

# Banff • Jasper Kootenay • Yoho National Parks

Alberta/British Columbia

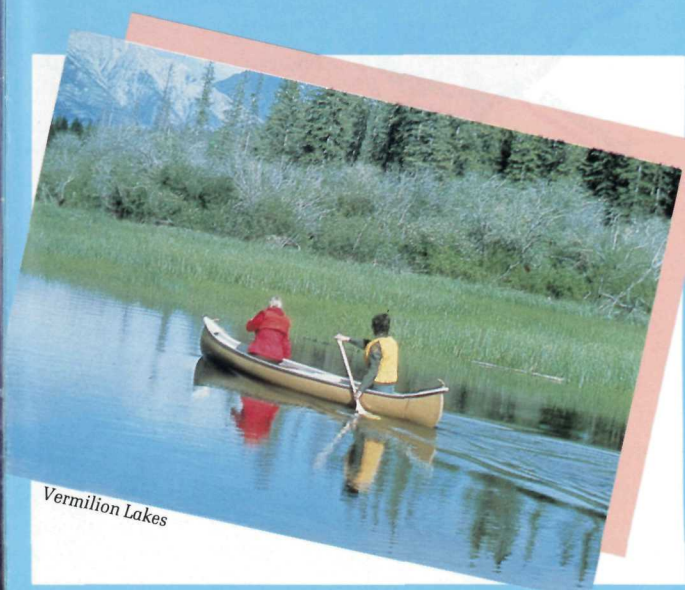


## INTRODUCTION

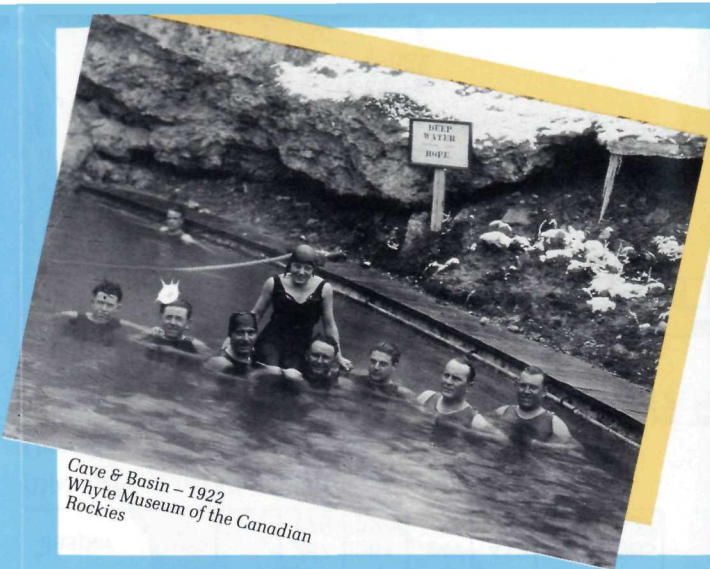
The four Rocky Mountain national parks of Banff, Jasper, Kootenay and Yoho share boundaries, scenery, geology, plant and animal life, human history and importance to the world.

These four parks were declared a World Heritage Site in 1985 by the United Nations Educational Scientific and Cultural Organization (UNESCO). World Heritage sites and monuments are considered to be of such exceptional interest and of such universal value that protecting them is a concern of all mankind.

The four Rocky Mountain parks were chosen for this honor because they include all four geological zones of the Rocky Mountains in an outstanding setting of exceptional beauty. These characteristics, exemplified by the Burgess Shale fossils, the Columbia Icefield and the Maligne Valley, give the parks world value.



