GRAND TETON
NATIONAL PARK

✦ *WYOMING* ✦

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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HAROLD L. ICKES, Secretary
NATIONAL PARK SERVICE
ARNO B. CAMMERER, Director

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The statement on wild life contained in this booklet was prepared by Sam T. Woodring, park superintendent, the historical and geological sections by F. M. Fryxell, ranger-naturalist, and those on trees and birds by Louis Williams, ranger-naturalist

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RULES AND REGULATIONS

The park regulations are designed for the protection of the natural beauties as well as for the comfort and convenience of visitors. The following synopsis is for the general guidance of visitors, who are requested to assist in the administration of the park by observing them. Copies of the complete rules and regulations promulgated by the Secretary of the Interior for the government of the park may be obtained at the office of the superintendent and at other points of concentration throughout the park.

The destruction, injury, defacement, or disturbance of any buildings, signs, equipment, trees, flowers, vegetation, rocks, minerals, animal, bird or other life is prohibited.

Camps must be kept clean. Rubbish and garbage should be burned. Refuse should be placed in cans provided for this purpose. If no cans are provided where camp is made, refuse should be buried.

Do not throw paper, lunch refuse, or other trash on the roads and trails. Carry until the same can be burned in camp or placed in receptacle.

Fires shall be lighted only when necessary and when no longer needed shall be completely extinguished. No lighted cigarette, cigar, match, or other burning material shall be thrown from any vehicle or saddle animal or dropped into any leaves, grass, twigs or tree mold. Smoking or the building of fires may be prohibited by the superintendent when the hazard makes such action necessary.

The hunting, killing, wounding, frightening, capturing or attempting to capture any wild bird or animal is prohibited. Firearms are prohibited within the park except with the written permission of the superintendent.

When fishing, avoid closed waters. Ten fish per person constitute the limit for a day's catch. The possession of more than two days' catch at any one time is prohibited. Fishing in any way other than with hook and line is prohibited.

Still and motion picture cameras may be freely used in the park for general scenic purposes.

Drive carefully at all times. Muffler cut-outs must be kept closed. Speed limits must be observed. All accidents must be reported at the nearest ranger station or to the office of the superintendent.

The penalty for violation of the rules and regulations is a fine not exceeding $500, or imprisonment not exceeding 6 months, or both, together with all costs of the proceedings.

The Government is not responsible for accidents of any nature.

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IMPORTANT DATES IN TETON HISTORY

1807. Discovery of the Tetons by John Colter.
1811. The Astorians crossed Teton Pass.
1810–45. "The Fur Era" in the Rocky Mountains, which reached its height between 1825 and 1840.
1828. Capt. William Sublette named Jackson Hole after his partner in the fur trade, David Jackson.
1832. Rendezvous of the fur trappers in Pierres Hole; the Battle of Pierres Hole.
1832–35. Captain Bonneville made frequent visits to the Teton country.
1835. Rev. Samuel Parker conducted the first Protestant service in the Rocky Mountains a few miles south of the Tetons.
1843. Michaud attempted an ascent of the Grand Teton.
1860. Brig. Gen. W. F. Raynolds and Dr. F. V. Hayden crossed through the Teton country.
1872. William H. Jackson, with a geological party of the Hayden survey in the Tetons, secured the first photographs of these famous landmarks.
1877. The Hayden survey party of Orestes St. John made geological studies in the Tetons.
1879. Thomas Moran painted the Teton Range.
1884. The first settlers crossed Teton Pass into Jackson Hole.
1897. Teton Forest Reserve created.
1898. The first major Teton peaks scaled (Buck Mountain and Grand Teton).
1909. The Upper Gros Ventre landslide.
1925. The Lower Gros Ventre landslide.
1927. The Gros Ventre flood.
1929. Grand Teton National Park created and dedicated.
1930. The last major Teton peaks scaled (Nez Perce and Mount Owen).
1933. Completion of the first link in the Skyline Trails.

GRAND TETON NATIONAL PARK

THE Grand Teton National Park embraces the most scenic portion of the Teton Range of Wyoming, with an area of approximately 150 square miles, or 96,000 acres. It varies from 3 to 9 miles in width and is 27 miles in length, The northern extremity of the park is about 11 miles south of the southern boundary of Yellowstone National Park. This park was established by President Coolidge on February 26, 1929.

In addition to its sublime peaks and canyons, the Grand Teton National Park includes six large lakes and many smaller bodies of water, glaciers, and snowfields, and extensive forests of pine, fir, spruce, cottonwood, and aspen. However, much of the park area is above timberline (10,500 feet), the Tetons rising 3,000 to more than 7,000 feet above the floor of Jackson Hole.

The great array of peaks which constitutes the scenic climax of this national park is one of the noblest in the world. It is alpine in the truest sense. Southwest of Jenny Lake is a culminating group of lofty peaks whose dominating figure is the Grand Teton, the famous mountain after which the park takes its name. The resemblance of this group, whose clustered, tapering spires tower aloft to a height of thousands of feet and are hung with never-melting snowfields, to a vast cathedral, must suggest itself to every observer.

However widely traveled, visitors viewing the Tetons for the first time confess that the beauty of this park and the rugged grandeur of its mountains come to them as a distinct revelation. This is amply proved by the increasingly large number of visitors who return summer after summer to spend their vacations in the Grand Teton National Park. The recreational possibilities of these mountains, they have found, are practically limitless. Here they may camp on the lakes, swim and fish, ride or hike the trails, engage in the strenuous sport of mountaineering, or—if their needs and wishes so dictate—simply relax and rest.

The Grand, Middle, and South Tetons comprise the historic *Trois Tetons* (three breasts) which were noted landmarks to the trappers and explorers of the early nineteenth century. The Three Tetons are seen to best advantage from the west and southwest. As the observer's viewpoint is shifted, the major peaks change greatly in outline and relative position, but despite this fact one soon learns to recognize each.

Eleven peaks are of such boldness and prominence that they receive rank as major peaks. In order of descending altitude they are: Grand

Teton, 13,747 feet; Mount Owen, 12,910; Middle Teton, 12,769; South Teton, 12,500; Teewinot, 12,100; Mount Moran, 12,100; Nez Perce, 11,700; Mount Woodring, 11,500; Buck Mountain, 11,400; Mount St. John, 11,400; and Mount Wister, 11,000.

In addition to the 11 major peaks there are an even larger number of somewhat lesser prominence and altitude, such as Cloudveil Dome, 12,000 feet; Eagles Rest, 11,300; Table Mountain, 11,075; Bivouac Peak, 11,000; Prospectors Mountain, 11,000; Rockchuck, 11,000; Rolling Thunder, 10,900; Fossil Mountain, 10,800; Rendezvous Peak, 10,800; Mount Hunt, 10,700; Symmetry Spire, 10,500; and Storm Point, 10,100, as well as a host of nameless pinnacles and crags which serve still further to make the Teton skyline the most jagged of any on the continent.

The larger lakes of the park, Leigh, Beaver Dick, Jenny, Bradley, Taggart, and Phelps, all lie close to the foot of the range and like beads are linked together by the sparkling, tumbling waters of Cottonwood Creek and neighboring streams. Nestled in dense forests outside the mouths of canyons, these lakes mirror in their quiet depths nearby peaks whose pointed summits rise with sheer slopes a mile or more above their level.

HISTORY OF THE REGION

Many of our national parks have been carved from wilderness areas previously little known to man and but seldom visited. The Tetons, on the contrary, are remarkably rich in historic associations. The Grand Teton itself has been referred to by an eminent historian as "the most noted historic summit of the West."

Up to the beginning of the last century Indians held undisputed sway over the country dominated by the Three Tetons. Then as now Jackson Hole was literally a happy hunting ground, and while the severe winters precluded permanent habitation, during the milder seasons bands of Indians frequently came into the basin on hunting or warring expeditions. They represented many tribes, usually hostile to each other: The dreaded Blackfeet, the Crows, the Nez Perce, the Flatheads, the Shoshoni, and others. There is little reason to believe that these Indians ever invaded the more rugged portions of the Tetons, but it is certain they regularly crossed the range, utilizing the several passes.

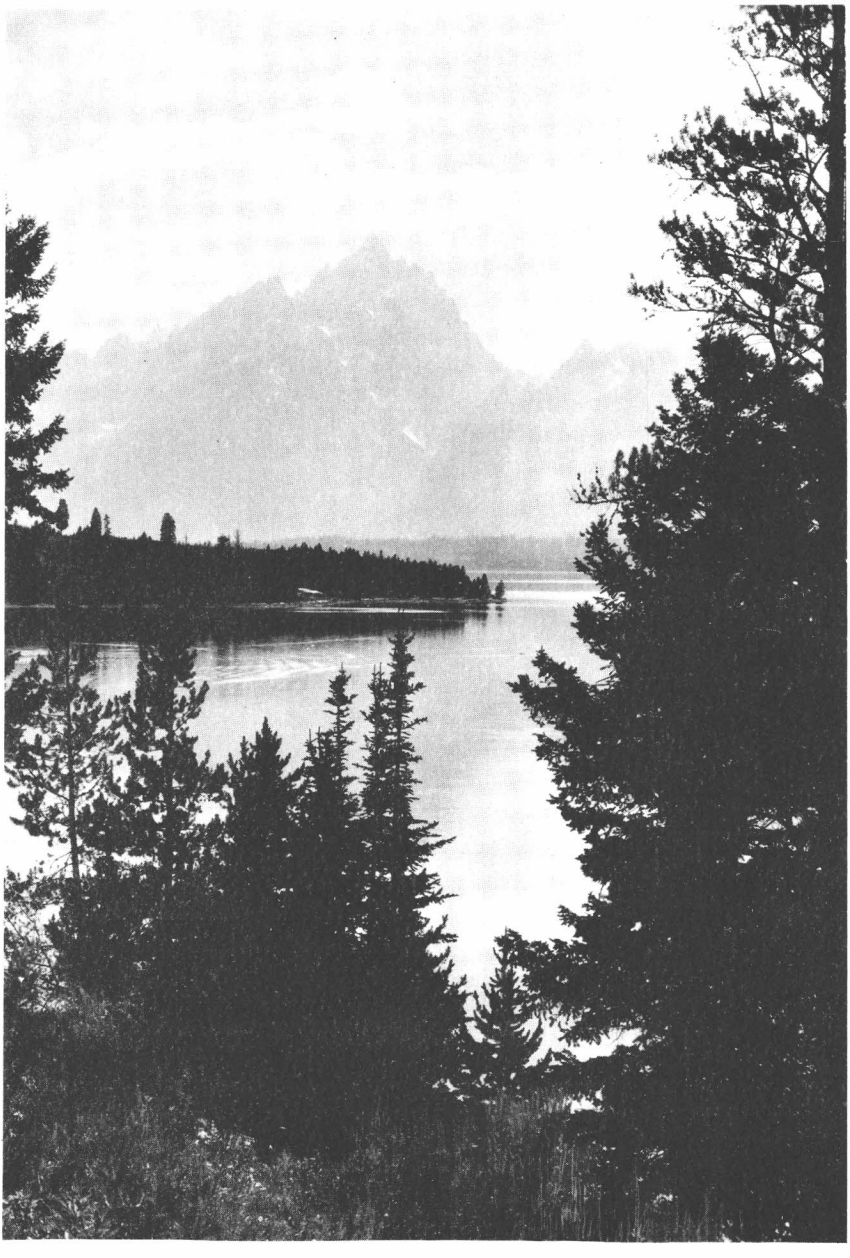
The Tetons first became known to white men in 1807, in which year the intrepid John Colter crossed the range presumably near Teton Pass on the memorable journey which also made him discoverer of the Yellowstone country. In 1811 the Astorians, under Wilson Price Hunt, entered Jackson Hole by the Hoback Canyon and, failing in an attempt to navigate the

