

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. Visiting Waterton-Glacier International Peace Park today, you 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. Its popularity quickly gave rise to others, including Waterton Lakes in 1895 and Glacier in 1910. Their location, adjoining one another along the International Boundary, led to further evolution of the park ideal. In 1932 the governments of Canada and the United States 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 of 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 like the wolf and trumpeter swan, eradicated in many other parts of their original North American ranges. Hope lives also in the survival here of rare and sensitive creatures like 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 worldwide recognition when it was designated as a World Heritage Site.

Waterton Lakes
© S. LUNN

A Meeting Place

Old-growth forests, wind-swept prairies, ancient glaciers, and deep lakes may seem worlds apart. But in Waterton-Glacier International Peace Park the 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, you can travel from lush cedar/hemlock forest through alpine

meadows to the edge of western prairies. George Bird Grinnell, co-founder of the Audubon Society and of the Boone and Crockett Club, often visited this place where the prairies give way to glacier-sculpted mountains. Grinnell tirelessly advocated both the interests of native Blackfeet people and 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 map below). Waters from the International Peace Park flow



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

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 devil’s club and western red cedar to alpine poppy, fescue bunchgrass, and aspen, combine in living mosaics of habitats richer than in all but a few Rocky Mountain areas. One of the few areas in North America where



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

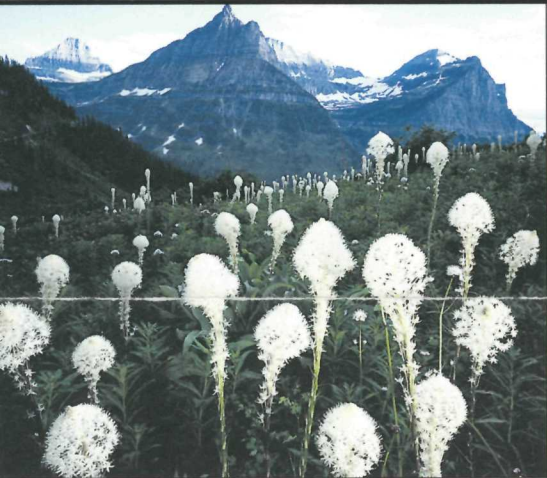


The two national parks were named an International Peace Park by the United States and Canada in 1932.

grizzly bears live at peace with people, this is also a place where wolves, once persecuted close to extinction here, found peace and safety when they crossed the 49th parallel back into Glacier National Park to reclaim 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 in a spectacular landscape here 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.

Over 1,200 vascular plant species are found within the International Peace Park. Ones with similar physical needs 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 other plants normally living in very different environments is unique.

Here fescue grassland, usually found in high plains east of the Rockies, grows on mountaintops 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 valleys for winter. Cougars are widespread too, 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. And so do over 250 kinds of birds—bald and golden eagles, harlequin ducks and rufous hummingbirds—and 70 species of mammals that dwell in the international peace park. Native bull and cutthroat trout are among over 25 species of native fish here.



