

#### Location

Banff National Park lies along the eastern slopes of the Rocky Mountains in Alberta, with its eastern entrance 75 miles west of the City of Calgary. The continental divide provides the western boundary of the Park for 150 miles, with Yoho and Kootenay National Parks in British Columbia sharing this natural boundary for some distance. Jasper National Park adjoins it on the north in the vicinity of the Columbia Icefield. The total area of the Park is 2,564 square miles.

The detailed map in this folder has been prepared especially to assist visitors to identify readily the various features of the Park.

#### Purpose

Banff National Park is one of Canada's 18 National Parks which form a chain of nature sanctuaries extending from Mount Revelstoke in British Columbia to Terra Nova in Newfoundland. These parks have been established for the preservation of selected areas in their natural state for the benefit, education, and enjoyment of present and future generations of Canadians.

This vast area of nearly 29,350 square miles is administered by the Department of Northern Affairs and National Resources.

# NATURAL FEATURES

# Geological

Among the unique geological features of the Park are the mineral hot springs bubbling out from the slopes of Sulphur Mountain. It was the discovery of these springs in 1883 which caused the first reservation of ten square miles to be protected by the Government of Canada. This action originated Canada's present system of National Parks.

These springs originate from surface water which percolates downwards through pores, fissures, and cracks to great depths, where the temperature of the hot rock masses is very high. The heated waters return to the surface along a zone of fractures related to the thrust of the mountain rocks. On its way the steam and superheated water dissolves some of the limestone rock which has a high sulphur content.

The mountains of the Park are part of that great belt of almost parallel mountain ranges that extend for nearly a thousand miles in a northwesterly direction from the State of Montana through Alberta and British Columbia into the Yukon and Northwest Territories. Some of the peaks rise more than 11,000 feet above sea-level; deep valleys expose great naked cliffs of sedimentary rock which reveal the story of the mountains for all to see. These rocks vary in age from pre-Cambrian, seen in ridges exposed along the Trans-Canada Highway near Lake Louise (over 550 million years old) to Lower Cretaceous rocks (about 100 million years old) which appear at the foot of Cascade and Rundle Mountains, and contain coal seams. Several coal mines once operated in the park but such exploitation is no longer permitted.

Great icefields still cover large areas in the high mountain country on the Continental Divide, where there is considerable precipitation, much of it in the form of snow. Glacier tongues of these icefields are visible from the Banff-Jasper Highway: the Crowfoot, Bow and Peyto Glaciers are examples. Meltwaters from the glaciers form many beautiful streams and waterfalls and are the chief source of water on the Continental Divide. Where the meltwater pours into a flat valley, lovely green lakes accumulate, many of them dammed by glacial moraines. Among these lakes are Lake Louise, Bow Lake, Hector Lake, and Peyto Lake, and there are many others not seen from the highway.



Nature's law of survival in action.

One of the most fascinating aspects of mountain geology is the tremendous pattern of erosion to be seen everywhere. The rocks are still being sculptured by ice, wind, water, and frost. Massive boulders, rock slides, moraines, thundering waterfalls, and placid lakes bear evidence of these forces of erosion. The slight tinge of green to be seen on the high scree slopes marks where small plants are beginning to grow as erosion leaves small pockets of soil among the rocks.

Visitors interested in the geology of the mountains may purchase *The Story of the Mountains* in Banff National Park,  $(50\phi)$ , and A Guide to Geology for Visitors in Canada's National Parks, (\$1.00), from Park Information Offices.

#### **Plantlife**

Below the mountain cliffs lie alpine meadows flowered with Arctic and alpine species of great variety and beauty, bordered in many places by groves of Lyall's larch, a deciduous conifer which turns gold in autumn. In association with this larch other alpine species of coniferous trees are the alpine fir and Engelmann's spruce, and on some arid slopes, the whitebark pine. These species of trees are fairly restricted in altitude, and below 5,000 feet give way to white spruce and lodgepole pine, with blue Douglas fir and some limber pine on drier slopes. However there is no firm boundary between the species and many spruce are hybrids of the white and the Engelmann's. Aspen poplar is fairly general but groves of it occur only in the broader valleys, where open meadows have developed. Balsam poplar is found along the river banks.

