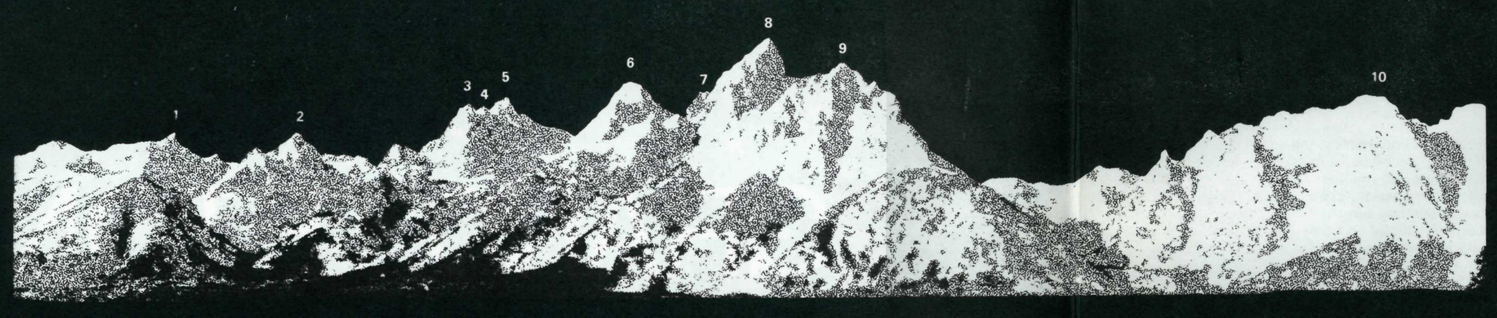
GRAND TETON



Buck Mtn.	1	Middle Teton	6
Mt. Wister	2	Teepe Pillar	7
Nez Perce Peak	3	Grand Teton	8
Cloudveil Dome	4	Mt. Teewinot	9
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MAN AND THE TETONS

Until 1800, Indians held undisputed sway over the country dominated by the Three Tetons, frequently coming across the passes into the basins on warring or hunting expeditions.

The Tetons probably first became known to white men in 1807-8 when the intrepid John Colter crossed the range on the journey that also made him the discoverer of the Yellowstone country. In 1811 the Astorians, under Wilson Price Hunt, entered Jackson Hole and crossed the range on their expedition to the mouth of the Columbia.

The decades that follow are frequently referred to as the "fur era," for the Tetons became the center of remarkable activity on the part of fur trappers representing both British and American interests. By 1845 the trappers had vanished from the Rockies; during the next four decades the valleys near the Tetons were largely deserted except for wandering bands of Indians who occasionally drifted in.

But the frontier was relentlessly closing in, and one Government expedition after another passed through or near the Teton country. These parties named many of the park's natural features, including Leigh, Jenny, Taggart, Bradley, and Phelps Lakes, and Mount St. John.

In the late 1880's came the first settlers. They entered by the Gros Ventre River and Teton Pass and settled first in the south end of the valley. Two

Intricate and inspired artwork representing many American Indian cultures is displayed in the David T. Vernon Memorial collection at the Colter Bay Visitor Center.

old homesteads have been partially restored as historic sites: Menors Ferry near park headquarters and the Cunningham place on the east side of the valley.

Among the later settlers were those men who recognized that this beautiful area should be preserved for all people. They had great foresight and a strong feeling that the region should be protected from exploitation.

In 1929 the Teton Range and the lovely lakes at the mouths of its deep canyons were assured protection by the establishment of Grand Teton National Park. But it was obvious that part of the valley, with its own charms, was also in need of protection. Thus, the Jackson Hole area was made a National Monument in 1943; in 1950, Congress set aside the upper valley in a greater Grand Teton National Park.

The gross area of the park is now 1,256 square kilometers (485 square miles), of which about 98 percent is in Federal ownership.

THE GEOLOGICAL STORY

The Grand Tetons, among the noblest creations in the American West, are a congregation of blue-gray pyramids soaring more than a mile above the sagebrush flats and morainal lakes of Jackson Hole. The Tetons are striking examples of the fault-block type of mountain. The steep eastern front is the result of a recent geological uplift of the range along a great fracture line—a fault—in the earth's crust. Similar mountain systems, such as the Sierra Nevada in California and many of the desert ranges of the Great Basin, also owe their existence to block faulting. The Teton fault shows signs of movement within the last few thousand years; in the context of geological time, this means that we can consider that the process is still going on.

