THE CONSERVATION OF
THE WILD LIFE OF CANADA

BY

C. GORDON HEWITT, D.Sc.
DOMINION ENTOMOLOGIST AND CONSULTING ZOOLOGIST

WITH NUMEROUS ILLUSTRATIONS

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WHEN Gordon Hewitt came to Ottawa in the fall of 1909 to enter upon his duties as Dominion Entomologist, he fully expected to return to Manchester University in a year or so, there to continue his researches in entomology and his lectures in zoology; but the call of Canada was not to be ignored: he found work for a giant to do and he bent himself to his task.

Ten years of life in office were allowed him, and, during that time, he had the satisfaction of developing the Dominion Entomological Service from a small division, attached to the Experimental Farm, to a separate branch of the Department of Agriculture, with four divisions at Ottawa, and twelve laboratories throughout Canada, organized for the purpose of watching, combating and forestalling insect injury to forests and crops. Quarantine stations were also established to prevent the importation of foreign pests. For this work, trained, scientific men were required, and here his enviable talent for selecting the right man for the place, and in using his powers to the full stood him in good stead. Indeed, the relation that existed between my husband and his associates was like that which animates a group of friends, where each one gives the best that is in him and looks for the best in others—a bright record in Civil Service history of loyalty and disinterestedness. Commenting on his remarkable faculty of choosing his associates and attaching them to himself and his schemes, Doctor W. M. Wheeler wrote: "The truly remarkable record of development and public service exhibited by Doctor Hewitt's department during the decade of his administration was clearly due to the unusual abilities of the man. Combin-
ing a thorough training in zoology with rare gifts as an investigator, executive talent of a high order, and sympathetic insight into the achievements of other workers, not only in entomology, but in biology generally, he could not fail to secure the affection, as well as the confidence and admiration of all the men, and particularly the young men, whom he had chosen as aids in building up his department.*

In 1916 he was offered and accepted the position of Consulting Zoologist. His duties were thus enlarged, and his sphere of useful activity appreciably increased. For the new work he was especially fitted, as Doctor Wm. T. Hornaday says: “His broad mind reached out, and grasped the whole invertebrate fauna of the vast region embraced in the Canadian Dominion.”† His sphere of influence extended beyond the Dominion, again quoting Doctor Wheeler: “Realizing that very many of the native and introduced animals, and the economic problems to which they give rise, are identical in Canada and the northern United States, he took an actively constructive part in all deliberations, wherever men were assembled in either of the sister commonwealths, to discuss practical matters relating to our insects, birds, and mammals,” and by accepting the position of Canadian representative on the International Commission for the Protection of Nature his work became world-wide.

Inspired by Doctor Hornaday, and encouraged by Mr. James White, he commenced to write this book, which occupied much of his spare time during the last four years of his life. As he wrote the book at home in the evenings, I became familiar with it, chapter by chapter, for he liked to read aloud what he had written; also, before writing, he was eager to discuss present needs and future developments. Evening after evening in his library, easy chairs on either side of the fire, a low table beside him, holding paper, reference books, and the indispensable tin of “John Cotton,” while snowstorms might rage without, in imagination he was able to roam with the bison or musk-ox on the sunny plains, to climb the peaks with the mountain goat, or to hear the songs of birds in sanctuaries made safe by his effort. The facts and conclusions herein contained were gathered and matured throughout days of action, research, and travel, when he followed the pressing needs of the country, and attacked problems as they presented themselves, never resting until they were solved, and then, unsatisfied, merely using success as a stimulant to greater effort.

Pages could be written of his work in preparing and in drafting what is now known as the Northwest Game Act, and, after the bill was introduced in Parliament, of his watchful support of the measure until all opposition was overcome and it became law. The Migratory Birds Treaty also tested his powers; international and interprovincial arrangements and compromises had to be made, and the successful completion of this important treaty bears witness to his courage and diplomacy. During these and other less important negotiations, he would travel many miles for a single interview; he was thankful when the cause, supported and enforced by his persuasive powers, won the day, and he was willing to try again when they failed. How rarely they failed! The appeal of his winning personality and his earnest desire to help usually carried conviction.

As an example of his sincerity, and of his willingness to carry out whatever he asked others to do, before publicly advocating individual and community effort in wild life conservation, he hung nesting-boxes in the trees, and supplied an original water bath in his own garden. Little homes for bumble-bees were carefully tucked under the

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† The statement of the Permanent Wild Life Protection Fund, vol. III.
lilac hedges and berry-bearing shrubs were planted. The following spring he had the reward of being able to count fifteen nests and the visits of thirty-four species of birds.

His love of nature was not merely sentimental or theoretical. He was an enthusiastic, practical gardener—he liked to dig in the soil and to spread manure. He planted with the precision and skill of an artist; he sowed seeds with equal zest; and, after a rain, he loved to fork around, and thus to make each bulb, perennial, or vegetable “comfortable.” Nor were the poetical accompaniments of the craft ever absent. Morning and evening—before his office hours and after—he walked around the garden, bathing himself in greenness, and in the odour of lilacs, roses, and new-mown grass. Then it was he spoke to every flower and bird, no matter how small or how shy, and held converse with the chipmunks and squirrels, who held a safe tenure within the garden precincts.

After his immediate community was convinced of the need of bird conservation, and Rockcliffe Park and the Experimental Farm became sanctuaries, he went farther afield: in every province in the Dominion he addressed meetings on the subject of the conservation of our wild life.

This is but a short record of the ideals which led to the making of this book, and of the character of him who wrote it. A great deal might be said by me in faithful and thankful acknowledgment of that character, but which would, in the end, seem to me cold and inadequate. I can, therefore, only take refuge in the words of another, one who valued him level with his deserts, who truly recognized his wonderful gifts, and who appreciated the way in which they were ever employed for the brightening of this world. I quote from the memoir by his friend, Duncan Campbell Scott, in the proceedings of the Royal Society of Canada:

“His death was tragic in its suddenness. He had attended the meetings of the Commission of Conservation, at Montreal, on February 19 and 20, at which he presented an important paper on ‘Fur-bearing Animals, Their Economic Significance and Future.’

“Soon after his return to Ottawa, on the 20th, he was taken seriously ill with influenza; this soon developed into pleural pneumonia, and he died about 11 p.m., on February 29, 1920.