In the lower valleys are found an interesting blend of mountain and prairie flowers, varying with environment. The Indian paint brush is one of the most interesting plants to see, varying in colour and size but found at all altitudes. Several small orchids occur in the coniferous forests of the main valleys. The yellow avalanche lily and the chalice-cup or western anemone poke their heads through the snow at timberline in late June. Some of the best meadows in which to see flowers are within walking distance of the Tunnel Mountain campground, and along Highway 1A west of Banff. The flowers of the forest and river bank



A golden eagle surveys his domain.

may be seen along the Spray River and along the Bow River below the golf course; vetches, wintergreens and wild roses grow here, while the twin flower and heart-leaved arnica scent the air. The plants of the Park are protected, and so others may enjoy them, are not to be plucked.

#### Wildlife

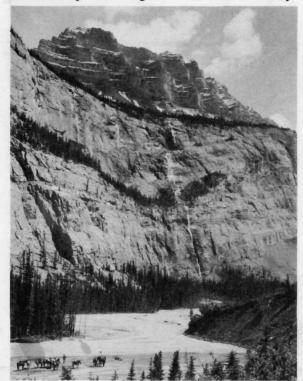
Many animals may be seen from the highways—black bear, elk, deer, moose, Rocky Mountain Sheep, and coyote. The Rocky Mountain Goat is a cliff dweller and scrutiny of the rocks and the steep meadows below is sometimes rewarding.

Red squirrel, chipmunk, and porcupine are common throughout the Park as are the Columbian ground squirrel, which frequents open meadows at all altitudes and the golden-mantled ground squirrel, which lives among the rocks. Marmot and the small pika, a relative of the hare, also live in the rocky places of the Park. There are a few beaver, and muskrat are fairly plentiful, but sharp and patient eyes are needed to spot these water dwellers.

More retiring in nature are the small number of grizzly bears which spend the summers in the remote valleys near timberline. Marten, mink, weasel, mountain lion, and lynx, as well as wolverine and badger, are present in the Park, although seldom seen. All are protected to ensure the perpetuation of native species within the park boundaries. Several publications concerning wildlife are available.

#### **Birdlife**

Although the area is not on a major flyway, many interesting birds live in the Park or migrate through it. Some 185 species have been reported to date. Mountain music is provided by the tiny ruby-crowned kinglet, seldom seen but often heard from the top of the largest conifer in his territory.



Centuries of erosion are etched in these rocks.

The hermit thrush, Swainson's thrush, warbling vireo, and the winter wren are also members of the mountain chorus. Several warblers live in the Park, the Audubon being the most common.

Among the park "bandits" are the Canada or grey jay, Clark's nutcracker and the black-billed magpie. These are permanent residents, as are the mountain chickadee, red-breasted nuthatch, brown creeper, and the hardy water ouzel or dipper.

Canada geese, mallard, blue-winged teal, common merganser, and Barrow's goldeneye breed on the lakes of the Bow Valley and harlequin duck may be found breeding on the alpine lakes.

Birds of Canada's Mountain Parks, a descriptive booklet with 50 coloured plates, may be purchased for \$1.50. Bird check-lists are provided free.

#### Fish

Modern methods of fish management are followed to improve angling in the lakes and streams of the Park and a regular stocking program is carried out. Game fish found in this Park include rainbow, cutthroat, brown eastern brook, Dolly Varden, lake trout; there are also two hybrids—a rainbow and cutthroat cross and the splake, which is a cross of lake and eastern brook trout. Rocky Mountain whitefish are also natives to these waters.

Fishing bulletins are issued regularly and are available at Park Information Offices, where the required fishing licence should be obtained. These are available from all Park Wardens, who also have special fishing information for their own districts. Angling regulations as well as an Angler's Guide to Banff National Park are provided with each fishing licence.

