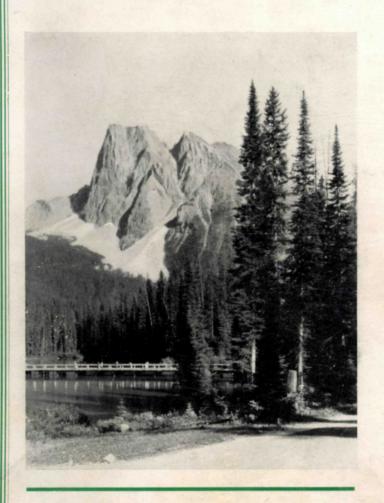
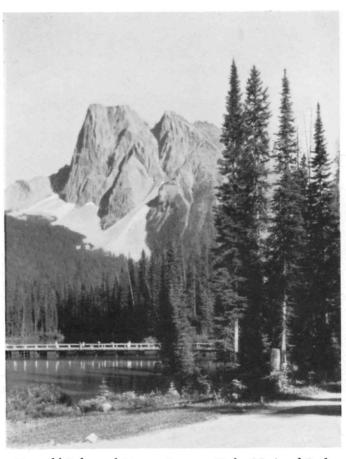
M. B. WILLIAMS



During the past twenty-five years Canada has seen a great achievement—the conservation of the vast Parks or Sanctuaries, in the Rockies and on the Plains, where wild animal and plant life is protected and where people are free to camp and fish and enjoy life in the open air. The story of the Canadian National Parks is the story of a people coming into possession of its land.

Miss Williams has been in the movement from the very first, and in this fascinating book she deals with every aspect of it. She tells of the dramatic rescue from extinction of the buffalo, elk, and antelope; of the lives and difficulties of the Parks' Curators, especially the terrible danger of fire; of the great highways which have been built; and a number of enchanting real-life stories of the animals she knows so well.





Emerald Lake and Mount Burgess, Yoho National Park, British Columbia.

M. B. WILLIAMS

THOMAS NELSON AND SONS LTD LONDON EDINBURGH PARIS MELBOURNE TORONTO NEW YORK

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First published, October 1936

M. B. H. BEST OF CRITICS BECAUSE SHE IS SO EASILY BORED

"I see a great land waiting for its own people to come and take possession of it." Edward Carpenter: Towards Democracy.

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CHAPTER I

BEGINNINGS

A SEPTEMBER rain was beating upon the window—a cold rain foretelling the ending of summer, foretelling, too, if one had had ears to hear it, the ending of old, the beginning of new things. That golden summer of the long peaceful Victorian era which had carried over to the death of the old king, was past. Now a new age was beginning; a new king was crowned. And of all the birthday gifts which the new age was bringing, none was to be more remarkable than that strange automatic toy-the combustion engine. Inventors had rubbed the lamp and there had appeared a new Genius who would bring man powers and enjoyments undreamed of, new ways of living, even a new morality. Already the taxi was

honking the doom of the hackney, though elderly females still trembled at a speed of twenty miles an hour. Bleriot had flown the Channel, but no one could foresee the death-raining legions who would follow him in a few years. The quiet country-side still held its ancient immemorial peace, and there was no one to dream that within a decade the solitudes would be hunted down by packs of lorries, that the horn, not of the hunter but of the speed fiend, would be heard on every hill.

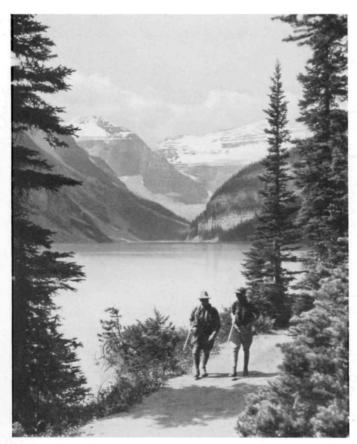
Certainly not the young man who sat in that drab Civil Service office at Ottawa or the seven others who sat at shining new desks in adjoining rooms, though they too were at a moment of change. The young man was not looking through those rather grimy window-panes at the rather depressing back premises of the Rideau Club; he was not conscious of the beating rain. He was not thinking of the bare distempered walls, the ill-assorted furniture, the cheerless bookcase empty of books. He was studying with intense concentration two documents which lay before him—one, the "Dominion Forest Reserves and Parks Act of 1911," which set aside certain areas in the Dominion

of Canada for the perpetual "benefit and enjoyment of the people," under the control of an officer to be known as the Commissioner of Dominion Parks; the other, an Order-in-Council appointing him to the position.

Seven thousand five hundred square miles! It was a small kingdom! And it was all henceforth to be under Government control, removed from the operation of any other Act except the Criminal Code. The Commissioner and his small staff were to initiate policies of protection and development, to discharge on behalf of the Government a new public trust. When he had been offered the post, he had accepted it lightheartedly, thinking that the care of a few beautiful places would be almost too easy and delightful a task. "National Parks!" It was a strange, almost meaningless term, conveying little to the imagination. In Europe kings and great noblemen had had their parks for centuries, as preserves for their game and pleasure grounds for a select few. There had been, too, the small ornamental parks of the cities with their ordered flower beds, trim walks, and stretches of smooth green lawn. But these National Parks, it appeared, were something quite different.

George Catlin, the American naturalist and artist, who spent his life making records of the Indians of North America with his brush, had been the first to use the term, when he had urged the creation of a "National Park" to preserve the wonders of the Yellowstone region in 1831. Nearly fifty years later Catlin's dream was realized, and the American Congress set aside a large area as the "Yellowstone National Park."

A few years afterwards the Canadian Government decided to operate the Hot Springs at Banff under public ownership, and created the ten square miles immediately surrounding them, "Banff National Park." Soon the wonder and beauty of the Canadian mountains began to be realized, and with commendable foresight and wisdom the Government reserved large areas from settlement. Some of these were called "Park Reserves," others "Parks," but only one, the Banff National Park, had been set aside by Act of Parliament, with full authority for its administration. Having done so much, the Government straightway forgot about them, and for years the reserves were left to look after themselves. At Banff an energetic local super-



Lake Louise, Banff National Park.

intendent persuaded the Government to vote a few appropriations for roads and sidewalks, but otherwise the parks had been Cinderellas at the national hearthstone.

But with the turn of the century there had come that new movement in America known as the Conservation movement. The United States and Canada were emerging from the pioneer age, awakening to a new sense of nationhood. Until then they had taken their vast wealth of mines, forests, and game for granted, drawing upon them extravagantly, with little more foresight than the child or the Indian. Now careful observers were compelling them to face sobering truths. The great national resources of both countries, it appeared, were by no means "illimitable"; in many cases accounts were dangerously overdrawn; in others actual bankruptcy was in sight. The forests needed immediate and stern protection. Dr. William T. Hornaday, of the New York Zoological Society, was gloomily prophesying a "gameless continent." The losses to agriculture through the disappearance of insectivorous birds were placed at \$50,000,000 a year. Already the great hardwood forests had (4,320)

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largely fallen; waterfalls were being harnessed; the game was being driven ever farther back. Even the beauty of the earth was seen to be disappearing before their eyes. The water sprites of Niagara, who had woven their airy veils across the gorge between the two countries, only for delight, had been set to turn the wheels of industry, to churn the cream and draw the water on hundreds of farms.

The Liberal Government, which had held office in Canada uninterruptedly from 1896 to 1911, had shown themselves specially favourable to conservation policies. They had established a Conservation Commission which had investigated actual conditions in respect of the natural resources. They had set aside large areas as forest reserves and established a special Branch to take charge of them. In 1911, a few months before they went out of office, they had passed the Dominion Forest Reserves and Parks Act, raising the existing reserves to the full dignity of National Parks and providing for the creation of a separate Branch to administer them. No longer were the parks to be ignored and neglected. The Government had taken out papers of adoption, accepted public responsibility for their care

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and protection, and appointed special guardians for their future development. As a rule, public sentiment precedes and compels legislation, but in this case the Government had led the way. And now it was the task of the new Commissioner and his small staff to carry out the Government's desire.

There was little in the new office at Ottawa to serve for guide or inspiration. The files which had been transferred to the recently formed organization were for the most part dreary compilations of correspondence concerning transfers of land in the town sites of Banff and Field, the collection of rates and telephone charges, complaints regarding dusty roads and the absence of a garbage collection. There were few photographs and no books, with the exception of Government records and bulletins. Three thousand miles away from their inspiring reality, it was difficult to visualize these National Parks, and far more difficult to realize to what manifold uses they might be put.

As soon as possible after the organization had been set going in Ottawa, Mr. J. B. Harkin, the new Commissioner, went out to western Canada

to inspect the areas which were to be under his control. It was the early autumn and the mountains were looking their loveliest. The dogwoods and the willows were red upon the hills; the poplars and aspens filling all the valleys with golden radiance. Never are the mountain skies bluer or the mountain tops whiter than at this season, for fresh snow falls almost every night. The atmosphere, too, is softer, and the great summits, sometimes so aloof, so sternly removed from any converse with the earth, seem friendly and benign. How kindly they looked down upon the little town of Banff nestled in the verdant amphitheatre of the Bow Valley, with its green-white river foaming into rapids and tumbling in a beautiful fall almost within the town! Above, the river widened out into calm lakes whose depths gave back in doubled beauty the glories of peak and sky.

Banff, in 1911, had still the picturesque atmosphere of a half-western, half-alpine town. During the season its streets were thronged with a varied and colourful crowd—cowboys in "five gallon hats," gay neckerchiefs, and brightly studded leather "shapps," riding hardmouthed, wicked little ponies; Indians, with im-

passive faces, sometimes wearing the ceremonial buckskins and eagle's feather; "mounties" in smart uniforms with shining spurs; alpine climbers with rucksacks and alpenstocks; artists with easels and boxes; botanists and geologists with little tin cases; and hundreds of tourists, every second one of whom carried a camera.

Through the streets from time to time passed the little caravans of pack-ponies, often as many as twenty or thirty in a string, their enormous bundles swaying clumsily as they broke into a trot to keep up with the bell horse. At the head would ride one of the famous mountain guides, experienced in trails and hunting-grounds, for this might be a hunting expedition, fitted out by some wealthy sportsman from New York or Chicago, setting off for the big game regions beyond the park. The railway was the traffic route of a continent across the mountains, and along its thin ribbon from east to west were to be found comfortable, even luxurious hotels, but away from it, on each side to the north and south, stretched a chaos of peaks and ranges still unentangled, threaded only by old half-obliterated Indian trails-a mountain wilderness equaling Switzerland in mingled beauty and grandeur,

but as little touched by civilization as Switzerland was when Hannibal crossed the Alps.

But though Banff was the capital of a great Government reserve, it had been allowed to grow up until now without plan or control. The architecture was irregular and the streets unsurfaced. When the crowded tally-ho coaches swept through them with their four or six horses they threw up clouds of dust in dry weather and mud in wet. The sidewalks were of cinder, the water and drainage systems inadequate. There was little provision for public recreation, no playgrounds or shelters, no public sites where people could camp without endangering the forest.

The Hot Springs, which closely resemble in content the famous springs at Bath, had long enjoyed a wide reputation for their curative efficacy in rheumatic and kindred complaints. Report declared the original discoverer of these waters to have been an old and rheumatic grizzly bear. A year or so before the construction of the railway, a trapper had come across a well-beaten grizzly trail. He followed the tracks down the Bow Valley and came to a natural pool on the slopes of Sulphur Mountain, fed by

a spring of unusually high temperature. There were unmistakable signs that the old bear had used the pool as a bathtub. Later it was even said that the trapper had actually seen him limping down the trail and lowering himself into the warm waters, so grateful to aching bones. The trapper, however, seems to have gone on his way without attaching any special significance to the incident.

Other adventurers are said to have visited the springs in early days, but it was not until the coming of the railway that the waters were really discovered. One day engineers who were laying the new lines along the Bow Valley noticed a thin column of steam rising from the mountain-side across the river. Hastily constructing a rude raft, they went over to investigate, and found a natural pool fed by hot springs lying about twenty feet below the aperture through which the steam was issuing. It was a crater-like opening about the width of a man's body, and peering down it they could hear the sound of rushing water. A felled pine tree served for a ladder, and squeezing through the narrow venthole they descended into the steaming darkness below. Here they found them-

selves in a small cave, evidently hollowed out by subterranean waters, which had blown out the opening at the top, but, later, had forced a lateral way along the crack in the strata out to the Bow Valley. The high temperature of the water showed them that this was one of the hottest springs then known in Canada, and the important discovery was at once reported.

As the railway neared completion there were applications to develop the springs commercially, and a surprising number of claimants for the rights of original discovery appeared. Indeed, every one but the ancient grizzly seemed to be demanding compensation. Faced with so many claimants, the Government hesitated. In the meantime the last spike was driven in the Canadian Pacific Railway at the little hamlet of Craigellachie, in the Selkirk ranges, and the first train went reverberating through the astonished mountains. It was the beginning of a new epoch for Canada, and the possibilities of the future touched men's minds with a new fire. The railway company had invited a party of ministers of the Crown and members of parliament to travel as their first guests over the new line. They returned east with an enlarged con-

ception of their own land, with imaginations kindled by the beauty and wonder of the mountains, and with a wider vision of their individual responsibilities. The Government decided to develop the springs as a national undertaking, and when, in 1887, a Bill was brought down to set aside a few square miles in their immediate neighbourhood as a "National Park," it met with warm support from both sides of the House. Sir John A. MacDonald, then Prime Minister, gave the Bill his strong support, remarking, with a characteristically astute smile, that he believed Banff would eventually become a continental resort, and might serve not only to recuperate the people but recoup the treasury as well.

A few years later the National Park idea had grown. The Government of the United States began to set aside other areas, chiefly to preserve natural wonders. Canada had no geysers or volcanoes, but in her western mountains she possessed a region as glorious as that which had made the Alps the playground of the world. Ruskin and others had been lamenting the damage which had been done through thoughtless commercial exploitation in Switzerland.

(4,320)

The consciences of men were beginning to respond to that new gospel of conservation. "The earth is the Lord's and the fullness thereof," they had repeated glibly, and had even with delicious irony set it above one of their greatest temples of "Big Business." Now, animated by glimmerings of a new gospel, and acting upon suggestions from a few public-minded and far-seeing Canadians, the Government enlarged the small Banff reserve to two hundred and sixty square miles, and reserved lands at Lake Louise, Field, and Glacier from settlement.

At these points the railway built large tourist hotels and improved the immediate surroundings. Field became a railway divisional point, and a dreary small town grew up at the base of glorious Mount Field. A few miles of roads gave access to the most outstanding attractions, but this was as far as any National Park development had gone. For the most part people merely "took in" the mountains on a journey to or from the Pacific coast. Few, even of those who came to Banff, guessed that they were within a National Park. The fact was seldom advertised, and the term conveyed little to the popular mind.

From the time of the completion of the railway Banff had been the chief gateway to the mountains, and the fame of its springs brought hundreds to take the cure. The Government leased some of the waters to the Canadian Pacific Railway Company and to private capital, and a fine sanitarium was built, but they retained the principal springs and the natural pool for public use. Two primitive bath-houses had been erected, which served well enough for a few years, but which soon became out of date and inadequate for the increasing numbers who wished to use them. For the fame of the springs soon spread far and wide, and sufferers from all parts of the prairies came seeking relief. People too poor to pay for lodgings camped out in tents, and many of the cures reported were almost miraculous. For years, scattered about on the hillside near the springs, were many little boards stuck into crevices of the rocks-tombstones to departed rheumatism, monuments to restored health. "I had to be carried up to the springs," declared one of these, "could not bear even the motion of a carriage. I had not walked for two years, and every movement was an agony. In three weeks I walked down to Banff, and in

five I ran a foot race. Praise God!" "I threw away the crutches I had used for four years," read another, "after I had been here ten days." "A month after I began to take the baths," said another, "I climbed to the top of Sulphur Mountain. For five years I had not been able to walk without a crutch."

In 1911 invalids were still coming to Banff in large numbers, but these, for the most part, used the so-called "Upper Springs," where the waters were of a slightly higher temperature. The Cave and Basin Springs were serving for a recreational bathing-place as well. The lakes and streams of the mountains are usually too cold and too dangerous for swimming, but in this open-air pool, warm even in the depths of winter, bathing was a delight. The only trouble was that the rocky pool was far too small, and on holidays, when large excursions came up from the prairies, it became a case literally of "standing room only."