“He seemed to be on the threshold of a long career, in which added years would bring even greater success, and would fulfill all that he was destined to accomplish. His gifts were varied, and his sympathies deep and general. He touched life at so many points that one cannot think that his interest ever flagged. His knowledge and appreciation of the arts and belles lettres were finely balanced by a warm love of nature, and this led him into enthusiasms for our wild life. His ideal habitation was always surrounded by a garden, and every foot of soil was made to yield either use or beauty. There was in all his work a rare combination of earnestness, with lightness of touch. Highly characteristic, too, was a fine sense of humour, which kept all things in their proper relation. His personality was of that even bearing that finds the best in all men, and gives duly the best in itself. Even his casual acquaintances had sorrow when he died. To those who knew him well there will remain a deep regret; to those who received fully the intimate charm of his personality in familiar intercourse there cannot be any mitigation of his loss, for he was a peerless friend.”

Elizabeth Hewitt.

Rockcliffe Park, Ottawa.
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CHAPTER I
INTRODUCTION

Canada is the home and refuge of the most important and desirable wild animals of this continent. The southern portion of that wonderfully rich and interesting North American fauna that everywhere greeted the early explorers and settlers in the United States has melted away before the advancing tide of settlement like snow, and only in the inaccessible places and in a few protected spots has the harried remnant found greater security and an irretrievable loss been prevented. The northern part of the continent was less tempting to the earlier settlers and more hospitable to its native wild life. The impenetrable forests, trackless wilderness, and mountains of Canada afforded a sanctuary to the greater part of the wild life of the continent, and retarded settlement has proved its salvation. The people of the United States now mourn the loss of their wild life and are endeavouring to rescue the remnant from complete extermination, realizing how great an asset it is to the country and the significance of its depletion. A young country enjoys the advantage of being able to profit by the mistakes of older countries. It lies within our power to preserve for ourselves, but more particularly for posterity for whom we hold it in trust, the wild life of this country. It rests with us to prove that the advance of civilization into the more remote sections of Canada does
not imply the total destruction of the wild life, but that civilization in its true sense signifies the elimination of the spirit of barbarism and the introduction of an enlightened attitude.

The problems, therefore, confronting us involve a knowledge of the following questions: Of what does our wild life consist; what is its value; what are the factors that are responsible for its reduction and ultimate extermination; what steps are we taking to conserve it; and how can we improve on present methods with a view to conserving a valuable natural resource, the constituent parts of which cannot be replaced once they are lost? In the succeeding chapters these questions will be considered. It is felt that a presentation and discussion of the status of the wild life of Canada will afford the best means of securing that wide sympathy of the people throughout the Dominion that is essential to the success of any measures that have already been taken or may be adopted in the future with the object of conserving this resource. While in this matter of wild-life conservation we have much to regret in the past, we have reason to be proud of the efforts that we are now making to remedy past mistakes, and a more general realization of our opportunities to improve our national life and welfare through these means will undoubtedly lead to further efforts. It is desirable that, before proceeding further, the classes of animals to be considered in the inquiry should be specified. The term “wild life” naturally includes all the members of our native Canadian fauna, but it is obvious that the term must be restricted for our present purposes for the sake of adequate treatment and to avoid digressions into well-recognized groups of our fauna. Strictly speaking, it would include the game, non-game, and fur-bearing mammals, the game and non-game birds, the fishes and other members of our fauna. The conservation of our fishes will not be considered here; it has been the subject of
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discussion by the Commission of Conservation in other reports. In its report on “Fur Farming in Canada” the Commission has presented a fairly complete statement regarding the fur-bearing mammals of the country, and there is no necessity to duplicate the facts so presented. For that reason the fur-bearing mammals will not be considered at length, but only in so far as their conservation in the wild state necessarily constitutes an important aspect of the general problem of wild-life conservation. In this account it is proposed to deal in particular with the larger wild mammals, many of which are commonly included under the head of “big game,” and the birds of Canada, inasmuch as these animals constitute that portion of our native fauna that is in the greatest need of adequate protection with a view to preventing the extermination that will inevitably follow failure on our part to provide it.

Nature has laid on the shoulders of the Canadian people an obligation, and at the same time an opportunity, of a peculiar character in so far as the preservation of the wild life, not of this hemisphere alone but of the whole world, is concerned. In the gradual evolution of the great land masses of the earth’s surface it has come about that by its geographical situation and physical characteristics the greater part of Canadian territory constitutes a distinct faunal region, differing from other regions of the world by reason of the fact that it contains certain species of animals not found elsewhere. In some cases these animals are related to forms in other regions of the world; in other cases they are distinct and unrelated. In the Canadian region, to mention a few of the larger forms of wild life, we find the moose (Alces machlis), which is related to the elk* of northern Europe and Asia; the wapiti (Cervus canadensis), which is closely allied to the red deer of the old world, and the caribou (Rangifer species), which very closely resembles the reindeer of northern Europe. The bison or buffalo is related to the European bison, which has suffered a serious reduction in numbers and is now confined to the primæval forests of Lithuania, Moldavia, Wallachia, and the Caucasus, where it is artificially preserved.* The mountain-sheep (Ovis species), so characteristic of our Western mountains, are well represented in the old world, the centre of their habitat being the immense mountain ranges of Central Asia. The musk-ox (Ovibos moschatus) is an animal allied to the sheep family, that is particularly distinctive of our region of the world, ranging as it does over the barren grounds and arctic regions of the north and eastward to Greenland. The Rocky Mountain goat (Oreamnos montanus and its sub-species) is found only in the Rocky Mountains. Finally, the most interesting of all our mammals is the prong-buck or antelope (Antilocapra americana), which forms by itself a distinctive family of the ungulate or hoofed animals. It is entirely confined to a region comprising a portion of the Prairie Provinces and the Western States. While it is allied in certain respects to the antelopes of the old world, it is unique among all hollow-horned ruminants by reason of the fact that, like the members of the deer family, it sheds its horns every year.

* It is unfortunate that the word elk has come to be used in North America as an alternate name for the wapiti. As popular names must naturally be used for these animals, it seems very desirable to confine the name elk to the European Alces or moose, and use the Shawnee name, wapiti, for Cervus canadensis.