Blackfeet at Atlantic Falls, 1914

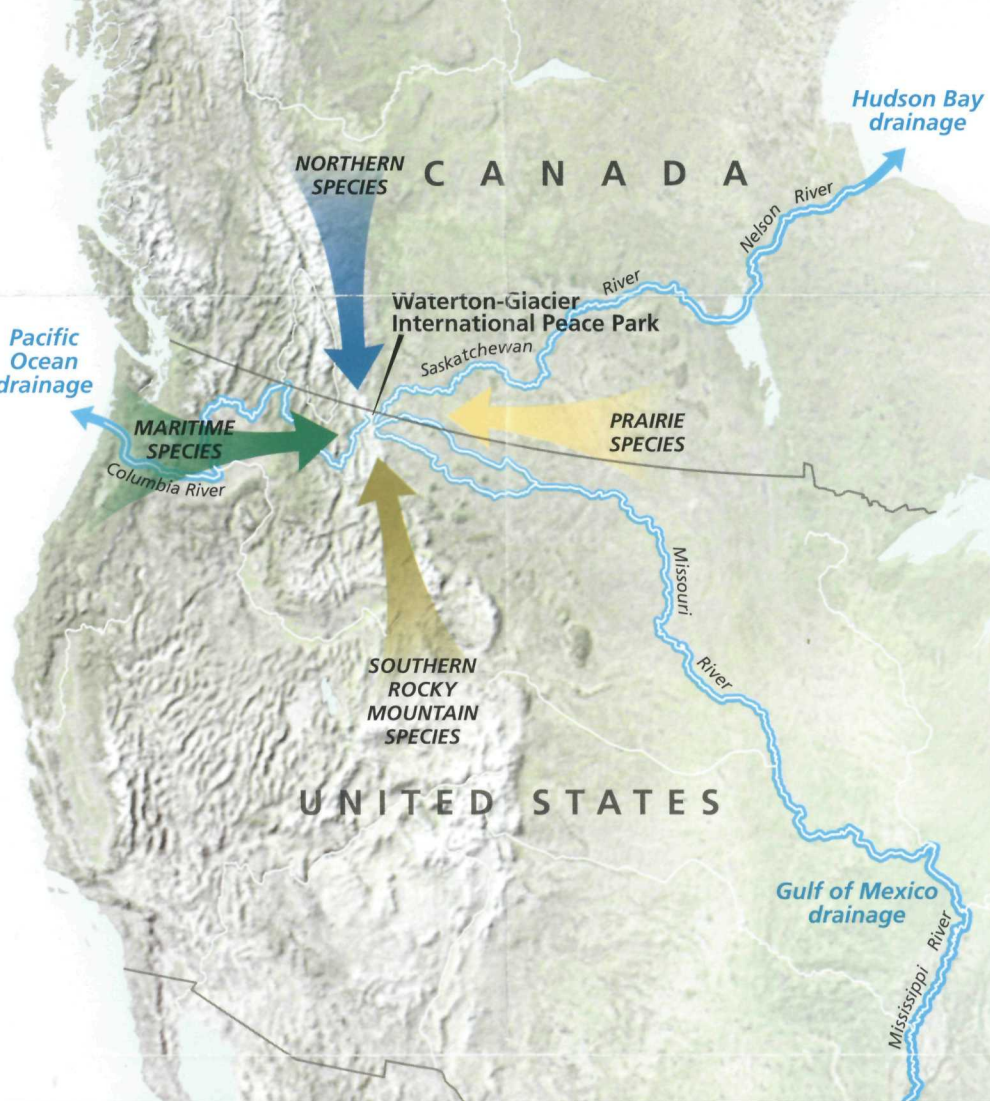
To Share and Sustain the Ecosystem

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.

Since the 1900s other groups have formed deep bonds to the land too. Many ranches here have been owned by the same families for

four generations. And ranching keeps lands 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 work serving those who visit the parks year by year.

Visit this place and you 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 into these mountains from all directions. Over time the Crown of the Continent trapped so much moisture that snowfields became glaciers.

Growing and spreading, glaciers carved today’s landscape. About 12,000 years ago the last of the great glaciers melted back. Today’s younger glacier ice survives only in the highest, coldest places. Now, for thousands of years fire and water

have been dominant forces at play on this landscape. Streams flood and ebb yearly. Avalanches thunder down steep slopes. Lightning sets forest fires, and not so long ago, aboriginal hunters lit grass fires. Here are dynamic ecosystems, diverse and wild.