A new and commodious bath-house in keeping with the dignity of this great resort was immediately necessary. The town streets and roads badly needed attention. A better electric lighting system, more public utilities, were at

once required. There should be public recreational fields and golf links, better provision for visitors in every way.

Outside of Banff, in the great park, there were as yet few roads, and these were dusty or muddy and too narrow for anything but carriage travel. The marvellous beauty of the mountains surpassed all the Commissioner's expectations. The parks were a wonderful heritage for the Canadian people, but how much remained to be done before that heritage could be entered upon! Part of the territory was still unmapped, part even unexplored; many of the finest regions were beyond the reach of all but a hardy or wealthy few. Hundreds of miles of trails would have to be built, and there must be roads. Already the motor was knocking at the door of the mountains. The new age was at hand and public provision would have to be made for its requirements.

What a responsibility must rest upon those charged with the protection of these treasure houses of beauty! The curator of a national gallery of art may rely upon his fire-proof walls, upon locks and bars, but the parks were open on all sides. They had not even a fence to shut out

poachers; to build a fence in the mountains would have been an impossible task. Fire would be a constant menace. There would be other enemies too-men who could not see beyond the purely material or selfish values, who would look with greedy eyes upon these dedicated woods, rivers, and game. Well, they would have to build up the defences, to be ready to meet all attacks, natural or human, as well as they could. New regulations would need to be established immediately, rigid architectural control, better fire and game protective services. A campaign of education and publicity, a series of books and brochures providing tourists with authentic information and enlightening Canadians as to their wonderful national possessions, must be undertaken at once.

But all this would require money, a great deal of money. How were hard-headed, unsentimental parliamentarians to be persuaded that National Parks were objects worthy of increased appropriations and not mere "frills"? The name "National Park" would make little appeal, the expression "conservation of beauty" would probably be suspect. How could the evils of misuse be guarded against, and yet

provision made for the freest access and fullest legitimate use? What finer issues, as yet unsuspected, could the parks be made to serve? These were problems sufficiently difficult to damp the courage of any executive. But the Commissioner was young. He had energy, enthusiasm, imagination, and an unusual capacity for disinterested service. And he cheerfully faced the task.

CHAPTER 2

THE PARKS IN THE MOUNTAINS

A SEA of mountains!" So one of the early explorers had described the Canadian mountains, and from any of the loftier peaks, such as Mount Columbia, one perceives how apt the description is. They stretch away on all sides as far as the eye can reach, range after range, in long parallel lines running from southwest to north-east, like giant combers frozen into immobility, with crests jagged and splintered like wind-torn waves, and foaming up along the Great Divide into perpetual snows. On a clear day, seventy miles away to the east, you may see the prairies, flat and green as another ocean and half as wide as the Atlantic, curving off to a dim horizon. It conveys little to say that this mountain region is twelve hundred miles long from north to south and four hundred from east to west, or that it takes thirty-six hours to cross it in a fast

THE PARKS IN THE MOUNTAINS

express train. Southwards, the mountains go on to the International Boundary, and, northwards, to the Arctic Ocean, and though the National Parks are large, they form only a fraction of this vast alpine territory.

"The Shining Mountains," the Cree Indians called them with happy inspiration, as they gazed at their dim blue line, low-hung among the western clouds, tipped with glittering white; but "assin-wati," or Stony Mountains, they were called by the Assiniboines, the "stonecookers," who lived under their shadow and hunted the wild goat and the eagle along their tremendous cliffs. French-Canadian voyageurs translated the name into "montagnes des roches," and English explorers into "Rocky Mountains," and as Rocky Mountains, or, more colloquially, "the Rockies," they are known today, though the geologist divides the whole region into three great mountain systems, and calls only the eastern one the Rocky Mountain system.

Looking westward from Mount Columbia across the Divide, which forms the watershed of the continent, you can see the great Intramontane Trench, occupied in part by the (4,320)

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Columbia River, which divides the true Rockies from the much older Selkirks and the central ranges to the west. Beyond these, though they are too far away to be visible, lie the peaks of the coast system, extending as far as Vancouver Island, for the mountains end only at the sea. Compared with these two systems the Rockies are mere parvenus. The Selkirks lifted lofty heads along an archæan sea in the "dark backward and abysm of time," when the land was divided from the waters on the first geological day. Rocky dust washed down from their summits formed a sea-bottom ten miles deep, and when at last the skin of the earth cooled and the great thrust came from westward, this sea-floor was lifted upwards and pushed into long parallel folds, and deeply buried fossils of trilobites and molluscs found themselves two miles in air on the summits of the Rockies.

The many coloured granites of the Selkirks have been rubbed down and rounded off into sugar-loaf summits, but the limestones of the Rockies still show the marks of youth in splintered towers and pinnacles and jagged crests, so sharp that they look as if they had been cut out of cardboard for the backdrop of a

THE PARKS IN THE MOUNTAINS

theatrical scene. Theatrical, too, are the deep gorges, the tremendous waterfalls, the unbelievably brilliant lakes. Visitors from older lands sometimes miss the warmer purples and softer atmosphere to which they have been accustomed, and it is true that in the thin, clear air of Canada, especially on the eastern slope, the colouring is lighter and the outlines harder and sharper. Sometimes, on a grey morning, you may find the peaks standing out cold and forbidding as immutable facts, but wait only an hour or so and the scene will change. The clouds will dissolve, and under the prismatic radiance of Canadian sunlight the cold limestones will take on tones as soft as the breast of a bird-delicate mutations of mauves, olives, and airy rose, which the eye must be trained to see—the stern outlines will melt, the mountains will soar upwards as if they were merely tethered to the earth, airy, unsubstantial things, which a breath of wind might almost blow away. Sunrise and sunset perform their magical transformations, peak after peak lighting up into pink and gold as the swinging beam of the sun touches them, at night fading out into a daffodil glow which lingers for hours, to be replaced in

northern latitudes, like Jasper Park, by a ghostly radiance which is known as the "false dawn."

As the eastern ranges go northward they spread out, fanwise, into ever-increasing width. At the forty-ninth parallel the main Divide is only thirteen miles away from the eastern foot-hills, at the Kicking Horse Pass it is sixty-six miles, and at the Yellowhead Pass it is eighty miles. It seems as if Nature had been trying the same experiment on an ever-increasing scale, until, in Jasper Park, the landscape appears to have been laid out with the measuring rod of the Seventh Angel. Each of the National Parks has, therefore, a special character and individuality of its own, which distinguishes it from every other.

If you look at the map on pages 146–7, showing the National Parks, you will see that the two largest and best known lie one above the other on the eastern slope, while to the south, adjoining the International Boundary, is another much smaller reservation called Waterton Lakes Park. It is a reserve not nearly so well known as it should be, probably because the park is not directly accessible by railway, but its reputation is growing with each year.

In 1911 Waterton Lakes Park was a small

THE PARKS IN THE MOUNTAINS

reservation covering only thirteen square miles, though the area was later enlarged to over two hundred square miles. If there are grander and more imposing parts of the Rockies, there are few, if any, more perfect in loveliness. Here Nature has been sparing with her canvas, and with good effect. The landscape is "all compact together," a "maximum of scenery in a minimum of space." The loveliest feature is the large Waterton Lake, which stretches a blue arm across the International Boundary and ties together the Canadian park and Glacier National Park, which lies immediately to the south in the United States, uniting the two into one playground and sanctuary. The wild animals, the birds, and the fish, who recognize no national boundaries, customs, or passport regulations, have long wandered from one to the other without discrimination, and now man is free to do the same. A few years ago, in commemoration of a century of peace between the two nations, these reserves were constituted an "International Peace Park," a happy monument to a remarkable national friendship and to emotions which unite rather than divide.

The Indians have a legend that this region

was miraculously created. Very long ago-so the old men who know the ancient tales will tell you-where the park now stands was all unbroken prairie. Among the tribes there lived at that time a young brave called Sokumapi. On an evil day he fell into the hands of the Seven Devils, who carried him down to the underworld and made him a slave. There he fell in love with a beautiful maiden, captive like himself, who suggested to him a way of escape. While the evil ones slept the lovers stole away, taking with them three magic gifts, a stick, a stone, and a basket of water. Westward across the prairie the masters of evil pursued them, but when they were close upon them Sokumapi threw down the stick and it became a luxuriant forest blocking the way. Profiting by this delay the pair fled on, but were again overtaken, and now Sokumapi threw down the stone. At once mountains sprang up. Before the Devils could overcome this barrier, the Indian emptied the basket of water. It became a lake, the basket was transformed into a canoe, and across the blue waters the lovers escaped. A little westward, on the crest of the Divide, they made a home together, and there are those who believe

THE PARKS IN THE MOUNTAINS

that to this day their happy spirits haunt the shores of lovely "Omoksiki," which in the Indian tongue means "beautiful waters," and which is now less poetically known as Waterton Lake. And, they add, from its shores the Seven Devils departed, and their evil shadows never darkened its clear surface again.

The Banff Park is known to all lovers of the Canadian mountains, and during the season its two chief resorts—Banff and Lake Louise—are thronged with visitors from many lands. The Bow River, which takes its rise under the shadow of the Great Divide, flows down across the ranges, and its transverse valley forms the main avenue of travel to and through the park.

There are three great groups of peaks in the south of the park—one topped by the pyramidal head of Mount Assiniboine, the loftiest peak in the Banff Park, called by alpinists, whom it has so often defeated, the "Matterhorn of the Rockies." Beyond lies the British Military Group, a new region whose peaks were named soon after the Great War—Mount Allenby, Mount Byng, Mount Currie, Mount French, Mount Smith-Dorrien. Still farther south lies the Royal Group, named after members of the

Royal family. Around Lake Louise circles another group, hung with glaciers and snowfields, and holding, tucked away into rocky pockets, half a dozen exquisitely coloured lakes. Along the Divide is the Waputik Group, which sends down wildly broken icefalls to the valleys below.

Banff was named by Lord Strathcona after his birthplace in Scotland, and each autumn Highland Games are held in his honour. These and the "Indian Days" held in late July are the two most important sports events of the season. The Stony tribe had their ancestral hunting-grounds in this region, and though they live now in reservations outside the park, they ride in from miles around to pitch their tepees once more in the Bow meadows and to hold their old contests in horsemanship and archery. The great mile-long procession with which the games open, with the Indians riding three abreast, their glistening brown bodies resplendent in beaded regalia, and the war bonnets of eagle plumes sweeping down their backs, is a sight which recalls the glory of their vanished days. Once the Stonies were among the fiercest warriors of the West, but now they are a peaceful, friendly people, honest and simple.

THE PARKS IN THE MOUNTAINS

Nearly every region in the vicinity of Banff reminds them of that former existence. There is the Sun Dance Canyon where they once held their great religious festivals to the sun, the Devil's Gap, haunted by a hereditary demon, and the Devil's Lake, or Lake Minnewanka, whose evil spirit they sought to propitiate by leaving gifts of tobacco, pipes, beaded pouches, and tomahawks on the cliffs of a black promontory known as the Devil's Head. But the old religious rites are no longer observed. The Stonies are now professing Christians, converted by that kindly missionary Dr. Rundle, who won from them the touching tribute, "Poor he came among us and poor he went away, leaving us rich."

Twenty miles west of Banff the geological structure changes and the "block-type" of mountains, like Mount Temple, Mount Cathedral, and Castle Mountain, appears. Castle Mountain is a natural fortress rising from a base eight miles long, topped by turrets, bastions, and battlements like a mediæval stronghold. This is the legendary home of the Chinook Wind, that warm dry wind of the western prairies which descends from the mountains in late

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winter and spring and devours the snow. The story goes that the young and strong West Wind was protecting the beautiful South Wind and her little daughter Chinook when they were attacked by the terrible North Wind, the ruler of the Arctic. The West Wind was victorious, but in the struggle the little Chinook was blinded. Since she could no longer fly with the other winds she was given a home in Castle Mountain, and sometimes, on spring nights, it is said, she glides down to the prairies, seeking her lost mother and leaving spring behind her wherever her feet have trod.

"When God made Guinevere he used both hands," said Cabell, and the remark comes into mind at Lake Louise. Once in a while the great Creative Artist does the thing so perfectly that even the dullest must "pause and look and wonder," startled by the mystery of perfect beauty. Lake Louise is one of those rare things. The water is intense in colour, but that colour is never the same for two minutes in succession. It sweeps the whole gamut of green, blue, amethyst, and violet, undershot by marvellous undertones of green and gold, shifting and changing from moment to moment, as if some

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magician were mixing his colours in its magic bowl.

The majesty of the picture is attained by the great sweep of the curve in front, by the sheer wall of Mount Fairview and the lofty snow-crowned head of Lefroy to the left, and the darkly wooded slopes of Mount St. Piran to the right. Between, rising apparently from the verge of the lake, but in reality four miles away, is the massive bulk of Mount Victoria, with its huge benches of snow, some of them two hundred feet deep, and its fine glacier. The mountain is so placed that for the greater part of the day it catches the full glory of the sun, névé and glacier standing out in a dazzling whiteness, which is reflected in the blue lake below.

A few miles away, in the wild and lonely valley of the Ten Peaks, is the peacock-hued Lake Moraine, set in the arc of the Ten Peaks. In a neighbouring valley lies the solitary Consolation Lake, very lovely, but known to few. Down the Giant's Steps, in Paradise Valley, at least so Indian mothers say, comes "Mucheemanitou" looking for naughty little children, whom he carries off to his home up in the sky to eat. But there is nothing in the Paradise

Valley itself to suggest evil; it is a bit of exquisite pastoral loveliness untouched by man, its green meadows brilliant with flowers and its stillness broken only by the sound of falling waters, resembling the vision of Mirza, so Edenlike is its freshness.

At the summit of the Kicking Horse Pass the traveller leaves Alberta for British Columbia, and the Banff for the Yoho Park. Almost immediately he becomes aware of a totally different character in the landscape. To visualize the main Rockies one must think of them as a series of gigantic writing-desks—very straight on the back or west, and sloping gently away on the front or east. This "back" of the main Divide is often so steep as to become almost a sheer wall over which, as in the Yoho Valley, waterfalls, born from the melting snows above, fall over a thousand feet into the valley below.

For many years the Canadian Pacific Railway struggled with the problem of that western slope. Every day four huge engines, dragging the heavy freight and passenger trains, puffed and panted their way up the tremendous ascent. Every day the west-bound trains slid downwards,

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as slowly as might be, under full brakes, gathering momentum with each mile. Here and there spring switches were installed, and unless the engineer signalled that his train was under perfect control, the switch sprang open, and carried the train up the mountain-side until it had, so to speak, recovered its feet. Then, its impetus lost, it backed out to the main line again, and once more crept downwards.

If the traveller had nerve enough left to look about him, he caught, at every curve, glimpses of some of the most dramatic scenery in the mountains. The great massifs of Mount Cathedral, Mount Stephen, and Mount Burgess tower ahead, and opening far away to the right lies the blue gorge of the Yoho Valley. "Yoho," exclaimed the Indian in wonder and delight when he first saw this region, and "Yoho" became the name of the park. "I am not afraid," wrote one visitor, "of exaggerating the beauties of the Yoho. This valley of enormous trees, spiring up from unseen gorges to well-nigh unseen heights; of cataracts that fall in foam a thousand feet; of massed innumerable glaciers; this valley into which it seems you could drop all Switzerland and still look down, is not

easily overpraised. The difficulty is to praise it adequately."

One of the first things you notice on the western slope is the greater richness of vegetation. The forests are thicker, the slender pines and firs reach greater heights. As a rule there are fewer lakes than on the eastern slope, but Yoho Park has two which are as lovely as any in the mountains, the well-known Emerald Lake and Lake O'Hara. Emerald Lake is a sylvan gem, surrounded by rocky and snow-capped peaks, and set in a circle of jade green forest which completely clothes its shores. You may count twenty shades of green in its crystalline waters at one time, but never one of blue, and though the hues range from darkest chrysolite to palest milky jade they never lose their peculiar jewellike brilliance. Sargent was one of the first to paint Lake O'Hara, and he was of the opinion that it surpassed Lake Louise both in colour and setting. Comparisons between two things of such beauty are in reality impossible, but certainly this little sapphire gem, set against the splintered pinnacles of the Wiwaxy peaks and fed by an exquisite waterfall, is a place worth travelling many miles to see.