#### How You Can Learn More About the Park

To help you know the Park better and obtain greater enjoyment from your visit, the National Parks provide an Interpretation Service. This includes conducted tours and nature talks illustrated with coloured slides and films to explain the purpose and the natural phenomena of the Park. The evening programs are presented in the larger campgrounds and in the outdoor amphitheatre

near the Park Office. Well marked nature trails of a self-guiding type are indicated on the accompanying map. Trailside exhibits are also provided at points of interest. Detailed information is available at Park Information Offices.

# How to See the Interesting Features

From the park highways a vast panorama of scenery is revealed, and with luck some wildlife also may be observed. For a more intimate contact with this mountainous area, the park trails offer many new and wonderful experiences. With travel on foot or on horseback to the alpine meadows and remote lakes, the "scenery" is revealed as a living museum of nature. A walk along a quiet stream, or an afternoon in a canoe paddling leisurely around the shore of the Vermilion Lakes, offers something different. The distance travelled may not be far, but the experience will long be remembered: the flowers at your feet, the scent of the trees shading your rest, the beaver startled from his mud-packed lodge.

There are over 700 miles of park trails covering all the main valleys of the Park. Many of these to remote areas are most suited to trips by saddle horse. Other areas are readily accessible for day walking or riding, particularly the Lake Louise and Moraine Lake districts. Trails in the townsite area are shown on a separate map for *Park Roads and Trails near Banff Townsite*.

North of Lake Louise is another fine alpine region for hiking or riding: the Ptarmigan and Baker Lake-Skoki Valley area. On Johnston's Creek there is a good trail up the canyon to a series of beautiful waterfalls, with an open meadow valley farther upstream. The trail from the Bow Valley up Redearth Creek gives access to another district of alpine lakes: Shadow, Egypt, Mummy, Scarab, with an alternative route via Sunshine and Simpson Passes. Travel up Redearth Creek requires provision for overnight camping, but day trips may be made in the superb alpine meadows of the Sunshine area. Many interesting trails are found along the Banff-Jasper Highway, and the District Wardens are the best advisers for those who wish to explore.

#### GENERAL INFORMATION

#### Park Administration

A resident Superintendent is in charge of the Park at the Park Office in the townsite. Park Wardens stationed in the 13 districts of the Park are responsible for protection of all natural features, and for the safety and guidance of visitors. A detachment of the Royal Canadian Mounted Police assists in the maintenance of law and order.

#### Season

The Park is open throughout the year. The Banff-Jasper Highway, however, is closed from October until June because of snow conditions.

#### Camping

There are 11 campgrounds adjacent to Park Highways. Three of these, at Tunnel Mountain, Two Jack Lake, and Johnston Canyon, are modern campgrounds, where a nominal fee is charged. At Tunnel Mountain Campground electrical outlets are available for trailers, and there is a new section here with all modern facilities for trailers.

Other campgrounds along the highways provide kitchen shelters, water, and firewood for free camping. Camping is confined to these designated areas.

Visitors who wish to camp along the trails must register with the District Warden before leaving, and again upon their return. This regulation is for the protection of the visitor and the Park.

Picnic shelters and wayside tables are located at various points throughout the Park, as indicated on the map. Most of these picnic sites have firewood, water, and sanitary facilities.

#### Accommodation

A variety of accommodation is offered in the Park, details of which are listed in the Accommodation Directory for Canada's National Parks available at all Park Information Offices. Nearly all facilities of a modern town are found within the park boundaries, the majority being convenient to the main townsite.

#### Preservation

National Parks are selected areas set apart as nature sanctuaries and special care is taken to maintain them in their natural state. For this reason, all birds, animals, wildlife, trees, rocks and fossils are to remain undisturbed. Even the wildflowers are not to be picked; they are to be left for others to enjoy. Feeding, touching, or molesting wild animals is not permitted. This is in the interests of the animal, as well as the human who could receive serious injury.