In striking contrast to the youth of the mountain range is the great age of the rocks themselves. Recent datings by geophysicists reveal that some of the crystalline rocks are about 2½ billion years old! Yet these once-molten veins penetrate rocks that were already ancient and metamorphosed into gneiss when these intrusions came up from below. Here, then, some of the oldest rocks in the world have been brought to light by one of the most recent mountain uplifts.

Erosion has completely cut away great segments of the mountain mass—erosion that probably began with the very first uplift of the mountain block. As uplift proceeded, erosion continued more intensely with increase in the gradients of the mountain streams. These rushing torrents tore away rocks, creating gorges.

Then came the profound sculpturing of the ice age. During the past million years several periods of intense mountain glaciation have occurred. At the head of each gorge more snow piled up in winter than would melt the following summer. Great masses of snow slowly changed to glacial ice. In response to the inexorable pull of gravity these masses became streams of creeping ice, which plucked off bits of the canyon wall here and ground away rock obstructions there.

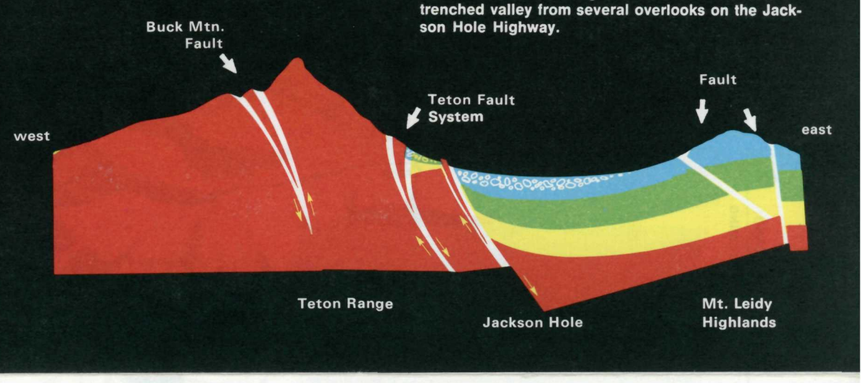
At one time this valley was filled with a great ice mass, formed by mountain glaciers from the Tetons and from the highlands of the present Yellowstone National Park. Glacial debris (gravel and cobbles) on top of Signal Mountain was dropped by this inland sea of ice.

Fluctuations in the climate melted away this ice sheet, only to bring back glaciers of smaller size during more recent cold periods. As recently as 9,000 years ago valley glaciers flowed from the crest of the Teton Range down to Jackson Hole. Crescent mounds (terminal moraines) left at the snouts of these most recent glaciers now are the natural dams for the lakes at the foot of mountain slopes.

Again the climate moderated and became about what it is today. The ice melted away and, retreating gradually, once again exposed the canyon bottoms. The forces of rain, wind, landslides, and other agents of erosion resumed their attack on the uplifted range. Ice sculpturing is evident in all the major canyons of the park.

Although the present glaciers are a mere vestige of the king-size masses of the ice age, they are still quarrying away into the face of the mountains. No one can confidently predict whether glaciers will once again extend and fill these valleys or when another mountain uplift might occur. There is no reason to think, however, that either process has come to an end. Thousands of years from now the scene may be quite different from that which delights the visitor today.

Because most of the ice has vanished, you can see the effect these glaciers had on the landscape. At the head of each canyon is a rounded natural amphitheater, called a cirque. These were the gathering places for mountain glaciers from which great ice tongues extended downward. The U-shaped valleys were carved out by the now vanished ice. Smaller tributary glaciers plucked away at each of the higher peaks of the range. This detailed sculpturing resulted in the noble spires that extend along the range and culminate in the majestic cathedral-like pinnacle of Grand Teton. Much of the rock waste carried down from the eroding mountain range was strewn in the valley, making up a great deal of the present flat floor of Jackson Hole. Good cross sections of this valley fill are displayed where the Snake River has carved through it. You can see the entrenched valley from several overlooks on the Jackson Hole Highway.



ENJOYING THE PARK

Boating. Floating the Snake River, a popular way to view wildlife and spectacular scenery, is possible with your own craft or through commercial river-guide services. A boat permit is required and is good for the entire park. Motors are not permitted on the river. Only experienced canoeists should attempt this swift, cold water. Topographic quadrangle maps will help you plan your trip.