Vermilion Lakes



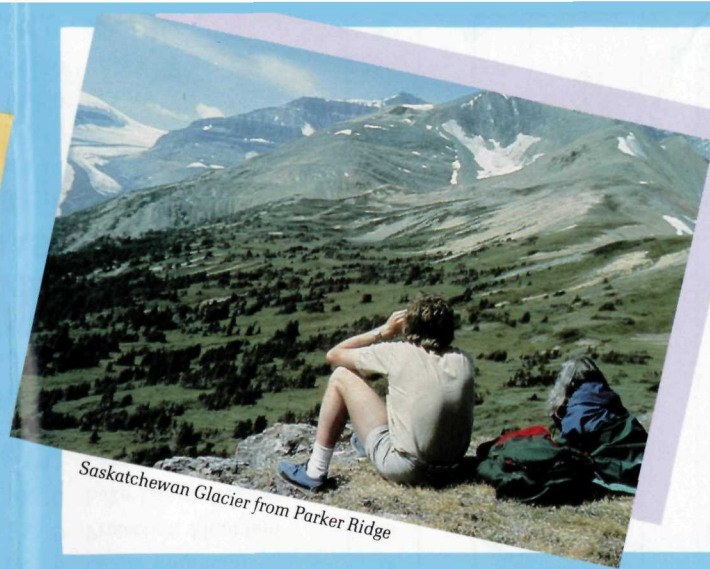
Cave & Basin - 1922  
Whyte Museum of the Canadian Rockies

## HISTORY

The human history of the four mountain parks likely began about 11,000 to 12,000 years ago. For most of this period, Indians entered and settled in the Rockies in search of sources of food and clothing. In certain places in the parks, Indians quarried tool materials. In areas now in Kootenay National Park, they collected ochre or iron oxide for decorative use. There is also some evidence of native use near the parks' hot springs.

In the eighteenth and nineteenth centuries, the Rockies were viewed by early explorers as a major obstacle in the effort to find a western route to the Pacific Ocean. With the assistance of Indian guides familiar with mountain passes, early explorers such as Mackenzie, Thompson, McGillivray and Simpson overcame this obstacle. The fur trade era of the mid-1800s brought traders and merchants to the area.

The coming of the transcontinental railway marked the beginning of the national parks system in Canada. In 1883 three railway workers chanced upon the Cave and Basin hot springs, now a part of Banff National Park. For the enjoyment and healthful benefit of all Canadians, the hot springs and an area around them were set aside by the Canadian government in



Saskatchewan Glacier from Parker Ridge

1885 as a park reserve. Two years later, the federal government formally established Rocky Mountains Park as Canada's first national park, later to be known as Banff National Park.

Yoho and Jasper national parks have also been closely associated with railway construction. A small reserve around Mount Stephen, British Columbia, was set aside near the Canadian Pacific Railway line in 1886, marking the beginning of Yoho National Park. Jasper became a national park in 1907 in association with the construction of Canada's second and more northerly transcontinental railway.

Transportation also sparked the establishment of Kootenay National Park in 1920. The province of British Columbia began construction of the Banff-Windermere Road in 1910 but ran out of funds before its completion. In return for land on both sides of the route, the federal government completed the road and the park was established in 1920.

The transportation theme dominated the history of these parks and continues to play an important role. There are a transcontinental highway (Trans-Canada), a trans-provincial highway (Yellowhead) and two major parkways (Bow Valley and Icefields) and the Banff-Windermere Highway passing

through the parks as well as the two railway routes. Banff and Jasper townsites developed in the early days to service the railway and to provide essential services to many park visitors.

Some mineral and forest exploitation was allowed in the parks until about the 1930s and until the 1960s in Yoho. Since then, the parks have been virtually free of resource extraction and industry.

## GEOLOGY

Geological formations in the four mountain national parks are composed largely of shale, dolomite, sandstone, limestone and slate spanning time periods from the Precambrian to the Cretaceous. Forces have resulted in faulting, folding and uplifting of these rock layers to produce mountain ranges which form the continental spine.

The Canadian Rocky Mountains consist of the Western Ranges, the Main Ranges, the Front Ranges and the Foothills, all of which are represented in the four parks. Glaciers carved these ranges and the climate has worn them to create a variety of landforms.

The Western Ranges, found in the southern part of Kootenay National Park and in the western part of Yoho, include formations of thick shales that folded intricately when the mountains were formed.