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Glacier Park is a comparatively small reserve, covering only 456 square miles, but it presents a perfect picture of the differing features of the Selkirk Mountains. Their summits, once probably higher than their youthful descendants, the Rockies, have been worn down and rounded off till they are now from one to two thousand feet lower in general elevation. The warm winds from the Pacific condense above these mountains and the snowfall is extremely heavy, sometimes as much as fifty feet in one season. This great mass melts but little from year to year and forms a thick cap over all the peaks, reaching down practically to timber line. Rich forests of cedar, fir, hemlock, and spruce climb upwards to meet it, and sometimes as many as one hundred glaciers may be counted at once-dazzlingly white against the dark background of green. All the other beautiful phenomena of an alpine world are also present—ice caves, waterfalls, green valleys, and uplands that bloom throughout the summer in perfect seas of colour. Glacier Park has very little accommodation for travellers and is little known, but it is one of the loveliest of all the national reserves.

When it was established in 1911, Jasper

National Park, in the northern Rockies, was a vast, undeveloped, almost unknown mountain wilderness. The wide valley of the Athabaska River, the "Mistahay-shakaw-seepee," or "Great River of the Woods," which has a width varying from two to five miles from rim to rim, is the central geographic feature of the park. Smiling, green, and spacious, floored with grassy meadowlands, its sides rising to wooded benches set with a score of vividly coloured lakes, its upper slopes arrased with the rich green of pine and spruce—this noble valley alone would make a pleasure-ground for multitudes, yet it forms, as it were, only the main corridor to this great reserve.

You could spend many summers in Jasper Park exploring its charted and uncharted valleys without exhausting its many possibilities. Near its western boundary is the Tonquin Valley, lying so high up as to be almost at timber line, enclosed by that curious wall of natural fortresses called "The Ramparts"—here forming the Divide. Travelling south, you come to the historic Athabaska Pass, guarded by the romantic peaks of Mount Brown and Mount Hooker, so long believed to be the highest peaks in the Rockies. Eastward lies that remarkably beauti-

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ful lake so maligned by its name—Maligne Lake—whose strangely contrasted pyramids have been made famous by Canadian artists. There are some who hold Maligne Lake to be finer than Lake Louise, and it is true that Maligne is laid out on a grander scale. But mountain lakes differ from one another—like the stars—only in glory. Lake Louise is chamber music, Maligne the full orchestra.

About fifty miles to the south of Jasper—the headquarters of the park—the Rocky Mountains proper reach their culmination in the Columbia icefield. Although Mount Robson to the north is the highest peak in the system, it occupies an isolated position; it is merely the great tower in front of the central edifice. Here, in this sea of ice, one hundred and ten miles in extent, is the true apex of the "roof of the Rockies." It is a glassy dome, formed by the accumulations of ice and snow during many centuries, lifted high above the clouds upon the rocky ribs of a score of lofty peaks—glorious Mount Columbia, Mount Douglas, Mount Bryce, The Twins, Mount Athabaska, and Mount Clemenceau, all over 11,000 feet. Springing down from the icefield on all sides curve the

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crystal arches of more than a score of glaciers—the largest six miles long and nearly two miles wide—transformed as they reach the valley into streams that become the headwaters of three great rivers, which take their way finally to three oceans—the Athabaska to the Arctic, the Saskatchewan to the Atlantic, and the Columbia to the Pacific.

CHAPTER 3

THE PROTECTION OF THE FOREST

IN the old, old days, before the coming of the white man, the Indian was the keeper of the American forest. Through its shadowy aisles he came and went, padding silently on moccasined feet, pitching his tepee in some sylvan glade, making his fire by lake or stream, but leaving scarcely more trace of his coming and going than the wild animals themselves. To him the forest was a home. He felt himself a part of the great Nature round and about him. lived in the whispering trees, spoke to him from the babbling waters, sent him omens of good or evil. When he made camp he took a few dry leaves and twigs and made a small fire, cooking his food close above it. To this day your Indian guide in the mountains can tell from a glance at the ashes of a camp-fire whether an Indian or a white man has passed that way. "Injun make one small fire," he will say; "white man make

big fire, burn much wood. Injun burn little wood."

In this world so dowered with beauty when he came to it, the white man, too often, played the part of the Hun and the barbarian. He trampled with heavy feet through groves sacred to Indian deities, seeing in them only so many thousand dollars worth of timber, or deliberately setting fire to them as the easiest way of clearing the land. The glorious hardwood forests, the beautiful stands of white pine, which clothed the fertile lands of eastern Canada with a green mantle of beauty when the first settlers came, have all fallen under the axe. Even the magnificent sequoias of the Pacific coast will soon be nothing but a name or found only in isolated specimens. Part of this destruction was inevitable in the opening up of the country. The stately forest had to give way to the tilled field; though there has been a frightful and unnecessary bill of waste which still goes on. But in the great forest reserves, covering many thousands of square miles, and the National Parks the forests are now finding sanctuary, and are being protected with jealous and intelligent care.

The forests of the Rockies! How much they

add to the beauty of this mountain land! They fling their rich cloak of green about the stark majesty of the peaks, softening the harsh contours, clothing the bony ribs and tremendous flanks with their luxuriant and graceful folds. One cannot look at them without a feeling of sympathy for so much hardihood and courage. From the valleys battalions of pine trees charge up the slopes. They climb up the rocky walls to the upper heights like armies storming a citadel, clinging desperately to the tiniest foothold, taking advantage of every crack and crevice to get a firmer grip for their roots. As they go upwards the struggle grows ever fiercer. At about 6,000 feet altitude the pines are beaten back by the frosts of the upper solitudes, and only the balsam fir and the Lyall's larch remain. At last even they cannot stand upright, but crouch, twisted and tortured into misshapen dwarfs by the buffetings of tempest and snow. Finally, at about 6,500 feet, the battle is over. Life is no longer possible for the trees in that perennial cold. Only the hardy heathers, the saxifrage, and the mountain lily, close pressed against the rock, may climb still farther, creeping sometimes to the very verge of the eternal snows.

And how beneficent these forests are, winnowing the air from impurities, scenting it with the perfume of their healing gum, manufacturing, by their subtle chemistry, vitalizing ozone—of all intoxicants the most exhilarating and the least harmful! Holding, too, like great sponges, the moisture which must be fed out little by little to give life and fertility to the thousands of miles of prairies spread out below, and providing homes for wild animals and birds in countless numbers!

In the lower altitudes grow the willows and aspens, the Balm of Gileads, and the graceful mountain birches, their lighter green contrasting with the darker green of the conifers. Above them stand the mass formations of the lodge-pole pine, the prevailing tree of the eastern slopes. Its hard cones and long-lived seeds enable it to persist in the face of many adverse conditions, and its cheerful green—lighter by several tones than the dark forests of firs and cedars which clothe the Selkirks—harmonizes admirably with the platinum grey of the limestones of the eastern ranges. At a little distance these jack-pine forests, as they are called, take on an almost olive hue. Under the brilliant sunshine of a Canadian sky

the massive ranges, rugged, sharp-bitten, majestic, have nothing depressing about them. The peaks lift their silvery or snowy crests against the dazzling blue, the passing clouds weave their veils about them or drag the indigo scarves of floating shadows across their slopes, while the olive green forests fit them so closely that from a distance they seem almost to be covered with moss.

As you come down into Yoho Park on the western slope you observe at once a more abundant vegetation. The slender jack pines often grow so closely together that you wonder how even a moose or deer can force its way through. The valleys near the Divide are deep and narrow, and might sometimes have more than a touch of gloom if Nature had not taken care to provide an abundance of waterfalls, which tumble in gleaming white against many a dark background of forest and harsh rock.

The contracted valley of the Kicking Horse River leads you out of Yoho Park to the western gateway of the true Rockies. Beyond lies the Columbia River, here just starting its adventurous course to the western sea. You cross the river, and in a few miles enter the Glacier National

Park, and at once you observe a completely different type of vegetation. Conditions are easier here for plant life, owing to the heavy precipitation, for sometimes as much as fifty feet of snow falls in a single year. Overhead wave the graceful fronds of the giant cedar, while the Douglas fir, perhaps the noblest of all the conifers, thrusts its straight shaft and dark plumes from two to three hundred feet in air.

Among the shrubs there is one which in early days gave the Selkirks an unpleasant reputation. "The Devil's Club," wrote one explorer, "is the lion in the way of every man who would blaze a trail through the Selkirk valleys." Like many another projection of the Evil One, it presents a fair face. At first sight you gaze admiringly at its wide leaves, crowned by bunches of bright red berries. But beneath the Devil's Club hides most villainous thorns which tear clothes to ribbons, break off in the flesh, and cause painful festers. In places these shrubs grow so thickly together that it is almost impossible to hack a way through, and one does not wonder that the Indian hunter gave the Selkirks a wide berth.

To every lover of beauty the wild flowers are

a constant source of delight, and their profusion, colour, and fragrance add the last touch of loveliness to many an alpine scene. Hundreds of varieties have been identified by botanists, and intensive surveys of many particular regions have been made.

The ordinary traveller, however, is less interested from the scientific point of view. It is enough for him to greet them with surprise and delight along the mountain trails, through the deep woods, or high up among the bare peaks, where their exquisite colour and fragile grace soften what might else be too stern a scene. To know a few of them by sight, too, gives him a feeling of friendliness, and adds a pleasure to the day's march.

In the mountains the rigid cycle of the seasons that one finds elsewhere disappears, for as one goes upwards the hand of the year moves backward, and one may often find the first spring flowers opening their eyes in some high mountain meadow when the lower valleys are gay with their midsummer bloom. In the Athabaska Valley spring comes about the middle of April, and soon the white anemones and the yellow snow lilies will be pushing up through the cold

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earth. By the last of June the side hills will be gorgeous with Philadelphia lilies, red as poppies against the dark pines, and the wild rose. A little later the gaillardias will be nodding along every open trail, and the vivid Indian paintbrush will be flaunting its scarlet torch. In the deep woods, too, the exquisite twinflower, with its tiny pink bells on its swaying frail stalk, and the white queencups will lift their shining blossoms, the dryas will cover some rough bit of ground with snowy-petalled blossoms, the shy Canada violet bank the shore of some mountain stream. In cool moist places you will see, too, the delicately poised blossoms of the red and yellow columbine, primroses, the woolly Labrador tea, the red monkey flower, or the fairywinged calypso, one of the loveliest of the mountain orchids; while from inaccessible ledges the slender harebell-"deeply, darkly, beautifully blue "-will hang its graceful head."

The richest rewards, however, go to those who dare to leave the valleys, for it is in the higher meadows, lying almost at timber line, that Nature's loveliest gardens are found. Here colour and fragrance run riot, as if life, compressed into so short a span, grew more intense and lovely.

In July, places like Little Shovel Pass or Marmot Pass in Jasper Park, or Simpson Pass in the Banff Park are a perfect vision of beauty, a mosaic of colour-blue forget-me-nots and larkspurs, golden arnicas, scarlet-tongued paint-brushes, stately green and white zygadenes, or the fragrant wild heliotrope.

About 6,000 feet up, when most of the trees have given up the struggle against the bitter cold, the frail flowers still push upwards. The white and red heathers will cover many an airy upland with a glorious robe, "the little speedwell's darling blue" will shine from the edge of some harsh moraine, while still higher, at an elevation of even 10,000 feet, at the very edge of the eternal snows, you will find the audacious little snow-lily, starry patches of moss campion, or the magenta blossoms of the dwarf alpine willow-herb, "waving a last flag of colour against the all-conquering white and grey."

Canada has no true edelweiss, but in the mountains there are several species of everlastings, and one of these, delicately tipped with pink, which is found in very high altitudes, has been called the Cavell flower in honour of Nurse Edith Cavell.

Following a winter of light snowfall, half of which may be licked up by Chinook winds before its moisture penetrates the soil, there may come weeks of unbroken sunshine. Through the long days of the "Moon of Leaves" and the "Moon of Berries," under the steady glare of an almost cloudless sky, and fanned by warm winds, the forests of the Rockies are made dry and brittle as tinder, and only too ready for attack. The tangle of deadfall, the carpet of dry leaves, supply excellent kindling, and a tiny spark will be sufficient to start a conflagration. An improperly extinguished camp-fire, a half-burned cigarette tossed carelessly away, a live cinder from a passing railway train, sometimes even the rays of the sun, focussed upon a bit of broken glass or a discarded bottle, will be enough to set miles of beautiful mountain country aflame.

A great fire anywhere is a terrible thing to witness, but a forest fire strikes panic into the heart of man, beast, and bird. The suddenness of its outbreak, the rapidity with which it spreads, the utter ruin which results, must be seen to be realized. No one who has witnessed a great fire will ever forget the experience. The roar and crackle of the flames, which leap above

the tallest trees, the sombre pall of black smoke darkening the sun—ten, twenty, even fifty miles away—the sight of beautiful green trees writhing like living things in this ever-widening furnace, create an inferno to which even the hand of a Doré could not do justice. The wild animals and birds, driven from their homes, half-blinded by smoke, fly in terror, forgetting ancient enmittes -lynx, bear, moose, deer, marten, fisher, and the lesser animals all running together, united by the common emotion of fear and the common instinct to seek the shelter of lake or stream. Many of them, unfortunately, do not escape, for the fire comes on even swifter feet than theirs. Fire, therefore, is the arch-enemy of the forest, and during a dry season those who have charge of the western reservations sleep, not only with one eye open, but with ear and nose, too, alert, on guard day and night.

While a beginning had been made in protective policy, the warden service in all the parks was too small in 1911 to cover the large areas requiring protection, and its equipment was inadequate and out of date. Hitherto chief reliance had been placed on the man-and-bucket brigade. This is a poor expedient at best, but when a fire breaks

out high up on a mountain-side, and the only available water is in the valley below, it is practically useless. By the time a man has climbed up a steep slope covered with deadfall and underbrush, very little water is likely to be left in the pail, and the man himself is soon exhausted. In a modern scientific world, the Commissioner decided, such methods were clearly antiquated, and he set about applying science to the problem without delay.

Under his supervision experiments were immediately begun with a view to the development of a light, easily portable fire-engine, and in a few months a suitable piece of equipment had been devised, compact and durable, yet so light as to be readily carried on pony-back or slipped into a canoe or motor launch. To make it practicable for places where even a pony could not go, the engine was made in two parts, so that two men could carry it strapped to their backs, their hands being left free for climbing or for carrying an axe or spade. With one of these engines and a few hundred feet of canvas hose a man could make use of any water near, and if he arrived before the fire had gained too much headway, could extinguish it single-handed.

Better still, he could completely saturate the humus, so that no secondary fire would occur, for often even when a fire has been beaten out, the smouldering ashes will remain alive underground for days afterwards, and should a strong breeze spring up, it may fan them into flame, and a new conflagration, even greater than the first, may result.

The problem of a fire high on a mountain-side, when the only water lay at the bottom of the valley, was solved by the provision of collapsible canvas tanks, which were also made light enough to be carried folded on a man's back. One portable unit could then be placed by the side of a lake or creek and a stream of water forced up as high as it could go to the canvas tank. Here another engine in turn forced the water upwards another hundred feet, and so on, until the fire was reached. This one piece of mechanical equipment practically revolutionized forest firefighting methods. It was taken up by forest conservationists all over the continent, and has greatly reduced the dangers and damage from fire both in the National Parks and elsewhere.

The building up of efficient warden staffs in each park took time, but it was accomplished as

speedily as appropriations permitted. Needless to say, it requires a special type of man to "make good." The life of the trail is not an easy one. A man must spend hours each day in the saddle, and when he reaches home he will have no companion but his horse. The warden's cabins, built by themselves of logs cut from the forest, are often twenty or thirty miles from a neighbour, and in the outlying sections of Jasper Park the men may go a whole month without seeing another human being. Their entire household goods must be packed on the back of a pony, so luxuries are few, but whatever else is lacking, a wireless set is always included. This and their forest telephone are the only threads that tie them to civilization. When night falls they have merely to twirl a few knobs and they can draw on the programmes of a continent. One year a warden whose cabin was forty miles from the park headquarters sent in a most graphic pen-and-ink drawing of "A Warden's Christmas." Outside the snow lay piled high against the little cabin, but within a bright fire was burning, and the solitary occupant was dancing a foxtrot to the strains of a Californian orchestra, his spare combinations held at arm's length as

partner, while an astonished pack-rat gazed in wonder at the scene from a corner of the rafters. This lonely life, however, appeals to many men, often to men of education. One very efficient warden was an Oxford graduate, another the son of a well-known English journalist.

