

Waterton-Glacier

International Peace Park World Heritage Site

Waterton Lakes National Park
Alberta, Canada
Parks Canada



Parks Canada

Glacier National Park
Montana, U.S.A.
National Park Service
U.S. Department of the Interior



"Posterity will bless us." Canada's Minister of Interior wrote this in 1895 when what is now Waterton Lakes National Park was established. Today's visitor to Waterton-Glacier International Peace Park can only marvel at the foresight of those who set aside these national parks when western North America still seemed boundless and wild. Yellowstone became the world's first national park in 1872. The popularity of that first park gave rise to others, including Waterton Lakes in 1895 and Glacier in 1910. Their location, adjoining one another along the International Boundary, led to a further evolution of the park ideal. In 1932 the governments of Canada and the U.S. linked the two parks as the world's first International Peace Park.

This landscape has always been sacred to the Blackfeet, Salish, and Kootenai peoples. It remains no less sacred today for the enduring vision of peace embodied in its unique status. Two countries, two provinces, one state, and the Blackfeet people share common boundaries and stewardship. Together all these groups protect and celebrate one of the most ecologically diverse parts of the Rocky Mountain West.

Waterton-Glacier International Peace Park represents a vision of a world in which peoples set aside their differences to work collectively in the interest of all life, for all time. This sacred place is the living embodiment of hope. Hope lives here in the

recovery of animals such as the wolf and trumpeter swan, eradicated in many other parts of their original North American ranges. Hope lives, too, in the survival here of rare and sensitive creatures such as the grizzly bear, lynx, bull trout, and long-toed salamander. People travel from around the world to renew their spirits in Waterton-Glacier International Peace Park. The global importance of this special place was reaffirmed in the 1970s with the designations of Glacier and Waterton Lakes as Biosphere Reserves. In 1995 the International Peace Park again gained global recognition with its designation as a World Heritage Site.

Waterton Lakes, photo by S. Lunn

A Meeting Place

Old-growth forests, wind-swept prairies, ancient glaciers, and deep lakes may seem worlds apart. But here in Waterton-Glacier International Peace Park plants and animals of the humid Pacific Northwest meet and mingle with those of the great plains and northern forests. In the space of a few miles, visitors can travel from lush cedar/hemlock forest through alpine meadows to the edge of the west-

ern prairies. George Bird Grinnell, co-founder of the Audubon Society and the Boone and Crockett Club, often visited this place where the prairies give way to glacier-sculpted mountains. Grinnell was a tireless advocate both of the interests of native Blackfeet people and for establishment of Glacier National Park. It was Grinnell who aptly named this place the "Crown of the Continent" in 1908.

From Triple Divide Peak, southeast of Logan Pass, a hand's width can determine whether a raindrop becomes part of the Columbia, Mississippi, or Saskatchewan river systems (see the map below). Waters from the International Peace Park flow to the Pacific Ocean, Gulf of Mexico, and northeastward into Hudson Bay. Life also flows into the International Peace Park. A great diversity of plants, from



The International Peace Park was designated as a World Heritage Site in 1995.

devil's clubs and western red cedars to alpine poppies, fescue bunchgrasses, and aspens, combines in a living mosaic of habitats richer than almost anywhere else in the Rocky Mountains. One of the few areas in North America where grizzly bears still live at peace with humans, this is also a place where wolves, once persecuted close to extinction in this region, found peace and safety when they



In the 1970s Glacier and Waterton Lakes national parks were named Biosphere Reserves.