* According to Dr. Theodor G. Ahrens, “The Present Status of the European Bison or Wisent,” Journal of Mammalogy, vol. 2, no. 2, May, 1921, pp. 58-62, the Lithuanian herd numbered 170 or 180 in 1918, but after the German revolution it seems that all or nearly all the remaining bison were shot by the inhabitants and the retiring German soldiers, among whom discipline had been undermined by the revolution. Later the war between Poland and Russia passed over the region. Since the Russian revolution the Kuban Cossacks have demanded the return of their old hunting grounds in the Caucasus, so that extermination of the bison in that region is also to be feared. Besides the few introduced specimens still extant in Pless and possibly in Ascania Nova there remain a few specimens in zoological gardens. Summing up, he concludes that the extinction of the species is imminent.

-R. M. A.
Certain of the foregoing animals extend their range southward into the United States, but Canada is their natural habitat and in Canada they attain their maximum development, apart from the fact that in the United States they have been seriously reduced in many instances.

Our responsibilities in the matter of the conservation of these animals are therefore unmistakably clear. It is our bounden duty to prevent the extermination of all but the noxious species on the higher grounds of our obligations to the people of other countries, as guardians of our portion of the wild life of the world, and to future Canadians, the heirs of a region so richly endowed.

CHAPTER II

THE VALUE OF WILD LIFE TO THE NATION

In order to secure the interest and active support of the people of Canada in the conservation of our wild life, it is necessary at the outset to indicate as clearly as possible the economic significance of such measures as are now being taken and of those that should be adopted with a view to the preservation of our native animals. A consideration of this aspect is not rendered necessary by any lack of appreciation on the part of Canadians generally as to their moral obligations in this matter or because reasons of sentiment carry no weight. It is rendered necessary largely on account of the rapid opening up and development of the country, and because such development comes into direct conflict with the ability of many important forms of our wild life to survive.

Utilization of Non-Agricultural Lands.—The basic industry of Canada is agriculture, and the extension of this industry involves the bringing under cultivation of new areas of land which were formerly the home of our wild life. Therefore, in order to justify on economic grounds the conservation of our wild life its economic value as compared with agriculture in the first place must be set forth.

Not all lands are suitable for agriculture. Even in the best agricultural sections of the country areas unsuited to agriculture occur. In some cases, as will be shown later, such areas have been set apart as forest reserves; in other cases a struggling population endeavours to eke out a meagre existence on the sparse products of the unfertile soil. The problem of the best method of dealing with such
non-agricultural lands has already received some consideration by our governments. In the future it will demand more attention than we have hitherto thought necessary. And it is here primarily that the practical application of the principles of wild-life conservation should receive serious attention, for it will afford one of the most important methods by which the unproductive or scarcely productive areas can be rendered productive. However, it is of the gravest importance to remember this, that while the question as to the utilization of such lands is under consideration we do not permit the means whereby their productivity can be secured, namely through the taking advantage of the presence of our wild life, that is, by the utilization of our natural resources, to disappear through our neglect to appreciate at the present time their potential value to the community at large.

Deer as a Meat Supply.—One of the most serious problems of the present day is the gradually increasing cost of food, particularly meat. Every effort is being made to increase mixed farming and to encourage the live-stock industry. And yet a potential source of meat is left to the mercy of sportsmen or gunners and their dogs. I refer to our native deer, and particularly to the white-tailed deer which frequents the Canadian woods and forests east of the Rocky Mountains. Here is an excellent meat animal which is hardy, and with proper protection, by which is meant the prohibition of unwarranted slaughter, will increase rapidly in numbers. There are hundreds of square miles of land unsuited to agriculture, and forest land that might be producing not only timber but meat also, and in every way such production would be profitable.

That such an idea is not theoretical but eminently practical is demonstrated by the experience of the State of Vermont. In common with the adjoining States the people in Vermont some years ago had reduced the numbers of white-tailed deer, formerly so abundant, to the verge of practical extermination. So far as could be ascertained the species was practically extinct in Vermont by 1870. In 1875 thirteen white-tailed deer, comprising six bucks and seven does, were procured by a number of sportsmen of Rutland, Vt., and liberated in the forests adjoining that city. For twenty-three years none were killed, except a few that were illegally shot. They increased in numbers and were sufficiently abundant by 1897 to permit the establishment of a short open season, when 150 were shot. Their increase during subsequent years is indicated by the figures given by Hornaday.* “In 1901, 211 were killed; in 1902, 561; in 1905, 791; in 1907, 1,600; in 1908, 2,208, and in 1909 the grand total was 5,261. For the year last mentioned, 1909, the average weight of the deer killed was 155 pounds each, which for some reason was far below all preceding years, and suggests an error.” The total weight of venison taken was 716,358 pounds. Computed at the lowest reasonable valuation, twelve cents per pound, the total value for 1909 would be $85,962."

As the deer gradually spread over the State they did some damage to agricultural crops, and it was wisely decided to compensate the farmers for such damages. Such a practice is followed in England in the case of damage inflicted by foxes which are preserved for hunting purposes. During the two years, 1908 and 1909, the total amount paid in damages was $4,865.98, and the value of the total number of deer legally killed during those two years was $107,790, which indicates the soundness of the policy of indemnification.

The example of Vermont is a valuable object-lesson. There is no reason why a similar policy should not be

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† In the years 1905 to 1908 the average weights ranged from 196 to 207 pounds.
adopted throughout eastern Canada, where we have large areas that are unproductive so far as the food supply is concerned and where deer will thrive abundantly, as it constitutes their native home. On economic grounds the possibilities of the wild meat supply should receive the serious consideration of the provincial governments and of the people. We cannot afford to neglect so valuable an opportunity. It involves nothing more than a sane and judicious protective policy, adequately extended and applied. It would mean that our non-agricultural areas would be made productive and our forest areas more productive.