Far above the forests, in summer-time, wheeling like an eagle over the solitary peaks and valleys, circles the air-patrol. From an aeroplane even a tiny thread of smoke is visible for miles, and this "warden of the sky-trails" is often able to prevent a serious outbreak.

A comprehensive network of trails radiating from the park headquarters, hundreds of miles of forest telephone line, strung along from tree to tree, "caches" where additional tools and engines are stored for emergency—all these have done much to reduce the fire hazard to a minimum. But sometimes, in spite of the fidelity and alertness of the forest guardians, the Fire King will get the start of them and a terrific battle ensue.

As soon as the report is received the park superintendent commandeers the services of all day labourers and rushes them to the nearest accessible point. If it be a really big fire, there

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may be from two hundred to three hundred men. Tools, fire-engines, food, and supplies are dispatched with them. The chief warden assumes command, forms a plan of attack, and places his forces at the most strategic points. Burning spars, carried upwards by the strong draught and falling a mile away, may give rise to new outbreaks, so that sometimes twenty fires will be raging at once. All day long the men fight desperately, their faces blackened by smoke, their eyes red and smarting, their hands blistered, scarcely stopping to snatch a few mouthfuls of food and drink. Only after midnight, when the wind drops and the fire cools down for two or three hours, do they fall out of the ranks for a little much needed sleep.

In spite of all the vigilance exercised by the park authorities, as many as two or three hundred outbreaks may occur in one season. These small fires are almost always held down to a negligible area, but there still remains the danger of a conflagration starting in the unguarded surrounding territories.

A few years ago a fire started outside the park boundary, and had gained considerable headway before it was discovered. All the Government

fire-fighting forces were at once rushed to the scene, but it required three weeks of the hardest effort to keep that fire from entering the park, and when it was conquered at last, the men were so exhausted that they literally dropped in their tracks wherever they happened to be and fell asleep. After an ordeal of this kind a park superintendent and a chief warden are about ready for a sanitarium. Haggard and holloweyed for want of sleep, they may be mere shadows of their former selves. Few will ever hear of the heroic fight they have gone through, and their only reward will be the personal satisfaction that they have once more saved the National Park.

CHAPTER 4

SANCTUARY

A WILD white goat stood on a rocky ledge, gazing out over miles of peaks and valleys. Since early morning she had stood there motionless, and now the sun was sloping to the west. The flock of ewes and young lambs had eaten their fill of the succulent grasses, and they were resting behind her, regarding her without curiosity. Long ago, when spring had sent the upper snows bounding down to the valleys, she had led the flock to this cloudy pasture high above timber line, far out of reach of enemies. There were many such uplands to choose from now, for each year the herds of Rocky Mountain goats grew fewer. Once their heavy clumsy bodies had clambered up and down all the main ranges, but now there were only scattered bands left, the wary remnant who had learned to keep out of man's way at the tops of unscalable cliffs in the remotest regions.

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Intent as an Indian keeping vigil for his guardian spirit-animal, his "snam," who will appear to him in a dream, the little white goat stood there. What did she hear? How could she know that a score of miles to southward a new law had been proclaimed, that there the old warfare between man and the beasts was over. For this was the news that was being wirelessed through the mountain forests, carried from range to range by some mysterious means of communication known only to the animals themselves. Not the word, but the spirit of the word-Sanctuary. Was it the great race soul of all the mountain goats who spoke to her, or had she been able to perceive certain signs beyond the power of human senses which her slow sagacious brain was assembling? Were her sharp-pointed ears able to detect that from a certain quarter the crack of rifles was no longer heard, or had the vibration of Fear gone from the forest? No one knows. But on the morrow she led her flock downwards and turned south to the National Park.

Once the mountains had been full of game and fur-bearing animals. Early travellers had referred to "vast herds," "enormous numbers."

Bighorn sheep, Rocky Mountain goat, black and grizzly bear, elk, moose, deer, caribou, beaver, marten, and fisher, and many smaller animals had been found throughout the mountains. The Indian tribes had taken their toll of them, but the Indian was taught that it displeased the Great Manitou to destroy the lives of animals wantonly. Though he was forced to kill to maintain his existence, the primitive man took no more than he needed, and as he bent above the fallen carcass he would breathe an ancestral prayer, "Forgive me, my brother, if I take your life to save my own." The notion of a real interconnection between human life and that of animals and trees presented no difficulty to his simple mind. To him all life was the same. He was but one part of the great whole. The arrogance which assumes dominion, the right to waste and slaughter lesser lives, was outside his philosophy.

When the white man first came to America the Indian looked upon him as a supernatural being. "Beeny," the seer of the Tahltan tribe on the Skeena, "Mind-over-all-the-world," as he not too modestly called himself, foretold the arrival of Sky Beings whose bodies were white

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all over like peeled logs and who were powerful as manitous. Their "dogs of the sky" (horses) were to carry his burdens. Their "fire-sticks" would kill game at a great distance, their axes would fell trees with a few blows. Life was to be easy and wonderful. The white man's manitous, too, would be more powerful than the Indian's, and his sacred emblems-a crossed stick, a white cloth, and a bowl of waterpowerful "magic," much greater medicine than the Indian's, and would procure for him all that he desired. They were to bring to the red man a new, a golden age. But that golden age, alas! never came. The white man taught them to despise their old tribal codes, and took their hunting-grounds away, in return for the doubtful benefits of a more highly developed civilization.

When the first explorers reached the Rockies the long struggle between the French and English for possession of the continent was over, but the contest for the fur empire of the west was at its height. The active and intrepid agents of the two great companies—the Hudson's Bay and the North-west Companies—had been pushing east, west, north, and south, and even to the

Arctic Ocean, in quest of furs for the marts of the world. Rumours had reached them of regions within the mountains rich beyond telling in furs of every kind. At the beginning of the nineteenth century both companies had entered the new territory. They needed the Indian as guide, hunter, and trapper, and tempted him with bright cloth, blankets, firearms, and tools, even-unfortunately for both-with fire-water as well. The Indian, impressed by the white man's success, and conscious of a growing feeling of inferiority before his superior skill and knowledge, forsook the old tribal wisdom which had taught him to spare the females and young, and take only as much game as he needed for his own personal use.

The market for pelts was inexhaustible. Beaver skins for the mandarins of China; sables for the courts of Europe; foxes, ermines, marten, and fisher for the beauties of Mayfair and the wealthy merchants of the north—it was a harvest of gold, bringing in huge dividends to satisfy shareholders overseas. Hunters spread everywhere throughout the mountains, and from rival posts rich packs of furs were sent back east by canoe or dog-team.

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panies was brought to an end by their amalgamation under the name of the older partnerthe Hudson's Bay Company. Now, twice a year, to and fro across the mountains went the "Fur Brigades," the "mountain expresses" carrying mail, dispatches, and supplies from Fort Churchill to the Pacific. At the "Committee's Punch Bowl," a twin-lipped little mountain tarn lying on the very summit of the Great Divide, and spilling its waters both to the eastern and the western oceans, the brigade from the Columbia met the brigade from Hudson Bay and exchanged loads, quaffing, whenever it was available, "a jorum of punch in honour of the Great Company." In summer they made the trip with canoes, horses, and on foot; in winter with dog-teams or on snowshoes. What a picturesque though no doubt an often bedraggled cavalcade it was; startling the silence of the mountains with jingling horse bells, gay chansons of the French-Canadian voyageurs, sharp words of command, shouts and cries to obstreperous pack-ponies! At the head of the brigade went the officers of the fur company, nearly always young Scotsmen or Englishmen, ambitious to win distinction or fortune in the new (4,320)

world. "As leaders," wrote Washington Irving, "they were probably unsurpassed, and in the French-Canadian voyageurs they found their best assistants, daring, quick-witted, ready to laugh at the worst privations."

For another quarter of a century the wealth continued to flow, then the fur-bearing animals began to grow scarce. Each year the packs grew lighter, the returns less satisfactory. At last the trade was no longer profitable and the posts in the mountains were closed. The Indian trappers, their hunting-grounds depopulated, their ancient occupation gone, sank into a destitute condition, and at last accepted the tame life of the reserve.

For the next fifty years sportsmen and free hunters, with more unscrupulous methods and more efficient weapons, preyed on the game that was left, but the animals had become extremely wary. Each year they had fled farther and farther back into the mountains, away from the hated sound and scent of man, and by the opening of the new century and the establishment of the National Parks, the deer was the only animal left in any numbers in any of the reserves.

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Although there was no expectation that the remnant of wild life left in the parks could ever be restored to anything like their former numbers, the Commissioner hoped that, with careful conservation, the stocks might be maintained—might even increase in time. New regulations were established for the protection of animals and birds, and an effort was begun to obtain a census of the larger species.

As part of the new fire and game regulations it was required that each warden should carry with him on his patrol a small diary in which he was asked to enter the day's chief events or any items of interest, such as small outbreaks of fire, Indians met with on the trail, animals encountered, weather conditions, and so forth. At the end of each month these diaries were sent in to head office at Ottawa.

Often these reports showed a delightfully intelligent observation, though sometimes it was clear that literary composition had been a laborious task for fingers more at home with an axe or a gun than a pen. But in whatever form they arrived, sprinkled with blots and showing unmistakable signs of having travelled in too close proximity to a pocket luncheon, they were

valuable. Here was real news from the front told by eye-witnesses.

In less than two years' time a strange story, pieced together from these first-hand reports over widely separated districts, began to shape itself. To those who read them three thousand miles away, the inference seemed at first incredible, but as the months went on and the evidence grew and grew, there was no doubt about it—the wild life was coming back! One after another the diaries told the same tale. Laconic statements most of them, but with the indubitable accent of truth: "Seen a bunch of ten sheep to-day"; "deer seem to be getting more plentiful"; "noticed three goat on Mount Kerkeslin, first I have ever seen there"; "beaver appear to be coming back, many signs of new cuttings"; "saw fifty sheep in one flock heading for the Bow Valley"; "moose and caribou from outside the boundaries are coming into the park."

So it went, piling up evidence from all areas in the parks. The only explanation possible seemed to be that the wild things had arrived at the knowledge that within certain areas no trap would be set, no gun fired, no poison left

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by the drinking pool. The great persecution was over. Man was willing to be friends. And since man was willing to be magnanimous, with equal magnanimity the animals responded. Every time a new trail was cut through to the boundaries they made use of it, and would be met by the wardens confidently trotting along it into the "brave new world."

In Jasper Park moose came in from the prairies to breed along Athabaska River, and one herd, which had its feeding-grounds near the headwaters of the Saskatchewan, actually climbed a high range of mountains and came down to dwell in safety in that park. A few years later a large herd of Douglas caribou—a rare species, almost extinct, which had been living in sequestered valleys miles away in British Columbia—suddenly appeared in the Tonquin Valley. It had crossed the Great Divide to seek the shelter of Jasper Park. And each season, though the caribou are still extremely shy and wild, they continue to be seen there.

When Kootenay Park was established in British Columbia, along the Banff-Windermere Highway, the story repeated itself. It was at

first believed that this reserve—a strip of only five miles wide on each side of the motor road—was too small to become an effective game sanctuary. But within six months from the time of the establishment of the park, the superintendent reported that game appeared to be coming back, and in two years more the wild life was adding charm and interest to many a vista seen from the road.

It was not long until the wild things began to come in closer; soon even into the proximity of the main roads. It was a thrilling day when bighorn sheep were reported to have been seen again in the Bow Valley, and when a wild goat was picked out by the glasses of a tourist high up on the slopes of Mount Rundle, calmly peering down upon what must have been a strange sight to him—the golf links in the Banff Park.

In a few years the wild deer were so much at home in Banff that they would come to the very doors of the houses, and take food from the hands of little children, while wild sheep would feed unconcernedly within camera shot in both the Bow and Athabaska Valleys. Beaver began to occupy their old works in Jasper Park, and

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soon a busy colony had established itself along the wide reaches of the Athabaska River near the eastern gateway. Too busy a colony, for the dam which they erected flooded over a large area and made it necessary to divert the road for a time. In Waterton Lakes Park, too, beaver came back to found new colonies, losing, although less rapidly than the other animals, their deep distrust of man.

The game wardens began to take a special, almost a proprietary, pride and interest in the return of the wild life, and kept a stern lookout for poaching and infringements of the regulations. Banff, Lake Louise, and Jasper were old outfitting centres from which hunting parties set out on expeditions to big game territories beyond the park borders, and although the regulations required that all guns should be sealed so long as their owners were within the parks, there was always the possibility, once they were two or three days out in the wilderness, that hunters might forget their whereabouts and take a shot at some animal within the National Park limit. The wardens, however, developed an almost uncanny alertness in detecting suspicious characters, and this "nose for

crime" spread in a quite remarkable manner throughout the entire force.

One autumn a game warden was suspicious of a hunting party which had set out from Banff, with the announced intention of travelling to a big game region north of the park. He observed that they had timed their arrival at the hunting-grounds two days before the season was to open. It looked to him as though they meant to do a little shooting before there was any competition. He followed up their trail the next day, visiting their camping-places, but found everything in order. At the last campingplace, a few hundred yards from the confines of the park, he made a very thorough investigation. It was clear that the hunters had slept there the night before, but there was no sign of anything wrong. While he was examining a neighbouring thicket, his wise old grey mare set out on a detective expedition of her own, and the warden was startled by hearing a shrill excited whinnying-her customary signal of trouble. He ran over to her, thinking that in the usual "ornery" way of cayuses she had got herself into some fix or other, and found her furiously pawing the ground. She had loosened perhaps



The King of the Trail, a Giant Grizzly.



Rocky Mountain Goat.

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a foot of earth, and there, plainly visible, was the horn of a recently killed wild sheep!

It took the warden only a few moments to lay bare the evidence of the crime. It was still only the thirtieth of October. The hunting season did not open until the first of November, so the hunters had either broken the provincial game regulations or shot an animal in the park. They were liable to prosecution on both counts. The party was followed up, arrested, and brought to trial. Before the magistrate they admitted that they had shot the sheep within the park boundaries; they were fined several hundred dollars and their rifles and expensive hunting equipment confiscated; and the grey mare acquired a reputation for being the best "sleuth" in the park.

Sometimes the wild animals themselves passed sentence, and executed summary justice after their own fashion. One Sunday a labourer employed in a mine at the outskirts of the Banff Park stole down along the eastern boundary with a concealed gun, hoping that he might chance upon some game in this out of the way corner of the park. A mile within the boundary he came across two grizzly bear cubs and shot

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one of them. Finding his booty too heavy to carry off alone, he went back for assistance. An hour or so later he returned with three companions. As they approached the spot they were walking one behind the other on the narrow trail, the criminal, as it happened, being the last of the four. Suddenly the man in front cried out in alarm, and there, a few yards away, stood the mother grizzly, her teeth bared, her eyes green with maternal fury! Before they had time to think she plunged forward, brushed past the first three men, and with one terrible blow sent the murderer of her cub crashing to the ground, and killed him before their eyes.

Year by year the animals go on increasing and growing more accustomed to the proximity of man. It must be remembered that these animals are living natural lives in the happiest sense of the word. Their natural enemies, the predatory species, have also increased under protection, though the wardens are empowered to shoot some of the more destructive animals, such as the lynx or cougar.

But even the predatory, as the Commissioner has steadily maintained, have their place in the balance of nature. They help to maintain the

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strength and vigour of the species upon which they prey, and are often interesting and beautiful in themselves. The grizzly, though under certain provocations dangerous to man, is also being afforded protection. He is a magnificent and highly intelligent animal. Left alone and given proper warning, he will take good care not to let you come across his path, and in the twenty-five years since the parks were established no visitor has suffered injury at his hands. The black bear, that "happy hooligan" of the woods, is not likely to be dangerous unless in the case of a mother bear separated from her cubs, though if encouraged by familiarity he may become destructive. He has little sense of social behaviour, and his passion for bacon, potatoes, and other delectable items in man's commissariat often leads him to destroy valuable property, and brings down upon him the sentence of death.