Boating is permitted on Jackson, Phelps, and Jenny Lakes, but motors are restricted to 7½ h.p. maximum on Jenny Lake. Only hand-propelled craft are permitted on Emma Matilda, Two Ocean, Bradley, Taggart, Leigh, Bearpaw, and String Lakes. A nonfee boat permit is required.

Boat tours are offered all summer on Jenny and Jackson Lakes by park concessioners. A combination bus-boat tour starts daily in season from Jackson Lake Lodge.

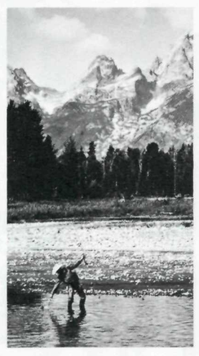
Accommodations. Food and lodging are offered at Colter Bay, and at Jackson Lake, Jenny Lake, and Signal Mountain Lodges, Moran, WY 83013. Signal Mountain Lodge has limited services in winter. Triangle X Ranch, Moose, WY 83012, offers guest ranch vacations on a year-round basis. Please write directly to the ranch for recommended advance reservations and additional information.

Fishing. Most of the park is open in season for fishing. A Wyoming fishing license is required and may be purchased

Overshadowed by Mt. Moran, boaters cross the quiet waters of String Lake.

in the park at the Colter Bay or Moose Tackle Shops, at Signal Mountain, and at Leeks Marina. Visitor centers have information on special park fishing regulations covering bait restrictions and creel limits. Fishing guides are available at the lodges.

Camping. Five campgrounds are operated by the National Park Service from June through September. A concessioner-operated trailer village with all hookups is at Colter Bay. Reservations may be made for this facility by writing the Grand Teton Lodge Company, Moran, WY 83013. Dumping stations for holding tanks are at the Colter Bay, Signal Mountain, and Gros Ventre Campgrounds. You may stay a maximum of 14 days, except at Jenny Lake, which is limited to 10 days and tents only. All camping is restricted to



designated sites. Group campsites are reserved in advance by writing the superintendent, Grand Teton National Park, Moose, WY 83012. More than a dozen Forest Service and commercial campgrounds are located near the park.

Swimming. Water temperatures are reasonable during late July and August in shallow areas of String, Leigh, and Jackson Lakes, but generally swimming in the park lakes is a cold experience—and without the security of a lifeguard. Swimming in the Snake River is not recommended. Jenny and Taggart Lakes are sources for domestic water and are closed to swimming.

Hiking the Trails. Hiking and back-country camping continue to grow in popularity on the 320 kilometers (200 miles) of maintained park trails. Campsite reservations are required and may be obtained at visitor centers by requesting a nonfee camping permit. For your safety and the preservation of the natural environment, *pets and vehicles are not permitted on any trails.* Carry out what you carried into the wilderness. Trails in the high country (above 2,450 meters, or 8,000 feet) are usually snow-covered until mid-July. Valley trails are generally free of snow by mid-June.

An easy way to get acquainted with the beauties of Grand Teton is to take the half-day hike to Hidden Falls. This may begin or end with a boat trip across Jenny Lake; the falls are only 0.8 kilometer (a half-mile)

Ski touring is a growing winter sport in Grand Teton.

from the landing on the farther shore. Join the naturalist's party at the boat dock; the trip will provide background information and experience that will enhance your visits to other parts of the park.

If you want to try more intensive exploring, to "head for the back country" or just to hike away casually from the crowd for a few hours, take some of the hiking trails that have informational signs at their trailheads. Inquire at park visitor centers about back-country trails before starting longer hikes.

Use of the trails is encouraged, but many of them traverse country which has changed little since man's entry into the area. Let reason and prudence guide your actions. Stay on the trails; short-cutting is hazardous. *If you wish to hike or climb other than on an established trail (whether you are going to climb a mountain or not), you must register at Jenny Lake Ranger Station in summer and at Park Headquarters during other seasons.* Remember, animals in the park are wild; for your own safety, give them a chance to move out of your way.

Mountaineering. It is doubtful if anyone views the rugged Teton Range without at least wondering what it must be like to stand on the summits of the peaks. Thus, mountain climbing has become a major outdoor activity in the park. It provides a wide variety of objectives, routes, and classes of climbing.

Mountain climbing is hazardous, requiring different degrees of conditioning and experience for various climbs. You must register with a back-country ranger before attempting a climb of any mountain within the park. Because of the ruggedness of the terrain, solo trips are not advised.