The Grand Teton.

Snake River, likewise crossed the Teton Range in the vicinity of Teton Pass, continuing thence to the mouth of the Columbia where the trading post, Astoria, was founded. The Tetons also figure in the adventures of the returning Astorians in 1812. In Washington Irving's classic account of the Astorian expedition (Astoria, published in 1836) the name "Tetons", French for "breasts", first appears in literature.

The decades which follow may truly be referred to as "the Fur Era", for the Tetons became the center of remarkable activities on the part of fur trappers representing both British and American interests, the former by the Northwest and Hudson's Bay Cos., the latter by a succession of companies operating out of St. Louis, Mo. "It was the trio of peaks so distinctively presented from the west and southwest that made the Tetons famous as landmarks among the roving trappers who, guiding their courses by these easily recognized summits, singly or in groups passed over Teton Pass and through Pierres Hole in their seasonal migrations to and from their remote hunting grounds." Could these ancient monuments speak they "would make known some of the most interesting events in the annals of the fur trade. For this was the paradise of the trapper. In every direction meandered the streams along which he pursued his trade, and nearby were the valleys where the rival companies gathered in annual conclave to fight the bloodless battles of their business. There is scarcely an acre of open country in sight of it that has not been the scene of forgotten struggles with the implacable Blackfeet, while far and near, in unknown graves, lie many obscure wanderers of whose lonely fate no record survives." Captain Bonneville, Father DeSmet, Rev. Samuel Parker, Jedediah Smith, Bridger, Kit Carson, David Jackson (after whom Jackson Hole and Jackson Lake were named), Sublette, Joe Meek—these are names to conjure with in western history! These and many others equally distinguished appear in the records of the Teton country, particularly in the third and fourth decades of the century. The 1832 rendezvous of the American trappers was held in Teton Basin, then known as "Pierres Hole", at the foot of the Tetons; it was attended by many of the most famous trappers of the time, and furnished occasion for the Battle of Pierres Hole, a notable engagement between the trappers and Blackfeet.

The picturesque name "Jackson Hole" dates back to 1828, in which year Capt. William Sublette so named it after his fellow trapper, David Jackson, who was especially partial to this beautiful valley. The term "Hole" was used by the trappers of that period in much the same sense as is the word "basin" today, being applied to any mountain-girt valley.



The Tetons from Jackson Lake. *Crandall photograph.*

In the high country—Grand Teton and Mount Owen from Lake Solitude. *Crandall photograph.*

In the 1840's the value of beaver skins declined and with it the fur trade. By 1845 the romantic trapper of "the Fur Era" had vanished from the Rockies—not, however, without having won for himself an imperishable place in American history. During the next four decades the valleys near the Tetons were largely deserted, except for wandering bands of Indians that still occasionally drifted in. But the frontier was relentlessly closing in, and one Government expedition after another passed through the Teton country or skirted its borders. Most important of these were the Hayden surveys, which in 1871, 1872, 1877, and 1878 sent parties into the region. The names of several members of the 1872 expedition are perpetuated in connection with Leigh, Beaver Dick, Jenny, Bradley, Taggart, and Phelps Lakes. Orestes St. John, geologist with the 1877 Hayden party, and the great artist, Thomas Moran, who in 1879 went with a military escort to

An old photograph of Jack Davis, a gold miner who was a familiar figure in the Jackson Hole country at the turn of the century. He died in 1912 and was buried in a coffin made from his sluice box. Note the pack animals loaded with elk meat.

paint the Tetons, are similarly remembered in the names of two of the principal peaks. To this transition period also belong the earliest prospectors of Jackson Hole, as well as several famous big game hunters who came here in search of trophies—forerunners of the hundreds of hunters who now annually invade this region.

In the middle eighties came the first settlers. They entered by Teton Pass, and to begin with naturally settled in the south end of the hole. Here as elsewhere the story of the homesteader has been one of isolation, privations, and hardship, met, however, with persistency and indomitable courage. Nor is the story confined to the past, for maintaining a livelihood amongst these mountains still calls for resourcefulness, fortitude, and—not infrequently—even heroism.

History, here, is still in the making. Teton Forest Reserve was not created until 1897; the railroad reached Victor in 1912; the Jackson Lake Dam was finished in 1911; many of the roads and bridges of the region were constructed within the past decade; and the Grand Teton National Park was created in 1929. The detailed exploration of the range and the conquest of its high peaks have taken place in relatively recent years, and since 1929 trails have been built which for the first time make the Tetons really accessible to the public. In later paragraphs will be found an account of the mountaineering history of the Tetons. And so the dramatic human story of these mountains is brought down to the present.

GEOGRAPHIC FEATURES AND THEIR ORIGIN

THE TETON RANGE

On the Jackson Hole side the Teton Range presents one of the most precipitous mountain fronts on the continent—indeed, in the world. Except at Teton Pass, near its southern end, the range is practically an insuperable barrier. Forty miles in length, it springs abruptly from Jackson Hole and only a few miles west of its base attains elevations of from 9,000 to nearly 14,000 feet above the sea. Thus most of the range is lifted above timber line into the realm of perpetual snow, and in its deeper recesses small glaciers still linger. The grandeur of the beetling gray crags, sheer precipices, and perennial snowfields is vastly enhanced by the total absence of foothills, and by contrast with the relatively flat floor of Jackson Hole, from which they are usually viewed.

The Teton Range may be described as a long block of the earth that has been broken and uplifted along its eastern margin, and thus tilted westward. Movement of this sort along a fracture is what the geologist terms "faulting." The total amount of uplift along the eastern edge of the block amounts to more than 10,000 feet. Doubtless this uplift was accomplished not by one tremendous cataclysm but by a series of small faulting movements distributed over a very long period. Probably the time of faulting was as remote as the middle of the Tertiary period (the period just before the Ice Age, the latest chapter of the earth's history).

The contrast between the east and west sides of the Teton Range is most impressive. From the east, the Jackson Hole side, one views the precipitous side of the mountain block as it has been exposed by uplift and erosion. From the west, the Idaho side, is seen the broad top of the block, which is gently inclined toward the west. In the eastern front, furthermore, one sees the ancient, deep-seated crystalline rocks (gneiss, schist, and pegmatite) belonging to the earliest known geologic era, the Archean. In places on the

The Tetons from the Upper Cascade Canyon Trail.

top of the block (at the head of Death and Avalanche Canyons, for example) are seen the inclined layers of limestone, quartzite, and shale belonging to the less ancient Paleozoic era. These layers formerly covered the entire block but they have been worn away from half of the area, thus exposing the underlying crystallines. The west and north flanks of the range are overlapped by relatively young beds of lava that are continuous with those covering eastern Idaho and the Yellowstone plateaus.

From a tilted block, such as that described above, to the exquisitely beautiful Teton Range appears to be a far cry; but it was from such a simple mass, roughly rectangular in its outlines, that Nature chiseled a masterpiece. The tools utilized were no less simple—the frost, the rain, the snow, ice, gravity, and daily and seasonal temperature changes. These agencies were enabled to attack the rough block with exceptional vigor at this great altitude and because of the steepness of the slopes. So, through the operation of forces and agencies with which we are all familiar and which are still active the world over, the present range has taken form.

JACKSON HOLE

Jackson Hole, which adjoins the park on the southeast, is one of the most sequestered and severely inclosed basins in the Rockies, encompassed as it is on all sides by impressive mountain barriers. It is 48 miles long, for the most part 6 to 8 miles wide, and embraces an area of over 400 square miles. Its floor ranges in altitude from 6,000 to 7,000 feet. Jackson Hole lies on the Pacific slope of the Continental Divide, which is less than 20 miles to the northeast, and occupies the central portion of the headwaters area of the Snake River. Mountain streams converge radially toward it from the surrounding highlands. The Snake River receives these as, with tortuous and braided course, it traverses the full length of Jackson Hole.