Development of Northwestern Territories.—How often has our pride in the possession of so enormous an area as Canada comprises been touched to the quick by the reminder that our vast undeveloped Northwest Territories and barren lands are practically unproductive, if we leave out of consideration the fur trade, which has seriously diminished. But there is no reason for depression. On the contrary there is every ground for confidence in the potentialities of our northern territories and their profitable development, provided we will adopt the correct attitude towards the conservation of the wild life of those territories. The economic development of northern Canada is dependent upon the proper conservation of the wild life of that section of the Dominion. If adequate measures are adopted to conserve upon proper lines the game and fur-bearing animals of those portions of the Northwest Territories unsuited to agriculture, and such portions constitute by far the greater part, there is no reason why the whole of that area should not be productive and contribute to the wealth of the country. The possession of such territories would become a matter of pride rather than of reproach.

How is it possible to regard the countless numbers of caribou that inhabit those regions, and to which fuller reference will be made later, except as an inestimable food supply? In view of the fact that the fur-bearing animals of the north furnish not only luxuries but also necessities, what greater opportunity could we have of establishing the fur-bearing industry on a sound, practical basis? It was not without reason that furs constituted the first lure that attracted the outside world to Canada. This country contained the greatest variety of valuable fur-bearing animals, for the possession of which men risked everything, including their own lives. Now our agricultural lands constitute that lure, but the remnant of those fur-bearing animals is still with us. Conservation of our natural resources is taking the place of exploitation. We should apply the doctrine to the fur-bearing animals and thus secure their full value to the community. And it cannot be stated too often that conservation means the protection of natural resources from injudicious exploitation and their provident utilization. Our northern territories, under proper administration, could become not only a valuable source of food supply, but also one of the chief fur-producing areas of the world.

The mineral wealth in our northern territories constitutes a valuable natural resource awaiting development, and it should be remembered that such development will be rendered more possible by the presence of an adequate food supply such as I have mentioned, which fact indicates another economic aspect of this problem.

Barren-ground Caribou as Source of Meat and Clothing.—The development of a “wild” food supply, by which I mean the caribou in our northern territories from the Labrador coast to the Yukon, would fulfil three objects: First, it would supplement the meat supply from domesticated animals and add to the area of productive land in the country. Caribou furnishes one of the finest of meats, and under proper protection and adequate supervision there is no reason why we should not in the future develop a caribou meat industry, and export frozen caribou from the north.
Secondly, it would furnish an important means of subsistence to those whose work carried them into those regions where transportation and food supplies constitute a serious problem. If reindeer could be employed for hauling purposes they would prove superior to dogs, owing to their ability to find food available, such as the northern mosses and lichens, whereas the food question in the case of dog transport is always a serious one. Thirdly, the presence of such a food supply would enable us to keep those regions populated to a greater degree than would be otherwise possible, thus facilitating the task of developing those areas to the extent that their valuable natural resources, particularly minerals, render desirable. The musk-ox is also an animal of undoubted potential value in the development of our northern and arctic territories, and its utilization is discussed in later chapters.

Relation of Natives to Wild Life.—The necessity of a native food supply in northern Canada demands serious consideration. Among the important aids at the present time in the utilization and development of the northern territories are their natural inhabitants, the Indians, and, to a lesser degree, the Eskimos. Further, our moral obligations to the Indians render it necessary that means shall be taken to ensure them an adequate food supply and a potential source of revenue. This opens up the large question of the relation of the Indians to wild-life conservation to which further reference will be made later. But it cannot be too often remarked that the Indian, when unspoiled by white men, is traditionally a conservator of wild life, that is, he uses it but does not exterminate it. The Indians and the Eskimos knew what the results would be if they conducted a policy of extermination, and they took common-sense precautions accordingly. The Indians had their traditional hunting-grounds, and under the guidance of the recognized trading companies, particularly the Hudson’s Bay Company, they were careful not to exterminate in any area the fur-bearing or game animals. This policy continued until the advent of the independent fur trader—the “free trader” and hunter—who observed no law and whose whole aim was to secure the greatest quantity of furs by the quickest method regardless of the future. The effect of men of this type on the attitude of the Indian towards wild life was what one might expect, but we cannot hold the latter entirely responsible for his abandonment of his former habits. The Indian will conserve wild life if he believes that it is to his advantage to do so. He is not so “red in tooth and claw” as many of those who are frequently accustomed to speak ill of him. His primitive weapons were playthings compared with the modern sporting rifles. The wild life constituted his natural means of subsistence and, with the advent of the trading companies, of revenue. In his primitive state he was merely a unit in that balance of nature that is so marvellously adjusted that while the abundance of species of animals rises and falls extermination does not follow the preying of one species of animal upon another. For such changes as have been brought about in the Indian’s attitude he is not to blame, and the foregoing facts are set forth with a view to removing prejudice in the minds of those who have not seriously considered the rights of the Indians in this matter. Our obligations to them in those areas where tribes still exist who have always lived on the wild life that still constitutes a means of subsistence, cannot be overlooked or neglected in developing those regions.

Recreative Value of Wild Life.—When we come to consider the recreative value of our wild life we touch an aspect of wild-life conservation that is as universal in its appeal to the sentiments of Canadians as it is inestimable in its value to the nation. Few men there are who never feel or respond to the call of the open air, the lure of the wild; and to all those who cast aside the daily task and seek re-
freshment on mountain or prairie, in the bush or by lake or stream our wild life most commonly serves as the object they have in view.

Kipling has expressed the call of the wild in his "The Feet of the Young Men," and all Canadian sportsmen remain young:

So for one the wet sail arching through the rainbow round the bow, And for one the creak of snow-shoes on the crust; And for one the lakeside lilies where the bull-moose waits the cow, And for one the mule train coughing in the dust.

Who hath smelt wood smoke at twilight? Who hath heard the birch-log burning? Who is quick to read the noises of the night? Let him follow with the others, for the Young Men's feet are turning To the camps of proved desire and known delight!

Do you know the blackened timber—do you know that racing stream With the raw, right-angled log-jam at the end; And the bar of sun warmed shingle where a man may bask and dream To the click of shed canoe poles round the bend? It is there that we are going with our rods and reels and traces, To a silent, smoky Indian that we know— To a couch of new-pulled hemlock with the starlight on our faces, For the Red Gods call us out and we must go!

Do you know the world's white roof-tree—do you know that windy rift Where the baffling mountain-eddies chop and change? Do you know the long day's patience, belly-down on frozen drift, While the head of heads is feeding out of range? It is there that I am going, where the boulders and the snow lie, With a trusty, nimble tracker that I know.