The two tamest species of all the animals in the parks are the bighorn sheep and the mule deer, who may be seen by almost any visitor. But though many sportsmen now take even keener delight in hunting with a camera than with a gun, this does not mean that they can walk

out any morning and "shoot" goat, bear, elk, or moose. The camera sportsman also has to stalk his game with skill and cunning. These animals are still wild. They are not domesticated. They keep their old wild vigour and aloofness. Let us hope they always will.

What delight this wild life has added to the landscape! The Canadian mountains at last have their "humanizing" touch. They seem no longer empty and unfriendly. For the visitor every trail and road now conceal possibilities of adventure. To look up as you travel on horse-back and see a band of stately bighorn or a mountain goat poised on a cliff above, or from your tent door in the morning to watch a graceful doe and fawn stealing down to drink in some mountain lake; to catch, even as you motor along a highway, a half-glimpse of a velvet-black or brown coat making off through the underbrush; perhaps even to see a couple of young cubs swinging lazily in the top of a slim jack pine—these encounters have become for many the most interesting experiences of the day.



Every morning a mother bear spanks her cub soundly and sends him up into a safe bed in the tree-tops while she goes foraging for food.

CHAPTER 5

BRINGING BACK THE BUFFALO

MILES of grey-green prairie stretching away on all sides as far as the eye can see; little groves of aspens and poplars; clumps of dog-wood and willows; shining patches in the hollows that look like mirrors, but are in reality shallow lakes; a low wind whistling ceaselessly across the grasses, through grey sage bushes; a kill-deer calling, a prairie meadow lark, sweetest of his kind, ecstatically repeating "Spring o' the year, spring o' the year "; wild geese and duck overhead flying down to nests on the lakes below! Suddenly a high eerie note, like the cry of a banshee—an elk calling from somewhere out of sight! Then over the edge of the nearest knoll rises a dark brown shape followed by two, ten, twenty, fifty, numberless others-great shaggy creatures with enormous heads and shoulders. Slowly and rhythmically they move down the slope in endless procession, spreading out like a brown cloud on the plain. For a moment the reel of time reverses. You are in a "prairie schooner" travelling to North-west Canada in the great "Buffalo Days" of a hundred years ago. But only for a moment. Then the smell of petrol and the drumming of your engine remind you that this is the twentieth century, and that you are sitting in a Ford taxi hired in the neighbouring village, gazing at the national buffalo herd in their vast reserve at Wainwright, Alberta.

As you look at these brown thousands feeding so contentedly it is difficult to realize that thirty years ago the buffalo had become little more than a name. The bringing back of this splendid species is one of the great romances of conservation, but already a generation has grown up which knows only the happy ending. The success of Government efforts, both in Canada and the United States, to save the buffalo from extinction have been so signal, the response of the animals themselves so gratifying, that it is now reasonably assured that the buffalo, like the prince and princess in the fairy tale, will continue to live happy ever after. But those earlier chapters—the tragic record of wanton slaughter

and stupid waste—are among the darkest pages in all the long history of man's persecution of the so-called lower animals. "The finest ruminant that ever trod the earth," as one naturalist has called him, existing in probably greater numbers than was ever attained by any other quadruped, and yet, in the short space of two score years, completely annihilated!

As the animals come near you get a good look at them. You see the great bulk of the shoulders rising to the curious hump on the back, the broad chest, the enormous batteringram head, with its amusing pompadour tuft standing straight up above the forehead, the short curved horns, the silky beard, the rather weak hind-quarters, and the ridiculously inadequate tail. Even now, in May, his thick robe of wool is becoming too warm for comfort. To the right an old fellow is already using a stout poplar as an Argyle scratching-post, trying to scrape some of his winter "woollies" off. Near him another monster is rolling in the sand of a last year's "wallow" with the same end in mind. Soon the splendid winter robe will be hanging in rags about him, and for a month or so this "monarch of the plains" will be a

sorry tatterdemalion—a veritable "king of shreds and patches." In September the new coat will begin to grow again, and by November the buffalo will be at his best, with his dark robe muffling him up to the eyes like a Russian coachman.

Already the young calves are running beside their mothers, gambolling and frisking about on their stiff legs and butting her playfully with their hard little heads. They look very much like ordinary domestic calves, except for their colour, which is a bright brick red. Riding on the backs of some of the larger animals you see the curious "buffalo birds," which secure an easy meal by picking insects out of the thick robe. Now the buffalo scatter into small groups, some feeding quietly, others lying down like cattle and beginning to chew their cud. On the outskirts of the herd, standing sullenly alone or in the company of two or three others of his kindfor even animal misery loves company—are the so-called "outlaws," once proud and powerful kings of a herd, holding supremacy for years against all disputants, but beaten finally by some younger, more vigorous bull. Now, deposed and outcast by the stern law of the herd, they

drag out their remaining days in bitterness and dejection, standing motionless for hours, their small red eyes staring far across the plains as if lost in some melancholy dream of former greatness.

Along the top of the bluff against the skyline two horsemen ride into view. They stop and train their field-glasses upon the herd. All is well. No cow has become bogged in a muskeg, no young bull has injured himself in fighting, no coyotes are in sight lurking about to seize a young calf. But stop! Running about on the outskirts of the herd, calling distractedly, unheeded, circles a young calf. Its mother is missing; dead, perhaps, back on the trail. In a moment the riders have galloped down to it. Skilfully they cut it out of the herd. Then, dismounting, they speak to it and pat it reassuringly. A few minutes later it follows them in complete confidence and trots behind the horses, to be taken back to headquarters, there to become a "bottle-baby."

But even though it is reared by hand and treated with every kindness and consideration it will never lose its wildness. It may be brought up by a domestic cow, play side by side with her (4,320)12

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own calf, but as it grows older it will revert to its own wild nature. You can pen it up and break its heart, but you cannot tame it. Of all the buffalo that have lived in Wainwright Park only two could be bribed into friendship by proffered titbits. "Granny," a wise old cow, long since gone to "Mewamoakee," the happy land of dead buffaloes, learned to know and appreciate the delectable flavour of oats, and she would leave the herd and come a quarter of a mile at the sight of a familiar black pail. But though five thousand buffalo might stand and watch her, not a single one was ever tempted from his serene aloofness except her son "Ollie," who, no doubt, inherited his mother's failings with his father's strength—or could it have been a gleam of higher intelligence? In any case, he learned to copy her example, and grew fat and strong as a result. But even "Ollie," three minutes after he had eaten the last oat, would be ready to swing his great head and toss his caretaker upside down or charge a bystander.

The buffalo bull will protect his cows and calves, and even lick the wounds of an unfortunate companion, but he has never been known to attach himself to a human being. An "old

lady" of forty winters, with no teeth, who has been hand-fed and pampered for five years, will be ready to kick the hand that feeds her when she feels in a royal mood.

"Never argue with an angry buffalo. Avoid 'em when you can, and when you can't, run," is the warden's motto, and the only safe one.

This is the reason you are not allowed to enter the park on foot or even on horseback. In a motor car you are safe. Why, no one quite knows, whether because of its strange voice or smell, but certain it is that before the most decrepit "Lizzie" this haughty monarch will turn tail and run.

The "Bison Americanus," as Catesby was the first to call it, is not a member of the genus *Bubalus* to which the buffaloes of India and Africa belong. Its nearest relative is the Asiatic aurochs, and some naturalists believe that the bison is a variation of this species, derived from animals which, in mid-pleistocene times, crossed the land bridge then existing between Siberia and Alaska, and gradually spread southward to cover one-third of the North American continent. When stout Cortez reached Anahuac he found a buffalo in Montezuma's zoological

collection. Cabeza saw it wild in Texas in the sixteenth century, and other early explorers reported it from Georgia, the Carolinas, Virginia, Maryland, and Pennsylvania. But its main feeding-grounds were the grassy plains extending from the Mississippi to the Rockies, and from the Rio Grande to Great Slave Lake. Here it roamed in countless millions, migrating with the seasons north or south.

The present generation can scarcely grasp the magnitude of those great herds which choked rivers, overturned boats, and threw railway trains off the track. Early travellers to the West wrote of plains "black with buffalo." Col. R. I. Dodge states that on a drive of thirty-four miles which he once took, at least twenty-five miles of the distance was through one immense herd, and estimates their numbers as not less than 4,000,000. Others speak of "armies of buffalo, moving forward on a front twenty-five miles broad and fifty miles deep."

To the Indians of the western plains the buffalo meant food, clothing, and shelter. "Gitchie Manitou," the mighty, had sent it, they believed, as a special gift to man, and they acknowledged his beneficence with gratitude. Its flesh was

nutritious and palatable—even to-day a buffalo steak from a young cow is a dish for an epicure—its warm robe provided a covering against the cruelest cold, while its durable hide could be made into clothing, tepees, boats, lariats, bags, and bowstrings, and the horns into spoons and drinking cups.

But though he hunted it persistently, and often wastefully, the depredations of the Indian made little inroad upon the enormous totals, and never came near equalling the annual increase. When the white man came and the Indian exchanged his primitive bow and arrows for the white man's miraculous "fire-stick," the chase became more deadly. Still it remained a chase, and although it led to internecine strife over tribal hunting-grounds, it was not demoralizing. But with the completion of the three transcontinental railway lines across the United States, the buffalo hunt became commercially profitable. Then the white man took the red into partnership, and instructed him in the art of remorseless slaughter. Buffalo robes sold for from five to ten dollars apiece, hides from two to three dollars, and an Indian could often be persuaded to sell several for a

pint of cheap adulterated whisky. It was a new "El Dorado." With a little skill and cunning a man could make a fortune in a few years. Of a sudden there was a rush of greedy hunters to the West which resembled the feverish days of the gold seekers.

Nature had given the buffalo splendid gifts, some of which might have saved him. He had courage, endurance, keen scent, and a swiftness of foot which could outstrip the speed of the fastest horse. But his enormous head contained a small unsuspicious brain. The crack of a rifle conveyed nothing to his dull intelligence. He would stand staring stupidly while his companions were shot down, without the wit to take flight. His size and power had been his defence, he had not needed to develop cunning. Always, too, he had lived and acted in masses, never alone, and he had relied upon the strength of the herd. Shooting him—from safe ambush —was almost too easy. A man could kill as quickly as he could reload. One hunter boasted of picking off ninety-one buffalo in an hour, but his record was broken by another who shot one hundred and twelve, all from the same spot. The plains became a shambles. There

was nothing, not even the excitement of the chase, to redeem it. Hundreds of thousands were slain each season, and the valuable meat, sufficient to have fed a starving nation, was left to rot upon the ground. The hawk, the eagle, and the grey wolf grew fat with feasting, and the sweet air of the prairie pestilent with decay.

From the Red River Settlement in Manitoba organized parties of whites, half-breeds, and Indians went forth each year in numbers "larger than the army with which Cortez subdued a great empire." What other species was ever hunted in military formation by an army with officers, flags, rules of war, and, crowning irony of all, with chaplain and daily masses? The long procession of home-made carts extended sometimes for miles, and if the buffalo had had the sense to use his heels, he could have been beyond reach long before their arrival, for the squeaking of the wheels could be heard a mile away across the prairie. is estimated that these Red River hunters killed not less than 1,000,000 buffalo in twenty years.

Now, almost at the last moment, the buffalo's brain began to function. He learned to run

from man. At the instant he caught sight of a mounted rider he was off with the speed of an antelope. One of the last herds of 75,000 crossed the Yellowstone and, pursued by a mob of "Indians, pot-hunters, and white butchers," as an eye-witness called them, made a frantic dash for the British border. Of that great mass less than 5,000 reached it alive.

No species could have withstood such wholesale slaughter. By 1874 the great southern herd in the United States was practically exhausted; the northern herd held out for ten years more. In 1881 a falling off began to be noticed in ship-In 1882 hunters reported another bad In 1883 they outfitted as usual and went forth to the hunting-grounds to kill, only to meet with bankruptcy and disaster. buffalo was gone! At first it seemed incredible, but from all over the range came the same story. The Indians starved waiting for "moostoosh," but moostoosh had gone forever, and with it had gone the Indian's chief source of sustenance. In Canada stray bands roamed the prairies for a few years more, but by 1887 there too the buffalo had disappeared.

The next twenty years saw Canada's swiftest

development. The West was opened up for settlement, railways were built, and the plains that had been the vast range of the buffalo waved with green and yellow wheat. No doubt this usurpation of his feeding-grounds would eventually have brought about the reduction of the buffalo as it had of the Indian, but a wiser generation might have discovered some way of conserving a part, at least, of this valuable wild-life resource.

But Nature often refuses to be entirely defeated. She still works in a mysterious way her blunders to perform. And for the deus ex machina in the next chapter of the drama she chose a humble and, as usual, a totally unconscious instrument. "Walking Coyote," a Pend d'Oreille Indian, already furnished with a nice family, had strayed alone to the country of the Piegans, and there had fallen in love with the bright eyes of a Piegan woman. Against all the conventions of the tribe he had married her, and had lived happily, not "forever after," but for some time. Then nostalgia for his Pend d'Oreille home began to trouble him. He was torn between a desire to return and the fear of the stern punishment he knew awaited him. A gift, he

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thought, might soften the heart of his angry Pend d'Oreille father-in-law. On a hunting expedition which carried him across the Canadian border he encountered a herd of buffalo—perhaps part of the 5,000 which had escaped some years before. Here was a gift ready to his hand. He succeeded in cutting out four young calves, and, as is their habit, they trotted trustingly along at the heels of his horses. The gift was duly presented and accepted, although it did not avert his punishment, and poor "Walking Coyote" had to undergo a severe flogging before he was received back into the tribe and restored to the arms of his waiting family.

The calves, two bulls and two heifers, were placed in charge of the kind fathers of the Roman Catholic Mission. There in a few years they increased to a small herd of thirteen. Two shrewd half-breeds, Michael Pablo and Joseph Allard, foresaw that they might be made commercially profitable, and purchased ten at \$250 (£50) apiece. The buffalo were turned loose on the Indian reservation. When Allard died Pablo purchased part of his share and added a few others. From time to time he disposed of specimens to museums, zoological

exhibitions, and foreign governments at a good price, and he came to feel a great pride in his unique herd. When, in 1906, the United States Government decided to throw open the Indian reserve for settlement. Pablo was forced to seek some other disposition of his herd. He approached the American Government with an offer to sell, but though the proposal was warmly supported by President Theodore Roosevelt, the necessary appropriation was not secured. Pablo, who by this time was wealthy, was less anxious to make money than to find a good home for his herd. It occurred to him that there might be grazing grounds still left in Canada which he could acquire, and he made a tentative suggestion to a Canadian immigration officer stationed near him in Montana. This official. with commendable alertness, wrote at once to Ottawa, pointing out the unique opportunity of acquiring the last pure-blood wild herd in existence. The Minister of the Interior, the Hon. Frank Oliver, was an "old-timer" of the Canadian West, and in Sir Wilfred Laurier, then Premier of Canada, he found sympathetic support. The suggestion was heartily approved by Cabinet Council. Almost before he realized

what was happening Pablo received an offer from the Canadian Government to purchase the entire herd at a price of \$250 (£,50) per head.

Pablo set to work at once preparing for the last "round up." He engaged the cleverest cowboys in Montana, built corrals and special cars for shipment, and, as soon as the calving season was over, the hunt began.

Mexican cowboys, dreamy-eyed and slow-smiling, but ready to ride "hell-for-leather" sixteen hours at a stretch, were thrilled at the prospect, but no one, least of all Pablo, saw what the hunt would entail. The range was wild, broken country, infested with gophers and rattlesnakes and prickly cactus bushes. The buffalo, grown wary at last and unconscious of the happy fate awaiting them, resisted capture with all their enormous strength. A score of horses were killed, cowboys injured, but at the end of six weeks' hard riding, although many had escaped their pursuers, four hundred and eleven animals had been corralled on the range.

But the wildest scenes were yet to come. The buffalo had to be driven between wing fences twenty miles to the nearest railway. They fought every inch of the way, smashed the fences,

charged their pursuers, and finally broke into a wild stampede which ended only in the loading corral at Ravalli station. Against its stout 24-inch timbers they charged in vain, but nothing would induce them to enter the waiting cars. The cowboys took their lives in their hands at every moment. Eight fine bulls killed themselves in splendid but useless resistance, and the largest animals had finally to be roped and lifted by block and tackle into the reinforced cars.