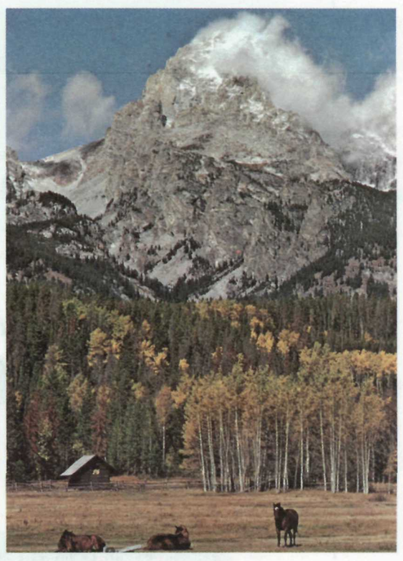
Climbing instruction and guide service are available in the park area in summer. Low-cost bunk space and a cook-out shelter are available for registered climbers at the Grand Teton Climber's Ranch.

When you are ready to climb a major peak like "The Grand," Mount Owen or Mount Moran, you usually set out in the afternoon for an overnight bivouac. Final ascent is made early the next morning, with return to the valley that evening. Some peaks can be climbed in one day.

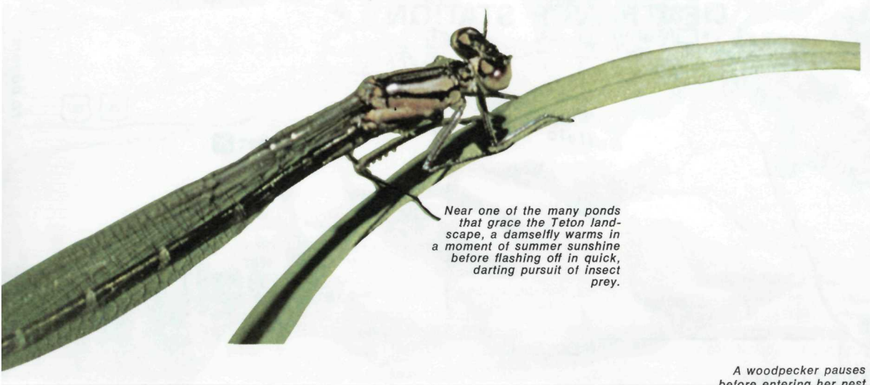
Horses. Stables are located at Colter Bay, Jackson Lake Lodge, and Jenny Lake. Guided horse trips vary from one hour in the valley to several days in the Teton Range. Some trails are restricted to foot travel only.

Driving. Park roads vary from modern paved highways to primitive unpaved routes. All are safe if driven with due respect for current conditions. Major routes are snowplowed all winter. *For your safety and the protection of park values, you are required to stay on established roadways.* Radar may be used to check speeding.

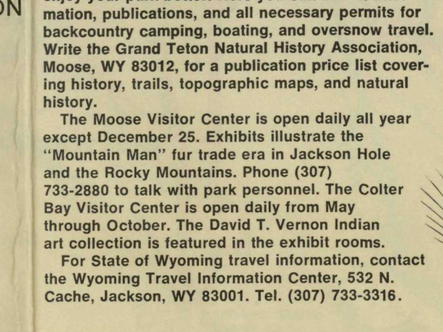
Interpretive Program. Naturalist-guided walks and campfire programs are scheduled daily throughout the summer. Check visitor center and campground bulletin boards for details. Snowshoes are provided for conducted trips February through April. Self-guided trails are located at Colter Bay, Oxbow Bend Environmental Study Area, Cunningham Cabin, and Menors Ferry. The museum at Menors Ferry features an original homestead cabin, old vehicles, and a small natural history museum open in summer.



The Grand Teton, often veiled in clouds, and towering 2100 meters (7000 feet) above the valley floor, clearly shows the sculpturing done by glaciers during the Ice Age.



Near one of the many ponds that grace the Teton landscape, a damselfly warms in a moment of summer sunshine before flashing off in quick, darting pursuit of insect prey.



Marsh Hawk

WILDLIFE AND PLANTS

Animals. All of Grand Teton National Park is a sanctuary. Look in the valley for elk, mule deer, and bison. Mule deer and elk range from the lowest parts of the valley to the tree line. A pond-side vigil may reward you with the sight of moose feeding on aquatic vegetation.