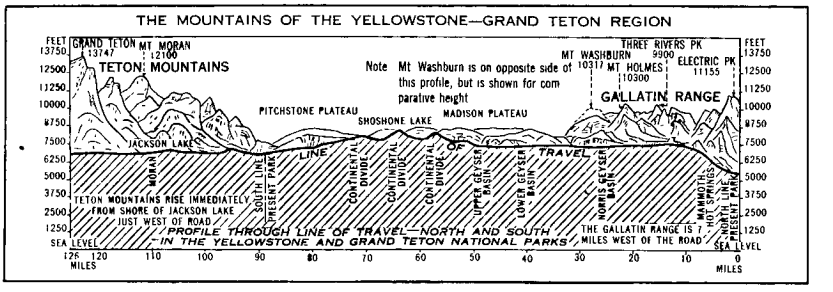
Jackson Hole has been largely excavated by the Snake River and its tributaries from the shale formations which once extended over the region to a depth of several thousand feet. Limestones, sandstones, and crystalline rocks surrounding the basin, being more resistant, were reduced less rapidly and therefore have been left standing in relief as highlands.

While the Snake River has been excavating Jackson Hole, it has maintained its course across the structures farther south and in the resistant rocks there encountered has developed the magnificent chasm through which it escapes from Jackson Hole, the canyon of the Snake River. Doubtless the river could excavate the basin only as fast as it was able to deepen this downstream gorge. There is no geologic basis whatever for the belief, locally prevalent, that the canyon was cut by the overflow from a lake occupying Jackson Hole.

THE WORK OF GLACIERS

Here as in several other national parks the glaciers of the Ice Age, known to the geologist as the Pleistocene period, played a leading role in developing the extraordinary scenic features. Just as the streams now converge toward Jackson Hole, so in ages past glaciers moved down toward, and in many instances into, the basin from the highlands to the east, north, and west.

Detailed study has shown that the Ice Age was not a single, simple episode, but is divisible into "stages"—*glacial stages*, during which extensive ice fields formed; and *interglacial stages*, during which these ice fields were largely or wholly withdrawn. The duration of each is to be thought of in terms of tens of thousands of years. In Jackson Hole, 3 glacial and 2 interglacial stages have been recognized. Only the most recent glacial stage need concern us here, the other two having occurred so long ago that their records are much obscured. The glacial history of the region is described in detail



Geologic section.

in a monograph, Glacial Features of Jackson Hole, Wyo., cited in the bibliography at the end of this booklet.

The latest glacial stage ended but yesterday, geologically speaking, and to it are due most of the scenic glories of the region. In the Teton Range every canyon from Phillips northward contained a glacier, and many of these reached eastward to the base of the range where, unconfined by canyon walls, they spread widely upon the floor of Jackson Hole. Where Jackson Lake now is there lay a great, sluggish field of ice resulting from the confluence of adjacent alpine glaciers.

Moraines, outwash plains, lakes, canyons, and peaks are among the scenic features that originated during the latest glacial stage that may easily be recognized.

Moraines are deposits of debris, piled up by the ice itself. These are heavily wooded, hummocky embankments which rest along the base of the

mountains from Granite Canyon northward, rising in some cases 200 or 300 feet above the floor of Jackson Hole and heaped with enormous boulders quarried by the ice far back in the range.

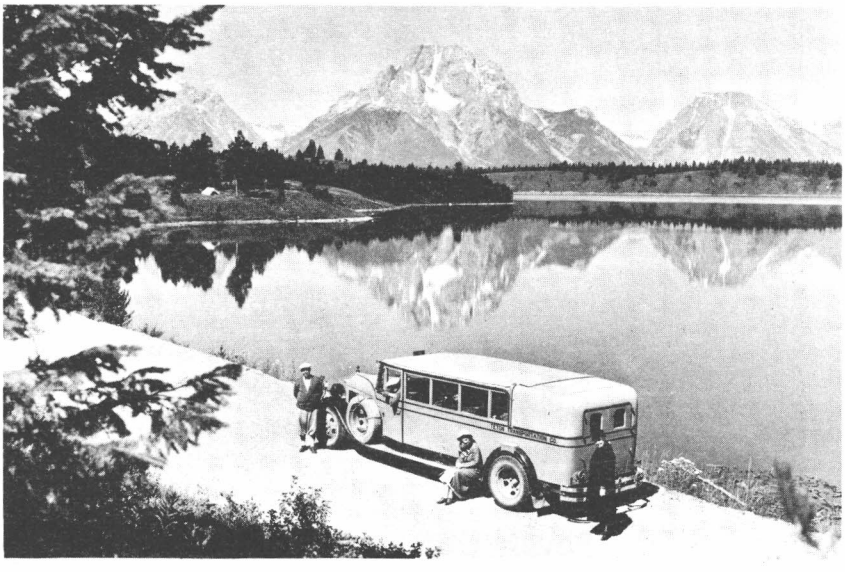
Outwash plains are the deposits formed by streams which, during the Ice Age, issued from the glaciers. Of such origin are the broad, cobble-strewn flats, usually overgrown with sage, which cover the floor of Jackson Hole. They are diversified by bars, abandoned stream channels, terraces, and "pitted plains", features of exceptional interest to one who examines them in detail, particularly so to the geologist. Several isolated buttes—Signal, Blacktail, and the Gros Ventre Buttes—rise like islands a thousand feet or more above these flats.

Limestone wall at the head of Taggart Canyon.

With two exceptions each of the large moraines incloses a lake. In this way Phelps, Taggart, Bradley, Jenny, Leigh, and Jackson Lakes originated; all ranged along the western border of Jackson Hole. No lakes were formed along the eastern border inasmuch as on this side no glaciers extended beyond their canyons. Beaver Dick Lake is dammed in part by outwash.

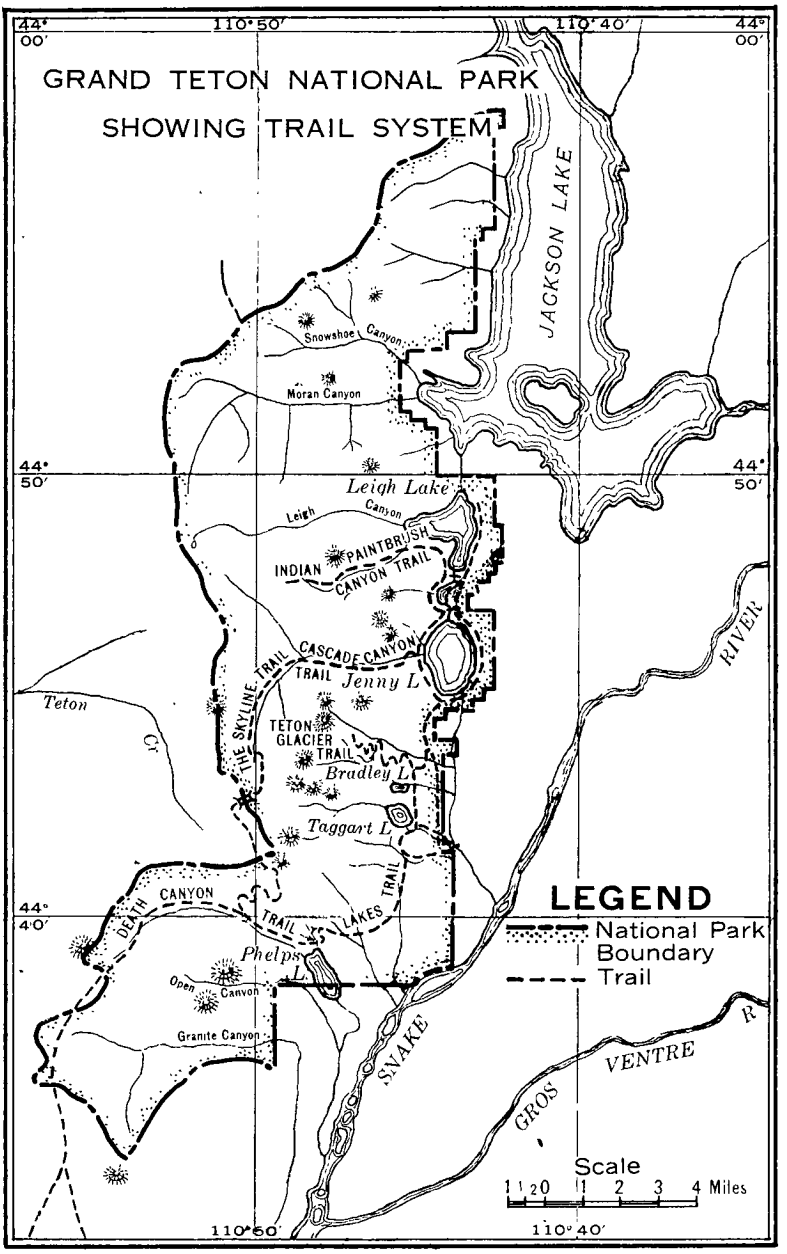
The visitor with several hours at his disposal should hike a few hundred feet up the Teton Glacier Trail or some other trail up the mountain side to a point of vantage from which he can look down on this superb array of lakes. He can then clearly see how each lake lies outside the mouth of a

canyon and how each occupies a basin formed by a crescent-shaped moraine the points of which extend back to each side of the canyon. Each lake is filled to the rim, so that the water spills over at a low place and cascades down to the basin floor, where Cottonwood Creek, in passing, collects the streams one by one. Within the moraines of Granite Canyon and Glacier Gulch, meadows replace the lakes once present, the latter having been filled or drained. This must eventually happen to every one of these lakes, though in the case of the deeper ones such fate may be long deferred. Recent soundings indicate that the maximum depth of Jackson Lake exceeds 400 feet; Leigh, 250 feet; Beaver Dick, 10 feet; Jenny, 226 feet; Bradley, 93 feet; Taggart, 31 feet; and Phelps, 158 feet.



Mount Moran from Jackson Lake. *Crandall photograph.*

Each canyon gives convincing evidence of the vigor with which the glacier it once contained gouged out its channel. In many places the rock of the broad floors and steep sides is still so polished that trees have failed to gain foothold. Every canyon leads up to one or more amphitheaters, or cirques, with sheer bare walls thousands of feet high. Trace these ice-gouged canyons headward and you will discover rock-rimmed lakelets or tarns of whose existence the maps of the region give not the slightest clue—some hung on precipitous mountain sides where one might be pardoned for asserting that no lake could possibly exist.