Once aboard, the order to leave was given, and they were rushed through at express speed to Northern Alberta. When they reached Lamont a crowd of curious sightseers had gathered at the station. Stories of their difficult capture had preceded them. Would the same scenes be re-enacted here? The train glided in slowly and came to a stop before the mile-long corral leading to the park. Officials quietly slid back the first door. A tremendous bull plunged down the gangway and made as if to charge the nearest fence. The spectators took to their heels in alarm, but, suddenly, the old bull stopped. He threw up his great head and began to sniff the air. The wind was blowing from the park, bringing with it the sweet scent of buffalo grass

from a range where his ancestors' feet had trod. The next moment he wheeled and started down the laneway towards the reserve. One by one, as quickly as the doors could be opened, the herd followed, and inside of an hour the weary animals were quietly feeding on the park's rich meadows. The buffalo had reached home at last!

The next year Pablo attempted to round up the remaining animals, but his season's work ended in failure. In the two succeeding years he captured three hundred and five more, making a total of seven hundred and sixteen in all—more than twice as many as either he or the Canadian Government expected. From the first moment they settled down in great apparent contentment, and have ever since done well. A close veterinary supervision is maintained over their health, but the gloomy predictions of epidemics and the dangers of inbreeding which disturbed their guardians in early years have not been realized.

By 1920 their numbers had reached the total of 6,000, which is as many as the grazing resources of Wainwright Park will support, and some disposal had to be made of the ever-

increasing surplus. As an experiment several shipments (about 1,200 in all) were sent to the Great Slave Lake region, where the so-called "wood bison" range. These buffalo were long regarded as a separate species, but are now believed to be a remnant of the plains buffalo which have acquired different characteristics through adopting a wooded area as their habitat. Although it is impossible to patrol this wild region completely or to take an accurate census, reports indicate that the introduced buffalo are doing well, and it is hoped they will ultimately repopulate large areas in the as yet uninhabited regions of the far north.

Left to themselves, if their old range could be given back to them, in a few centuries the buffalo might possibly regain something of their original numbers. But the plains have been captured by settlement. Where the buffalo grass grew stand populous cities; the old deep beaten trails have become motor highways. There is no place for so large and so wild an animal. Each year, therefore, the Government now disposes of a certain number. Part of the meat is made into pemmican for those other wards of the Government—the Eskimos and the Indians—while the

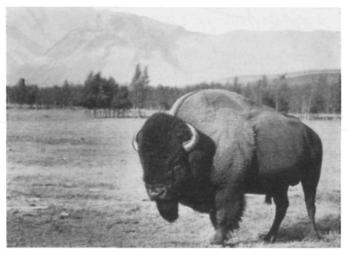
robes, tanned by a skilful modern process, are made into attractive rugs and fur coats. When His Majesty the King, then Prince of Wales, visited Canada he was presented with a buffalo coat which was as supple as a coon coat and no heavier. The garment is much too warm for an English climate, but in a northern blizzard, at a temperature of forty degrees below zero, it might easily save a man's life.

To any lover of wild animals Buffalo Park is a source of peculiar pleasure. Deer, moose, elk, yak, and many species of birds live here in freedom. Cattalo—that strange hybrid which Government scientists are seeking to develop by a double cross of buffalo, yak, and domestic cattle—can, as yet, hardly be said to be beautiful, but they are at least no stranger in appearance than the products of some of Nature's own experiments. Eventually it is hoped to develop a new range animal which will combine the hardihood and endurance of the buffalo with the milder temper of the domestic cow.

While the long summer days pass slowly the buffaloes grow sleek and fat, and when the sun grows too hot or the flies too annoying, they plunge into one of the numerous lakes and stand,



Elk in Buffalo National Park.



American Bison.

BRINGING BACK THE BUFFALO

waist-deep, in the cooling waters. In the meantime park officials are busy, ploughing the hundreds of miles of fire guard which protect the park from grass fires, strengthening fences, and restringing telephone wires, and growing the thousands of tons of hay which serve for the winter feed. In the autumn, when the sharp frosts come again and the dog-woods turn from crimson to brown, when the dancing fingers of the northern lights again play across the sky, the park riders quietly drift the cows and calves into a smaller enclosure, specially seeded down to rich grass for their winter food, and when the snows grow deep and the cold severe, great sleigh loads of hay are brought in as well to supplement their diet. Out on the main range the stout-hearted bulls "rustle" for themselves, brushing the snow away with their great heads, and when "Keewaydin," the north wind, sends his icy blasts and his cruel blizzards down from the Arctic, they draw together, and unlike the range cattle, who turn and run before him, they square their mighty shoulders and face the enemy, fearless and unflinching, and through the long months they wait with an animal's slow patience for the coming of another spring.

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CHAPTER 6

SANCTUARIES FOR ELK, ANTELOPE, AND BIRDS

SIDE by side with the buffalo in the Wainwright Park lives the elk, or "wapiti," as the Indians call it, whose noble race has narrowly escaped the same fate. It is perhaps the handsomest member of the deer family in North America, though the moose surpasses it in size and power.

The buffalo and the elk form a striking contrast in appearance. The buffalo wears the earth's colours on his shoulders, and seems essentially to belong to the earth. Every line of his massive body curves downwards; the head is swung low between the powerful shoulders, which seem to sag with the ponderous weight of the hump and robe. The elk, on the other hand, is one of the most graceful of the larger animals. As he runs across the short grass of the prairie his small feet seem hardly to touch

the ground, and from his slender fetlocks to the tips of his magnificently borne antlers every line strains upwards as if in aristocratic disdain of the earth. The buffalo's only utterance is a hoarse breathy grunt, half-pig, half-bear, while the elk has a high weird call like the wind in a chimney. The buffalo is a boulder in motion, the elk a moving tree. See him in the autumn when he ascends to the summit of some high ridge and stands with his many branched antlers forming a laced pattern against the sky, "bugling" his defiance to all males within earshot, and you will think him one of the finest pictures to be seen in all the animal world.

The elk once inhabited every forest from New York to the Arctic Circle, and its total numbers are believed to have reached 10,000,000. Of late years it has been driven out of all but five per cent. of its former range. Probably not more than 50,000 are now left, and of these several thousands are living in the National Parks and Sanctuaries of the United States and Canada. The elk's flesh is the finest of venison, and the Indians and early settlers hunted him over wide areas for food. His splendid antlers made him a much prized trophy of the sportsman, and the

slender adorned head—which, in life, is lifted so proudly, with its moist muzzle, sensitive quivering nostrils, and gentle questioning eyes—stuffed and hardened into a mere travesty of its former self, looks down from the walls of hundreds of clubs and country houses, there to be invaded in the end by moths and consigned ignominiously to the dustbin.

But the elk possessed another allurement, even more fatal than its antlers. The Indians, whose whole religion was bound up with charms and fetishes, believed that the teeth of "wapiti" were a powerful "magic," and carried them, reverently wrapped in a bundle of sweet grass, to ensure good luck. The white man adopted the superstition without the Indian's religious belief and hung the teeth as a talisman on his watch chain. Thousands of elk in recent years have been killed for their teeth alone, and the extermination of the species outside the National Parks and Sanctuaries, unless additional protection is afforded it, cannot be long delayed.

In the year 1906 a herd of about one hundred elk were discovered to be feeding near Edmonton, Alberta. A number of western pioneers and nature lovers urged the Government to give it special protection, and, as a result, a sanctuary of sixteen square miles was set aside in an area which was well wooded and watered by several lakes. The reserve was enclosed with a strong fence, and when, a year later, the first buffalo shipments arrived from Montana, Elk Island Park, as it was called, was able to receive them. When the main buffalo herd was transferred to the Wainwright Park about a hundred buffalo were left in the elk sanctuary, and the latest census shows that there are now one thousand buffalo in the park. It is interesting to note in passing that these animals have developed different characteristics in this wooded area. The hair is longer and darker, and the whole appearance is gradually coming to resemble the socalled "wood bison" of the north, variations which tend to substantiate the theory, held now by most naturalists, that this northern species is only a variation of the bison of the plains.

In the mountain parks the elk have always roamed wild, though not in large numbers. A few years ago during a winter of exceptionally deep snow, when the great elk herds of Yellowstone Park were dying for lack of food, the Canadian Government offered to take several

hundred animals to Banff Park. The American Government accepted the offer, and in spite of the weakened condition of the animals and the long journey north, most of them came through alive, and in the rich meadows and wooded valleys of the park they soon recovered their strength.

The prong-horned antelope (antilocapra) was another animal which had been never so wide spread, but which had been reduced to even lower numbers. Although it has many resemblances to some of the smaller members of that great Asiatic and African family which includes the Indian blackbuck, the serow, and the gazelle, and the well-known bushbuck and wildebeest in Africa, it is not a true antelope, and the prong-horn is allowed by naturalists the distinction of a separate species. It is an intelligent-looking little animal, about the size of a domestic goat, with upstanding ears and horns, a light greyish-brown in colour with whitish patches underneath. Its most distinctive adornment is a broad white stripe on the throat, which appears to be wound round like an old-fashioned cravat, giving the animal a quaint early Victorian expression that wins your affection at once.

The antelope's only defence is its remarkable swiftness of foot. In flight it can outstrip even the grey wolf himself. The Indians, who, like the Greeks, allow a certain margin of fallibility to their deities, say that when the Ancient One made the animals he placed the antelope up among the mountains and the wild goat out on the plains. But the antelope ran so quickly that it was continually bruising itself against the rocks, whereas the goat went slowly and clumsily on level ground and was overtaken by its enemies. So the Ancient One, who had the virtue, unusual in deities, of admitting his mistakes, exchanged his two new creations. He took the antelope and set it out on the plains, where it can run for miles, and he put the wild goat up among the mountains, and henceforth both lived happily.

When the Canadian West was opened to settlement about seventy years ago, antelope roamed the plains in vast numbers. It was a harmless, inoffensive little animal, but its flesh was edible when nothing better offered, and it provided an exciting target. It too has been mercilessly shot down. The antelope possesses one characteristic—one hesitates to call it a weakness

since it has led to so many important scientific discoveries-curiosity. Hunters soon discovered that if they wanted to attract antelope all they had to do was to set a stick up on a hillock with a bright flag or a bit of red flannel waving from it, and the antelope would come stealing in from miles around, apparently consumed with curiosity as to what this strange new thing in their environment meant. One settler who had built himself a shack of corrugated iron woke up one bright morning to find a small herd of antelope gazing at the structure as if fascinated. The morning sun shining upon the tin had made it an object visible for miles away. Until time had dulled the brilliance of the structure new antelope continued to arrive on a visit of inspection, but the settler, probably flattered by this compliment to his architecture, left them unharmed

Soon after the formation of the Parks Branch, game officials made a census of the antelope remaining in the western provinces, and startled Canada by announcing that not more than 1,200 remained in the whole Canadian West. There were strong reasons, both sentimental and scientific, for regret. The antelope had been

one of the most characteristic animals of the plains, and it was particularly interesting to scientists because of the rarity of the species. The success which had attended the preservation of the buffalo and other wild species in the National reserves encouraged the Commissioner to believe that the same happy results might be obtained with the antelope. At his suggestion a small herd of nine were captured and placed in a large enclosure in Wainwright Park. There, one after another, to every one's great disappointment, they pined away and died. In a few months not a single one was left. No signs of disease were evident, and the conclusion was reached that the shock of capture and the strain of shipment had been too much for the nervous system of this highly organized little creature. The next year the experiment was tried again, under what it was hoped were better conditions, but again it met with failure. Only two of the animals survived. In view of these repeated failures, it was generally believed that antelope could not survive capture, and that the attempt to establish a sanctuary must be given up.

But the Commissioner was not satisfied. He determined to make one more experiment.

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Was it not possible that if antelope were allowed to choose their own reserve, and if the shock and strain of capture could be avoided, something might yet be done? Game wardens in the prairie provinces were asked to notify the parks authorities if any considerable herd should stray into their territories, and plans were laid for enclosing the animals with a fence if that could be done without frightening them away.

One morning, not long after, a telegram was received at Ottawa, saying that a herd of about fifty had strayed into an easily accessible region in southern Alberta. Instructions were immediately telegraphed to set carpenters at work, and as quickly as possible the hammers were busy. But when the fence was half done the animals took to flight and disappeared across the prairie and were seen no more. The next year they were again reported to be in the same region, and a new attempt was made. So quietly this time was the work accomplished that the antelope suspected nothing, and they were safely enclosed in the eight square miles of reserve which is now called the Nemiskam Park.

From the first they were contented and happy, and did not appear to realize that the imprisoning

fence existed. Their health was excellent, and the next summer a number of young were born. It was generally believed that the explanation given for the previous failures must be the right one. The Commissioner decided, however, to have an analysis made of the food plants on both reserves, and a watch kept upon their habitual diet. It was found that the Nemiskam sanctuary contained certain plants which were not found in Buffalo Park. These plants form part of the daily diet of the antelope and grow wherever they naturally feed. The conclusion seems more than probable that these little plants contain certain salts or vitamins essential to the antelope's health, and that whenever they are absent they suffer from malnutrition and usually die.

The original herd of fifty has now increased to four hundred, a number which would have been considerably larger but for an unfortunate accident. One of the most abundant plants of the prairies is the so-called "tumble-weed," a species of thistle which, when the seed is ripe, rolls itself into a ball and allows the wind to carry it along. One autumn great piles of tumble-weed had accumulated against the Nemiskam fence. The winter brought exceptionally heavy

storms, and such a weight of snow gathered upon the piles of weed that the fence gave way under the strain. Before the break was noticed the antelope had strolled through the opening and had scattered widely across the prairie. With much difficulty about half were recovered and restored to the park, the rest had gone.

One of the enemies of the antelope is the coyote, the cunning wolf of the prairie, who is about the size of a collie dog. With one of the cleverest brains possessed by any of the wild animals, the coyote has discovered that within the park all animals are safe, and whenever he is hard pressed he slips through the park fence and claims sanctuary. But once there, he forgets the rules of sanctuary and preys upon the antelope kids, and though the park authorities are slow to take the lives of even predatory animals, sentence of death has to be passed upon the coyote wherever he is found.

In all the National Parks bird life is, of course, protected, and the birds, like the animals, appear to have discovered this fact for themselves. Ducks, geese, swan, and other waterfowl now use the lakes in the parks as resting-places on their long migrations, and each year more birds

remain in the parks to breed. Song birds have never been conspicuous, and it used to be a common saying "there are no birds in the mountains." But the song birds are there, over one hundred species of them, though they are difficult to see among the thick green of the conifers. Aside from the eagle, without which no mountain landscape would be complete, the two most characteristic and familiar birds are the Franklin's grouse and the Canada jay, both of which you will be likely to meet along any trail in the mountain parks. The Franklin's grouse is familiarly-and justly-known as the "foolhen." Only in a sanctuary, one thinks, could a bird with such a low I.Q. persist. He has no sense whatever of danger, and will fly down in the stupidest way in the very path of a motor car or under a pony's feet, or sit motionless on a log, staring dully at an approaching enemy. In the parks he receives the special consideration and affection due to the under-privileged, and his race appears to be increasing year by year.

The "whisky-jack," as the Canada jay is called, is the most sociable bird in the mountains. His name has nothing to do with his character, and is a corruption of the Indian word "wisa-

gatchon," but his reputation is not on the whole a creditable one, for he is the boldest and most inveterate thief in all the mountains, and he will fly down and steal a bit of bacon hot out of the pan under your very nose. But out on a wilderness trail thirty miles from anywhere his sociability earns him a warm welcome, and his small pilferings are gladly overlooked.

When, in 1916, the Migratory Bird Treaty was concluded between the United States and Great Britain, acting on behalf of Canada, responsibility for the enforcement of the mandatory Act was placed in charge of the National Parks organization. Regulations forbidding the taking of all insectivorous and song birds and controlling the seasons for wild fowl were drawn up, and the necessary machinery provided for their enforcement. But it was soon seen that this would not be enough, and that certain bird species must be afforded complete sanctuary protection. A bird survey covering the whole of Canada was accordingly made, and suitable areas, chiefly in northern Canada where waterfowl breed in largest numbers, were set aside. In the Gulf of the St. Lawrence two sanctuaries were established for gannets and one in British

Columbia for the trumpeter swan, a beautiful bird long believed to be extinct, which appeared there again and, under protection, gives hope of coming back. At Point Pelee, the southernmost point in Ontario, an area always used by migratory birds as a resting-place during their long spring and summer journeys, was set aside as a bird sanctuary and recreational park, and it is an interesting fact that this has become one of the most popular of all the reserves.

