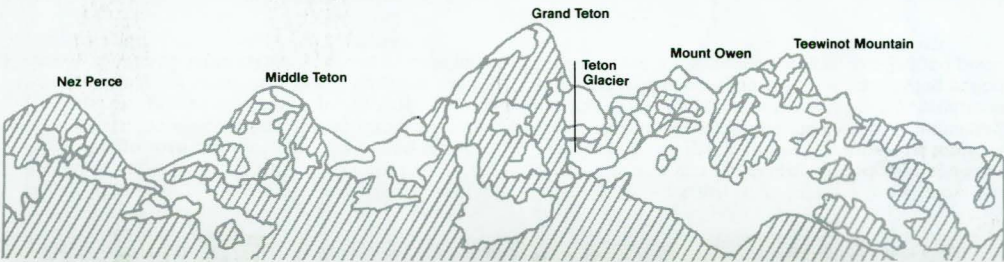


Grand Teton

Official Map and Guide

Grand Teton National Park
Wyoming
National Park Service
U.S. Department of the Interior

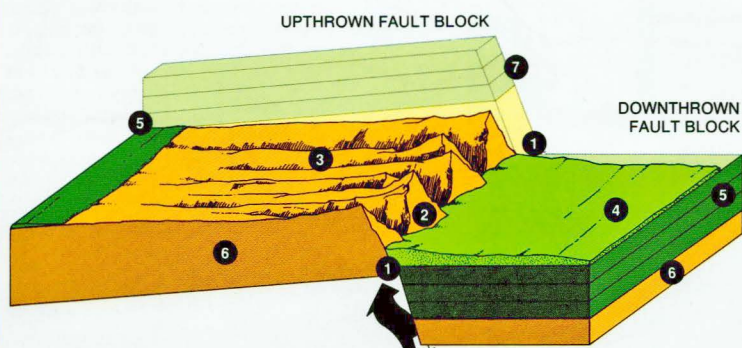


The Rising Range

Rocky Mountain scenery offers dramatic vistas but few more impressive than the Teton skyline. As the Teton Range rose through sporadic earthquake-producing jolts, the valley called Jackson Hole subsided. Because of the way the mountains formed, no foot-hills hide jagged peaks and broad canyons. At the base of the range, large lakes mirror the mountains on calm summer days, doubling their prominence.

During the immense span of time before the mountains' rise, vast seas repeatedly advanced and retreated, leaving behind a thick, nearly flat blanket of sedimentary rock layers. Between 60 and 70 million years ago ancestral mountains rose here as a broad, northwest-trending arch, and the last seas retreated eastward. Jackson Hole east of the arch became the site of enormous sheets of gravel interspersed with thick volcanic ash, lava, and freshwater lake sediments. Enormous tensional faults fractured these formations, and 9 million years ago today's Teton Range started rising. Broken sedimentary layers of ancient sandstone, shale, dolomite, and limestone still cap each end and the west side of the range. The sandstone remnant atop Mount Moran, over 6,000 feet above the valley, once connected to the same sandstone layer that now lies an estimated 24,000 feet below the valley floor block resulting from the faulting process that created these mountains.

In addition to this great displacement along the Teton fault, the central peaks were thrust even higher, along fault zones within the range. Wind, water, ice, and glaciers long ago stripped sedimentary layers off the central peaks, uncovering basement rock nearly as old as the Earth itself. Resistant granite, sculpted into



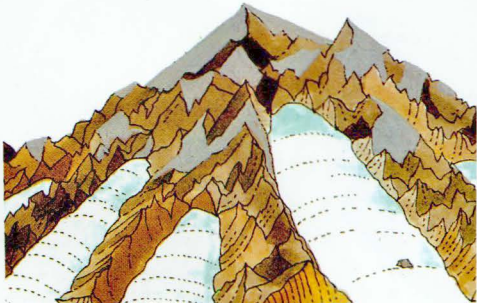
- 1 Teton Fault Zone
- 2 Steep eastern face
- 3 Gentle western slope
- 4 Valley floors filled with sediments of cobbles, gravel, and sand.
- 5 Sedimentary rock layers
- 6 Bedrock
- 7 Sedimentary rock layers now worn away; these matched layers 5.

the Grand Teton and adjacent peaks, lowers as the central range's exposed core.