GRAND TETON NATIONAL PARK
SHOWING TRAIL SYSTEM
44° 00′
110° 50′
110° 40′
44° 00′
JACKSON LAKE
Snowshoe Canyon
Moran Canyon
44° 50′
Leigh Lake
Leigh Canyon
INDIAN PAINTBRUSH CANYON TRAIL
CASCADE CANYON TRAIL
THE SKYLINE TRAIL
Jenny L.
Teton Cr.
TETON GLACIER TRAIL
Bradley L.
Taggart L.
DEATH CANYON TRAIL
LAKES TRAIL
44° 40′
Phelps L.
Open Canyon
Granite Canyon
SNAKE RIVER
GROS VENTRE R.
LEGEND
National Park Boundary
Trail
Scale
1 1/2 0 1 2 3 4 Miles
110° 50′
110° 40′

In few mountains can one find a greater variety of glaciated canyons than in the Tetons. They range from colossal clefts like Moran, Leigh, Cascade, and Death Canyons, of somber depth, to curious little hanging gulches and shallow glacial troughs which occur on Mounts St. John, Teewinot, Moran, and elsewhere.

Above all this is an alpine park, and its peaks constitute its climactic feature. Let those who claim to be disappointed in the peaks of the Rockies elsewhere come and view these. They are superb representatives of a type that is rare in this country—isolated, toothlike peaks with small summit area and sheer, even concave, sides; peaks combining spectacular boldness of profile with great altitude. Here indeed is an unsurpassed playground for mountaineers and an inexhaustible fountain of inspiration for those in search of the noblest in mountain landscape.

THE TETON TRIALS

An unbroken wilderness a few years ago, the Grand Teton National Park is now penetrated by some of the finest trails in the national-park system. Construction work on the Teton trails began June 13, 1930, and at the close of the 1933 season was near completion, with 55 miles of standard trail already in use. These trails, suitable alike for travel afoot or on saddle horses, are 3 to 4 feet wide, free of boulders, and of grade so moderate they may be followed by old or young with full safety and a minimum of physical exertion.

The Lakes Trail runs parallel to the mountains, following closely the base of the range and skirting the shore of each large body of water from Leigh Lake at the north to Phelps Lake at the south. This trail makes accessible the most important lakes, canyons, and peaks of the park, and is, naturally, the one from which all expeditions back into the range begin. By following trail and highway one can now encircle either Beaver Dick Lake or Jenny Lake, the hike around Jenny Lake being one of the most popular in the park.

The Canyon Trails, four in number, are spur trails extending westward from the Lakes Trail, back into the most rugged areas in the Teton Range. Intervening canyons have been left in their spendid wildness.

The Teton Glacier Trail extends up the east slope of the Grand Teton to two alpine lakes, Kinnikinnic and Amphitheater, at altitudes close to 10,000 feet. By means of the 17 switchbacks on this trail the hiker or horseman climbs to a point on the face of the Grand Teton, 3,000 feet above the floor of the valley, throughout this ascent enjoying matchless panorama of

the entire Jackson Hole country, and a view extending eastward 80 miles to the Wind River Mountains, whose peaks and glaciers may be seen sharply outlined against the horizon. Amphitheater Lake, at the end of the trail, occupies a protected glacial cirque and is a favorite starting point for ascents of Teewinot and Mount Owen. Teton Glacier, the most accessible of the ice-fields, is best reached from Amphitheater Lake, being three fourths of a mile northwest from the end of the trail. Though seasoned hikers make the climb from Jenny Lake to the glacier by way of this trail, it is advisable for most people to take horses as far as Amphitheater Lake, and continue on foot with a guide over to the glacier.

Trail riding is the most popular diversion. *Crandall photograph.*

The Indian Paintbrush Trail starts near the outlet of Leigh Lake and follows up the bottom of Indian Paintbrush Canyon to a point at the southwest base of Mount Woodring. The wealth of wild flowers along this trail gives name to the canyon, and early or late in the day one may see big game, especially moose, near the lakes and swamps. This trail affords superb views of Jackson and Leigh Lakes, eastward beyond the mouth of the canyon; and westward along the Divide glimpses of snow-clad ridges and peaks.

The Cascade Canyon Trail passes through a chasm whose walls rise sheer on either side for thousands of feet. By this trail one penetrates into

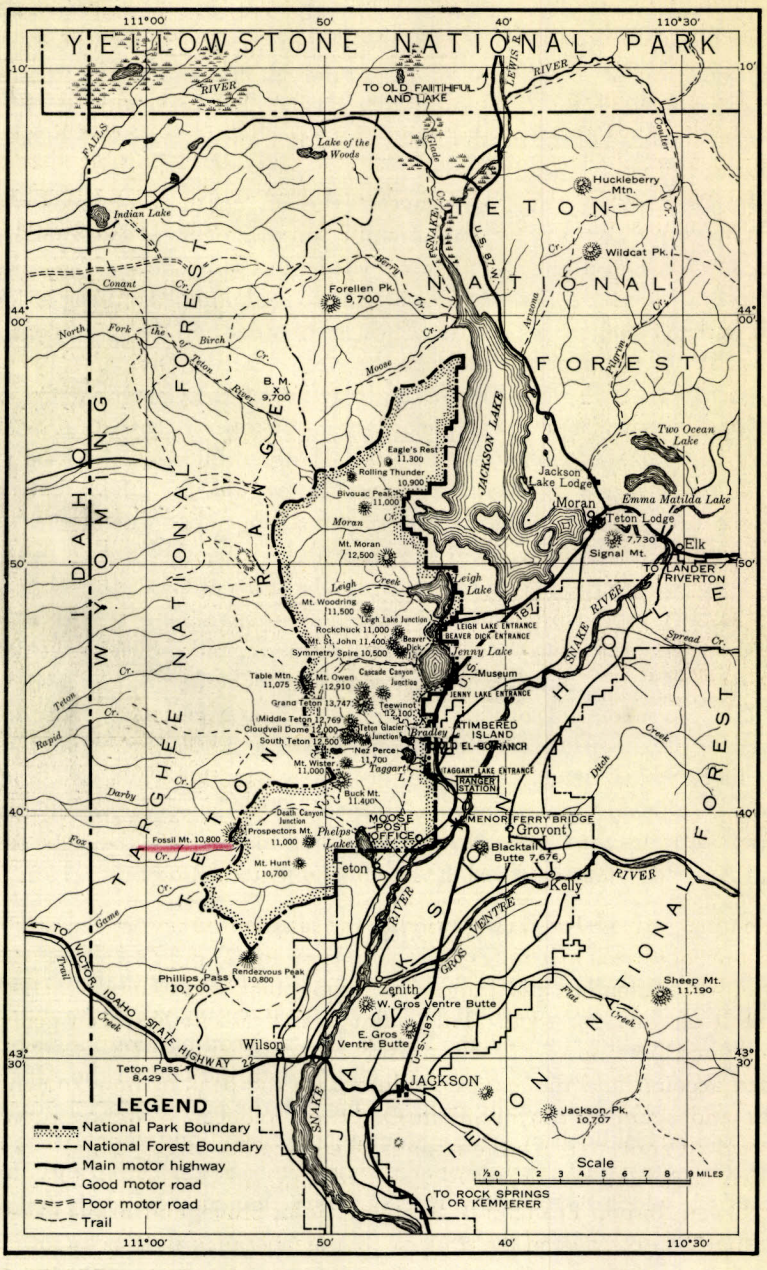
the deepest recesses of the Tetons. It skirts the base of several of the noblest peaks, Teewinot, Mount Owen, Table Mountain, and the Three Tetons, and it enables one to see these titans not only at close range but from new and impressive angles. Lake Solitude, a lakelet of rarest beauty at timberline near the head of the north fork of Cascade Canyon, may be reached by means of this trail.

The Death Canyon Trail traverses the full length of a canyon which in its lower portion is of profound depth and grandeur, as awesome as its name, but which above opens into broad, sunny meadows. No canyon better illustrates the difference between the rugged, alpine landscapes developed in the crystalline rock of the Teton east border and the softer contours formed in the sedimentary strata to the west, near the Divide.

The Skyline Trail.—The linking together of the Cascade and Death Canyon Trails, at their heads, took place on October 1, 1933, and marked the first step in the realization of a plan whereby the hiker and horseman will be enabled to visit that most fascinating region, the Divide, a belt of alpine country along which the waters of the range are turned either eastward into Wyoming or westward toward Idaho. Another link in the Skyline Trail will eventually be forged when the trails of Cascade and Indian Paintbrush Canyons are similarly joined. Now that the first unit is completed one can ascend to the Divide by one canyon and return by the other, making a loop trip that involves no repetition of route and that will take one into the wildest of alpine country for as long a period as desired. In traversing this loop one completely encircles the Three Tetons and adjacent high peaks, viewing them from all sides. In this way one learns to know these peaks with an intimacy impossible to the visitor who contents himself with distant views. No more thrilling mountain trip can be found in all America than that over the newly-completed loop of the Teton Skyline Trail.

MOUNTAIN CLIMBING

Among American climbers no range enjoys higher rank than the Tetons and its growing fame abroad is evidenced by increasingly large numbers of foreign mountaineers who come here to climb. Leading mountaineers unhesitatingly rank many of the Teton climbs with the best in the Alps and other world-famous climbing centers. Though the majority of climbs must be considered difficult even for mountaineers of skill and wide experience, there are several peaks, notably the Middle Teton, South Teton, and Mount Woodring, which have relatively easy routes that may be safely followed by anyone of average strength.