I have sworn an oath, to keep it on the Horns of *Ovis poli*, And the Red Gods call me out and I must go!

Canadian sportsmen are fortunate on account of the comparative ease with which they can satisfy their longings, owing to the proximity of good hunting-grounds to all our large centres of population. In few countries do the same conditions exist.

If we ask ourselves wherein lies the chief value of our wild life from the recreative standpoint, the reply would undoubtedly be in its relation to human efficiency. What man is there who, after months of unremitting toil, takes down his gun, rod, or camera, and, seeking the silence of the open air for a week or two, does not come back physically and mentally refreshed and remade? What can ever equal the reinvigorating effect on body and mind of days spent out in the open,

When you steal upon a land that man has not sullied with his intrusion, When the aboriginal shy dwellers in the broad solitudes Are asleep in their innumerable dens and night haunts Amid the dry ferns, in the tender nests Pressed into shape by the breasts of the Mother birds; How shall we simulate the thrill of announcement When lake after lake lingering in the starlight Turn their faces towards you, And are caressed in the salutation of colour?

—D. C. Scott.

Nothing can ever equal our wild life as a means of increasing human efficiency where the tendency of modern life is to work under the high pressure of city conditions. As our population increases the need will become greater, and unless every possible step is taken to conserve the wild life for the refreshment of the men of the future we shall gradually lose this unequalled source of national vigour.

So much has been written on this almost inexhaustible theme that little that is new can be said, even if a more lengthy treatment of this aspect of the value of our wild life were desirable; but its value as a means of increasing and maintaining our self-reliance and resourcefulness should not be lost sight of. Nothing calls for resourcefulness so much as the quest of wild life, when the beaten tracks of a more civilized life, where everything is provided for one, are left and one has to return to the primal competitive
habits. Resourcefulness is a characteristic of all those called upon to conquer new lands. And on no occasion has resourcefulness of such men stood them in so good stead as when the Canadians barred the way to Calais in the second battle of Ypres, or when the Australians and New Zealanders held impossible positions in Gallipoli.

CHAPTER III

THE EXTERMINATION OF WILD LIFE

One of the saddest features of the history of the wild life during recent times has been the disappearance, that is, the extermination of a number of animals that were formerly abundant. And this has taken place during a period in our history when our attitude towards such matters has been gradually changing for the better.

The pity of it all lies in the fact that once an animal becomes exterminated it cannot be replaced; it has gone forever. Many of our resources may be lost for a time, but they can be regained. Forests may be cut down or burnt, but reforestation is possible; towns may be destroyed by fire, but better ones can rise from the ashes. It is not so with our mammals and birds. Creatures that have existed long before the advent of man disappear as a result of his recklessness, and we are the poorer for their loss.

Nowhere is our fauna so rich where man has established himself to any great extent that we can afford to permit the complete disappearance of animals. Even the total destruction of our worst predatory animals would be an unfortunate loss. In order, therefore, to understand thoroughly the principles that are involved in the conservation of our wild life, we must appreciate the causes responsible for its disappearance, and realize the extent to which species have become extinct and are becoming exterminated.

Main Causes of Extermination.—Broadly speaking, the causes of extermination may be divided into two classes: unavoidable and avoidable. To a very large extent the extermination, at least the reduction to a point bordering
on extermination, of the buffalo was unavoidable, although, as will be evident when the matter is more fully discussed later, that reduction proceeded at a pace altogether out of proportion to its necessity. The buffalo formerly ranged over what have proved to be the most valuable grain-growing areas of the North American continent. With the settlement and bringing under cultivation of those areas it was inevitable that the range of the buffalo must become so seriously restricted as to be a menace to the continued existence of this animal. Transcontinental railroads divided the herds and hindered their normal migratory movements. Settlement followed the railroads. From an economic standpoint the case was against the existence of the buffalo in anything approaching large numbers.

To a lesser extent the reduction in the number of the antelope was unavoidable, at least so far as its history in the Northwestern States and Prairie Provinces of Canada is concerned. By the extension of the wheat-lands and the gradual reduction in the areas of range country the area available for antelope was seriously reduced and circumscribed. That fact, of course, was unavoidable, and led to the further reduction by shooting, which was avoidable.

In a few cases animals have become extinct from natural causes which were, of course, unavoidable. The case of the Labrador duck (Plate I) affords an illustration of the extinction of an animal from unknown causes.

On the other hand the extermination of other creatures, particularly birds, was avoidable. The extermination of the passenger pigeon and the great auk was brought about mainly by wanton destruction, as unnecessary as one could imagine. One of the chief objects of wild-life conservation is to prevent the extermination of animals where this is avoidable and to maintain the remnant of those animals whose reduction to the verge of extermination has been brought about by causes which are largely unavoidable as they are consequent upon the economic development of the country.

The main axiom of wild-life protection is this: A species of animal must not be destroyed at a greater rate than it can increase. Further, the preservation of any part of our native fauna depends upon the maintenance of sufficient of its normal range to permit unmolested feeding and breeding. In other words, killing for recreation or food must be wisely regulated, and the provision of refuges is indispensable.

Much of the destruction that has taken place, and is taking place, is thoughtless. The remedy for that is education, supplemented necessarily by legislation. The people of the United States and Canada are energetic in whatever they undertake, whether business or pleasure. But that energy when applied to sport may be disastrous, and it must be wisely restricted by law. Hornaday has aptly described the struggle between the forces tending to destruction on the one hand and protection on the other. He says: "In every township throughout the whole United States the destroyers of wild life either are active in slaughter or are ready to become active the moment they are left free to do so. Every beast, bird, fish, and creeping thing has its human enemy. Americans are notoriously enterprising, restless, and prone to venture. It is that restless activity and indomitable nervous energy that is manfully attempting 'dry-farming' in the west, desert-farming in the southwest, and the drainage of the Florida Everglades. Often the joy of the conquest of nature outruns the love of cash returns. Apply that spirit to forests, and it quickly becomes devastation. Apply it to wild life and it quickly becomes extermination. Our conquering and pulverizing natural spirit is a curse to all our wild life."