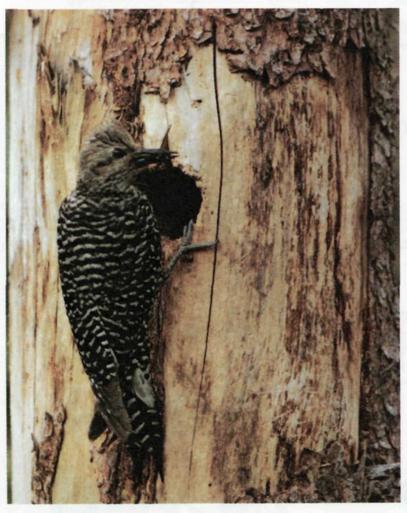
The chipmunk, golden-mantled ground squirrel and other smaller mammals are surprisingly bold; they will tease you by scampering along the trail in front of you, but will disappear in a flash if you approach them.

Among the barren rocks live the pika ("cony"), a relative of hares and rabbits, and the yellowbelly marmot, a large rodent.

The even larger beaver was busily at work long before this area ever became a park and is still at it. Look for examples of beaver work along the Snake River and its tributaries.

Wildlife viewing is best in the early morning and late afternoon hours. All native animals are wild; some may attack unpredictably, so *do not feed or approach them.* Photograph them from a safe distance, using telephoto lenses for closeups. Attendants at the visitor centers can help you identify and locate such species as moose, elk, bighorn, pronghorn, beaver, trumpeter swans, and eagles. Bird and mammal checklists are available at visitor centers.

A woodpecker pauses before entering her nest in a dead lodgepole pine.



Trees, Shrubs, and Wildflowers. A stroll on the valley floor or on one of the trails into the high country will take you through forests of lodgepole pine, Engelmann spruce, limber and whitebark pines, alpine fir, and Douglas-fir. Cottonwoods grow in profusion along the streams, together with willows and aspens—important food for moose and beaver.

In the valley and on intermediate terrain are stands of sagebrush in open or unforested sites, silverberry bushes glistening on the sandbars, and creeping mahonia with prickly, holly-like leaves.

A summer visitor to Jackson Hole can expect to see only a fraction of the

Several thousand elk winter in Jackson Hole, where they congregate on the sagebrush flats.

Blue flax is often found mingling with sagebrush. The flowers bloom in early summer.

floral displays of wild geranium, scarlet gilia, balsamroot, blue lupine, larkspur, fleabanes, penstemons, and cream-colored clusters of wild buckwheat. A traveler can scarcely pass through the valley, however, without encountering the Indian paintbrush, Wyoming's State flower. The bracts and upper leaves (not the flowers) give the plant the appearance of a brush dipped in red paint.

In the high country are small clumps of tiny, brilliant, blue flowered, alpine forget-me-nots. On mountain slopes can be seen blue columbine and glacier lily.

SERVICES

Food and Gasoline. Grocery stores and service stations are located at Colter Bay Village, Signal Mountain, Moose, and Kelly. Services at Colter Bay are open in summer only (June through September). Nearby Jackson offers shopping and services all year.

Air Service, Car Rentals. Grand Teton is served by Frontier Airlines, with scheduled service to the Jackson Hole Airport. An airport limousine meets each flight. Rental cars are available at the airport.

Bus Services. Bus connections to Jackson Hole can be made via Rock Springs, Wyo., and Idaho Falls, Idaho. Phone the Jackson Bus Depot (307) 733-3133 for current schedules. Jackson Lake Lodge runs a shuttle bus service within the park with connections at the Lodge for Yellowstone National Park.

Mail. Post offices are open all year at Moose, WY 83012, Moran, WY 83013, and Kelly, WY 83011. Mail should be addressed to you in care of General Delivery to any of the above or, in summer only, to Colter Bay, WY 83001.

Religious Services. During the summer nondenominational Protestant services are offered in the park amphitheaters, and regular services are held at the Chapel of the Transfiguration and the Chapel of the Sacred Heart. Several churches are located in Jackson.

THE PARK STORY

Grand Teton became a national park in 1929, but the area as then established included only the eastern side of the mountains and Jenny and Leigh Lakes. Left out were Jackson Lake and vast areas on the valley floor where the wapiti (elk) range in the winter. The park, at its inception, was incomplete.

In 1926, Horace M. Albright, then superintendent of Yellowstone National Park and later director of the National Park Service, took Mr. and Mrs. John D. Rockefeller, Jr., and their children on a two-day trip through Jackson Hole. That trip began the process which eventually enlarged the park to its present boundaries. A year later, Rockefeller began to purchase land in Jackson Hole with the idea of deeding it to the National Park Service at an appropriate time.

