

Jasper's Coolest Place

This protected landscape is both beautiful and dramatic. We invite you to learn more about the area by visiting the exhibits in the Glacier Gallery (lower level). In addition, there are several short walks in the immediate vicinity that provide excellent views of glaciers and the valleys they have carved.

About the Mountains

The mountain surrounding you originally formed on the floor of an ancient sea. Two hundred million years ago, the northwest drifting North American continent collided with another plate moving northeast. During this time, the sedimentary rock layers that had formed on the bottom of the oceans were warped, twisted, piled upon one another and broken along fault lines. This mountain building phase continued until around twenty five million years ago.

The mountains were subsequently carved by glaciers. At the height of the last ice age (150,000 to 10,000 years ago) the northern glaciers and mountain glaciers flowed together to form an ice sheet that stretched across Canada. During that period the mountain glaciers carved out the valley and shaped the mountain peaks surrounding you. While mountain building has ended, the glaciers continue to sculpt the mountains, particularly those in this area.

About the Glaciers

Glaciers form where more snow falls in winter than melts each summer. Over time and under pressure, the snow compacts and metamorphoses into dense glacial ice. A glacier is a mass of ice that moves under the force of gravity (i.e. it flows downhill). Accordingly, they are often referred to as rivers of ice.

About the Icefield

Just as rivers flow out from lakes, glaciers flow out from an icefield. An icefield is a sheet of glacial ice that is trapped by higher surrounding land and which feeds more than one glacier. The Columbia Icefield is one such lake of ice bounded by peaks such as Mt. Columbia, Mt. Andromeda and Mt. Kitchener. It covers approximately 200 km² and feeds six large glaciers: Saskatchewan, Castleguard, Dome, Stutfield, Columbia and Athabasca. The last of these, the Athabasca Glacier, is one of the most accessible glaciers in the world and the focus of most visits to the area.



About the Rivers

The Columbia Icefields is a hydrological apex, the meeting point of three continent-wide watersheds. On the western side (B.C.), the meltwaters flow into the Columbia River and on to the Pacific Ocean. On the eastern side (Alberta), the meltwaters flow into both the North Saskatchewan River, which empties into Hudson's Bay, and then into the Atlantic Ocean; and also into the Athabasca-McKenzie system, which empties to the Arctic Ocean.

These rivers are the fresh water source for the millions of North Americans who live in the Prairies, British Columbia and Washington, for their agricultural systems and for the countless ecological communities along the way. It is easy to see how important it is that the source of these rivers be protected in a national park.



About the Alpine

Alpine vegetation is very fragile due to its short growing season and harsh growing environment. Please help to protect this beautiful flora: **stay on the trail!** Avoid cutting switchbacks and do walk through snow or muddy spots if required to avoid trampling trailside wildflowers.

Did you know?

- ▶ The ice cap is about 200 km² and more than 250 m thick in certain areas.
- ▶ The average yearly snowfall on the Columbia Icefield is seven metres.
- ▶ Ice in the Athabasca Glacier takes 150 years to flow from the icefield to the glacier's toe.
- ▶ Between 1870 and today, the Athabasca Glacier has lost more than two-thirds of its volume and more than half its surface area.
- ▶ The Athabasca Glacier once extended beyond the Icefields Parkway. It has retreated 1.5 km in 125 years.



Toe of the Athabasca Glacier

1.5km return (1 – 1.5hours)

TRAILHEAD: directly across from the Icefield Centre building, turn off Highway 93 onto the access road for the Athabasca Glacier. Keep right, and follow the road down to the parking lot. The trail begins by the interpretive signs in the southwest corner of the lot.



CAUTION!

Over the years, several people have died from falling into crevasses on the Athabasca Glacier. These deep, ice-cold cracks lie hidden below a thin covering of snow that may collapse under a person's weight. Millwells – places where meltwater plunges down deep vertical shafts in the ice – are slippery around their entrances and extremely dangerous.

Glacier travel should be attempted only by experienced and properly equipped mountaineers. Please read and heed the safety signs.

Welcome to the Columbia Icefield

Jasper National Park of Canada



Jasper, Banff, Kootenay and Yoho national parks, together with the provincial parks of Hamber, Mount Robson and Mount Assiniboine, are recognized internationally as a UNESCO World Heritage Site. The Canadian Rocky Mountain Parks World Heritage Site encompasses 20,585 km² – one of the largest protected areas in the world.



Parker Ridge
5.2 km return
(2 - 3 hours)



Trailhead: 8.8 km south of the Icefield Centre on Highway 93. Look for the hiker sign at the large parking lot on the right.



Wilcox Pass
2.4 km return to the first viewpoint,
8 km to the pass and back.



Trailhead: the parking area on the left-hand side of the Wilcox Creek Campground entrance road, 3.1 km south of the Icefield Centre.

Legend

- Hiker only trail
- Hiker & horse only trail
- Highway
- Restricted access road
- Parking
- Disabled access parking
- Hotel parking
- Information
- Ice explorer
- Exhibit
- Trailhead
- Lookout
- Washroom
- Disabled access washroom
- Commercial accommodation
- Restaurant
- Hostel
- RV-tent camping
- Tents-only campground
- Dump station
- Summit & elevation point
- Contour intervals 50 metres