Danger in Numbers.—The very abundance of our wild life has frequently been the cause of its extermination.
Who would have thought of suggesting, less than one hundred years ago, when flocks of millions of passenger pigeons ranged over the whole United States and parts of Canada, their multitudes at times darkening the air, that in the year 1916 not a single living specimen would exist? Yet the only specimens we have are the stuffed ones and the skins in our museums and private collections. This bird was wiped out of existence for the market and for the pot. Mr. W. B. Mershon has recorded the shipment, in 1869, from the town of Hartford, Mich., for the market, of three carloads of pigeons daily for forty days, making a total of 11,880,000 birds. Another town in Michigan marketed 15,840,000 pigeons in two years. These are samples of the destruction that was taking place everywhere. No creature could withstand the effects of such slaughter.

The great auk, one of our most interesting sea-birds, related to the murres, was formerly abundant on the islands and shores of the Gulf of St. Lawrence. Easy of capture and about the size of a goose, it was killed in thousands by the crews of vessels engaged in its destruction for the sake of the oil it contained. To-day it is extinct. Few skins remain in our museums and its eggs are so scarce that they are worth about $1,200 each.

Along our Atlantic coast the Eskimo curlew (Numenius borealis Forst.) used to wing its way in countless myriads during its fall migration from the breeding-places in the Barren Grounds to South America. In the spring it travelled north again across the interior and swarmed over the prairies. They landed in enormous numbers on the Atlantic coast, from Newfoundland and Nova Scotia to New England. In Newfoundland their millions darkened the sky and the fishermen salted them down in barrels. Every year they were killed in thousands for the market; they suffered by reason of their excessive abundance. At the close of the
last century ornithologists realized that this most useful and highly esteemed of our American game birds was disappearing, until in 1908 Preble stated: "It has become practically exterminated, although formerly enormously abundant and fairly common up to 1890." The market demand and the tastes of the epicures have sealed its fate. Its abundance proved to be its destruction.

As with the birds so with our mammals, and in later chapters the reduction of the buffalo and the antelope from millions to a few thousands will be described. To-day the caribou is undoubtedly in danger of a similar fate. And in fact the same is true of any animal, be it bird or mammal: so long as mere numbers are regarded as a reason for excessive killing, just so surely will the extermination of an animal follow. It should also be pointed out that when a formerly abundant animal becomes reduced in numbers the remnant may tend to herd together and thus give an impression locally of great abundance. This danger exists in the case of such a gregarious animal as the caribou. Local abundance, therefore, should never be taken as an indication of general abundance and as a reason for permitting killing in large numbers.

It is therefore of the greatest importance to realize that numerical abundance is no guarantee that an animal will not be exterminated, unless its destruction is carefully regulated and permitted to a very limited degree. The examples given are surely sufficient proof of this fact, and should be a serious warning to us in the conservation of the more abundant species of mammals and birds.

The Various Adverse Factors.—The greatest exterminator of all wild life has always been the market hunter, caring only for the largest and most immediate pecuniary returns and utterly regardless of the future and of the rights of posterity to enjoy the wild creatures, both furred and feathered,
that our hospitable land so abundantly provided, and still provides if we will only conserve them in accordance with their needs.

Compared with the rapacity of man, the destruction of our wild life by natural factors is slight, although it must demand our serious consideration. When animals become reduced in numbers through man's improvidence, then their natural enemies which have not suffered a like diminution take an unnatural and abnormal toll. The usual balance of nature is completely upset, and the remnant is exposed to excessive numbers of their enemies. The latter increase in numbers and become emboldened in their attacks. Predatory animals, such as wolves, harry the struggling bands whose former abundance enabled them to withstand the natural onslaughts of their enemies. Therefore, when an animal is reduced in numbers, the necessity of lessening the effects of natural reduction by predatory enemies becomes an important part of any policy of protection.

In Canada forest fires constitute one of the most serious dangers to animal life. Not only do such conflagrations destroy large numbers of mammals and birds, particularly young ones, but they destroy the haunts of such animals, and in consequence any replenishing or restocking of the devastated area is impeded for some time, and in any case the conditions are never as suitable or as attractive.

It has already been pointed out that a species of animal must not be destroyed at a greater rate than it can increase. This axiom involves a number of fundamental requirements. The first of these is the necessity of safeguarding the future of the species by adequate protection of the females. When the females of game animals are killed a reduction in numbers will invariably ensue, and the decrease in the abundance of game animals, owing to the killing of the females, is now generally recognized by those responsible for the protection of game. Where the females are not protected the chances of serious reduction and ultimate extermination are enormously increased. The second requisite in the conservation of a species of game animal is a realization of the effect that inevitably follows the killing of the most virile males. The sportsman’s aim is usually to secure the finest specimen, which usually implies the largest male; in the case of deer this means the best head. If this quest is carried out to excess it may involve the destruction of the most virile animals to an extent that would affect the general virility of the local stock of game with the obvious results. The stock would undergo degeneration, and the destructive effects of natural factors would be correspondingly enhanced. The remedy for this state of affairs is regulation as regards the number of males that may be killed, and the maintenance of a virile nucleus by means of protected refuges. The latter remedy will be considered more fully in a later chapter.

Apart from inadequate protection, which is an avoidable factor in ultimate extermination, great reduction in numbers has been brought about in the case of our wild fowl, such as ducks and geese, by the extension of agriculture in various parts of the country, but particularly in the Prairie Provinces. The drainage of swamps and natural breeding-places has been an important factor in the reduction of our supply of wild fowl. And these birds have been gradually pushed further afield from their former breeding-places. The remedy for this state of affairs, so far as a remedy can be applied, is the reservation of areas unsuitable for profitable agriculture as refuges and breeding-places to secure as abundant a local supply of birds as possible.

Inadequate protection of wild fowl during the spring has been one of the chief causes of an avoidable character of the great reduction in the numbers of ducks, geese, and shore-birds. Spring shooting, had it been permitted to continue —by international action, of which I shall speak later, it
has been wholly prohibited—would not only have reduced the numbers of wild fowl as a whole to seriously small proportions, but would undoubtedly have led to the extermination of certain species. Fall shooting is perfectly legitimate so long as the number that may be killed is limited by law, as it involves only the destruction of a portion of the annual increase; that is, it is using the interest on the capital stock of birds. But spring shooting implies the destruction of the breeding stock, that is, of the capital. The supporters of spring shooting either refused or failed to realize that, even though the birds, during migration, are not actually breeding, they are generally mated. Many species of ducks mate as early as February, and the killing of such birds involved the reduction of the number of birds required to maintain an increase sufficient to provide legitimate shooting in the fall without effecting a reduction in the total number.