Grand Teton National Park

Although the conquest of the Tetons has largely been accomplished within the decade just closed, the beginnings of mountaineering go back nearly a century. Naturally the Grand Teton was first to be challenged, and the Wyoming historian, Coutant, records that in 1843 a French explorer, Michaud, with a well-organized party attempted its ascent but was stopped short of the summit by unscalable cliffs. It is possible that even earlier white men—trappers and explorers—matched their strength and strategy against this peak or others in the Tetons, but if so their efforts have

Enjoying the scenery from a "turnout" by the lake shore.

gone unrecorded. From the period of the Hayden surveys in the seventies, accounts of several attempts have come down to us, and one party, consisting of N. P. Langford and James Stevenson, purported to have reached the summit on July 29, 1872. This claim to first ascent has been generally discredited because of the serious discrepancies between Langford's published account and the actual conditions on the peak as now known. In 1891 and again in 1897 William O. Owen, pioneer Wyoming surveyor, headed attempts to reach the summit which likewise failed. Finally in 1898 a party sponsored by the Rocky Mountain Club, of Colorado, and comprising Owen, Bishop Franklin S. Spalding, John Shive, and Frank Petersen, on August 11 discovered the traverse (popularly called the "belly roll" and

"cooning place"), which, 700 feet beneath the summit, leads around the northwest face and so opens up a clear route to the top.

The conquest of the Grand Teton achieved, public interest waned and a quarter century elapsed before the peak was again scaled. In 1923 two parties retraced the route of 1898, and each year thereafter numerous ascents have been made. In recent years as many as 20 to 30 parties have climbed the peak each summer. Not a few women and children are included among those who have scaled the Grand Teton.

Repeated efforts were made to achieve the summit of the Grand Teton by routes other than the traditional one, and in 1929 one of these resulted in a successful ascent of the east ridge by Kenneth A. Henderson and Robert L. M. Underhill. In 1931 no less than three additional routes were discovered: The southwest ridge was climbed by Glenn Exum; the southeast ridge by Underhill, Phil Smith, and Frank Truslow; and the north face by Underhill and F. M. Fryxell. Thus five wholly distinct routes have been employed on this mountain, though only the traditional route and possibly the southwest ridge can be recommended to any except most expert alpinists.

Within the last decade other peaks in the range have come in for more and more attention. This they richly deserve, since from both a scenic and mountaineering standpoint many of them are worthy peers of the Grand Teton itself. Mount Moran, Mount Owen, Teewinot, Nez Perce, and the Middle Teton comprise a mountain assemblage which, for nobility of form and grandeur, would be difficult to equal anywhere.

So far as known Buck Mountain, most southerly of the "matterhorn peaks", was the first major peak in the range to be scaled, the ascent being made early in 1898 by the topographical party of T. M. Bannon. Thereafter no important ascents were made until 1919, when LeRoy Jeffers scaled the lower summit of Mount Moran. The main summit of this peak was first climbed in 1922 by L. H. Hardy, Ben C. Rich, and Bennet McNulty. In 1923 A. R. Ellingwood climbed both the Middle and South Tetons on the same day, on the South Teton being accompanied by Eleanor Davis. In 1928 Mount Wister was climbed by Phil Smith and Oliver Zierlein; in 1929 Teewinot and Mount St. John by Fryxell and Smith; in 1930 Nez Perce by Fryxell and Smith; and Mount Owen by Underhill, Henderson, Fryxell, and Smith. With the ascent of Mount Owen the conquest of the major peaks, begun so many years before, was at length completed.

In the meantime the minor peaks were by no means neglected, the first ascents being made principally since 1929 by the climbers whose names have already been mentioned. The last of the minor peaks in the park to be climbed was Rolling Thunder, scaled in 1933. As in the case of the Grand

Teton, a variety of routes have been worked out on almost all of the major and minor peaks. Between 1929 and 1931 the important summits of the range were equipped with standard Government register tubes and register books, in which climbers may enter records of their ascents. The full story of the conquest of the Tetons is told in a book entitled "The Teton Peaks and Their Ascents." (See Bibliography.)

SUGGESTIONS TO CLIMBERS

In 1931 authorized guide service was made available in the park, Paul Petzoldt and later Glenn Exum being authorized to conduct parties up the

Mount Wister and Taggart Canyon.

peaks. Both are experienced climbers and familiar with the range, as well as with guiding practices. In view of the difficulties one encounters on the Teton peaks and the hazards they present, prospective climbers—especially if inexperienced—are urged to make use of the guide service. If venturing out unguided, climbers should under all circumstances consult rangers or guides for full information relative to routes and equipment. Climbing parties *are required, under all circumstances,* to report at either park headquarters or Jenny Lake Ranger Station before and after each expedition, whether guided or unguided.

The climbing season varies with the amount of snow in the range and the character of the weather, but ordinarily it extends from the middle of June to the end of September, being at its best during July, August, and early September. In most cases it is advisable to allow 2 days for an ascent of the Grand Teton, Mount Owen, or Mount Moran, and 1 or 2 days for all other peaks depending upon the experience of the climber and the time at his disposal. Jenny Lake Campground is the logical outfitting point for most expeditions; it is close to the peaks and the sources of supply as well. For most ascents the usual alpine equipment—ice axes, rope, and hobbed boots or climbing shoes—is essential. In the case of guided parties arrangements for renting equipment may be made with the guides.

WILD ANIMALS

Grand Teton National Park and Jackson Hole like their neighbor, Yellowstone National Park, are the natural habitat of many species of mammals, a few of which have disappeared in the march of civilization.

Grand Teton Park is a fine place to see moose.

Compared with other regions commonly visited by travelers, opportunity is excellent for seeing moose, the most distinctive of Grand Teton mammals. Food conditions are right for these browsing animals who stay in the park throughout the year.

Next in interest to the park visitor is probably the elk, though they are not abundant within the actual confines of the park. Found farther north in

summer, in or near the Yellowstone boundaries, they cross the Snake River to the lower part of Jackson Hole in winter. In severe winters they are fed hay at the Government elk range a few miles from the town of Jackson. This great herd, the largest on the continent, numbers almost 20,000 head.

The engineering prowess of beaver is always a source of great fascination. Within the park are to be seen many results of their activity: The well-constructed dams, the skillful canals, the dome-shaped houses, the huge trees felled for food and construction material. With little time and trouble the interested person can actually see these busy mammals and watch them in their industrious undertakings.

Deer can be seen within the park. Both grizzly and black bears are also present though they inhabit the wilder sections. Of smaller animals, the rock-hares or conies are relatively common, and their bleating cry is often heard from the rocky slopes in which they make their home.

BIRDS

The bird life of the Grand Teton region is extremely interesting because of the geographical conformation of the area, which includes high peaks, wooded slopes, marshes, lakes, sage flats, and river bottoms. Such a variety of zones, combined with great variations of weather during the year, brings a large number of birds into this immediate area. More than 90 species were definitely identified in the park during July 1933, and it seems certain that well over 100 species frequent the park at one time or another during the year. During the summer months the rare trumpeter swan is frequently observed near the park, although it has not recently been observed within the park proper. Persons especially interested in bird study may secure a check list of Grand Teton birds, or other detailed information, by writing to the park superintendent.

TREES AND PLANTS

In several respects the flora of the Tetons is unique. The high mountains have constituted a barrier to plant migration which many forms could not cross; hence the range limit of a number of plants in found here. Representatives from north, south, east, and west are found in this general region, this being the limit, in many instances, of their distribution. There are many plants typical of the central Rockies, and a few known only to this range. Five life zones are recognized within the park, all occurring in a distance of less than 15 miles. Plants migrating from other regions have made themselves at home in each zone.

The flowering period begins in the park as soon as the ridges and flats become free of snow in May, and it continues until about August 15 in the Arctic-Alpine Zone. Hence plants of at least one zone and usually of several may be seen blooming at any time of the spring or summer.

The evergreen trees form an appropriate frame for the majestic Teton peaks and are reflected in the beautiful lakes which they encircle.

Lodgepole pine is the most common tree, covering the floor of the valley and extending up the mountains to about 8,000 feet. The pines may be easily distinguished from the other evergreens by the long slender needles occurring in bundles. Lodgepole has two needles in each bundle. Trees of this species were extensively used by the Indians for lodge poles.

Whitebark pine is the tree of timberline, the occasional specimens found at a lower elevation are usually dwarfed. Needles occur five in each bundle; cones are 1 to 3 inches long and almost ovate; the tree is much-branched and of medium size.

Douglas tree has been called Douglas spruce, Douglas fir, and red fir; however, it is neither a spruce nor a fir but is worthy of separate distinction. One needle; cones are 2 to 4 inches long; a three-lobed bract projects from beneath each scale of the cone, a very distinctive character. Common at middle elevations.

Alpine fir grows from the base of the mountains to timberline; at high altitudes it is dwarfed and sprawling. One needle, flat; cones 2 to 3 inches long, scales paperlike; tree usually pyramidal and beautifully symmetrical.

Engelmann spruce is the largest tree in the park, and is usually found growing in moist places and near the lakes and streams. One needle, square in cross-section, stiff and sharp; cones 2 to 3 inches long, scales papery.

Blue spruce is not common and is found only in the Snake River bottoms. The form found here in not typical, lacking the blue cast. One needle, square in cross-section, stiff and sharp; cones 3 to 5 inches long, scales papery.

Creeping juniper is not common. It is a prostrate form, lacking definite trunk. Leaves awllike, one half inch long or less, stiff and sharp, spreading from the twigs; fruit, berrylike.