Cascading water initially cut steep, V-shaped gorges throughout the rising range. Changes in the Earth's climate caused long periods when snowfall exceeded



melting, precipitating glaciers in sizes beyond imagination. Glaciers advanced, and in warmer times receded, in mountain gorges and cut across the floor of Jackson Hole. Southward-flowing ice more than 3,000 feet thick filled the valley, overriding buttes and surrounding mountains. Only the high Teton peaks protruded through engulfing ice. Mountain glaciers, particularly during the last Ice Age, widened steep gorges into broad, U-shaped canyons.



Jeff Foot

determine vegetation, which in turn controls the variety, abundance, and distribution of wildlife.

At upper elevations a dozen smaller glaciers slowly flow from the cirques cut by Ice Age giants. Schoolroom Glacier, so named for its easily observable classic characteristics, represents but one page of the living textbook that includes the accessible rock of the Teton Range, Jackson Hole, and adjoining features. This rock offers the most complete geologic record in North America. Future events will include infrequent earthquakes that signal movement along the fault zone as the Teton Range continues to rise, and Jackson Hole drops down. Wind, water, and ice will sculpt ancient rock into a different, but no less impressive skyline.

Wayside exhibits at many turnouts along main park roads identify major peaks and explain natural features. Turnouts also ensure safe parking for viewing and photographing the mountain scene.

Teton Science School, located within the park, offers in-depth instruction for all ages, year-round. Topics of study relate to the Teton Range and Jackson Hole. Courses in natural history and ecology stress field study supplemented by informal lectures. Summer seminars last three to five days and usually cover geology, plants, animals, birds, and photography. For information and schedules, write to the Director, Teton Science School, P.O. Box 68, Kelly, WY 83011, or call 307-733-4765.

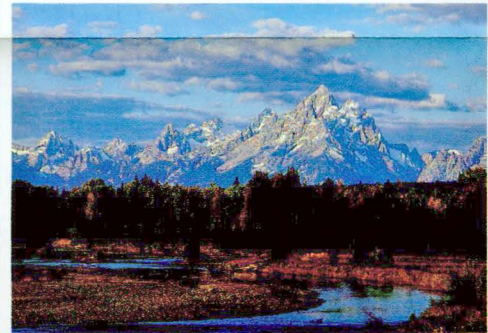
Publications on sale at visitor centers include the official national park handbook, *Grand Teton*, and the publications: *Creation of the Teton Landscape*, *From Trapper to Tourist*, and *Teton Trails*. For a complete list of books and maps, write to: Grand Teton National Park Association, P.O. Drawer 170, Moose, WY 83012. Earnings from this nonprofit corporation support the park's interpretive efforts. *Twain*, the free park newspaper, offers current information on a host of subjects, including natural history, camping, and self-guiding trails. *Twain* also contains a comprehensive list of concession services, notably lodging, restaurants, stores, gas stations, and mountaineering and float trip services.

Along the Snake

The Snake River originates in the wilderness near the south boundary of Yellowstone and meanders into Jackson Lake. The Snake River flows out of the lake through Jackson Lake dam, then runs eastward past Oxbow Bend. The slow-moving water of Oxbow Bend, a cut-off meander of the Snake River, provides rich habitat for a diverse array of wildlife including herons, waterfowl, pelicans, muskrats, beavers, river otters, and moose. At Moran Junction the river turns abruptly southwest and flows down the broadened bed of the ancestral Snake, which diagonally bisects Jackson Hole. Today's river erodes with a fraction of its original force.

From Jackson Lake the Snake winds in braided channels for 27 miles within the park. Slower moving water in side channels ensures essential habitat for numerous aquatic animals and plants. Beavers, river otters, and trout swim by moose feeding on aquatic plants. Native Snake River cutthroat trout depend on the park's natural aquatic system for survival. Trout consume aquatic insects and small fish. Bald eagles, ospreys, and others in turn feed on the trout.