But of all factors responsible for the enormous reduction in the numbers of our wild fowl the market gunner was one of the most serious. Absolutely devoid of any desire to conserve birds, and inbred with the sole desire to kill as many birds as possible, and in the shortest time, the market gunner was only limited by the physical impossibility of killing more than a certain number of birds per day. The great slaughtering-grounds on which our Canadian-bred birds were killed in their thousands for the markets of New York, Boston, Philadelphia, New Orleans, St. Louis, Chicago, San Francisco, and other large cities in the United States, were: Cape Cod; Great South Bay, New York; Currituck Sound, North Carolina; Marsh Island, Louisiana; the Sunk Lands of Arkansas; the Lake regions of Minnesota; the prairie regions of the Middle West; the Great Salt Lake; the Klamath Lake region in Oregon; and in southern California. To-day the number of wild fowl to be found in these places is but a small proportion of the former thou-

sands, and certain of these haunts, such as Marsh Island and Klamath Lakes, have been set aside as bird refuges.

In conclusion, let it be remembered that the extermination of any animal cannot be prevented unless such an animal is sufficiently protected to obviate the danger of its destruction at a greater rate than its natural increase.
diet to a large extent the years of abundance of many of our important fur-bearing animals is sufficient to warrant a more careful and intensive study of these phenomena and the underlying causes. Is the decrease in abundance due to starvation, owing to the disappearance of the main article of diet, or does a decrease in the food supply affect the fertility of the predatory species? According to MacFarlane, the females are said to be more prolific when the numbers of the animals constituting the main food are on the increase. Does the overfeeding consequent upon the great abundance of food affect, in an adverse manner, the reproductive powers of the predatory species? All these are problems which demand further close study in the field. It is hoped that such studies, extending over a number of years, may be undertaken by competent investigators in the future, as such a knowledge of the causes of these fluctuations is essential to an adequate understanding of a subject having economic possibilities of a very high order.

CHAPTER X

RESERVES FOR GAME AND WILD LIFE IN CANADA

Under the peculiar conditions that exist on the North American continent, where the opening up of enormous areas of land by agricultural development, the penetration of virgin forest by railroads, lumbermen, and prospectors, and the reclamation of the wilderness have led to widespread destruction of the haunts of our wild life, with a consequent disappearance of the greater portion of it, other measures than the promulgation of game laws, which at the best are difficult to enforce completely, are necessary to insure the preservation of what wild life remains. Of such protective measures by far the most important is the establishment of wild-life reserves, refuges, or sanctuaries in which the native mammals and birds are protected. Such wild-life reserves should include a sufficient area to provide ample natural summer and winter range for the wild life that they are intended to protect. They should be, and as a rule are, unsuitable for agricultural development. Nor should they include mining or other commercial properties that are likely to interfere with their purpose. So far as is possible the boundaries of such reserves should be well defined, and the necessary steps should be taken to secure within the reserve areas the required protection to the wild life they contain, and all protective measures should be rigidly enforced.

THE NATIONAL PARKS

We have reason to be proud of the withdrawal from settlement and establishment by the Dominion Government of extensive tracts of land as national parks, for the purpose,
not only of preserving areas of incomparably magnificent scenery in which recreation may be sought by our people, but also of protecting the wild life that such areas contain. In most cases the double function is combined; in other cases areas have been reserved for the sole purpose of protecting our wild life.

As the Dominion Government only controls the crown-lands in the provinces of Manitoba, Saskatchewan, and Alberta, and the areas known as the "Railway Belt" and "Peace River Block" in British Columbia, the Dominion parks are restricted to such provinces. In fact, these parks are mainly in the Rocky Mountain region of Alberta, the management of the wild-life reserves in the greater portion of these western provinces having been left to the provincial governments, as will be shown subsequently. The Dominion parks are administered by the Parks branch of the Department of the Interior, under the direction of the Commissioner of Dominion Parks.

All the Dominion Parks are absolute preserves for wild life, hunting being strictly prohibited within their borders, and fishing is allowed under special regulations (see p. 275).

**Jasper Park.** - Jasper Park is the largest of the Dominion parks. It was established by Order in Council of September 14, 1907, and comprises an area of approximately 4,400 square miles. Within its confines are to be found magnificent ranges of mountains and incomparable peaks, one of the most beautiful of which is Mount Edith Cavell (11,033 feet), which was named in honour of that brave English nurse who died a martyr to German brutality, of which this mountain will be a lasting reminder. The park affords unexcelled and extensive natural range for practically all the big-game animals. Mountain sheep and goats are increasing in numbers, grizzly and black bears are not uncommon, and will multiply with the absolute protection they now enjoy. Moose were abundant before the advent of the two transcontinental railroads which traverse the park, and, although large numbers were killed during the construction of these railroads, they will undoubtedly increase. Wapiti or elk were formerly found in the wooded valleys, and it is hoped that on account of their protection and increase in the region south of the park they will repopulate their former range to the north. Deer and beaver are increasing in abundance. Caribou may be expected to benefit from the protection now given to the area which includes and adjoins excellent caribou range, including the chief haunts of the black mountain caribou (p. 63). Wild fowl also occur in large numbers, and excellent breeding-places are afforded by the extensive marshes.

We may confidently look forward to the time when this great area will be one of the best-stocked wild-life reserves on the North American continent, and a source of pride and pleasure to the tired city-dwellers, who visit it for recreation and to study our wild life under natural conditions.

**The Rocky Mountains Park.** - This is the oldest of the Dominion Parks. It was established in 1887, two years after the completion of the Canadian Pacific Railway. It embraces an area of 2,751 square miles, and includes some of the finest mountain, forest, and lake scenery in the Rocky Mountains. On its mountain ranges mountain sheep and goats are increasing in numbers. So abundant are the sheep that it is no uncommon sight for visitors to see, during the summer months, a flock of over thirty ewes and lambs on one of the main automobile roads which traverse the park.