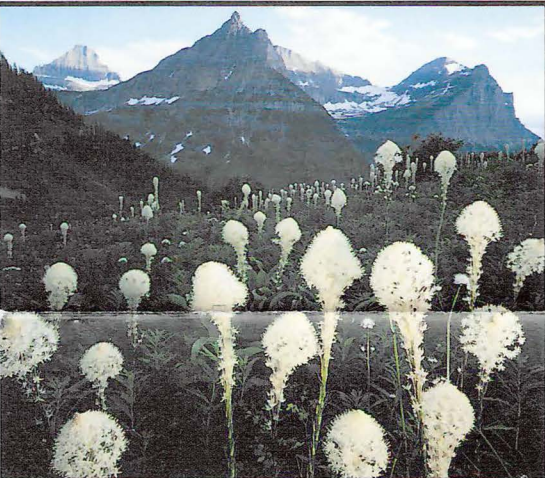
crossed the 49th parallel back into Glacier National Park to begin reclaiming their wilderness birthright.

People come to this meeting place from around the world. Here they find peace among the peaks and savor scenery that was carved by glaciers from some of the world's oldest sedimentary rocks. Many nations meet here in a spectacular land-



The two national parks were named an international Peace Park by the United States and Canada in 1932.

scape that continues to inspire each new generation with the ideal of living peace—between nations, among people, and with all of nature.



Beargrass

Plants From Diverse Environments Mix

The mountain landscape holds a diverse mosaic of plants. Sunny hillsides are warm and dry; shady slopes cool and moist. Valley floors accumulate deep soils, but mountain ridges are bony and raw. Shale weathers into clay soils. Limestone breaks into coarse fragments.

More than 1,200 vascular plant species are found within the International Peace Park. Ones with similar physical requirements grow near each other: wintergreen and feather mosses prefer the shade of old-growth

cedar or Douglas fir forest. Many plants grow elsewhere, too, but how they form communities here with others normally living in very different environments is unique.

Here, fescue grassland, usually found in the high plains east of the Rockies, grows on mountain-tops where prairie plants mix with alpine flowers. Lush but thorny devil's club, a wet-forest plant, grows here just a half-day's hike from grassy ridges crowned with limber pine.



Grizzly female and cub

All the Native Carnivores Survive Here

The International Peace Park is one of the few places in North America where all the native carnivores survive. Grizzly and black bears forage amid the greenery along streams and avalanche slopes or fatten on huckleberries or saskatoons.

In 1986 wolves denned in the North Fork of the Flathead River for the first time in 50 years and now range both parks and surrounding landscapes. They hunt elk and deer, especially as they gather in the valleys for winter. Cougars, too, are widespread, mostly

at low elevations. Large predators indicate a healthy landscape with abundant prey, intact habitats, and tolerant people.

Bear tracks and wolf howls offer us all hope and inspiration. So do the more than 250 kinds of birds—bald and golden eagles, harlequin ducks and rufous hummingbirds—and the 70 species of mammals that dwell in the International Peace Park. Native bull and cutthroat trout are among more than 25 kinds of native fish.



Blackfeet at Atlantic Falls, 1914

To Share and Sustain the Ecosystem

Native people have gathered plants and hunted in these mountains for thousands of years. Traditional cultural activities remain important to the Blackfeet, whose reservation lies along the east side of Glacier National Park. Waterton Lakes National Park, in Canada, nearly surrounds a wilderness portion of the Blood Indian Reserve.

In the past century other groups have developed deep bonds to the land, too. Many ranches here have been owned by the same families for four generations. And ranch-

ing keeps land next to the International Peace Park rural and lightly settled, helping to sustain wildlife and open space. Residents of area towns work in the forest or oil and gas industries. Many people find employment serving those who visit the parks each year.

Visitors to this place become part of a human community that shares, and works to sustain, the rich ecosystem that gives it life.



Powerful forces in the Earth shoved the colorful rock of the Lewis Overthrust into the sky 75 million years ago. The young mountains intercepted clouds. Rain and snowmelt fed streams draining into three major river systems, and living things found their way up into these mountains from all directions. The Crown of the Continent trapped so much moisture that, in time, snowfields became glaciers. Growing and spreading, glaciers carved the landscape we see today. About 12,000 years ago the last of those great glaciers melted back. Today's younger glacier ice survives in only the highest, coldest places.

