



Backbone of the Continent

From Mexico to Alaska, for 2,700 miles the great Rocky Mountain chain forms the backbone of North America, the world's longest mountain barrier. Set in the Southern Rockies, Rocky Mountain National Park could be called "the top of the world for everybody." Here treeline and tundra—the miniaturized alpine world—are accessible to all along the park's Trail Ridge Road. This highest major highway in North America tops out at 12,183 feet above sea level not far from the Alpine Visitor Center (see *map on the back*). At the Tundra Communities Trail east of the visitor center you can park your car and take a walk in the alpine realm that hikers and backpackers elsewhere may labor thousands of feet uphill to experience. And what an experience! Here is one of the most expansive areas of alpine terrain in the United States. Nearly one third of the park is above treeline—11,400 feet of elevation in the park—the limit above which conditions are too harsh for trees to grow.

Rocky Mountain National Park holds 72 named peaks above 12,000 feet of elevation. Long's Peak, at 14,259 feet, is the northernmost so-called "fourteener"—peak rising above 14,000 feet—in the Rocky Mountain chain. Great Earth forces thrust the Rockies skyward 70 million years ago, but many of the exposed granite rocks in this park are much older: 1.3 billion years or more! Three major glacial episodes from 738,000 to 13,750 years ago sculpted the scenery that inspired citizens to persuade Congress to make this a national park in 1915, one year before Congress created the National Park Service. For over 30 years most of the park has been managed like designated wilderness—to preserve its natural conditions and wilderness character. The National Park Service mission is to preserve this natural treasure unimpaired for the enjoyment of this and future generations. We invite you to join us in this great adventure of preservation and enjoyment.

Often seen from Trail Ridge Road, yellow-bellied marmots enjoy basking in the sun on rocky outcrops.

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Ecosystems of the Rockies

Alpine Alpine tundra occurs above treeline where the climate is extremely harsh. Fierce drying winds, bitter cold, intense ultraviolet light, thin soil, and a brief growing season let only specialized plants and animals thrive. Alpine plants are tiny, growing close to the ground. Many have waxy leaf surfaces to resist moisture loss, or dense, tiny hairs to trap warmth against stems and leaves. Plants just inches tall may grow taproots six feet long to get moisture and anchor them against the wind. Alpine winters are long—for nearly eight months average temperatures do not rise



Low-growing mat and cushion plants dot alpine landscapes. Compact and streamlined, these plants deflect wind and enjoy the significantly warmer temperatures close to the ground.

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above freezing. Animals survive by strategies of migrating, hibernating, or staying put. The ptarmigan is well-adapted for staying put. Its large dense body holds in heat, and feathers cover even its eyelids, nostrils, legs, and feet. Ptarmigan can actually gain weight in winter by eating nutrient-rich willow buds.

White-tailed ptarmigan color phases



Summer

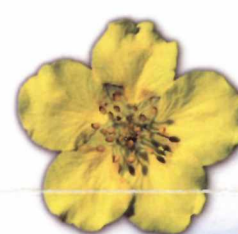
Molting

Winter

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food sources, migrating animals start to leave the tundra in August. American pipits fly to Central America, but other tundra dwellers, like elk and coyotes, move down into lower valleys in and near the park.

White-tailed ptarmigan are masters of camouflage (above). Their plumage changes from a speckled brown in summer to white in winter, letting them blend in with surrounding rocks and snow. When danger approaches, the ptarmigan can conserve energy by simply standing still rather than flying. Ptarmigan eat the dwarfed alpine willow.



Alpine avens bloom on rocky fields of alpine tundra. The parts of the plant above ground are small, but the roots may reach down six feet into the mineral-rich subsoil.

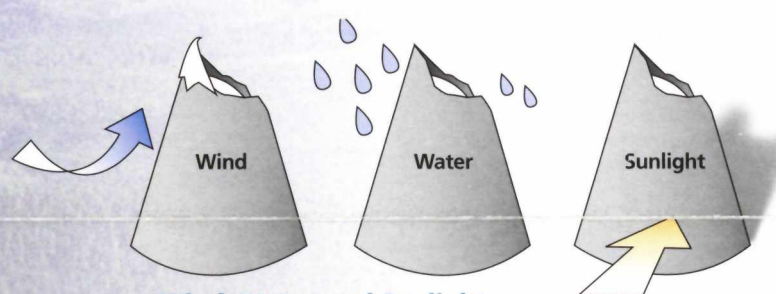
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Alpine

Above 11,400 feet of elevation

Subalpine

9,000–11,400 feet of elevation



Wind, Water, and Sunlight

Winter's stout westerly winds scour ridgetops bare, and snow drifts deeply into the lee of ridges. In spring, easterly winds bring heavy snowfall from upslope storms. Intense ultraviolet light beats down on south-facing slopes all year long. Permanent snowfields hold on in sheltered basins that face northeast.