Canada has a special responsibility where migratory bird life is concerned since many species breed only in Canada. In recent years the advancement of settlement has endangered many breeding-grounds which were once isolated and secure from molestation; the draining of swamps for agricultural purposes and the lowering of lake levels have destroyed many former bird homes, while the building of roads, the motor car, and the modern rifle have increased both the number and the power of bird enemies, so that sanctuaries for many species have become increasingly necessary. About a hundred of these have now been established, and there, under protection, thousands of feathered creatures are breeding in peace.

A happy expedient for enlisting the cooperation of bird lovers in every part of the Dominion has been the appointment of honorary bird wardens. These unofficial guardians, now numbering several hundred bird lovers, do not receive any remuneration, but they act as distributing centres for educational material. They watch over the bird life in their own communities and forward to Ottawa the reports of their observations. Through films, lectures, and leaflets the interest of children has been aroused, and they are rendering valuable help in the building of bird boxes and the protection of nests.

Bird banding and studies as to the interrelation of species are also serving to build up valuable data, upon which future policy may be based.

CHAPTER 7

HIGHWAY BUILDERS

ENGINEERING achievements the world over during the past quarter of a century have become to-day so much a matter of commonplace that we are in danger of losing the sense of their romance. People refer regretfully to our mechanical civilization as if to-day men had ceased to see visions or to dream dreams. Yet, was there ever an age in which the imagination has been so daring and so victorious! Out of the machine has stepped, if not a god, at least a magician with undreamed of capabilities. his command, east, west, north, and south on every continent, thousands of miles of roads have unrolled like magic carpets; difficulties our forefathers would have believed insuperable have been overcome, and into many long-closed regions a way is being found.

Twenty-five years ago it would have aston(4,320) 109 16

ished the original parks service more than a little if they had been told that in the short space of a quarter of a century they would come to be one of the most important highway building organizations in the Dominion; that they would eventually construct nearly one thousand miles of motor highways, including two roads across the Rockies from east to west, and one from north to south—engineering accomplishments only second in achievement to the building of the railway. Yet this has been a natural development of their work.

So quickly did the new era arrive that the parks organization had scarcely begun its work in 1911 when the demand came for a motor highway from Calgary to Banff, thirty-five miles of which would lie within the Banff Park. There was talk, too, of a road from Banff across the main Rockies, which would open a way from the plains to the Pacific coast, and the dream of a transcontinental highway across the whole Dominion from sea to sea was already taking shape in the minds of a few "visionaries," as people still called them. For the new invention was still regarded by many with distrust and suspicion. They could not foresee the new

powers it would confer upon them, or dream that within a few years it would bring about a new way of living, sweeping away with one gesture old measures of time and distance, and enabling the ordinary man, for the first time since he exchanged his careless nomadic existence for the warm security of the fireside, to escape from the narrow boundaries of his local parish and enter upon a wider and more eventful life.

An old wagon road, narrow, rough, and dusty, led down from Banff to the quickly growing city of Calgary. The motorists of Alberta urged that it should be converted into a motor highway. Once this was done a weekend holiday in the National Park would become a practicable possibility for hundreds of busy workers on the plains. The Federal and Provincial Governments agreed to undertake the work together, the National Parks Branch building the thirty-five miles of road within the park and the province the forty-five miles to the park entrance. Within two years this road was completed. But at Banff the motorist was still only in the antechamber of the mountains. What was wanted next was a road across the main Divide to the Columbia Valley, where

connections could be made with existing roads leading down to the United States and thence to California and to the Pacific coast.

In considering a possible route for the crossing of the main Rockies, the existence was recalled of an almost forgotten pass, discovered half a century before by one of the greatest explorers of the Canadian mountains Dr. (later Sir) James Hector. In 1857 Her Majesty's Government had sent an expedition to Canada, headed by Captain Palliser, to discover a suitable route for a military wagon road across the mountains to the western sea, and with British thoroughness they carried out the task. The Rockies were explored in three divisions. Dr. Hector, the official geologist, was in charge of the central division, and was instructed to investigate the Bow Valley and to explore as many passes as possible.

It was the third of August when his little party set out across the foothills on that memorable journey which was to mean so much to the future history of Canada. The heat of summer was at its height. Hector had with him a trusty Indian guide, called "Nimrod" for short, three Red River men, well versed in the ways of the

woods, one horse apiece, and three additional ones for carrying bedding, instruments, and ammunition, for he had been told that the mountains were full of game, and so "took no provisions except a little tea and a few pounds of grease." At Castle Mountain they remained two days drying the meat of a moose, then Hector turned south along the Vermilion Creek in quest of a pass at its head which his guide told him had once been used by Cree and Kootenay Indians. The climb was steep, the August sun beat down fiercely, and they had to hew and hack their way through a tangle of deadfall that made travel a nightmare. But Hector was delighted with the pass, which seemed to offer an easy and economical location for a road.

The descent was safely made on the west side, but now new troubles began. Torrential rains fell, and in the steaming heat their meat supplies were spoiled. Worse still, no fresh game could be found! How thoroughly the mountains had been denuded of game now began to be seen. Soon the last of their food was gone, and they had to fall back on a few mountain trout and wild raspberries. At Kootenay River, Hector turned north, following the Beaverfoot to

its junction with another stream. The food supply was growing serious for both men and beasts; for days little grass had been found; the horses' legs had been badly cut by fallen timber and their tempers were on edge. Dr. Hector therefore decided to turn back to the Divide. Once on the east slope more game might be found. But they were scarcely started when an unfortunate accident occurred which nearly cost him his life and which was destined to give a name to the entire region. One of the tormented pack horses, seeking to escape the maddening deadfalls, plunged down the steep bank into the dangerous current, and all hands had to come to the rescue. Hector's horse, left alone, wandered off into the woods, and when Hector returned to capture him, it lashed out with its heels and struck him in the chest, rendering him unconscious. Their situation was now desperate. The little party had had no real food for days, their leader was ill, perhaps dying. As soon as he recovered consciousness, though suffering great pain, Hector commanded his men to lay him under a tree, and sent them all off to hunt for game. At nightfall, weary and dejected, they returned empty-handed. The

next day they met with no better success, and Nimrod, the guide, had the misfortune to run a sharp spike through his foot.

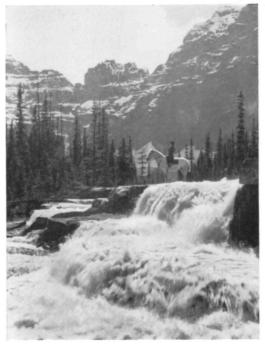
Actual starvation was in sight. The men begged Hector to sacrifice one of the horses, and there was a particularly bad-tempered pack horse which all would have cheerfully dispatched, but Hector knew the danger of resorting to such an expedient. Summoning all his resolution, he had his men lift him on to his horse, and gave orders to take the road towards the western slope. Up this tremendous ascent, difficult even in a motor car to-day, the dejected little party, weakened by famine, struggled, with nothing to deaden the pangs of hunger but a few blueberries hastily snatched between the endless labour of chopping and felling to make their way. But at last, more dead than alive, they reached the summit. The famished horses fell upon the deep grass of its meadows, Nimrod caught a "fool-hen," and this, boiled with candle ends and grease, served as a welcome though scanty meal for five. The first frosts of autumn were beginning to skim the little lakes with ice, and, shivering, weary, and hungry, they fell into a prolonged sleep, with no thought

in their minds that they had discovered the pass which was to be the main key in the opening up of the Rockies, and that beside the very spot where they lay, the story of their achievement would be carved in stone to be read by the countless thousands who would travel across the Kicking Horse Pass to and from the western sea. Probably because he thought the western approach too difficult, Hector scarcely mentioned the Kicking Horse Pass; it was the Vermilion Pass which received his commendation.

But no military wagon road had ever been built, and the Vermilion Pass had dropped from men's minds. When the project of a motor highway was put forward Hector's report was remembered, this route was decided upon, and surveys began. By June 1914 the National Parks engineers had completed the section from Banff to the Vermilion Pass and the province of British Columbia had built twelve miles on its division of the road. Then came the Great War, which put a stop to everything but the most necessary undertakings. At its close the project was revived and, since the province found itself financially unable to continue construction, the



Linnet Lake, in Waterton Lakes National Park, Southern Alberta, with its "safety pool" for children.



The "Giant Steps" Waterfall in Paradise Valley, Banff National Park, Alberta.

Federal Government took over the work. The first sixty miles of the new highway lay within the National Park, the next sixty through provincial crown land. Both Governments recognized that it would be a great advantage if the same environment could be preserved throughout, and the province of British Columbia accordingly ceded a strip of territory five miles wide on each side of the right-of-way to the Dominion for National Park purposes. This became the Kootenay Highway Park, the first one of its kind to be established.

The construction of a modern highway through a virgin mountain wilderness, which was unmapped and unsurveyed and where few of the peaks even bore a name, was a tremendous task. The engineers had not even points to which to tie their lines. Railheads were more than seventy miles apart, and dynamite and other supplies had to be carried in over mountain passes which in winter were buried under ten feet of snow. Yet summer and winter the work went on, and by the autumn of 1922, a year before the date fixed upon, the new road was opened for travel, and became known as the Banff–Windermere Highway.

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Now the motorist could travel for one hundred and twenty-five miles without leaving the environment afforded by a National Park. He found throughout the same reverence for the landscape, the same affectionate care for wild animals and plant life. No vulgar hoardings, no blatant petrol stations, no incongruous building development disturbed his enjoyment. The location of the road had been so selected that it made no scar in any vista of the landscape, and Nature came close to it on both sides.

But Yoho Park, with its beautiful Yoho Valley and Emerald Lake, was still inaccessible except by railway. A year or so before, the National Parks service had built a road to Lake Louise; a few miles more would bring the road to the summit of the Kicking Horse Pass. From the pass to Golden, the western gateway of the main Rockies, was fifty miles more. But from Golden a provincial road already led along the Columbia Valley to the western outlet of the new Banff–Windermere Highway. If a road could be built through Yoho Park to Golden, a mountain circle, nearly three hundred miles long, would be open through the heart of the Central Rockies, every mile of which would

pass through scenery of great interest and beauty.

In 1924 engineers began the work, and by 1927 it was completed. The descent of the west slope, which had presented for years so difficult a problem to the railway and which led finally to the construction of the great spiral tunnel five miles long, was solved by the utilization of the old railway right-of-way. Grades too difficult for heavy passenger trains could easily be made suitable for a motor car, and down these thrilling spirals, with their dramatic and ever-changing vistas of towering peaks above and the dark bowl of the valley below, the motorist now circles without changing gears, catching from each level a new view of those serpentine coils, thrust in and out of the very bowels of the mountains, by which the steel python rears itself to the Divide.

The climax of the road, however, is its western section, which was built by the provincial government. There, for fifteen miles, the road follows the contracted valley of the Kicking Horse River, which narrows with each mile until, ten miles from Golden, it becomes a deep gorge with rocky walls rising over two thousand

feet high, and in places not thirty feet apart. Along its floor boils and fumes the rivergreenish-white with glacier silt-while the railway, hard put to find a location in such narrow quarters, crosses from side to side seeking better footing, and is forced at times to burrow into the solid rock. This had been one of the most difficult sections in the construction of the railway, and it presented an even more difficult problem to the road engineers. There was clearly no room on the floor of the valley for a motor road, so they looked higher, and chose a location upon the face of the canyon's walls. At one point the highway is about six hundred feet above the railway. Looking down, the river seems a narrow silver tape, the train, winding through the valley, a child's meccano toy. Then the road descends again, the vista opens out, and you see before you the wide valley of the historic Columbia River with the ancient Selkirks lifting snowy heads beyond.

This last section of fifteen miles required three years to build. The greatest care had to be exercised in the removal of débris on account of the tracks below. One rock dropped down the valley side might break a rail and wreck an

oncoming express. Cribbing, too, was a problem. Towards the western end the nearest suitable timber grew on the mountain-top above. Logs could not be rolled down over the edge, because they were wanted half-way. Accordingly the required timber, about six hundred thousand lineal feet, had to be let down twelve hundred feet by cable and drum.

On this section construction work on a stretch of two miles was carried on throughout the winter, supplies being brought in by pack train. Heavy snowstorms added to the difficulties. Huge drifts filled up the trail between Golden and the work camp. The only way communication could be kept open with the base of supplies was by building a wagon road eight or ten miles over the mountain to Golden. Dynamiting operations, too, were unusually difficult. Where rock excavations were necessary a man was let down by a rope over the side of the cliff. Hanging suspended at the end of fifty feet of rope, he bored a hole into the mountain for the shot, lit the fuse, and then signalled to his companions at the top to haul away. Yet the section was completed without a serious accident of any kind. Excellent grades have been obtained

throughout, reaching in only one place as high a gradient as eight per cent., and this only for a short distance.

Now only one last link remained to be constructed and a motor road would be open from coast to coast. The shortest route lay across the Selkirks, but a road here would be expensive to build and always in danger from heavy snow slides. A location was therefore chosen following the Big Bend of the Columbia about the Selkirks, and the Dominion and Provincial Governments agreed to divide the expense. National Parks engineers have completed the section from Donald to Canoe River, and, by a new arrangement with the province of British Columbia, they will undertake the section from Canoe River to Revelstoke.

This road, too, lies through unmapped and unsurveyed territory where there was not even an Indian trail. Camps have been sometimes ninety miles from the railroad, and supplies have had to be taken in over rough trails often deep with snow. The financial depression of the past few years has delayed its completion, but the Government has recently voted an appropriation which it is expected will enable the road to be

ready for use in about two years' time. Along this highway the province has ceded to the Dominion for National Park purposes a valuable stand of giant cedars, one of the last remnants of the "big-timber" forests in British Columbia.

Within the last few years a road has also been built from Edmonton to Jasper, opening up the way to the Northern Rockies and the wonderful playground of Jasper Park. The route follows the Athabaska Valley along the very path worn by the fur brigades. This wide processional avenue sweeps for miles between guards of lofty peaks to Jasper, passing within sight of busy beaver colonies and the habitual feeding-grounds of moose and sheep.

But the greatest of all the engineering feats undertaken by the National Parks organization will be the new highway, already under construction, from Jasper to Lake Louise. All other roads through the mountains lead, like the railways, from east to west. This will run from north to south for one hundred and fifty miles, literally along "the roof of the Rockies," and it will open to the traveller a region known to him as yet only through the enthusiastic descriptions of those fortunate few who have been able

to undertake the hardships of a long three weeks' journey by pack train. Half the road will lie in Jasper Park territory, half in the Banff Park, and when completed it will make of the two reserves in reality what they have long been in name, one vast playground, and it will open to the motorist a circle route which it is no exaggeration to say will be one of the most picturesque mountain highways in the world.

In this hitherto remote region, in the neighbourhood of the Columbia icefield, more than seventy per cent. of the loftiest peaks of the eastern system are crowded together in a bewildering succession of brilliant groups, while immense icefields send down wildly broken icefalls and glaciers to the flower strewn valleys.

In some places the new road will be only four miles from the Great Divide, in full sight of its perpetual snows; at others it will be as much as twenty miles away. Engineering difficulties will be augmented by the isolation of the region, but an excellent route has been found which will obviate the necessity of using the lofty Wilcox Pass, long considered the real stumbling-block to the construction of such a road.

For several years past the Government has

established camps for the unemployed in the National Parks, and general improvements and road construction has been carried on as relief work. Food and clothing, a small remuneration, and recreational facilities were provided, as well as medical attention. For many able-bodied men this interim occupation has been a godsend. It has given them a healthful life in the open which has kept them wholesomely fit, while to some at least it must have been a satisfaction to know that their labour was contributing to a great national undertaking which will remain for all time, and which without their assistance might have been impossible.