The Main Ranges are found in all four of the parks. These ranges are made up of limestone, sandstone, and shale and include the oldest rock found in the four mountain parks. These ranges contain the highest mountains in the four parks and form the Continental Divide. Castle Mountain in Banff National Park, Mount Edith Cavell in Jasper and Mount Stephen in Yoho are dramatic examples of the many Main Range peaks.

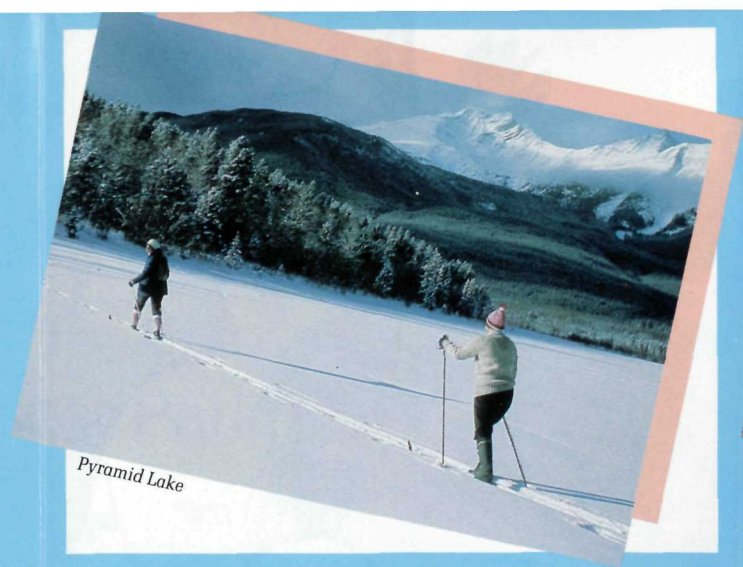
The Front Ranges are found in Banff and Jasper and are composed of thick layers of limestone and shale. These mountains often have a tilted, tooth-like appearance and in places, the rock layers have been folded. Mountains such as Mount Rundle in Banff and Roche Miette in Jasper are characteristic of these ranges.

The Foothills are the easternmost extension of the Rockies. A small area in the southeastern portion of Jasper provides the only representation of the rounded rolling Foothills in the four parks.

The sedimentary Rocky Mountains contain an extensive fossil record dating from the Precambrian period. Of special interest in the Main Ranges are the exquisitely preserved soft-bodied fossils found in the Burgess Shale layer of the Stephen Formation in Yoho National Park. As one of the most significant fossil sites in the world, the Burgess Shale shows evolution in action during Middle Cambrian times.

Although the last major glacial advance ended about 10,000 years ago, active glaciers and icefields still exist throughout the region, particularly in the Main Ranges. The most significant in the area is the Columbia Icefield. The Columbia Icefield is the largest in the Rocky Mountains and the largest in North America's subarctic interior.

Covering 325 km<sup>2</sup> (125 square miles) the Columbia Icefield spans the Continental Divide and the boundary between Jasper and Banff national parks. The Athabasca Glacier, located adjacent to the Icefields Parkway which links Banff and Jasper, provides unequalled opportunities for visitors to view ongoing glacial processes.



Pyramid Lake



Mountain goat

## WILDLIFE

The four parks are home to an interesting and varied wildlife population. Fifty-six species of mammals are found in these parks, ranging in size from the impressive moose to the tiny pigmy shrew. The ungulates (moose, elk, mountain goat, bighorn sheep, white-tailed deer and mule deer) are often seen in their natural habitat by visitors. Early morning and evening are the best times for viewing wildlife in the parks.

A population of about 200 grizzly bears, along with cougars, black bears and timber wolves also live in the parks and are more rarely seen by visitors.

More than 280 species of birds have been identified including golden and bald eagles.

Amphibians and reptiles are limited because of the relatively severe climate. One species of toad, three of frog, one salamander species and two types of snakes have been recorded.