Along the river, willows thrive among tall cottonwood, spruce, and occasional aspen trees. Moose browse on shrubs and trees that line the river's banks. Beavers eat the inner bark of willows, aspens, and cottonwoods



Jeff Gnass

and weave branches into lodges and dams along side channels. In the summer the riverbottom teems with diving, wading, and woodland birds, while elk graze in wet meadows. During darkness owls and other predators hunt in this riparian ecosystem.

Born of wilderness snowpack, the Snake River swells with meltwater. Trappers and settlers called it the Mad River, as it was more than a challenge to cross during the spring. Today's challenge is to protect this powerful life-supporting river as it flows through the park and as it winds westward to the Pacific Ocean.



Moose browse on willows along rivers and streams. When bulls raise their heads while feeding on underwater aquatic plants in ponds, water pours off their palm-shaped antlers. Killdeer feed in wet areas. They nest on gravel where camouflage conceals their eggs.

At right, top to bottom, yellow-bellied marmot, coyote, and pronghorn are inset into Mt. Moran and a meadow of balsamroot.

Trails

Self-guiding trails provide insight into the story behind the scenery. Booklets available at each trailhead describe prominent features bordering the 2-mile Colter Bay Nature Trail and the 3-mile Taggart Lake Trail and discuss history along the 1/2-mile Menor's Ferry and the 1/2-mile Cunningham Cabin Trail. Trailhead locations are shown on the park map. The Cascade Canyon trail begins at the south end of Jenny Lake, and the booklet explains natural features up to Lake Solitude, 9 miles from the trailhead.

Trails traverse the valley and mountains for more than 200 miles. They provide access to backcountry lakes, streams, canyons, and camping zones. Trail difficulty levels range from easy to strenuous, and lengths vary from hikes of a few minutes to several days.

Visitors who take the time to hike mountain trails discover the magnitude and hidden qualities of the peaks and canyons. The Teton Crest Trail runs from the south boundary of the park to Paintbrush Canyon. It offers extensive views of the range and distant land. Visitors unaccustomed to high elevations may descend to the Crest Trail from the top of the tram at Teton Village. Rewarding trails in Granite, Death, and Cascade Canyons connect the Crest Trail to the Valley Trail.

Wildlife

The geologic forces and natural systems that interact to produce inspiring scenery also nurture a remarkable diversity of animals. Despite a short growing season, the Greater Yellowstone Ecosystem supports the largest elk herd remaining in the world. About 4,000 summer in Grand Teton. A small herd of bison also summers in the park and winters on the National Elk Refuge. Moose meander beside canyon streams during warm weather but seek protection from frigid winds in valley bottomlands. Seldom seen black bears, and an occasional grizzly, forage in canyons and woodlands to store body fat for winter sleep.

Bald eagles and ospreys fish and nest along the Snake River. Several eagles endure the cold months. Each spring great blue herons return to their rookeries. Trumpeter swans, the largest North American waterfowl, build sizable pond-level nests; when ice prevails they depend on warm springs in the region. Beavers dam streams to create ponds that benefit Canada geese, mallards, cinnamon teal, and a multitude of summer and migratory waterfowl.

The Greater Yellowstone Ecosystem, which includes the Teton Range and Jackson Hole, remains as the largest essentially intact natural area in the contiguous United States. Evergreen forests and wild rivers abound. Elk, bison, bears, eagles, and swans that once thrived nationwide now survive on this island of hope. They symbolize the remaining wilderness. Their survival and the ecosystem that supports them will mean much to future generations.

Wildflowers in an amazing variety and profusion bloom through the warm months. Sagebrush buttercups follow receding snowpack. Spring beauties, yellowbells, and steershead blossom closely behind, growing close to the ground for protection from late snowstorms or frost. Brilliant color covers the valley floor during late June, the peak of the wildflower



Wildflowers, Pat O'Hara

Where to Watch Wildlife

	Elk	Moose	Mule deer	Black bear	Bighorn sheep	Bison	Pronghorn	Coyote
Willow Flats and Oxbow Bend	●	●	●	●	●	●	●	●
River bottomlands and pond areas	●	●	●	●	●	●	●	●
Sagebrush flats	●	●	●	●	●	●	●	●
Along Teton Park Road	●	●	●	●	●	●	●	●
Wooded slopes	●	●	●	●	●	●	●	●
Mountain canyons	●	●	●	●	●	●	●	●
Alpine areas	●	●	●	●	●	●	●	●

Early morning and evenings are best times to see many species.