For thousands of years fire and water have been the dominant forces at play on this

landscape. Streams flood and ebb each year. Avalanches thunder down steep slopes. Lightning ignites forest fires and, not so very long ago, aboriginal hunters lit grass fires. These are dynamic ecosystems—wild and diverse.

In 1995 the Waterton-Glacier International Peace Park gained recognition as a World Heritage Site, one of the great treasures of the world. Ancient rocks scratch the passing clouds here, grizzly bears dig roots on windswept slopes, mighty bull trout swim up the clear-running spawning streams, and thousands of visitors return each year to refill themselves with awe, inspiration, and the peace that lives in this place.

Plains and Mountains Together

Seen from the east, the mountains here seem to rise right out of prairie grasslands like a startled grizzly in a berry patch. Farther north, a band of low foothills provides a gradual transition from plains to mountains. To the south, the outlying mountain ranges break up the approach. But in the blink of an eagle's eye here, nearly flat becomes nearly vertical.

Hikers on the Carthew-Alderson, Redgap Pass, and Two Medicine Pass trails climb through the resin-scented mountain forests of Engelmann

spruce and subalpine fir. Emerging into a meadow at treeline, they look east and see prairie almost at their feet. Few mountain landscapes can offer such contrast.

This abrupt transition from prairie to sheltering mountain forests is one reason why the International Peace Park supports such large herds of elk, deer, bighorn sheep, and other herbivores as well as many black and grizzly bears.

Converging Ecosystems

No protected area of similar size in the Rocky Mountains has as much ecological diversity as the International Peace Park. Here at the Crown of the Continent, ecosystems from north, south, east, and west converge at the most narrow point in the Rocky Mountain chain. Other ecosystems connect to this area along mountain ridges and hill systems extending north and south.

Watersheds converge here, too, encouraging the migration and dispersal of plants and animals. Cutbank Creek

and the Two Medicine River drain east into the Missouri River, connecting the parks to plants and animals of the Mississippi drainage and Gulf of Mexico. Farther north the St. Mary, Belly, and Waterton rivers flow into the Saskatchewan River system across Canada's plains to the northern forests of the Hudson Bay drainage.

West of the Continental Divide, the headwaters of the Flathead River eventually join the mighty Columbia.

Where Even the Landscapes Have Met

Movement on the Lewis Overthrust Fault has accounted for both the sudden mountain-to-plains transition and the Rocky Mountains' narrow width here—barely 35 miles (60 km).

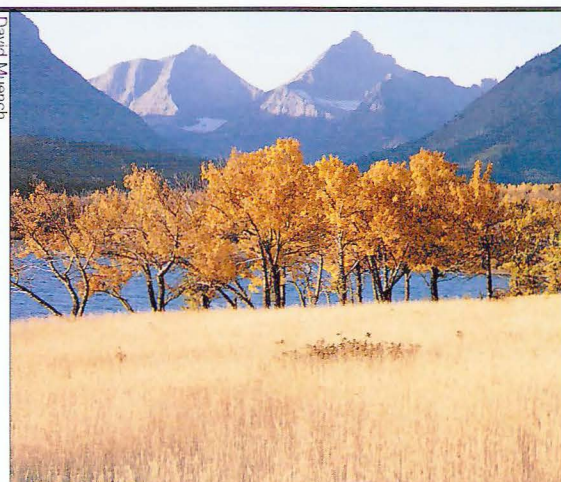
Massive Earth forces built the Rocky Mountains by uplifting, folding, and faulting beds of rock that formerly lay in flat, parallel layers. About 75 million years ago a vast expanse of rock some 60 miles (100 km) west of here cracked, lifted, and began to slide east. By the time this thrust block stopped traveling it had

become the mountains of today's International Peace Park.

The red and green argillites and pale limestones of the Lewis Overthrust are ancient rock. They began as mud and sediments 1.5 billion years ago in Precambrian oceans. Normally, older rock will lie beneath younger rock. However, here, the Lewis Overthrust forced ancient Precambrian rock over top of Cretaceous rocks that are just 75 million years old.