Cutthroat, rainbow, lake and brook trout, Dolly Varden, northern pike and lake and mountain whitefish are found in the major watersheds of the parks. Some of the parks' lakes are stocked regularly for anglers.

## A special note about wildlife

Most problems that arise between visitors and animals in national parks are caused by food. Feeding wildlife endangers both animal and man. Animals attracted to populated areas by frequent feeding or improperly stored food or garbage often become ill.

All wild animals are unpredictable and approaching them is dangerous. It is illegal to feed, entice or molest any animal in a national park. For information about bears, please obtain a copy of You Are In Bear Country from information centres.

The grass along road margins attracts many browsing animals. Please drive slowly and watch for these animals.

Hunting is forbidden in national parks.

## PLANT LIFE

Three different life zones can be seen easily by visitors: the montane zone in the lowest valleys; the subalpine zone at higher elevations; and the alpine zone above timberline, high on the shoulders of the mountains and bordering on the bare rock and permanent snow of the peaks. In Yoho, there are also pockets of interior rainforest.

The montane region is distinguished by grassy meadows and forests of Douglas fir, white spruce, trembling aspen and lodgepole pine. The montane region also includes some types of vegetation rare in the parks including the extensive wetland areas of Vermilion Lakes near Banff townsite and the sand and silt dune area of the Athabasca River in Jasper National Park.

The lower subalpine areas support closed coniferous forest dominated by Engelmann spruce, subalpine fir and lodgepole pine. Open meadows are also found.

The upper subalpine region has a greater snowfall and a shorter growing season and is characterized by mature forests with subalpine fir, krummholz (stunted trees) and Engelmann spruce. In summer, subalpine meadows are carpeted with wildflowers.

The alpine region cannot support trees. The plant life has had to adapt to the harsh region with its short growing seasons, extreme daily temperature fluctuations, high winds and intense ultra-violet radiation. This zone can be viewed without a long climb at The Whistlers in Jasper and at Sunshine, near Banff, where tramways take visitors to this region. Alpine meadows such as those above Lake O'Hara in Yoho are also typical of the high country.

## CLIMATE

All four parks experience great seasonal and annual variation in precipitation and temperature. Generally, winters are long and the summers cool and short, with occasional hot spells. Temperatures can range from as high as 30°C in summer to lower than -30°C in the winter.

Average maximum and minimum temperatures for the four parks follow:

Jan. -7°C/-16°C (19°F/3°F), Feb. -1°C/-12°C (30°F/10°F), March 3°C/-9°C (37°F/16°F), Apr. 9°C/-4°C (48°F/25°F), May 15°C/2°C (59°F/36°F), June 19°C/6°C (66°F/43°F), July 22°C/8°C (72°F/46°F), Aug. 21°C/7°C (70°F/45°F), Sept. 16°C/3°C (61°F/37°F), Oct. 10°C/-1°C (50°F/30°F), Nov. 1°C/-9°C (34°F/16°F), Dec. -5°C/-14°C (23°F/7°F). These temperatures apply to valley bottoms. At higher elevations temperatures will be five to seven degrees cooler.

Annual precipitation in the parks ranges from less than 380 mm at lower elevations to greater than 1,250 mm in regions along the Continental Divide (25 mm = 1 inch).

## WHERE TO GET MORE INFORMATION

More detailed information and many publications are available at park information centres or can be obtained by writing to the individual parks.

### BANFF

#### Information Centres

Lake Louise — mid-May to mid-October

Banff — year-round

#### Warden Offices

— for emergencies, 24 hours a day — public inquiries 7 a.m. to 10 p.m.

Lake Louise — year-round

Banff — year-round

#### Superintendent

Banff National Park  
Box 900  
Banff, Alberta T0L 0C0  
(403) 762-3324

### KOOTENAY

#### Information Centres

Marble Canyon — mid-October

June - Labour Day

West Park Gate — year-round

West Gate Information Centre — June - Labour Day

#### Superintendent

Kootenay National Park  
Box 220  
Radium Hot Springs, B.C.  
V0A 1M0  
(604) 347-9615



### JASPER

#### Information Centres

Jasper Townsite

— year-round

Icefield Centre

— May - Sept.