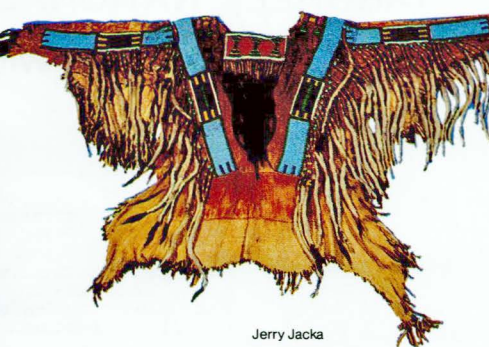
History

People entered Jackson Hole an estimated 12,000 years ago. Archeological evidence indicates that small groups hunted and gathered plants in the valley from 5,000 to 500 years before the present. During historic times no one tribe claimed ownership to Jackson Hole, but Blackfeet, Crow, Gros Ventre, Shoshone, and other Native Americans living on surrounding lands used this neutral valley during the warm months. Severe winters prevented year-round habitation.

John Colter allegedly was the first white man in the valley, entering in the winter of 1807-1808. Mountain



men followed and trapped valley beaver. Brigades of trappers traversed this crossroads of the western fur trade until the era ended about 1840. Valley settlement began in 1884. After 1900, some settlers realized that



Jeff Gnass

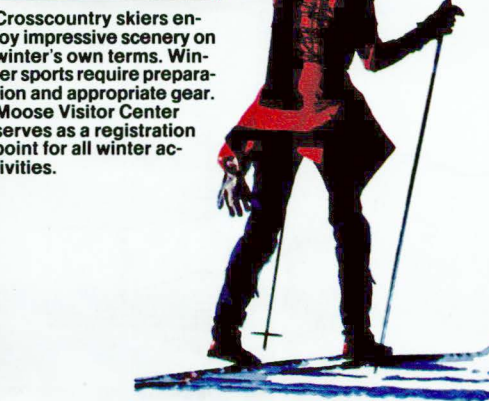
See a fine collection of Native American art at the Colter Bay Visitor Center. Exhibits illustrate the creativity, be-

liefs, and lifestyle of numerous North American nations, especially the Plains Indians.

"dudes winter better than cows" and started dude ranches.

In 1929, much of the Teton Range received protection through the establishment of the park. After years of debate Congress added the Jackson Hole portion in 1950. Prehistoric people came to feed the body. Today's visitors nourish the spirit. Management of the park honors the mandate to protect, for the enjoyment of future generations, the natural systems that produce the scenery and wildlife.

Crosscountry skiers enjoy impressive scenery on winter's own terms. Winter sports require preparation and appropriate gear. Moose Visitor Center serves as a registration point for all winter activities.



Jackie Gilmore

Winter

Winter dominates the Teton country for more than half the year. Deep snows cover the backside of the range. Prevailing winds from the southwest often howl past high peaks. Storm clouds may hide the mountains for days, but, after they pass, cold, clear air permits unsurpassed views. Lower temperatures and avalanche potential make mountain travel risky for those without proper knowledge, skills, and equipment. Crosscountry skis and snowshoes permit safe travel to exceptionally quiet, often windless valley vistas. In central Jackson Hole an average of 4 feet of snow covers sagebrush and fallen trees. Nightly temperatures often fall below -25°F during December and January, but low humidity and the warming sun greatly lessen the effects of the cold. Moose, coyotes, and snowshoe hares make tracks in freshly fallen snow. Seeing them enriches any ski trip.

Moose Visitor Center distributes the map of park ski trails, along with information on weather, avalanche, and road conditions. Plovers clear the main park road, but the roads at the foot of the range, and in Yellowstone, remain closed by snowpack until spring. Also at Moose, rangers provide snowshoes for guided hikes to help visitors appreciate winter in the park.

the Teton Range displays some of North America's oldest rocks.