Round with tiny ears and tails to reduce heat loss, pikas stay active in winter. They gather and dry plants in summer's sun, then store them as haystacks under rocky talus. Pikas like yellow-blossomed alpine avens, which contain chemicals that naturally preserve the hay piles against winter mold and rot.



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Montane

Below 9,000 feet of elevation

Subalpine The subalpine ecosystem lies between 9,000 feet and 11,400 feet. Its climate is characterized by long, cold winters, short, cool summers, and high annual precipitation—30 inches or more. It is the highest, windiest, and snowiest forest. Much of the snow that falls on the alpine tundra is blown down into the subalpine. Engelmann spruce and subalpine fir dominate the landscape and do well in the snowy winters. The abundant moisture produces a rich understory of broom huckleberry and juniper shrubs and many colorful wildflowers, like arnica, fairy slipper, twinflower, and senecio. Limber pines thrive in wind-

blown areas and are often twisted and turned. Winds can also stop growth on the windward side of spruce and fir trees, creating flag or banner trees. At treeline, low-growing trees called krummholz (German for "crooked wood") grow more horizon-



Pine marten and its tracks (right).

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Martens are agile tree climbers quick enough to catch chickarees and birds. On the ground they will prey on chipmunks, mice, ground squirrels, marmots, rabbits, and pikas.



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Seldom seen, boreal owls hunt at night. A mouse trail (above) ends with wing prints and a dent in the snow and may reveal this owl's work.

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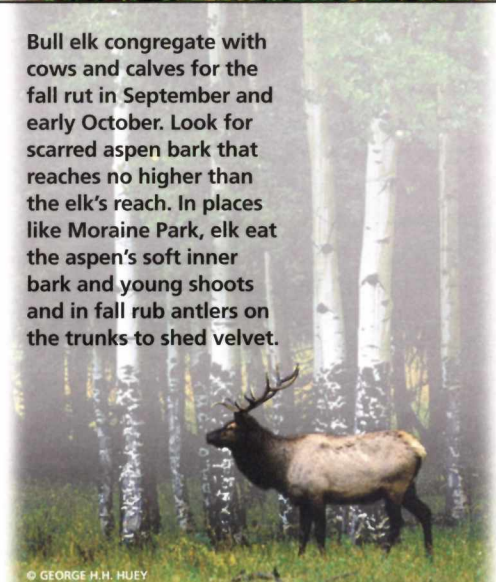
tally than vertically, and some may be hundreds of years old. Animals that frequent the subalpine forests are martens, long-tailed weasels, chickarees, and snowshoe hares. Because of the dense forest cover, birds are more often heard than seen. The melodic voices of the hermit thrush, ruby-crowned kinglet, and pine grosbeak are among those commonly heard in the subalpine forests.

The shade of Engelmann spruce trees (above), blooming fireweed, blue chiming bells, and Jacob's ladder make a summer stroll around a subalpine lake a colorful experience.

© DAVID MURPHY

Montane As you enter the park, you are entering the montane ecosystem—a land of pine forests and beautiful mountain meadows. Open stands of ponderosa pine dominate the drier, sunny slopes of the montane. Mature trees can be 150 feet tall and 400 years old. As the ponderosa ages, its bark changes from gray-brown to cinnamon-red and often gives off a pleasant, sweet fragrance when warmed by the sun.

The openness of the ponderosa forest allows sunlight to reach the many grasses, shrubs, and flowering plants that thrive here. Chokecherry, wax currant, and service-



Bull elk congregate with cows and calves for the fall rut in September and early October. Look for scarred aspen bark that reaches no higher than the elk's reach. In places like Moraine Park, elk eat the aspen's soft inner bark and young shoots and in fall rub antlers on the trunks to shed velvet.

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berry bushes provide food and shelter for many insects and birds and other animals. Mountain bluebirds feed and perch in open meadows. Tassel-eared Abert squirrels get food and shelter from ponderosa pines.

North-facing slopes of the montane escape the drying effects of the sun. Dense stands of Douglas fir, lodgepole pine, ponderosa pine, and an occasional Engelmann spruce cover these hillsides. Shade-tolerant plants grow on the forest floor. A black bear with her cubs may move through the forest toward a favorite food source. Interspersed within the montane are large, expansive mountain meadows with streams and wetland areas.