Please help protect your own Park for future enjoyment. It is part of your national inheritance.

### **Prevent Fire**

Campfires near the highway may be kindled only in fireplaces provided for this purpose, and must be completely extinguished before campers leave the site. Fire permits must be obtained from the District Warden for any open fires during trail travel. Visitors observing an unattended fire should attempt to extinguish it if possible, and promptly report it to the nearest Park Warden. Fire in a National Park can cause damage which cannot be repaired in a hundred years.

# Mountain Climbing

For the protection of mountain climbers, all mountain travel off the park trails must be registered with the District Warden, before and after the climb. Inexperienced climbers should obtain the services of a guide and full information concerning the necessary equipment.



An abundant variety of plantlife is seen in the valley of the Bow River.

Dogs and cats may accompany visitors into the Park. For protection of park animals however, dogs must be kept on leash.

#### Motor Licence

Motoring visitors are required to obtain a park motor vehicle licence at the entrance. This licence is good in all National Parks for the entire season.

#### **Motor-Boats**

Motor-boats may be used only on Lake Minnewanka and on the Bow River near Banff. A free permit is issued by the Warden Service for boats using these waters. All motor-boats must carry proper safety equipment and conform with Federal Navigation Regulations.

# How to Reach the Park

The Park is served by all usual methods of transportation-rail, air, bus, and car. The nearest airport is at Calgary, 80 miles southeast, and, as indicated on the accompanying map, there is a landing field near Banff for daylight landings of light aircraft.

# Park Enjoyment

Although the Park has been set apart primarily to preserve its natural state for the enjoyment of this and future generations, facilities have been provided to help visitors obtain greater benefits from their stay. At two of the mineral hot springs, outdoor bathing pools, (with steam baths at one) offer greater convenience for healthful enjoyment of these waters. Many miles of trails are maintained to enable visitors to escape from the pressures of modern living and seek the peace and quietness of forested glades. Specially selected trails have been developed as Nature Trails where various species of trees, shrubs and wildflowers are identified by labels. To secure the maximum benefit from their park experience, visitors will find the use of these and other trails into areas of unspoiled nature most rewarding. A journey into the more secluded sections of the Park can contribute greatly to the restoration of the human spirit. It is a sanctuary for man, as well as the wild creatures.

Private interests offer alternative recreational activities in both winter and summer, with sightseeing tours via motor-car, boat, mountain lift, skiis, or saddle-horse, as well as other facilities customarily found in most vacation areas.