Though difficulties prevented the establishment of a larger national park in Jackson Hole during the 1930s, Rockefeller continued his land purchases, eventually amassing 32,189 acres. In 1943, at his urging, the Federal Government took control of the land by means of Presidential proclamation. Despite this turn of events, regional interests continued to prevent the development of the land as a park. National park status for the area as it is came only in 1950. Since then Grand Teton has become one of America's most popular and widely acclaimed national parks.

The contributions of John D. Rockefeller, Jr., were recognized by the establishment in 1972 of the Memorial Parkway bearing his name.

Jackson Lake Dam, a link in the development of the water and land resources of the Upper Snake River Basin, was built in 1916 and is operated by the Bureau of Reclamation, U.S. Department of the Interior. It was originally authorized for irrigation—some 444,000 hectares (1,100,000 acres) of the fertile Snake River Valley—and for flood control along the Snake and Lower Columbia Rivers. The project has also contributed to outdoor recreation and fish and wildlife conservation.

SOURCES OF PARK INFORMATION

Dial-a-Park. A recorded information service will answer many of your questions about the park's weather, activities, and available facilities on a 24-hour basis all year. Phone (307) 733-2220.

Visitor centers are designed to help you know and enjoy your park better. Here you can obtain information, publications, and all necessary permits for backcountry camping, boating, and oversnow travel. Write the Grand Teton Natural History Association, Moose, WY 83012, for a publication price list covering history, trails, topographic maps, and natural history.

The Moose Visitor Center is open daily all year except December 25. Exhibits illustrate the "Mountain Man" fur trade era in Jackson Hole and the Rocky Mountains. Phone (307) 733-2880 to talk with park personnel. The Colter Bay Visitor Center is open daily from May through October. The David T. Vernon Indian art collection is featured in the exhibit rooms.

For State of Wyoming travel information, contact the Wyoming Travel Information Center, 532 N. Cache, Jackson, WY 83001. Tel. (307) 733-3316.

In May the male sage grouse puts on his courting display.

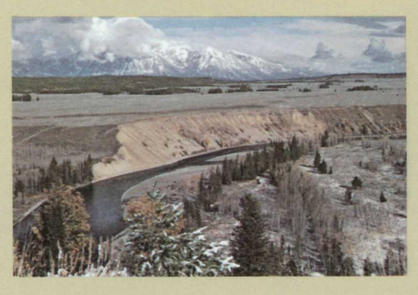
SAFETY PRECAUTIONS

For your safety and the protection of park features. Please . . .

Observe posted speed limits.
Report all accidents to a park ranger.
Drive vehicles only on established roadways.
Camp only in designated sites.
Obtain a camping permit for back-country sites.
Before starting on any off-trail hike or climb, register at the Jenny Lake Ranger Station in summer and at Park Headquarters during other seasons.
Keep pets physically restrained and off trails.
Obtain a boat permit for any watercraft.
Leave rocks and plants in their natural setting.
Fish with a Wyoming State license.
Obtain an oversnow vehicle permit at Moose Visitor Center for winter travel.
Keep motor vehicles off bikeways.
All park animals—including bears—are wild: do not feed or molest them.
Lightning-caused fires are allowed to burn in some parts of the park. If one is in progress, check with a ranger before planning a trip to the burn area.

TETON'S SEASONS

The eternal cycles of climate and weather leap into focus above the Snake River. Level glacial deposits, indicative of a once-colder climate, are revealed by the cutting action of the river.



Eternal snows and unceasing winds at summit elevations; water lilies and shimmering sagebrush in the lowlands—the seasons at Grand Teton reflect both the mountain heights and the calendar. Seasonal changes dominate the park, however, bringing warmth and life, winter and stillness in their turn.

Spring visitors are attracted by wildflowers, migrating birds, and elk during May and June, despite frequent rains and cool temperatures. If you intend to hike or camp, bring warm clothing and raingear. Be prepared for a variety of weather conditions, since it snows in either month. Temperatures can range from below freezing to over 20°C (about 70°F).