Bison on glaciated plains next to the mountains



Autumn colors beside St. Mary Lake



Ancient seafloor ripples reach for a summit

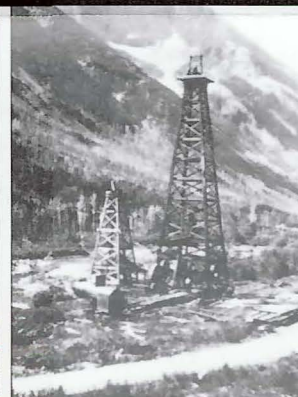
Uses of the Land Through Time



Blackfeet

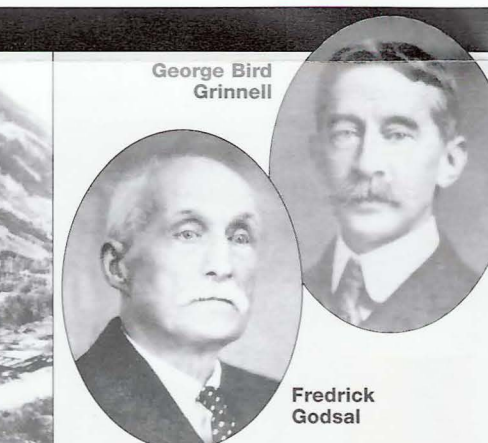
Native peoples have lived here for millennia. Modern roads and hiking trails now trace the routes they used over the Rocky Mountains. Campgrounds and visitor facilities now stand where they camped while gathering plants

and hunting animals. European colonization of western North America replaced traditional ways with successive waves of change. Trappers exploited the region's furs in the early 1800s. Gold and silver brought prospectors



Discovery oil well, Alberta

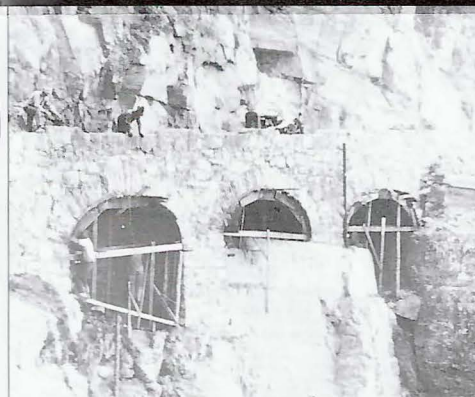
into the Rockies in the last half of the 19th century. Some found promising signs of oil in what is today the International Peace Park, but the brief oil boom died out quickly. Between 1857 and 1874, boundary surveys clearly defined the



49th parallel to head off future conflict between Canada and the U.S.A. Surveyors put their names on many peaks and mountain lakes. As ranchers and farmers laid claim to the surrounding lands, a growing number of visitors

discovered the beauty of the high Rockies. The Great Northern Railway, built in 1892 through Marias Pass, opened the region's beauties to discovery by tourists.

A few frontier visionaries like Canadian ranch-



Building Going-to-the-Sun Road

er Fredrick Godsal and George Bird Grinnell saw the need to protect the area's wildlife from

exploitation and its natural scenic beauty from piecemeal development. Their lobbying led to



Predator control, mountain lions

creation of national parks in Canada (1895) and the United States (1910). The great experiment embodied in the national park ideal continues to evolve. In early days, rangers and wardens killed predators. New roads and lodges

were thought essential to make parks relevant in a West largely inaccessible at that time. Flooding and wildfire were deemed disasters, not natural events. Today, millions of people come as visitors to this landscape that



Prince of Wales Hotel, Waterton Lakes

wears few lasting signs of those 20th-century changes. As wilderness shrinks in most of the world, park managers now strive to protect wild habitats, control impacts of development, and restore natural processes, like