Here grasses, wildflowers, and water-loving small trees thrive. Dense groves of aspen can be found at meadow edges. Deer and elk feed on vegetation. A coyote den may be hidden in willows while a red-tailed hawk flies overhead. Meadows, created long ago by glaciers, provide rich and diverse habitats for wildlife in the park.



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Seasons of the aspen leaf



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Short-winged and agile birds of prey, northern goshawks (left) are adapted for swift flight through dense forests. They like to nest in tall aspen trees, whose summer (at left) and fall leaf colors are shown above.

© E.J. PERER (BACKGROUND PHOTO)

Mountain People

Mountain Utes and Arapaho

Following retreating glaciers 10,000 years ago, humans first began living intermittently among these mountains. With skillful knowledge of plants and animals they lived off the land. By 6,000 years ago the Ute, or Mountain People, dominant here, lived in bands scattered throughout Colorado and Utah. They followed game and traveled over set seasonal routes, collecting plants along the way. Other groups, including the Cheyenne and Arapaho, lived primarily on the plains, hunting buffalo, with occasional mountain excursions.



Euro-Americans Arrive

Early 1800s Euro-American fur trappers and traders sought beaver throughout the Rockies until pelt prices fell in the 1840s. An 1858 gold rush in the Rockies created the boom towns of Denver, Boulder, and Golden. Mining didn't pay much here, but people discovered the area's beauty. Gold-seeker Joel Estes and his son, hunting to supply Denver meat markets, found the valley now named for him. In 1860 Estes built cabins for farming and market hunting. Scenery soon outpaced commodities in value and tourism began to develop.

A Ute family's teepee near the Rocky Mountains (left).

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The park was dedicated September 4, 1915, in ceremonies held at Horseshoe Park (right).

NATIONAL ARCHIVES



Protectors

Tourism continued to grow in Estes Park and Grand Lake as word of the surrounding mountains' beauty spread. A forest preserve was created, but many conservationists feared the surrounding mountains would be exploited. The idea of creating a national park and protecting the wilderness beauty of the area grew. Through the efforts of Enos Mills, F.O. Stanley, James Grafton Rogers, Joe Mills, and other Colorado citizens, Congress established Rocky Mountain National Park in 1915.

Roaming the Rockies

Park Information Check your free park newspaper for information about visitor centers, ranger-led programs, safety, high-country survival, services, hiking trails, wildlife, shuttle buses, and more. Nearby Estes Park and Grand Lake offer accommodations and services. Park visitor centers have information on access for persons with disabilities. Service animals are welcome.

Pets Pets are prohibited in all park areas not accessible by motor vehicle, including trails and meadows. Pets may not be unattended in vehicles if it endangers the pet or becomes a public nuisance. Where allowed, pets must be kept on a six-foot leash.

Hunting and Fishing Hunting is prohibited in the park. The possession of firearms is allowed, consistent with federal and state laws. Fishing requires a Colorado fishing license. You must abide by park regulations and special restrictions. Check at visitor centers or entrance stations for details.

Regulations Camp only in designated campgrounds. All backcountry camping requires a permit. • Leaving property unattended for over 24 hours without prior permission is prohibited. • Vehicles, including bicycles, must stay on roads or in parking areas. Stopping or parking on roads is prohibited. Overnight parking requires a

permit. • Do not feed, approach, or try to touch any wild animal. • Leave wildflowers and other plants for others to enjoy. • Open alcoholic beverage containers in vehicles on park roads are illegal.

Safety Altitude sickness is common among park visitors. Consult your doctor if you have a respiratory or heart condition. Natural hazards in the park include swift water, waterfalls, lightning, sudden changes in weather, falling trees, hypothermia, and giardiasis from drinking untreated water. While driving, please stay alert and watch for wildlife crossing roads.

Wilderness In 2009, Congress protected 95 percent of the park under the 1964 Wilderness Act. Road corridors and adjacent visitor use areas are excluded. Wilderness designation protects forever the land's wilderness character and natural conditions, opportunities for solitude and primitive recreation, and scientific, educational, and historical values. In wilderness, people can sense being a part of the whole community of life on Earth. Preserving wilderness shows restraint and humility, and benefits generations to come.

Rocky Mountain National Park is one of over 390 parks in the National Park System.



An angler tries his luck in Lily Lake.

To learn more about national parks and National Park Service programs in America's communities, visit www.nps.gov.

More Information
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For Information call 970-586-1206. For Trail Ridge Road status call 970-586-1222.

For emergencies only call 970-586-1203 or 911.

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