Summer days during July and August are generally warm and occasionally hot. Afternoon thunderstorms may completely cover a sky that was clear in the morning. Hikers, climbers, and small craft operators need to pay special attention to clouds and

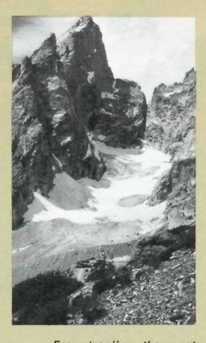
Glacier lilies bloom close behind the melting snows of springtime.

winds coming from the southwest. Daytime temperatures average near 30° C (80° F), dropping to about 4° C (40° F) at night. Park attendance has averaged 1 million a month, so patience may be necessary if trails are crowded and campsites are taken.

Autumn color is best about the first week of October when the aspen and cottonwood trees attain their most brilliant yellow hues. Days are generally cool and clear during September and October. To many visitors, this is the finest time of the year. Most park facilities are open in September, when it's easy to find space in lodges and campgrounds. During the month of November, elk migrate through the park to their winter range. Expect frosty nights warming to 15-20°C (about 65°F) in early autumn.

Winter lasts from November through April, with an average 5 meters (16 feet) of snowfall. Blizzards may last for several days, making travel hazardous, especially during whiteouts. Automobiles access is provided from Jackson on north to Flagg Ranch Village via the snowplowed Rockefeller Parkway. Highway 26-287 is open to Riverton and Lander east of the park.

The Teton Park Road is plowed north from Moose to the Cottonwood Creek Turnout parking area. This is a major debarkation point for ski-tourers, snowshoers, and snow mobilers. Another jump-off spot is Colter Bay, especially for ice-fishermen. Snowmobilers are not permitted on plowed roads, but may use any of the designated unplowed routes. Special regulations, including a registration permit, apply to oversnow vehicles. Sign out/sign in boxes are provided for all types of oversnow day-use trips. Concessioner ski-touring trips are available in the park. Winter mountaineering requires its own precautions and prior registration at the Moose Visitor Center. Bring your longies—daytime temperatures average near freezing, dropping to well below that at night.



From treeline, the crest of the Teton Range is a jagged, glacier-carved and barren alpine wilderness.

Cover photo:
Under the Willow Studio
Jackson Hole, Wyoming

We're joining the metric world. The National Park Service is introducing metric measurements in its publications to help Americans become acquainted with the metric system and to make interpretation more meaningful for park visitors from other nations.

Grand Teton National Park and the John D. Rockefeller, Jr., Memorial Parkway are administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Moose, WY 83012, is in immediate charge of these parks.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

National Park Service
U.S. DEPARTMENT OF THE INTERIOR

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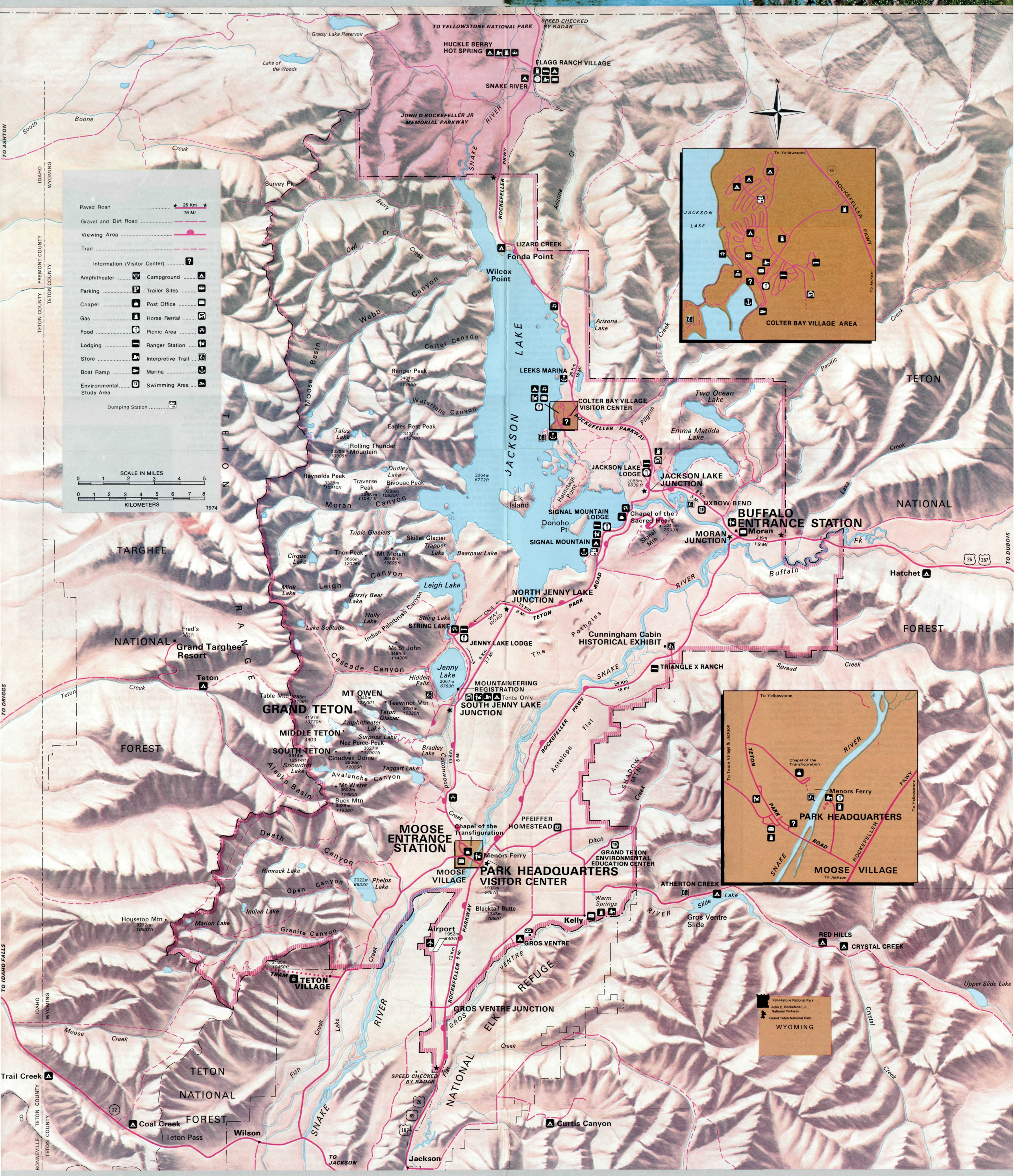