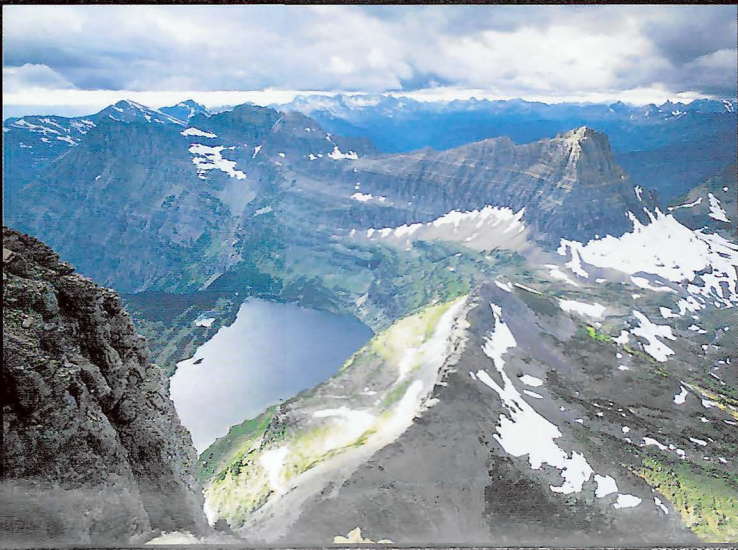
fire, to the landscape. Through all the many changes in how people have used the land, one thing has not changed: this remains one of the world's great places, worthy of special care and lasting respect.

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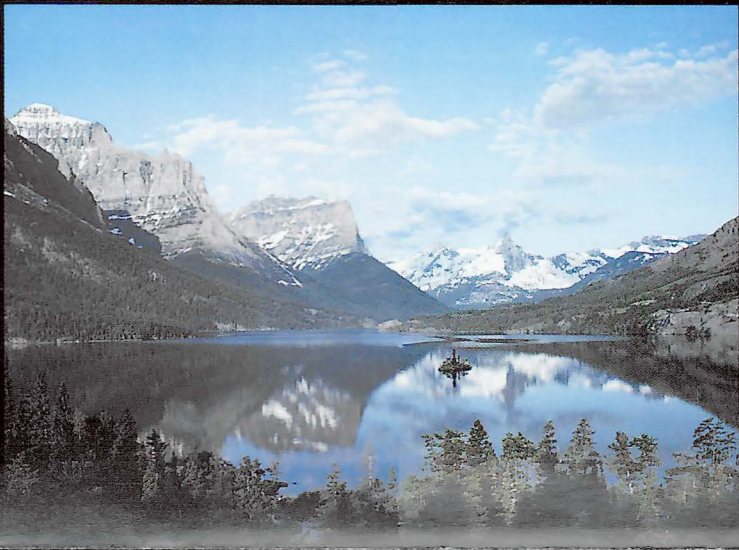
Features of Glaciation



Glaciers that lie against mountains erode ever-steepier cliffs by repeatedly freezing and thawing, plucking rock loose. The moving ice carries the broken rock down-valley. Where glaciers surround a mountain peak they may eventually erode it to a tooth-like horn.



The same back-cutting erosion may carve a mountain ridge as a sharp-edged arête. Many subalpine lakes in the International Peace Park rest in the bottoms of cirques—steep-sided valleys that once held glaciers and now look like they were formed by giant ice cream scoops.



Unlike rivers, glaciers erode wide-bottomed, steep-sided, U-shaped valleys (above). Deep glacial lakes—Waterton, St. Mary, and McDonald—fill the bottoms of some larger glacial valleys. Large glaciers carve deeper valleys than do small glaciers. Where small mountain glaciers once joined a larger valley glacier, hanging valleys (left) remain today.



Eskers (above) are ridges of gravel that were stream beds inside or on the surface of valley glaciers. Like conveyor belts, glaciers carried rock and gravel trapped inside the ice and loose on their surfaces. Hummocky landscapes of glacial moraine also remained behind when glaciers melted back 10,000 to 12,000 years ago.