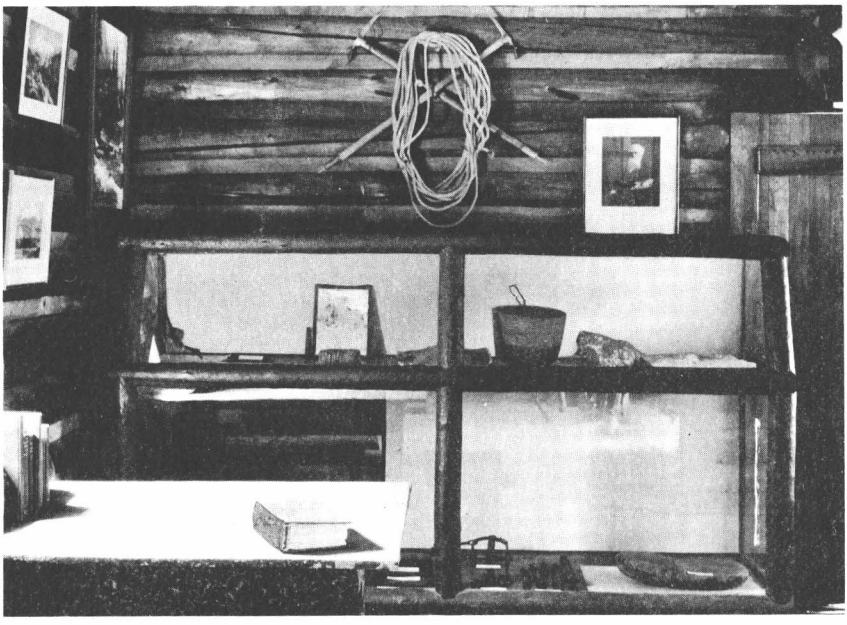
Aspen is the most common deciduous tree of the valley, growing on the slopes up to about 8,000 feet. The leaves are on very slender stalks and the slightest breeze puts them into motion, hence the popular names "Quaking asp" and "Quaking aspen." Leaves rounded, 1 to 3 inches broad, with a slender stalk of about the same length; bark smooth and whitish.

Balsam poplar is found along some of the stream banks and is the largest deciduous tree of the park. Leaves about 3 inches long and 2 inches broad,

longer than the stalk; bark smooth, becoming rough on the older trees. The small seed pods contain many seeds to each of which is attached a tuft of white hair or "cotton"; hence one of the common names, "Cottonwood."

EDUCATIONAL SERVICE

At Jenny Lake the park museum and ranger station are located, in which are housed exhibits pertaining to the history, geology, fauna, and flora of the Teton-Jackson Hole country. The collection devoted to mountaineering is in many respects unique. A library, reading table, and chairs are at the disposal of visitors wishing to do reference work. Adjacent to the museum



The museum contains many reminders of the colorful history of the Jackson Hole region.

is an open-air amphitheater where campfire talks on geology, wild life, and other subjects related to the park are given every evening at dusk by ranger-naturalists.

An information desk is maintained at the museum, and rangers are there at all hours of the day to answer inquiries. Information service is also maintained at park headquarters.

FISHING

Grand Teton Park offers splendid opportunities for fishing. Fish may be taken with the artificial fly during most of the summer, but the lake or

mackinaw trout, which are present in Jackson and Jenny Lakes in great numbers, must be lured with bait and caught with heavy tackle. Other species of trout in park waters are the cutthroat (also known as redthroat, native, and blackspotted), the Loch Leven, and the brook or speckled trout. The park waters are being stocked through the cooperation of the United States Bureau of Fisheries. A Wyoming fishing license, costing $1.50 for State residents and $4 for nonresidents, is required.

DUDE RANCHES

The trail of the summer vacationist has deviated during the last decade from the old familiar courses to embrace vast areas in Wyoming and Montana. A veritable invasion of eastern tourists, known in the parlance of men of the range as "dudes", has followed the opening up by modern transportation of this beautiful country.

Located in the mountainous regions of these two far Western States, on the last frontier, are the dude ranches, in the mouths of canyons, among foothills, or in clearings in the forest. These ranches are not pretentious places, but are rustic and unique. Their popularity began in 1904 when Howard, Willis, and Alden Eaton established the now famous Eaton brothers' "Dude Ranch" at Wolf, Wyo.

Many of these ranches are situated in territory within easy access to the Grand Teton and Yellowstone Parks. Near the former are the Dubois (Wyo.) dude ranches and those of the famous Jackson Hole. A complete list may be obtained by addressing the Dude Ranchers' Association, Billings, Mont.

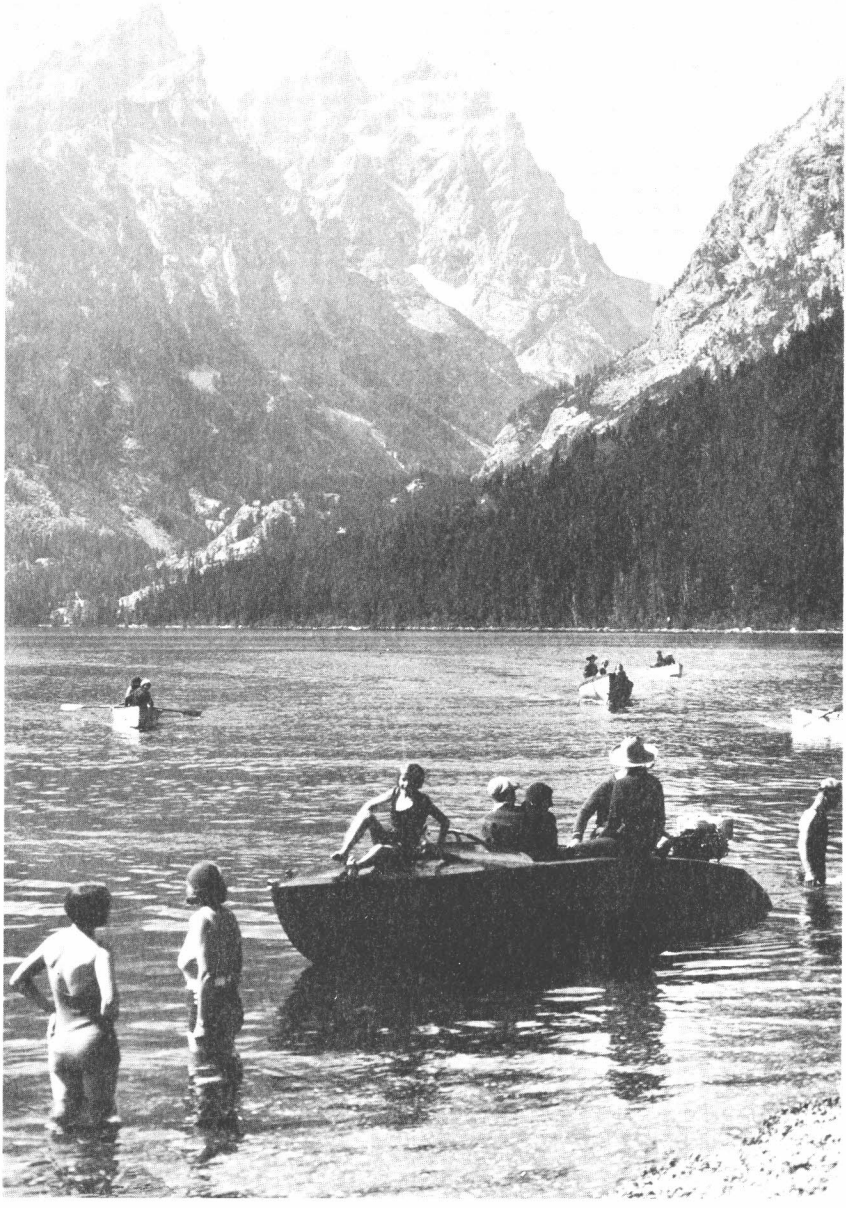
HUNTING

Jackson Hole has long been a noted hunting country, and under Wyoming laws elk, deer, sheep, moose, and bear may be hunted in the mountains east and south of Jackson Hole. Parties interested in hunting should consult the local game warden or the State fish and game department at Cheyenne, Wyo., for information as to licenses and seasons.

No hunting is permitted in the Grand Teton National Park, which of course, will always be a complete sanctuary for wild life.

ACCOMMODATIONS AND EXPENSES

There are modern, well-developed camp grounds at Jenny and Beaver Dick Lakes, and supplies, including fishing tackle, may be procured at Moran, Jenny Lake, Jackson, or Wilson. There are no hotels or lodges within the park, but these accommodations are available nearby at Jack-



Jenny Lake is popular for boating and swimming. Crandall photograph.

son and Moran at rates suitable to all pocketbooks. The National Park Service has no control over these enterprises.

At the south end of Jenny Lake, near the ranger station, A. C. Lyon maintains an excellent string of saddle and pack horses with good equipment for short or long trips. You may rent saddle horses without guides but only to ride over well-defined trails in designated areas. Discretion as to the ability of patrons to ride or to go unguided rests with the operator. Saddle horses without a guide cost $1 an hour; with a guide, $3.50. For guided parties of

Camping on the saddle between Cascade and Taggart Canyons.

less than 5 the charge is $7 a day; more than 5, $5 a day. Daily saddle horse trips to special points of interest such as Teton Glacier or Indian Paintbrush Canyon are made daily at reasonable rates. Pack trips to any part of the park or surrounding country, with guide, cook, and complete camping equipment may be arranged on a day's notice for parties of 5 or more at a charge of $12.50 each a day.

A short distance from where the saddle horses are kept, Charles J. Wort has a number of good motorboats and rowboats. Four or more persons may make a trip around Jenny Lake for $2 each. Rowboats may be rented for 50 cents an hour or $2 a day. Motorboats with a driver are $2 an hour and $12 a day; without a driver, $1.50 an hour and $6 a day.

The authorized official guide for mountain-climbing trips in Grand Teton Park is Paul Petzoldt. He maintains summer headquarters at Jenny Lake, and charges $8 a day a person for his services. Climbers may provide their own food or have their meals at $2 each at a timberline camp. Blankets and eider-down sleeping bags may be rented for $2.

A variety of photographs of the Teton Mountains and the surrounding country, ranging from postcards costing 10 cents for three to hand-tinted

Jackson Lake at twilight. *Crandall photograph.*

enlargements at $25 each, may be purchased at the Crandall Studios at Jenny Lake and Moran. Kodak films are developed at reasonable prices and photographic supplies are on sale.

Regular bus service is maintained between Grand Teton and Yellowstone National Parks and Lander, Wyo., and Victor, Idaho. Inquire at any concentration point about rates and schedules.