Photo above by Pat O'Hara

Grand Teton

Grand Teton National Park
Wyoming

National Park Service
U.S. Department of the Interior

Camping Camping is first-come, first-served and is permitted in five campgrounds; fees are charged. Trailers, RVs, and tents are allowed in all campgrounds except Jenny Lake, which only allows tents. Get advance reservations by mail for groups of 10 or more. Backcountry camping is permitted only in designated areas. Permits for backcountry camping are required for all overnight trips. Reservations for backcountry camping are accepted from January through May 15; a service fee is charged.

Water Safety Floating the Snake River within the park is allowed only in hand-propelled boats and rafts but never in inner tubes. Although the Snake may not seem powerful on the surface, only experienced floaters should try this swift, cold river. Motorboats are permitted on Jenny (8 h.p. limit) and Jackson lakes. Hand-propelled craft are permitted on Jackson, Jenny, Emma Matilda, Phelps, Two Ocean, Taggart, Bradley, Bearpaw, Leigh, and String lakes. Sailing, windsurfing, and water skiing are allowed only on Jackson Lake. Permits are required for all craft. Each craft must be registered yearly at the Moose, Colter Bay, or

Flagg Ranch visitor centers or Moran Entrance Station.

Swimming in park waters is generally a cold experience. Shallow areas of Jackson, String, and Leigh lakes have reasonable water temperatures during July and August. There are no lifeguards. Swimming in the Snake River is not recommended. Water in the streams and lakes should not be drunk unless properly treated. Untreated

water may contain *Giardia*, *Campylobacter*, and other harmful organisms. These organisms cause severe gastrointestinal distress. To kill or remove harmful organisms, boil, filter, or treat water before using it.

Wildlife Feeding any wildlife is not allowed. Animals in the park are part of complex and protected natural systems. Let animals find natural foods. Ground squirrels

carry diseases and should never be touched. Larger animals are quick, powerful, and unpredictable. Approaching closely can result in serious injury.

Fishing is allowed in most park lakes and streams. A Wyoming fishing license is required, and may be purchased at the Moose Village Store, Signal Mountain Lodge, and Colter Bay Tackle Shop. Visitor centers have information

on park fishing regulations, bait restrictions, creel limits, and open seasons. Wildflowers are part of the park's natural setting and add a distinctive touch of color to the valley and mountain scenery. Regulations prohibit destruction, injury, disturbance, or removal of public property or natural features including plants, animals, or rocks. Firewood may be collected if the tree is dead and down.

Vehicles Drive only on established roadways and observe all posted speed limits. Use caution when passing bicycles. Dawn and dusk are excellent times to observe wildlife, so watch other drivers for sudden stops. Be sure to pull vehicles well off the road into the paved or gravel turnouts to observe wildlife and scenery or to take photographs. Be alert for animals crossing the roads.

A state snowmobile registration is required. Snowplanes must be registered yearly at the Moose Visitor Center. Snowmobiles are permitted only on designated roads when snow conditions permit. Maps of permitted snowmobile routes are available at Flagg Ranch and Moose Visitor Center.

Pets Pets must be kept on a leash (maximum length six feet) at all

times. Pets are not permitted in public buildings, on trails, in the backcountry, on ranger-led activities, or in visitor centers. They are prohibited in boats on rivers and lakes other than Jackson Lake. Never leave pets unattended, especially not in a vehicle with closed windows. Temperatures can rise quickly, and a pet can die in a short time. Pet regulations are strictly enforced.

Climbing Climbing mountains is a technical sport requiring proper knowledge, experience, physical condition, and equipment. Overnight trips require a backcountry permit. The Jenny Lake Ranger Station is the center for climbing information from June through mid-September. Solo climbing is not advised.

More Information Write: Superintendent, Grand Teton National Park, P.O. Drawer 170, Moose, WY 83012-0170. Our TDD number is 307-739-3400. For trip planning information visit our web site www.nps.gov/grte. Or call us at 307-739-3600.

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Turnout or overlook

Unpaved road

Trail

Glacier / snowfield

Ranger station

Picnic area

Campground

Tent only campground

Food service

Lodging

Gasoline

Store

Marina

Stables

Self-guiding nature trail

Distances are shown between markers.

Do not use this map for backcountry hiking. Buy USGS topographic maps at visitor centers.

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