In 1995 Waterton-Glacier International Peace Park was named a World Heritage Site, one of the world’s great treasures. Ancient rocks scratch passing clouds, grizzly bears dig roots on windswept slopes, mighty bull trout swim up clear-running spawning streams, and people 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 Lakes, Redgap Pass, and Two Medicine Pass trails climb through 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 like size in the Rocky Mountains has as much ecological diversity as the international peace park. At this Crown of the Continent, ecosystems from north, south, east, and west converge at the narrowest 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 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 Saint 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, 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 Saint Mary Lake



Ancient seafloor ripples reach for a summit

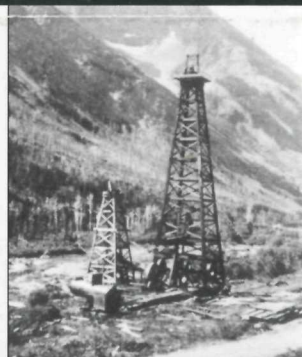
Uses of the Land Through Time



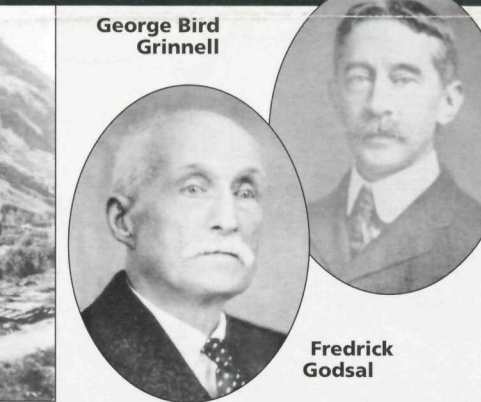
Blackfeet

Native peoples have lived here for millennia. Today’s roads and hiking trails trace their routes over the Rockies. Our campgrounds and other facilities stand where they camped to gather plants and hunt animals.

European colonization of western North America replaced traditional ways with successive waves of change. Trappers exploited furs in the early 1800s. Gold and silver brought prospectors to the Rockies in the last half of



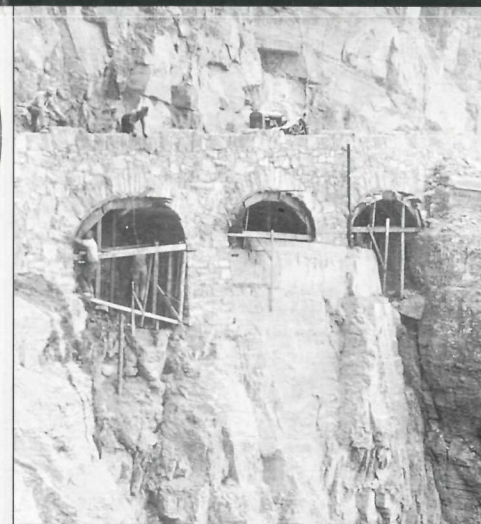
the 1800s. Some found promise of oil in what is now the international peace park, but the brief oil boom died quickly. Between 1857 and 1874, boundary surveys clearly defined the 49th parallel to head off future conflict between Canada



and the United States. Surveyors put their names on many peaks and mountain lakes. As ranchers and farmers laid claim to surrounding lands, a growing number of people discovered the high Rockies’ beauty. The Great Northern

Railway, built in 1892 through Marias Pass, opened the region’s beauty to discovery by tourists.

A few frontier visionaries like Canadian rancher Fredrick Godsall and like George Bird Grinnell saw



Building Going-to-the-Sun Road

the need to protect the wildlife from exploitation and the natural scenic beauty from piece-

meal development. Their work led to creation of national parks in Canada (1895) and the United



Predator control, mountain lions

States (1910). The great experiment embodied in the national park ideal is still evolving. In early days rangers and wardens killed predators. New roads and lodges were seen as essential to make parks relevant in a West largely inacces-

sible then. Flooding and wildfire were deemed disasters, not natural events.

Today millions of people come as visitors to this landscape that wears few lasting signs of those changes in the



Prince of Wales Hotel, Waterton Lakes

1900s. As wilderness shrinks in most of the world, park managers now strive to protect the world’s great places, and restore the natural processes, like fire, to the landscape. Through all the many changes in

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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 once holding glaciers. Cirques look like giant ice cream scoops formed them.



Unlike rivers, glaciers erode wide-bottomed, steep-sided, U-shaped valleys (above). Deep glacial lakes—Waterton, Saint Mary, and McDonald—fill the bottoms of some larger glacial valleys. Where a small mountain glacier 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 stayed behind when glaciers melted back 10,000 to 12,000 years ago.