# A Brief History of the Park

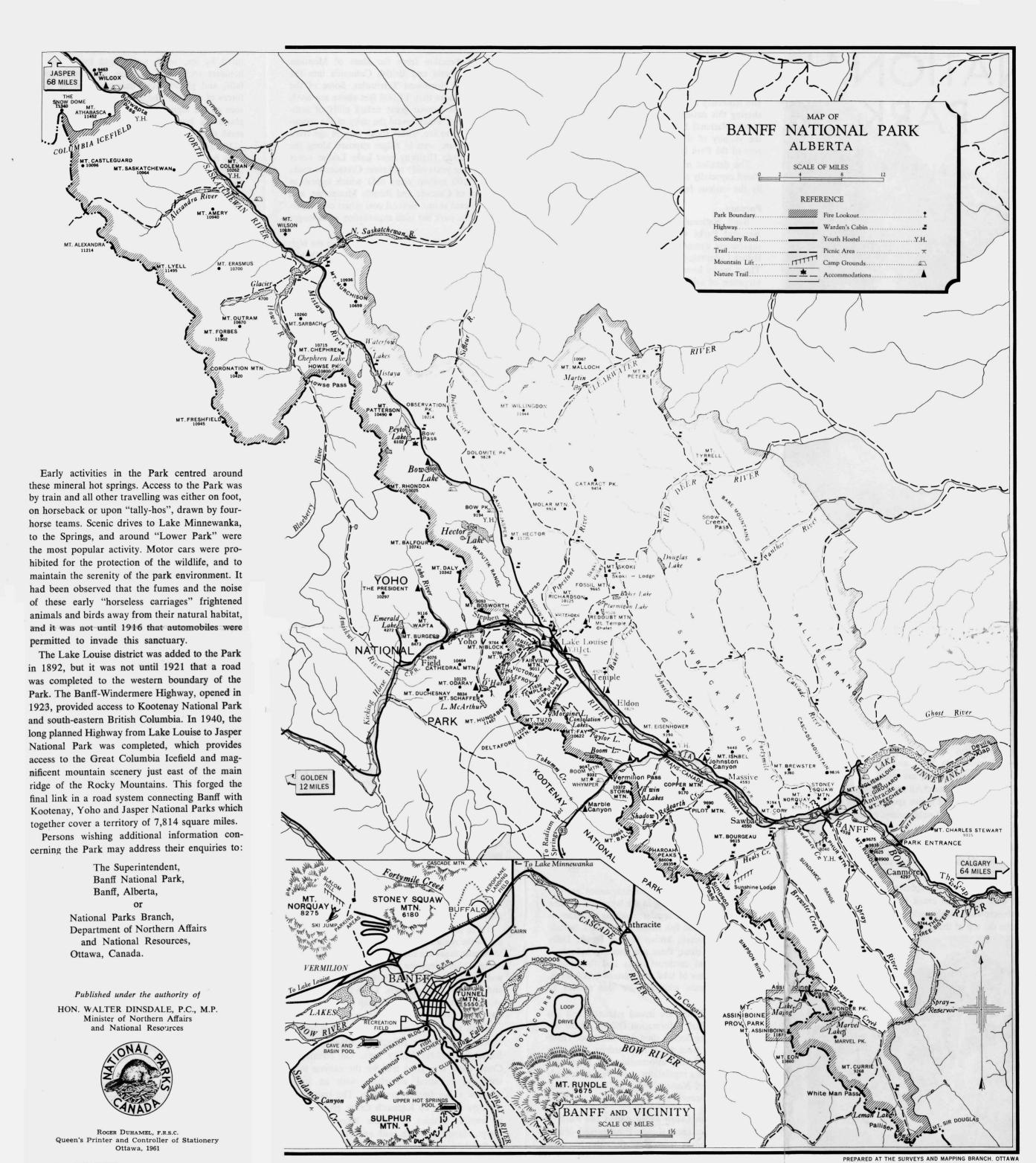
The early history of this area is found in diaries and reports of those who explored routes for the pioneer fur-traders of Western Canada. Between 1800 and 1811, the route discovered by David Thompson up the Saskatchewan and Howse Rivers into the Columbia Valley was used, until hostile Indians caused it to be abandoned in favour of Athabasca Pass further north.

Sir George Simpson, on his journey around the world in 1840 followed the Bow Valley beyond Banff and crossed Simpson Pass to the Vermilion River. In the same year, James Sinclair led his band of settlers across the Park to reach the Kootenay River en route to Oregon. Father P. de Smet and the Rev. Robert Tyrrell Rundle in 1845 and 1847 traversed the Park on their missionary work.

The Imperial Commission under Captain Palliser in 1857-60 explored the area to locate a travel route to British Columbia. Dr. James Hector in 1858 ascended the Bow River, crossed Vermilion Pass to the Kootenay and reached Kicking Horse River-now in Yoho National Park.

Fur-traders and prospectors continued to penetrate the area and in 1883, surveyors for the Canadian Pacific Railway searched for a route through the Great Mountain Barrier to lay their bands of steel into the then isolated Colony of British Columbia. In that year, railway workers learned of the Cave which had been formed by hot springs bubbling from the slopes of Sulphur Mountain, and erected a rough log building which was the first "bathing establishment" in this area.

Learning of this unique phenomenon of nature, far-sighted legislators in 1885 reserved an area of ten square miles around these springs to preserve them for the people of Canada. In 1887, by the Rocky Mountains Park Act, 100 square miles of this area were established as Canada's first National Park.



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