#### Warden Offices

— year-round

#### Superintendent

Jasper National Park  
P.O. Box 10  
Jasper, Alberta T0E 1E0  
(403) 852-6161

### YOHO

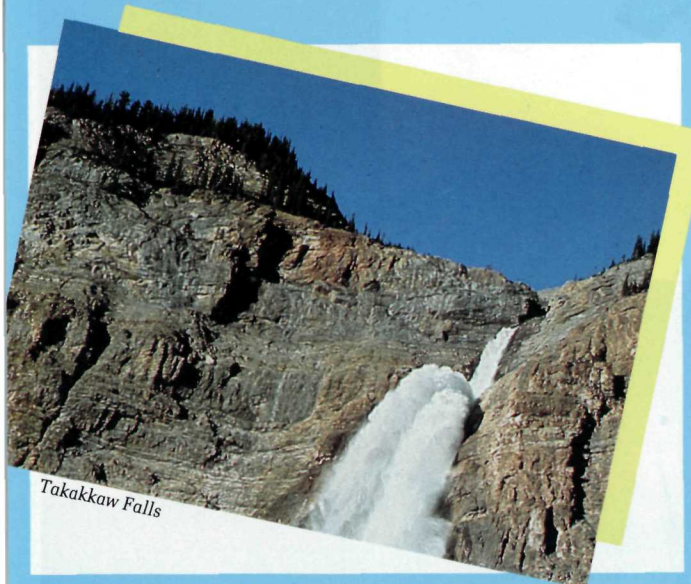
#### Information Centres

East Information Centre — mid May - mid October

West Information Centre — mid May - mid October

#### Superintendent

Yoho National Park  
Box 99  
Field, B.C.  
V0A 1G0  
(604) 343-6324



Takkaw Falls

Parks Canada  
Information Services  
Western Regional Office  
Room 520, 220 - 4th Ave. S.E.  
Box 2989, Station M  
Calgary, Alberta  
T2P 3H8 (403) 292-4440  
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Canada

## BANFF NATIONAL PARK

Banff, perhaps Canada's premier tourist magnet, attracts more than three million visitors a year from every corner of the globe. Mountaineers, skiers, hikers, cyclists, horseback riders, fishermen, canoeists, nature lovers and those who just want to take in a hearty dose of Rocky Mountain air flock to the park each year.

Banff covers 6,641 km<sup>2</sup> (2,564 square miles) of mountains, valleys, glaciers, forests, alpine meadows, lakes and wild rivers along the Alberta flank of the Continental Divide.

There are many sights to see and things to do in and near the town of Banff. A visit to the Cave and Basin Centennial Centre for a swim in the outdoor mineral water pool and a look back at the history of Banff and of Canada's national park system

is a pleasant way to spend an afternoon. Visitors also enjoy the Banff Park Museum and the Buffalo Paddock.

Lake Louise with glacier-clad Mount Victoria is one of the park's most popular stopping places. There are many trails for hiking and horseback riding in this area as well as canoeing on the lake and skiing in the winter.

The park contains at least 25 peaks which tower 3,000 metres (9,800 feet) or more. Scores of lakes are part of the natural backdrop and their turquoise hue begs to be captured on film. Geological oddities include hoodoos, plunging canyons and mineral hot springs.

# BANFF

## JASPER NATIONAL PARK

The largest of Canada's Rocky Mountain national parks, Jasper, spans 10,878 km<sup>2</sup> (4,200 square miles) of broad valleys and rugged mountains along the eastern slopes of the Rockies.