With each year the road plays a larger part in our lives. Many people, indeed, now spend almost as much time on the roads as they do in their homes and gardens. And Canada is beginning to dream of a time when the road will be as beautiful as the garden. She is thinking not only in terms of town planning, or of regional planning, but of national planning, of a broad scheme of development which will exercise control over the landscape along all the main highways. She is looking forward to a time when there will be National Parks in every

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province preserving the most beautiful and typical landscapes, tied together by a National Park Highway, a highway which will widen out, wherever suitable land is available, into Highway Parks or Recreational Areas. If this dream is ever realized, the motorist will be able to travel across the whole Dominion from sea to sea through a carefully preserved environment, where every beautiful tree and vista and bit of woodland is protected, and where he can find abundant places to camp, picnic, or rest.

CHAPTER 8

PEOPLE'S PARKS

NO development in respect of the National Parks and Sanctuaries during the past twenty-five years can have been more gratifying, if less expected, than the wholehearted support the National Parks have finally won from the Canadian people. A quarter of a century ago Canada was largely indifferent and apathetic where her scenic treasures were concerned. Inroads of private greed or the alienation of part of their territory would have aroused little indignation. In some quarters their value was critically questioned. To-day the Government are being urged from every part of the Dominion to establish additional reservations. Appropriations for National Park purposes are passed in parliament with the cordial support of both sides of the House, and there is growing up a national feeling for these great public possessions

which will ultimately constitute their best defence. Part of this very real interest is due to Government efforts in the way of education and publicity; part because Canadians are seeing for themselves the valuable contribution which these national reservations can make to the life of the people.

In the early days the indifference of legislators and others was overcome by financial arguments; sentimental ones would have been of little use. But when it was shown that the Banff Park, acre for acre and mile for mile, could produce a greater revenue through the foreign visitors it attracted than the rich wheatgrowing fields of Alberta, a new attitude was created. These National Parks, it seemed, were to be commercial assets, not liabilities. Tourist travel, the Commissioner pointed out, in almost his first report, was an invisible export, with this advantage over other commodities that it left the original capital stock unimpaired. The money brought into Canada in one year by American visitors would balance Canada's unfavourable margin of trade and pay the interest on the (then) national debt. But once the motor came into common use arguments were no

longer needed to show—what is now a commonplace—the economic importance of tourist travel. Soon the revenue derived from foreign visitors took third place among Canada's sources of wealth, and she began to realize that intangible assets might prove to be the most valuable of all, that indeed, like the pretty maid in the old nursery rhyme, her face might eventually be her fortune.

But the humanistic argument was always the most strongly stressed, and through the medium of films, lectures, and booklets people were informed of the possibilities open to them in these great wild areas maintained for their pleasure and benefit, and it was not long until requests began to come in for the establishment of additional parks in other parts of the country.

Eventually, it was seen, there should be established a chain of National Parks, preserving the most outstanding examples of beautiful landscape in every section of the country and providing recreational outlet for every part of the Dominion. The first new area selected was one at the summit of Mount Revelstoke, on the western fringe of the Selkirk Mountains. Here, above the clouds, lies a park-like plateau, carpeted in

summer with millions of wild flowers, in a setting of snow-crowned peaks. The slopes of the mountain form a natural ski-jump closely resembling that of the famous Blumendal Hill in Norway, and, owing to the altitude, winter sports can be carried on until the end of May. An area of about one hundred square miles was set aside in 1913, but a nineteen-mile motor highway had to be built to the summit before the park could become accessible. Owing to the Great War work progressed slowly, and it was not until 1919 that the road was completed and the park formally dedicated by H.M. the King, then H.R.H. the Prince of Wales, who was visiting Canada at the time.

But the prairie provinces of Saskatchewan and Manitoba had no national playgrounds; the parks in the Rockies were too far away. They were in urgent need of some holiday outlet for their rapidly growing populations. The greater part of Saskatchewan is given over to wheat growing, but in the northern part of the province, on the fringe of the first continent, there lay a region of rocks, woods, and waters which seemed to have been designed by Nature to be a natural pleasure-ground for man. Here thousands of

crystal lakes, from tiny rock basins only a few hundred yards across to large bodies of water fifty miles long, are tied together by little rivers and streams, forming an intricate network of waters through which one can travel for hundreds of miles. The white birch, the pine, and the white spruce grow here to unusual size and beauty, and there are scores of white sand beaches which make ideal bathing-places. The wild duck, the beaver, the pelican, and the loon have long built their homes beside these undisturbed waters, and through the virgin woods the black bear, the moose, and the deer have roamed since before the coming of man.

Until recent years the region has lain beyond the reach of all but a few adventurous travellers, though its waterways have been the canoe highways of the Indian, the trapper, and the fur trader. The rapid development of the prairies in the last half century and the coming of the motor car has brought this once remote region within reach of all parts of the province, and only a road about seventy miles long from Prince Albert was needed to make it accessible to thousands.

About ten years ago the then Prime Minister of Canada, the Hon. William Lyon Mackenzie

King, who represented the constituency of Prince Albert, interested himself in the project, and with his distinguished support and the whole-hearted co-operation of the province, an area covering 1,868 square miles was set aside, a motor highway was built connecting it with the provincial capital of Prince Albert, and the new playground was dedicated as "Prince Albert National Park."

Already it has more than justified its creation through the service it is rendering to this great section of the Dominion. There are perhaps few places in the whole of Canada where the lover of lakes and rivers can find so many opportunities for adventure. To send one's canoe gliding for days by uninhabited shores, far beyond the sound of motor car or railway; to portage through woods so solitary that even the sound of a breaking twig becomes exciting, because it means the passing of some wild animal; to camp and sleep under the sun and stars-what more can he ask? And beyond the park boundaries, to the north, west, and east, are new successions of lakes, extending like the links of a silver chain for literally hundreds of miles, so that if one had the time and the energy one could go on and



Sanctuary Lake, Prince Albert National Park.



Mount Harkin, in Kootenay National Park, British Columbia, named in honour of the first Commissioner of the National Parks of Canada.

on until one reached the Arctic Ocean on the one hand, and Hudson Bay on the other.

Prince Albert Park was a natural home for beaver, and when a few years ago the Government discovered Grey Owl endeavouring under almost insuperable difficulties to conserve these intelligent animals in a region in eastern Canada where hunters continually threatened to defeat his efforts, it offered him the protection of Prince Albert National Park. Here he was given the lordship of a small but beautiful lake, and here he has been carrying on his happy experiments in the domestication of beaver, the story of which has interested the world.

This Saskatchewan Park was so immediately successful that it aroused a desire on the part of the province of Manitoba to have a National Park of its own. Though Manitoba is included among the prairie provinces, the eastern half is well wooded, and it possesses a number of large and beautiful lakes. The choice of an area here was more difficult, but finally a region was selected which lay within the Riding Mountain Forest Reserve in one of the most interesting and beautiful sections of the province. The park has an elevation of nearly 2,000 feet, and its

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forest, which has long been under protection, is exceptionally beautiful, while a large lake provides pleasant bathing beaches and sites for summer homes. The wild animal life is abundant, and will no doubt increase, and to add to the interest, a herd of buffalo has been placed in a large fenced enclosure within the park where it can roam and breed undisturbed.

Both these parks were established to meet the recreational needs of the people and not primarily to protect the landscape, though both are happy examples of the most interesting wild country in each province. As in all the other parks, the Government retains the ownership of the land, but sites for summer cottages are laid out by the landscape and architectural division of the National Parks Branch, and the necessary public services—water and drainage systems, electricity, roads, streets, sidewalks, and playgrounds—are provided. Lots are leased at a low rental (about thirty shillings, \$7.50, a year) for a period of forty-two years, but no building can be erected unless approved by the National Park architects. Where plans are unsuitable or out of harmony with the environment they suggest improvements or offer a choice of others

that are no more expensive. All businesses are carried on under licence, but there are no monopolies and no concessions, so that the temptation to extortion does not arise.

The Maritime Provinces have long been eager to have National Parks established there, and a beautiful area in northern Cape Breton, containing some of the finest seascapes in Canada, and another in Prince Edward Island will soon be created National Parks; while, as soon as the right area can be decided upon, a reserve will be established in New Brunswick.

In all the parks the Government's policy has been to encourage the freest use, to make them "people's parks" in the broadest sense of the term. Motor camp-sites, with such comforts and conveniences as central kitchens, laundries, and baths, are established in the chief centres and other camp-sites laid out along the principal roads. There are huts for hikers and climbers, and the wardens and members of the Royal Canadian Mounted Police, who also patrol the parks, are always ready to render every assistance to riders of the trails. All kinds of outdoor sports are encouraged, and there are playing-fields, golf links, and tennis courts in almost all the

parks. In the Rockies there are several organizations which are helping young people to enjoy the mountains at slight expense. The "Annual Camp" held by the Alpine Club of Canada enables hundreds of enthusiastic young climbers to enjoy their exhilarating sport under experienced leadership. In the Banff Park there is an energetic organization known as the "Skyline Trail Hikers" who undertake expeditions on foot. The "Trail Riders of the Mountains" arrange delightful expeditions of two or three weeks' duration to unexplored regions, and their long cavalcades, sometimes with as many as two or three hundred horses, set out each summer on adventurous explorations that to many young people are as thrilling as a journey to Samarcand. From such holidays they come back not only with new health and vigour, but with a deeper love for their own land.

At the Hot Springs in Banff and Kootenay Parks there are fine public baths where, for twenty-five cents (one shilling) a person may have the use of towel, locker, and bathing suit, and admission to the swimming pools.

But though so many provisions are made for enjoyment and use, it is never forgotten that the

most precious possessions of the parks are their peace and solitude. Thousands of visitors may travel along the main valleys, but, except on these main arteries, the "cayuse" or mountain pony remains the only way of travel to many of the loveliest regions, and it is to be hoped he always will.

CHAPTER 9

THEIR OWN LAND

"THERE is no ideal," wrote Benjamin Kidd, "in conformity with the principles of civilization which may not be accomplished in the space of a man's lifetime." But ideals seldom remain the same for that long together. They grow and develop and change, like everything else, with the passing years. An anniversary merely affords a convenient moment to stand back and look at the design and see how it is working out. It is less than a man's lifetime since the National Parks of Canada were first established, and the original germ of the idea has grown far beyond the initial conception. Though it is still putting out new leaves and branches, its general meaning and significance are now fairly clear.

It is natural that those charged with direct responsibility should look back over those busy

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years and estimate results in terms of things done, in visible accomplishment. They count the hundreds of miles of roads, the thousands of miles of trails, that have been constructed; the public baths, the attractive public buildings that have been erected; the recreational fields and golf links, the camp-sites and museums, the streets, sidewalks, and public utilities that have been provided. For them the busy years have meant a never-ending series of new problems, presented in bewildering variety from day to day. At one moment they have had to select the best location for a great highway, the next the proper food for a polar bear; they have had to turn from the framing of important legislation to the selection of a title for a moving picture film. They have never been free from anxiety, for the years have brought many attacks upon the National Parks-threatened invasions of private interests, and the damage which the merely thoughtless and indifferent can bring about. They know—who better?—that until as much horror is aroused by the mutilation of a beautiful landscape as by the destruction of Rheims cathedral, until it is recognized that a masterpiece of Nature is not merely a national

possession but the property of the whole world, the National Parks will not be safe. Yet, as they remember the mounting censuses of wild animals, the ever-growing number of visitors, the increasing revenues, and the widening public interest, they may well feel that a good deal has already been accomplished.

Where in 1911 there were only seven parks with a total area of 7,500 square miles, there are now seventeen parks with an approximate total area of 20,000 square miles. Visitors, who numbered then only about 30,000 a year, now number nearly 800,000, while revenues have grown from approximately \$56,000 in 1911 to \$220,000.

How little could the young man who sat in that small office at Ottawa twenty-five years ago have imagined the manifold activities into which the work would develop—activities largely inspired by his own creative imagination and executive energy! How little, too, could he have foreseen the many difficulties and anxieties involved in this "almost too easy a task." For the setting aside of a National Park is only the first step. Protecting it from vulgarization and spoliation is a much more difficult matter,

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demanding unremitting vigilance and relentless adherence to a clearly defined policy. Of the original staff of seven members only one, the very capable Deputy Commissioner, remains. The first small organization has expanded into a large one, working under seven separate divisions. One has charge of the protection and welfare of the forest; one of the wild life; another exercises control over architecture and landscape, and still another frames the necessary legislation and attends to the thousand and one details in connection with the transfers of land and the acquiring of new areas; one division has charge of the preservation and marking of historic sites and landmarks and the care of small Historic Parks; another undertakes all engineering works, such as the building of roads, trails, bridges, and public utilities; while the seventh—the Publicity and Educational Division—has the task of making the parks known to Canadians and the rest of the world.

The conservation of wild life generally is being furthered by Round Table conferences of game officials and provincial authorities, held once a year at Ottawa, and also by articles and moving pictures. Valuable film records of wild beaver,

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grizzly and black bears, sea lions, goat, sheep, and many other forms of animal life have been made through the efforts of the energetic Director of Publicity, and these, together with films of the scenic and other attractions of the parks go to practically every country in the civilized world. Where in 1911 there were no photographs, there are now thousands of negatives recording every phase of the landscape and wild life, and thousands of feet of moving picture negative.

But the ordinary man is not interested in statistics or details of accomplishment. He only knows that through these great wild reservations he is coming into a new possession of his own land. The ancient rights of the commons, the friendship of wild animals, and the virgin beauty of the earth are being given back to him. Once they have passed through a park gateway, even the dullest are conscious that they have entered another and better world, a world of beauty and order, where freedom for every one is maintained by common observance of the law.

[&]quot;Largior hic campos aether et lumine vestit Purpureo: Solemque suum, sua sidera norunt."

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"Here a more copious air invests the fields, and clothes with purple light: and they know their own sun and their own stars."

So, in an age when changing conditions are compelling the partition of many of the great English estates, the United States and Canada, inspired by the same public vision, are building up these great "people's estates," whose title deeds are made out in the name of the nation. These vast public "preserves" are fulfilling the old aristocratic duty of caring for the beauty and dignity of the landscape, and point, one may hope, to a day when the face of the country-side will be everywhere cherished and protected.

Eventually there must be other types of reserves not generally thought of as beautiful. Bogs and swamps and arid places have their own value for the student, and a special flavour for those who have learned to love the tang of unsubdued nature. For the ordinary man, half-gipsy, half-poet, will always feel a hunger for the beautiful and the wild. We can never "go back to Nature," in the old sentimental Rousseau sense, never again be in Nature, simply and unconsciously, as the primitive man and the animal are. But perhaps we may yet go back to her,

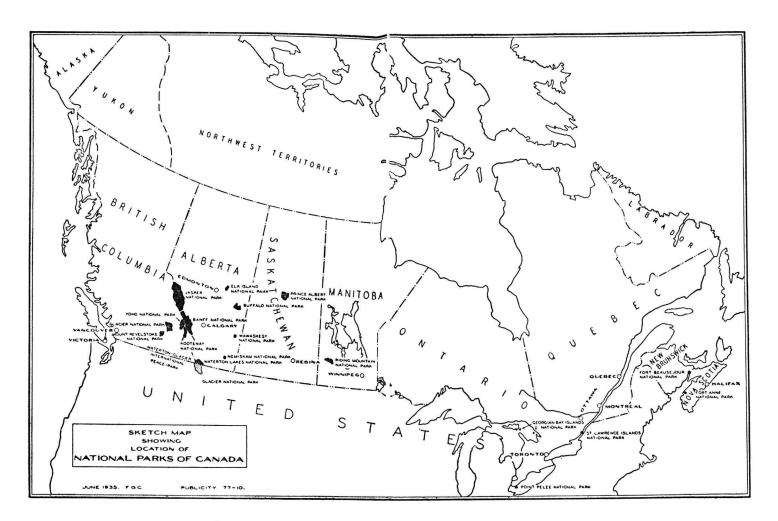
not as an escape from, but as a return to, reality, bringing with us all the gains of science and that humility which science is teaching us.

It may be that we shall then become more keenly aware of the meanings of Nature, and catch some glimpse of that vast and intricate organization so "intimately knit from its centre to its utmost circumference" that you cannot transplant a wild rose to your garden without coarsening its texture, or destroy a single species without altering the exquisite balance of life. And we may begin to understand why it was that in an age which seemed to be pouring all the fruits of its labours into tools of destruction, mankind began to take thought for the wild beauty of the earth, and to set aside places where the peace and the solitude and the primeval harmony of Nature could find sanctuary under the uninspiring name of "National Parks."

THE END

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