This booklet is issued once a year and the rates mentioned herein may have changed slightly since issuance, but the latest rates approved by the Secretary of the Interior are on file with the superintendent and the park operators.

ADMINISTRATION

The representative of the National Park Service in immediate charge of the park is Sam T. Woodring, superintendent, with office at park headquarters, address Moose, Wyo.

HOW TO REACH THE PARK

BY AUTOMOBILE

The Grand Teton National Park is reached by automobile from the north, south, east, and west. Each of these approaches is highly scenic in character affording splendid distant views of the Teton Range and Jackson Hole. United States Highway 87 West connects Jackson Hole with Yellowstone Park and is the north approach to the Teton Park. One mile north of Moran the traveler reaches United States Highway 187 which traverses Jackson Hole and makes the park accessible. From the east United States Highway 87 West, known as the Atlantic-Yellowstone-Pacific Highway, enters Jackson Hole through Togwotee Pass, altitude 9,658 feet, and the Buffalo Fork of the Snake River, joining the road from Yellowstone Park 1 mile north of Moran. The south road enters Jackson Hole via Hoback Canyon. This is an improved highway (U S 187) leaving Rock Springs, Wyo., on the Lincoln Highway.

There is also the western approach road from Idaho via Teton Pass to Wilson and Jackson. This highway crosses the Teton Range at an altitude of 8,600 feet.

BY RAILROAD

At the present time parties may reach the Grand Teton National Park by using rail lines to several gateways. The Union Pacific System has its nearest terminal at Victor, Idaho. It operates daily trains to and from Victor in the tourist season, and there is bus service from the rail terminus to Jackson, Grand Teton National Park, and Moran. Union Pacific passengers upon leaving the train at Rock Springs, Wyo., may make bus connections with the Teton region, by way of Hoback Canyon.

For many years the Yellowstone Park Transportation Co. has operated daily bus service between Old Faithful and Moran. It makes connections at Old Faithful, which enable passengers coming to Yellowstone Park via the Union Pacific (West Yellowstone Gateway), Northern Pacific (Gardiner Gateway), Chicago, Burlington & Quincy (Cody Gateway), and Chicago, Milwaukee, St. Paul & Pacific (Gallatin Gateway), comfortably and quickly to reach the Grand Teton National Park.

POINTS OF INTEREST ALONG THE WAY

The Grand Teton National Park is located in the interior of a vast mountain region, and its avenues of approach are, of necessity, through canyons and passes. These approaches are themselves of great interest and beauty, and afford magnificent distant views of the Teton Range. The country traversed is rich in associations of the Old West and contains numerous historic shrines which deserve the attention of the passing traveler.

The north approach, from Yellowstone Park by United States Highway 87 West, passes over the Continental Divide just a few miles south of West

The Teton Mountains from a small island in Jackson Lake.

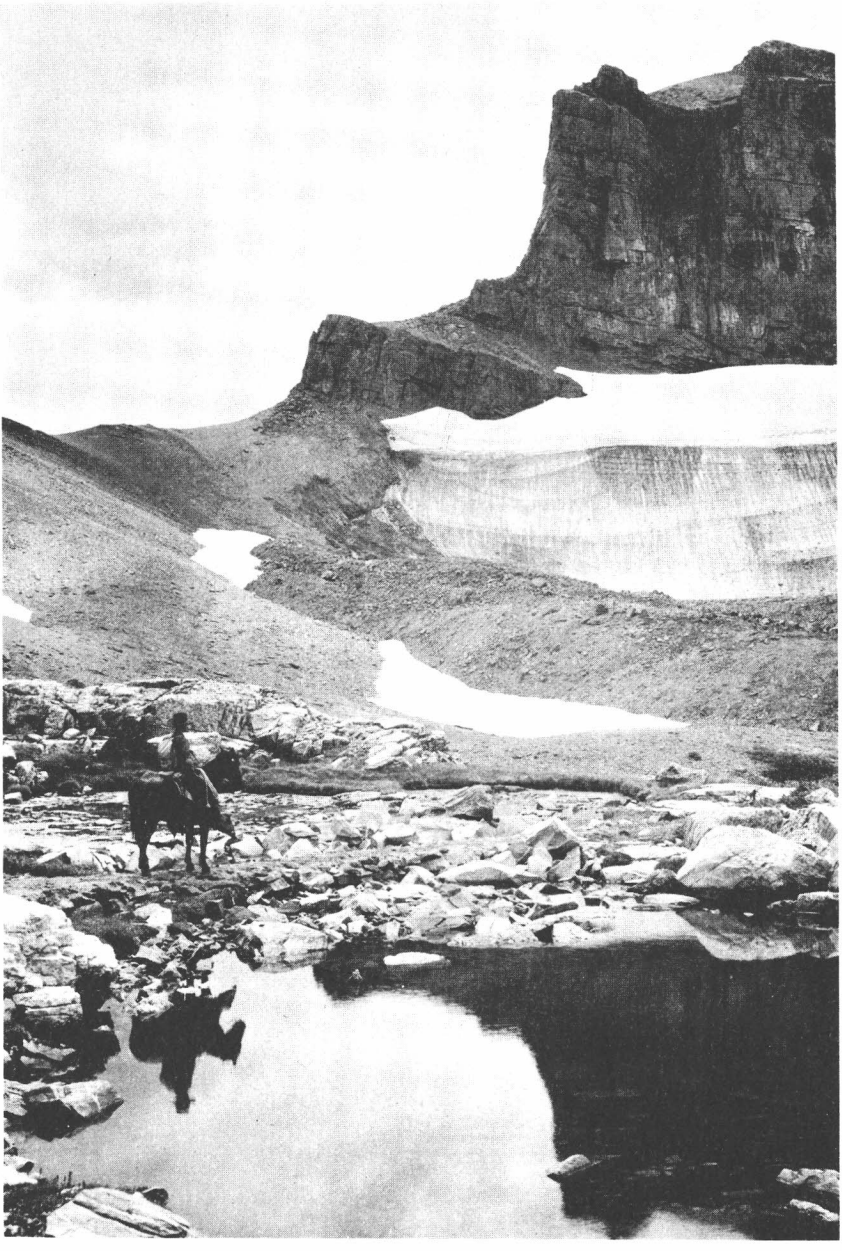
Thumb, and in leaving the Yellowstone Plateau follows the course of Lewis River. In the dense forests along this wilderness stream there are exceptional opportunities to see big game such as elk, deer, moose, and bears. Descending into Jackson Hole the highway skirts the east shore of Jackson Lake, and the view of the distant Tetons, rising from the far shore of the lake, is one the traveler will not soon forget. At this distance they glisten in delicate blue and white, so sharp they seem actually to bristle.

The west approach, from Salt Lake City and points farther west, leaves United States Highway 91 to 191 at Idaho Falls, Sugar City, or Ashton, Idaho, as most convenient, traverses historic Teton Basin, the "Pierres

Hole" of the early trappers, and passes over Teton Pass, elevation 8,429 feet, to the town of Jackson, which lies in the south end of Jackson Hole about 15 miles south of Teton Park headquarters. This approach is the only one from which the Three Tetons, noted landmarks of a century ago, stand out prominently, and the view of this trio is highly impressive. No less spectacular is the panorama of Jackson Hole revealed as one reaches the summit of Teton Pass. Undoubtedly the Teton Pass view is the finest to be had of this basin from any point on the highways.

The south approach, from Evanston, Kemmerer, Rock Springs, and other towns in southern Wyoming, follows United States Highway 187 or Wyoming Highway 287, and avoids all high mountain passes, entering Jackson Hole by way of the Hoback Canyon. This road does not open up glimpses of the Tetons until one is well into Jackson Hole, but it affords excellent views of the snow-clad Wind River Range; and strung along its course is a series of interesting monuments marking such historic spots as the site of Fort Bonneville, founded in 1832; the location of the fur trappers' rendezvous of 1824; the grave of John Hoback, guide to the early expedition known as "the Astorians"; and similar interesting places. At a point called "Names Hill", between Kemmerer and Tulsa, Wyo., can be seen names and dates as old as the 1820's carved in sandstone by the early trappers and travelers in this region.

The east approach, from the Black Hills, Casper, Cheyenne, Denver, and points farther east, crosses the Wind River Range into Jackson Hole over the Continental Divide at Togwotee Pass, on United States Highway 87 West. If so desired, in driving from Casper to Riverton one can choose the modern road which retraces part of the Oregon Trail, past such famous landmarks on the old trail as Independence Rock, Devils Gate, Muddy Gap, Whiskey Gap, and Split Rock. From Lander or Riverton a visit to the Shoshone Indian Reservation can be made with little increase of mileage. The approach to Togwotee Pass from either side is surpassingly fine, and the view of the Tetons from points just west of this pass is one of the finest obtainable. For boldness and jaggedness of skyline the Tetons thus seen from a distance of 40 miles have no rival anywhere.



Limestone Cliff reflected in pool.

BIBLIOGRAPHY

GENERAL, DESCRIPTIVE

ALBRIGHT, HORACE M., and TAYLOR, FRANK J. Oh, Ranger! A book about the national parks. Illustrated.

BURT, STRUTHERS. Diary of a Dude Wrangler. Charles Scribner's Sons, 1924. 331 pages.

FRYXELL, FRITIOF. The Grand Tetons, Our National Park of Matterhorns. American Forests and Forest Life, National Parks Number (August 1929). Pages 453–456.

WISTER, OWEN. The Virginian. MacMillan Co., 1902. 506 pages. (The setting for portions of this famous novel is taken from the Teton-Jackson Hole region.)

YARD, ROBERT STERLING. The Book of our National Parks. Charles Scribner's Sons, 1928. Illustrated. The Tetons on pages 227–228.

HISTORICAL

CHITTENDEN, BRIG. GEN. HIRAM MARTIN. The Yellowstone National Park. Stanford University Press, 1933 (Fourth Edition). Illustrated. 286 pages. The standard history of the Yellowstone region.

COUTANT, C. G. History of Wyoming. Volume I. Laramie, Wyo., 1899. 712 pages. (This volume, the only one issued, contains scattered references to the region.)