Many of the park's striking features are accessible by road — the Athabasca Glacier, Sunwapta and Athabasca Falls, Miette Hotsprings, glacier-clad Mount Edith Cavell and the limestone gorge of Maligne Canyon. Visitors can ride a tramway to the top of The Whistlers to view life above the treeline and the spectacle of surrounding mountain peaks and many of the lakes that dot the wide Athabasca Valley. Day trails, overnight hiking trips, horseback rides and a boat trip down Maligne Lake are other ways to see the park.

Jasper joins Banff National Park to the south via the Icefields Parkway. This parkway is virtually unparalleled for

beauty as it runs alongside a chain of massive icefields straddling the Continental Divide.

Large numbers of elk, bighorn sheep, mule deer and other large animals, as well as their predators, make Jasper National Park one of the last great wildlife ecosystems remaining in the Rocky Mountains.

The human history of the park includes stories of Indians, fur traders, geologists, railroad surveyors, mountaineers, naturalists and prospectors. The first explorers ventured into the Jasper region in the early 1800s in search of a fur trade route across the mountains. A local trading post became known as Jasper's House after the North West Company clerk Jasper Hawse. With the coming of the Grand Trunk Pacific Railway line through the Yellowhead Pass in 1907, the federal government decided to preserve the area as a national park.

# JASPER

## WHERE TO STAY

▲ Visitors may stay in any of the designated campgrounds listed in the camping section of this brochure (map side). Camping space is available at a fee on a first come, first served basis. Generally, a maximum stay of two consecutive weeks is allowed at these campgrounds which are normally open from mid-May to mid-September. Winter camping is available in a designated area in each park.

Commercial accommodation is available in and adjacent to the parks. Information on commercial accommodation is available from Environment Canada, Parks, Information Services, Box 2989, Station M, Calgary, Alberta, T2P 3H8, from Travel Alberta, 15th Floor, Capitol Square, 10025 Jasper Ave., Edmonton, Alberta, T5J 3Z3 and from Tourism British Columbia, 1117 Wharf St., Victoria, B.C., V8M 2Z2.

Facilities for the disabled are available in the four parks. Please contact the park for locations and details.

## WHAT TO DO

The national parks are open all year, although many services are not available from October to May. Many visitors see the park during the summer but each year an increasing number discover the variety of winter activities, including skiing at world-class resorts, cross-country skiing, ice-climbing, photography and wildlife viewing.

### Hiking

▲ The four parks have a combined total of 2,900 kilometres (1,749 miles) of hiking trails which include pleasant half-hour strolls to more adventurous trips into the parks' backcountry. Many of these hiking trails become cross-country ski trails in the winter. More details of the parks' hiking trails including brochures and topographic maps of backcountry areas can be obtained at the park information centres.

Backcountry campers in the parks require park use permits. The return of the permit at the end of the trip is not required. Jasper, Kootenay and Yoho control backcountry use by applying a quota system.

Banff issues backcountry use permits on a first come, first served basis. Visitors are advised to try areas where crowded conditions are rare.

If anyone is undertaking an activity which is hazardous, he may register. If a person registers in, he must, by law, register out by returning the safety registration on completion of the activity.

### Boating

▲▲▲▲ Banff — Boating is allowed on many of the park's lakes and rivers. Power boats may be used only on Lake Minnewanka.

Jasper — Rowboats and canoes are allowed on all of the ponds and lakes in the park except Cabin Lake. Power boats may be used on Pyramid and Medicine lakes. Boats with electric motors without on-board generators are allowed on any lake where boats are permitted.

Kootenay — Only the Vermilion and Kootenay rivers are suitable for boating. Motorized boats may not be used. The degree of difficulty varies along the reaches of the rivers. Some sections are hazardous and it is advisable to contact the information centres or warden service before boating. Boating is not permitted on park lakes.

Yoho — Non-motorized boats are allowed on all park waters. Visitors interested in undertaking a river trip should first inquire at an information centre.

### Fishing

▲ Fishing permits are required by anglers in Canada's national parks. Permits are available at park information centres, the administration building, campground and warden offices and from some concessionaires. This fishing permit is valid in all Canadian national parks. Visitors wishing to fish in waters outside national park boundaries must obtain a provincial fishing licence covering that area.