JOHN D. ROCKEFELLER, JR., MEMORIAL PARKWAY

The Parkway. The 132-kilometer (82-mile) Rockefeller Parkway, linking West Thumb in Yellowstone National Park with the South Entrance of Grand Teton National Park, was established on August 25, 1972, in recognition of John D. Rockefeller Jr.'s generosity. The main land area of the parkway, encompassing approximately 9,700 hectares (24,000 acres), lies between Yellowstone and Grand Teton National Parks. Within the parkway are an historic gravesite, army camp, freight station site, and a part of the Ashton-Moran freight road which operated until 1927.

From 1872 until 1907, the area was under Federal management primarily to prevent exploitation of the critical watershed. In 1908, the area became part of the Teton National Forest, and in 1972 it was transferred to the jurisdiction of the National Park Service.

The Snake River is the principal natural feature of the parkway area, and it follows a winding course through the eastern half of the area before flowing into Jackson Lake in Grand Teton National Park. Picturesque, occasionally steep cliffs and rock outcrops punctuate the lodgepole pine highlands along the western rim of the area. The eastern side of the area predominantly contains lodgepole pine forests and open meadow areas and is adjacent to the Teton wilderness area of the Teton National Forest.

The superintendent of Grand Teton National Park, whose address is Drawer 170, Moose WY 83012, is in charge of the parkway.

John D. Rockefeller, Jr., 1874–1960. A distinguished citizen, prominent philanthropist, and noted conservationist, John D. Rockefeller, Jr., made many gifts to the American people in the creation or expansion of a number of areas of the National Park System from coast to coast. These include Acadia National Park in Maine, Great Smoky Mountains National Park in North Carolina and Tennessee, Grand Teton National Park in Wyoming, Virgin Islands National Park, and the Blue Ridge Parkway in North Carolina and Virginia.

Both in America and Europe, John D. Rockefeller, Jr., contributed to the restoration of historic monuments. The most notable example of his efforts is the restoration of Williamsburg, Va.

Visitor Services. Informational services, nature walks, and evening campfire programs are provided through the parkway ranger station, located .4 kilometer (.25 mile) north of Flagg Ranch Village on U.S. 89-287. Information on the parkway is available through Dial-A-Park in Grand Teton. (307) 733-2220.

Flagg Ranch Village: Gasoline is available throughout the year. May 15-September 30: Lodging, food, store, river float trips, horseback riding, trailer park with and without full hookups. December 15-March 15: Lodging, food, store, snowmobile, and cross-country ski rentals and snowcoach rides.

Huckleberry Hot Springs: May 1-September 15: Tent camping, swimming pool, general store, laundry, and a service station with towing service.