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 glaciersculpted 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

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

Waterton-Glacier International Peace Park

STATES

SOUTHERN

ROCKY

MOUNTAIN

SPECIES

Hudson Bay

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

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



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

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 olds a diverse mosaid of plants. Sunny hillsides are warm and dry; shady lopes cool and moist. Valley floors accumulate deep soils, but mountain idges are bony and raw. shale weathers into clay soils. Limestone breaks to coarse fragments.

Over 1,200 vascular plant species are found within the International eace Park. Ones with similar physical needs grow near each other: wintergreen and feather mosses prefer the shade of old-growth cedar o Douglas fir forest. Many

The international peace

places in North America

where all the native car

nivores survive. Grizzly

amid the greenery along

slopes or fatten on huck-

streams and avalanche

and black bears forage

park is one of the few

plants grow elsewhere communities here with other plants normally

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



erries 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

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

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.

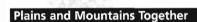
> owerful forces in the Earth shoved the colorful rock of the Lewis Overthrust into the sky 75 million years ago. tains from all directions. Over time the moisture that snowfields became glaciers.

today's landscape. About 12,000 years for thousands of years fire and water

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.

Gulf of Mexico

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.



Seen from the east, the mountains here seem to rise right out of prairie grasslands like a startled rizzly 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 eve here, nearly flat becomes nearly vertical

Hikers on the Carthew-Pass and Two Medicine Pass trails climb through forests of Engelmann

No protected area of

like size in the Rocky

Mountains has as much

ecological diversity as

the international peace

tems from north, south,

east, and west converge

at the narrowest point

in the Rocky Mountain

chain. Other ecosystem

along mountain ridges

and hill systems extend-

connect to this area

ing north and south.

Watersheds converge

here, too, encouraging

of plants and animals. Cutbank Creek and the

migration and dispersal

park. At this Crown of

the Continent, ecosys

Converging Ecosystems

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 shelter is one reason why the international peace park supports such large herds of elk, deer, big horn sheep, and other many black and grizzly

Two Medicine River

drain east into the Mis-

souri River, connecting

the parks to plants and

animals of the Missis-

the Saint Mary, Belly,

and Waterton rivers

sippi drainage and Gulf

of Mexico. Farther north

flow into the Saskatche

wan River system across

Canada's plains to the

northern forests of the

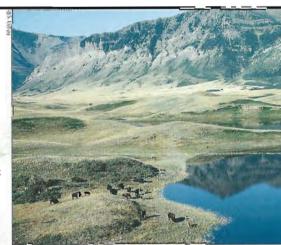
Hudson Bay drainage.

West of the Continental

Divide, headwaters of

the Flathead River even-

tually join the mighty



Bison on graciated plains next to the mountains



Grizzly female and cub

Blackfeet at Atlantic Falls, 1914

To Share and Sustain the Ecosystem

gathered plants and tains for thousands of years. Traditional cultural activities remain mportant to the Blackfeet, whose reservation ies along the east side of Glacier National Park. Waterton Lakes National Park, in Canada, nearly surrounds a wilderness portion of the Blood

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 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

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

The young mountains intercepted clouds. Rain and snowmelt fed streams draining into three major river systems, and living things found their way into these moun-Crown of the Continent trapped so much

Growing and spreading, glaciers carved ago the last of the great glaciers melted back. Today's younger glacier ice survives only in the highest, coldest places. Now,

have been dominant forces at play on this

In 1995 Waterton-Glacier International Peace Park was named a World Heritage

Where Even the Landscapes Have Met

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

Massive Earth forces built the Rocky Mountains by uplifting, fold-ing, 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 be gan to slide east. By the time this thrust block

stopped traveling it had become the mountains of today's international

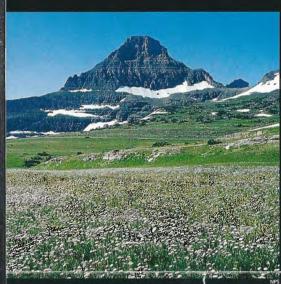
The red and green argil-

lites and pale limestones of the Lewis Overthrust are ancient rock. They began as mud and sedi ments 1.5 billion years ago in Precambrian oceans. Normally, older rock will lie beneath ounger rock. However, here, the Lewis Overthrust forced ancient Precambrian rock over top of Cretaceous rocks that are just 75 million vears old.



Ancient seafloor ripples reach for a summit

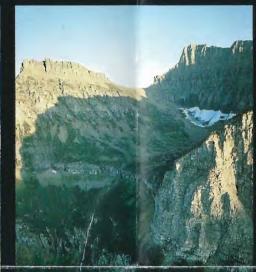
Features of Glaciation



Glaciers that lie against mountains erode ever-steeper cliffs by repeatedly freezing and thawing, plucking rock loose. The moving ice carries the broken rock downvalley. 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.

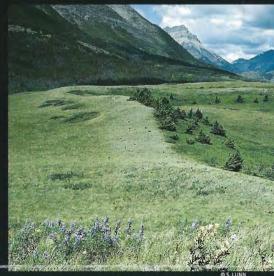


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Unlike rivers, glaciers erode wide-bottomed, steep-sided, U-shaped valleys (above). Deep glacial lakes—Waterton, Saint Mary, and McDonald—fill the bottoms of some larger glacial valleys. Where a small mountain glacier once joined a larger valley glacier, 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.

