Range. Elevations along the way vary from 1,600 feet at McKinley Park Station to nearly 4,000 feet at several of the low passes between the park's north flowing rivers. Many points along the road provide excellent views of rolling tundra and valley glaciers, as well as Mount McKinley and other major peaks of the Alaska Range. Leaving the park near Wonder Lake, the road follows Moose Creek through historic Kantishna, now nearly deserted but once a thriving gold town of more than 2,000 people. On the east, the park road meets the Denali Highway, which parallels the Alaska Range and joins the Alaskan road system at Paxson, 156 miles from the park entrance.

#### Trails

Several fine foot trails radiate from the McKinley Park Hotel. One, the Horseshoe Lake Trail, is self-guiding; it winds from the hotel to a beaver dam along the Nenana River.

Cross-country travel on gravel bars of rivers and along dry ridges is relatively easy and safe. However, if you contemplate making a cross-country trip, you should first obtain information on routes from the chief ranger's office.

#### How To Reach the Park

From Fairbanks and Anchorage you can get to the park by The Alaska Railroad. You can also get there by automobile over the Denali Highway which connects with the Alaska Highway via the Richardson Highway. You can ship your car to the park by railroad from either Fairbanks or Anchorage. Passenger service to McKinley Park is available from both towns 6 days a week during the summer.

A 3,000-foot landing strip, for private planes only, is located at McKinley Park Station, near the hotel.

#### Accommodations

McKinley Park Hotel (European plan) is a modern installation in every respect. Buses operate daily during the summer from the hotel to Mount Eielson,

66 miles distant, where a magnificent view of Mount McKinley can be had. Information on rates and reservations can be obtained from the Manager, McKinley Park Hotel, McKinley Park, Alaska.

#### Campgrounds

Near Savage River and at Wonder Lake there are modern campgrounds. Along the park road is Teklanika Campground and other campsites at convenient intervals. Nights may be chilly, and campers are advised to bring tents and warm sleeping gear. Since firewood is scarce, campstoves are recommended. You must obtain, at park headquarters, authorization to camp at other than designated campgrounds or campsites. You are advised not to take housetrailers over 15 feet long beyond Teklanika Campground.

#### Mission 66

MISSION 66 is a program designed to be completed by 1966 which will assure the maximum protection of the scenic, scientific, wilderness, and historic resources of the National Park System in such ways and by such means as will make them available for the use and enjoyment of present and future generations.

#### Administration

Mount McKinley National Park is administered by the National Park Service of the U. S. Department of the Interior. A superintendent, whose address is McKinley Park, Alaska, is in immediate charge. You can obtain information at park headquarters located 2 miles beyond McKinley Park Station on the park road.

#### Help Us Protect This Park

**Park regulations** are designed for the protection of the natural values and scenery as well as for your comfort and convenience. Complete regulations may be examined at the office of the superintendent. The following synopsis is for your guidance.

**Destruction**, defacement, or disturbance of buildings, signs, equipment, or other property, or of trees, flowers, vegetation, or other natural features is prohibited.

*Camping* is permitted at designated campsites, and at sites of your own selection by authorization from the park superintendent. Only dead, fallen timber may be used for fuel. All refuse should be burned or buried.

Fires. Permission to build fires outside of designated areas must be obtained from the superintendent. Fires must not be built in duff or in a location where a conflagration may result. After use, fires must be completely extinguished. Lighted cigars, cigarettes, or other burning material must be "dead out" before discarding in the park.

*Hunting* or otherwise molesting wild animals in the park is prohibited. All firearms must be sealed when you enter the park. *Fishing* in any manner other than with hook and line is prohibited. Fishing in certain waters may be suspended by special regulations.

**Boats.** Permission to operate privately owned boat, canoe, raft, or other floating craft must be obtained from the superintendent. The use of motors on boats is prohibited on Wonder Lake and other waters.

*Advertisements* and private notices must not be posted or displayed in the park, except such as the superintendent deems necessary for the convenience and guidance of the public.

**Prospecting** for minerals on park lands may be undertaken only under a special permit issued by the superintendent.

Dogs and cats are allowed on park lands only on leash, crated, or otherwise under physical restraint at all times. The park superintendent may designate areas where dogs and cats will not be permitted.

*Mountain climbing* may be undertaken only by permission of the superintendent.

Penalty for violation of regulations is a fine of not more than \$500, or imprisonment not exceeding 6 months, or both, together with all costs of the proceedings.

#### WARNING

ALL grizzly bears are extremely dangerous. Never approach, feed, or trust them—or any of the animals of the park.



United States Department of the Interior Fred A. Seaton, Secretary NATIONAL PARK SERVICE Conrad L. Wirth, Director



Cover: East side of Mount McKinley as seen from the air-Muldrow Glacier in foreground. (Photo by Bradford Wasbburn. Copright, National Geographic Society.)

Revised 1958

U. S. GOVERNMENT PRINTING OFFICE : 1958-0-452762