FRYXELL, FRITIOF. The Story of Deadman's Bar. Annals of Wyoming, volume 5 (June 1929). Pages 128–148.

IRVING, WASHINGTON. Astoria, or Anecdotes of an Enterprise Beyond the Rocky Mountains. New York, 1836. (This classic work contains the earliest known use of the name "Tetons.")

——— Adventures of Captain Bonneville. New York, 1837. (An important early work containing many references to the region.)

JACKSON, WILLIAM H. The Pioneer Photographer. World Book Co., 1929. The Tetons on pages 123–141. 314 pages. (An account of the Hayden surveys in the Teton region.)

——— Address Regarding the First Photographing of the Tetons. Prepared for the Dedication of the Grand Teton National Park. Annals of Wyoming, volume 6 (July–October 1929). Pages 189–191.

VINTON, STALLO. John Colter, Discoverer of Yellowstone Park. Edward Eberstadt, publisher, 1926. 114 pages. (Ch. II, pp. 43–63, is a discussion of the probable crossing of the Teton Range by John Colter in 1807.)

SCIENTIFIC

ALDEN, WILLIAM C. The Mountain That Made a Lake. Travel, volume 47 (July 1926). Pages 20–21, 45.

——— Landslide and Flood at Gros Ventre, Wyo. Am. Inst. Min. Eng., New York, 1928. 14 pages.

BLACKWELDER, ELIOT. The Gros Ventre Slide, an Active Earth Flow. Bulletin, Geological Society of America, volume 23 (1912). Pages 487–492.

——— Post-Cretaceous History of the Mountains of Central Western Wyoming. Journal of Geology, volume 23 (1915). Pages 97–117, 193–217.

BRADLEY, FRANK H. (Geological.) Report of Snake River Division. In Sixth Annual Report of the U.S. Geological Survey of the Territories (Hayden Surveys of 1872). Washington, 1873. Pages 217–223, 261–271.

BRANDEGEE, T. C. Teton Forest Reserve. In Nineteenth Annual Report, U.S. Geological Survey (for 1898), part V, Washington, 1899. Pages 191–212.

CAREY, MERRITT. Life Zone Investigations in Wyoming. North American Fauna No. 42, Biological Survey, U.S. Department of Agriculture. Washington, 1917. 95 pages.

FRYXELL, FRITIOF. Glacial Features of Jackson Hole, Wyo. Published by Augustana College, Rock Island, Ill., 1930. Illustrated. 128 pages.

IDDINGS, J. P., and WEED, W. H. Descriptive Geology of the Northern End of the Teton Range. Chapter IV (pp. 149–164) of Monograph XXXII, part II, Geology of the Yellowstone National Park. U.S. Geological Survey, Washington, 1899. 893 pages.

PREBLE, EDWARD A. Report on Condition of Elk in Jackson Hole, Wyo., in 1911. Bulletin No. 40, Biological Survey, U.S. Department of Agriculture, Washington, 1911. 23 pages.

SHELDON, CHARLES. The Conservation of the Elk of Jackson Hole, Wyo. Elk Commission Report. Washington, 1927. 36 pages.

ST. JOHN, ORESTES. Report of the Geological Field Work of the Teton Division. In Eleventh Annual Report of the U.S. Geological Survey of the Territories (Hayden Surveys of 1877). Washington, 1879. Pages 321–508.

MOUNTAINEERING

The mountaineering literature on the Teton Range is voluminous and only a few references are cited here. For other articles see the files of Trail and Timberline, Bulletin of the Sierra Club, Appalachia, American Alpine Journal, Canadian Alpine Journal, etc.

ELLINGWOOD, A. R. Our American Matterhorn. Outdoor Life, volume 54 (1924). Pages 181–186.

FRYXELL, FRITIOF. The Teton Peaks and Their Ascents. Crandall Studios, Jenny Lake, Wyo., 1932. 106 pages. Illustrated (including map). (A history of mountaineering in the Tetons up to 1931, inclusive. Summarizes the known routes up each peak. Bibliography.)

——— The Ascent of Mount Owen. American Alpine Journal, 1931, pages 320–326.

HENDERSON, KENNETH A. The Grand Teton. American Alpine Journal, 1930. Pages 138–139.

OWEN, WILLIAM O. Ascent of the Grand Teton. Outing, volume 38 (1901). Pages 302–307.

UNDERHILL, ROBERT L. M. The Grand Teton by the East Ridge. The Alpine Journal (London), November 1930. Pages 267–277.

——— Two New Routes Up the Grand Teton. The Canadian Alpine Journal, 1931. Pages 72–86.

GOVERNMENT PUBLICATIONS

Motorist Guide Map. Shows roads, camp grounds, lodges, and hotels, and give condensed information about Grand Teton and Yellowstone national parks. Distributed in the park only. Free.

Recreational Map. Shows Federal and State recreational areas throughout the United States and gives brief descriptions of principal ones. Address Director, National Park Service, Washington, D.C. Free.

National Parks Portfolio. By Robert Sterling Yard. Cloth bound and illustrated with more than 300 pictures of places of outstanding scenic interest. Superintendent of Documents, Washington, D.C. Price, $1.

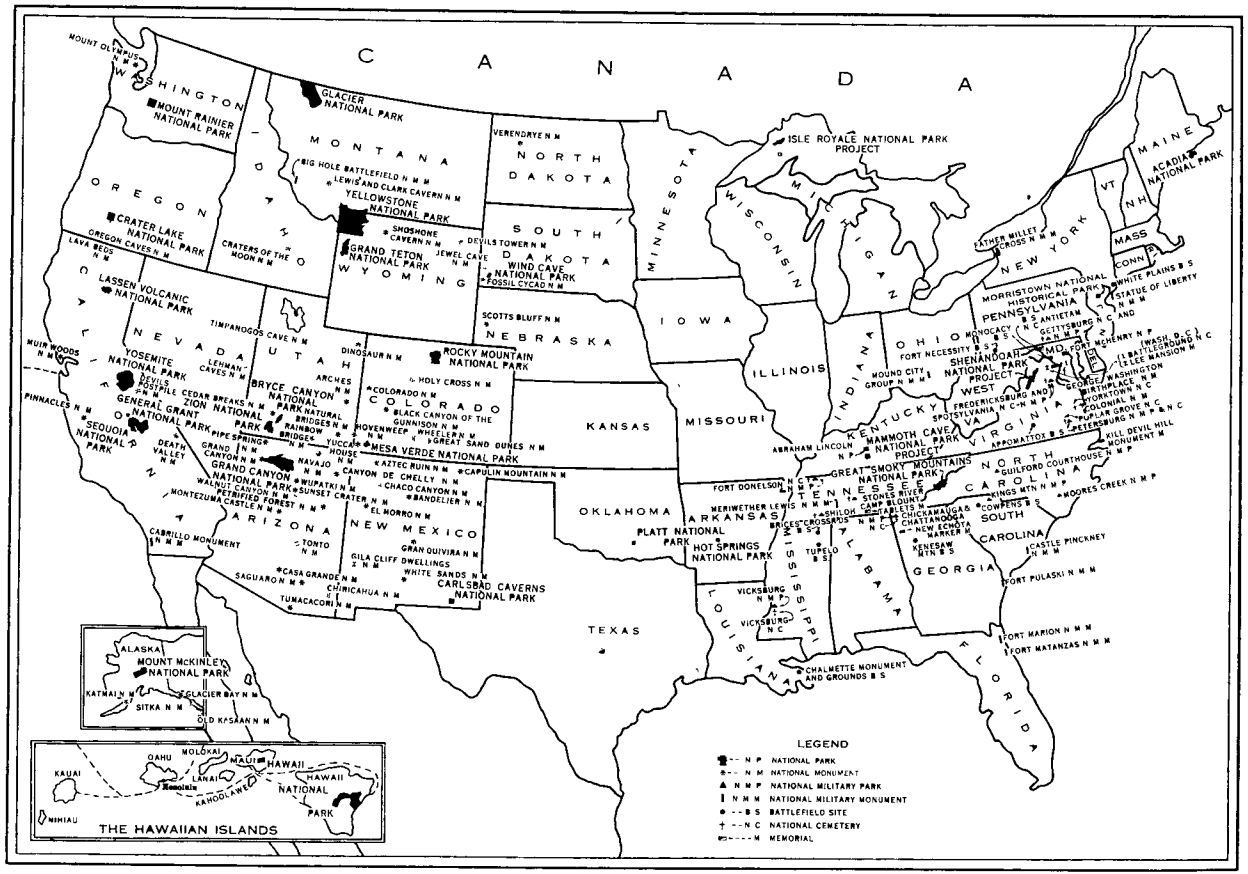
Fauna of the National Parks. By G. M. Wright, J. S. Dixon, and B. H. Thompson. A survey of wildlife with recommendations for adequate protection. Superintendent of Documents, Washington, D.C. Price, 20 cents.

Glimpses of Our National Parks. Brief descriptions of principal national parks. Address Director, National Park Service, Washington, D.C. Free.

Glimpses of Our National Monuments. Address as above. Free.

Illustrated booklets about the following national parks may be obtained free of charge by writing to the National Park Service.

Acadia National Park, Maine
Carlsbad Caverns National Park, New Mexico
Crater Lake National Park, Oregon
General Grant National Park, California
Glacier National Park, Montana
Grand Canyon National Park, Arizona
Great Smoky Mountains National Park, North Carolina-Tennessee
Hawaii National Park, Hawaii
Hot Springs National Park, Arkansas
Lassen Volcanic National Park, California
Mesa Verde National Park, Colorado
Mount McKinley National Park, Alaska
Mount Rainier National Park, Washington
Rocky Mountain National Park, Colorado
Sequoia National Park, California
Wind Cave National Park, South Dakota
Yellowstone National Park, Wyoming-Montana-Idaho
Yosemite National Park, California



LOCATION OF RESERVATIONS ADMINISTERED BY THE NATIONAL PARK SERVICE