### Swimming

▲ Swimming in lukewarm mineral water is available in summer at the Cave and Basin Centennial Centre in Banff National Park and year-round at the cool pool at the Radium Hot Springs Aquacourt. Soaking in outdoor hot pools fed by natural mineral springs is available at the Upper Hot Springs in Banff, the Miette Hotsprings in Jasper (summer) and the Radium Hot Springs Aquacourt in Kootenay. The springs that sparked the formation of Banff, Canada's first national park, can be viewed at the Cave and Basin Centennial Centre near Banff townsite.



# YOHO

## YOHO NATIONAL PARK

Yoho is a park of waterfalls and glacial lakes. It's a park with snow-topped mountain peaks, roaring rivers and deep silent forests. It's a park whose history is bound up with a railroad, spiral tunnels inside mountains and stories of runaway trains. No wonder Yoho National Park got its name from a Cree Indian word expressing awe.

The park spans 1,313 square kilometres (507 square miles) on the western slopes of the Rocky Mountains in British Columbia and borders on Banff and Kootenay national parks.

Yoho's craggy peaks and steep rock faces, home to mountain goats, posed an enormous engineering problem for Canada's early explorers. The mountains that were the curse of railway workers are responsible for the park's many waterfalls including Laughing Falls, Wapta Falls, Twin Falls, and one of Canada's highest (254 m, 833 ft.) Takakkaw Falls. The water from melting glaciers high up in the mountains is also responsible for the color of Emerald Lake and famed Lake O'Hara.

Water is again responsible for creating a major park attraction, a natural rock bridge over the Kicking Horse River. Torrents have worn a hole through the middle of a solid rock bed leaving a flat-rock bridge behind. Another marvel are the hoodoos which are pillars of glacial silt topped by precariously-balanced boulders creating long-stemmed toadstool shapes.

Many of British Columbia's plants and animals reach their eastern extension in Yoho. The high peaks of the Continental Divide wring out the precipitation remaining in clouds travelling eastward from the Pacific. This creates the pockets of wetbelt forest where species such as devil's club, western red cedar and western hemlock thrive.

One of the world's most interesting fossil beds, the Burgess Shale, is located in Yoho. Designated a World Heritage Site in 1981, the shale formation contains the fossilized remains of more than 120 marine animal species dating back 530 million years. The Burgess Shale World Heritage Site is now incorporated into the larger Four Rocky Mountain Park World Heritage Site.



# KOOTENAY

## KOOTENAY NATIONAL PARK

Kootenay National Park is a land of startling contrasts towering summits and hanging glaciers, narrow chasms and color-splashed mineral pools.

This 1,406 km<sup>2</sup> (543 square miles) mountain park is located in southeastern British Columbia on the western slopes of the Rocky Mountains adjoining Banff and Yoho national parks.

Every twist and turn of the Banff-Windermere Highway reveals something interesting to explore — the limestone gorge of Marble Canyon, the ochre-tinted paint pots once used by the Kootenai Indians to make vermilion paint to decorate their bodies and teepees and the Redwall Fault with its red cliffs and shattered rock. The famous Radium Hot Springs at the southern end of the park are natural mineral

springs heated deep in the earth's crust. The high peaks of the Rockies' Main Ranges cover the northern reaches of the park, while farther south the mountains become more gentle.

Since prehistoric times, this part of the central Rockies has served as a major north-south travel route. The Kootenai Indians settled in the region and pictographs found near the hot springs indicate this was a meeting place for plains and mountain bands.

Fur traders and explorers travelled the area in the 1800s, seeking suitable transportation routes through the high mountain passes. They were followed by homesteaders and entrepreneurs who realized the commercial potential of developing the hot springs. The first pool and bathhouse at Radium Hot Springs were built in 1911. The federal government then established Kootenay National Park in 1920.