In April, 1919, the superintendent reported that on the motor road west 375 mountain sheep, 10 goats, and 16 deer were seen within ten miles of Banff. The increase of mountain sheep in this park has been very noticeable, and is indicated by the following extracts from reports made by the wardens early in 1919:
Counted fifty-two mountain sheep on top of Cuthead Mountain.
Saw seventy-one sheep and twelve deer near Massive.
Found sheep in large numbers in unusually fine condition for the time of the year.
Saw big bunch of sheep near the Three Sisters.

All wild animals are increasing. Black bears occasionally become a nuisance on account of their visits to the garbage-cans of the summer residences, and during the winter the deer overcome their natural shyness and may be seen constantly in the streets of Banff. Excellent natural paddocks have been constructed near Banff, in which buffalo, wapiti, mountain sheep, goat, and deer are confined for the benefit of those who are unable to track these animals in their natural range in the park. These paddocks at the present time contain 8 buffalo, 10 moose, 27 wapiti, 19 Rocky Mountain sheep, and 6 Rocky Mountain goats. It is proposed to release a number of the wapiti from their commodious paddock in order that they may repopulate what formerly constituted the natural range of the wapiti. This area, together with Jasper and Waterton Lakes Parks, will serve as unrivalled breeding-ground for the big-game animals of the Rocky Mountains region, and the surplus wild-life population will afford a constant supply of big-game and fur-bearing animals for the adjacent unprotected regions. This is one of the great advantages of such natural reserves.

Waterton Lakes Park.—This is the third and most southerly of the Dominion Parks in the Rocky Mountain region of Alberta. It now includes an area of 423 square miles in the southwestern corner of the province, where it is contiguous to the Glacier National Park, which was created by the United States Government, the whole reserved area forming a magnificent scenic and wild-life reservation. It is a region of impressive mountains and lakes, with deeply carved valleys. The names of certain of these mountains, such as Sheep and Black Bear Mountains, testify as to the fauna within the park. Rocky Mountain sheep, and black and grizzly bear, are comparatively plentiful, and both black- and white-tailed deer abound and are increasing.

The following extracts from the diaries of the wardens, early in 1919, furnish evidence of the increase that is taking place in this park as a result of protection:

Saw between eighty and one hundred deer near Horseshoe basin.
Two hundred deer were within a mile of Cabin all through bad weather.
Saw seventy-five deer about two miles up Pass Creek.
While going up Pass Creek I saw seventy goats, about sixty sheep, and between fifty and sixty deer. I also saw ten or twelve deer at the Superintendent's office; was within two or three rods of them; they are quite tame.

The acting superintendent observes in April, 1919:

It is noted that elk are making their appearance in this district, and Warden Simpson also tells me he has observed moose tracks in here.

Elk Island Park.—About three miles from Lamont, Alberta, on the main line of the Canadian Northern Railway, a small reservation known as Elk Island Park has been established for the preservation, originally, of the wapiti or elk—but now other members of our wild life are included. The area is mostly wooded, the woods in the north end of the park being very thick, and suitable for moose and deer; in the southern section it is more rolling, less brushy, and suitable for buffalo. It contains Island Lake, a beautiful sheet of water about 1,040 acres in extent, and studded with fourteen wooded islands, on one of which a colony of cranes nest. The present estimated population (1919) of the larger animals in this park is as follows:

<table>
<thead>
<tr>
<th>Animal</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>195</td>
</tr>
<tr>
<td>Wapiti</td>
<td>106</td>
</tr>
<tr>
<td>Moose</td>
<td>57</td>
</tr>
<tr>
<td>Mule deer</td>
<td>111</td>
</tr>
</tbody>
</table>
Duck and other wild fowl are abundant during the summer.

Buffalo Park, Wainwright, Alta.—In the account that has been given of the buffalo (p. 134) this park has already been described. The entire area consists of hilly and rolling country, with numerous lakes and bluffs, the largest lake being Jameson Lake. These lakes furnish splendid breeding-places for innumerable wild fowl, and when visiting the park I have been very strongly impressed with its unusual suitability as a wild-life reserve. The fact that most of the land is not adapted for agricultural development makes it all the more fitted for a reserve.

In June, 1919, the population of the large animals was as follows:

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>3,830</td>
</tr>
<tr>
<td>Moose</td>
<td>22</td>
</tr>
<tr>
<td>Wapiti</td>
<td>106</td>
</tr>
<tr>
<td>Mule deer</td>
<td>420</td>
</tr>
<tr>
<td>Antelope</td>
<td>2</td>
</tr>
</tbody>
</table>

Antelope Park, at Foremost, in southern Alberta, has already been described in the account of the antelope (p. 71), of which there are now (1919) seventy-two* head in the reserve.

Yoho Park.—Yoho Park comprises an area of about 560 square miles on the western slope of the Rocky Mountains. It is divided into almost equal parts by the Kicking Horse River. Including as it does some of the most beautiful scenery to be found in the Rocky Mountain region, its chief value lies in its scenic attractions. But nevertheless it contains admirable natural feeding-grounds for the typical animals of this region.

Glacier Park.—Situated amid the snow-capped peaks of the Selkirk Mountains, Glacier Park comprises an area of about 468 square miles. Lofty mountains, deep valleys clothed with dense forests of giant cedar, Douglas fir, hemlock, spruce, and cottonwood, furnish scenery of great beauty, and at the same time the wild life enjoys absolute protection.

Revelstoke Park.—In 1914 an area of ninety-five square miles north of the city of Revelstoke was set aside as a Dominion park. It includes Mount Revelstoke and other peaks, and is situated in a region noted for grizzly bear. Since its establishment the grouse have increased in abundance.

Point Pelee National Park.—Through the efforts of the Commission of Conservation and the Advisory Board on Wild Life Protection an Order in Council was passed in 1918 creating Point Pelee, Ontario, as a national park for preservation of wild life and particularly the migratory birds. In the annual report of the Commission for 1918 this park, which comprises an area of about twenty-five square miles, is described by me as follows (p. 129):

"It is a triangular point of land in Essex county, extending for about nine miles into Lake Erie and measuring about six miles across the base of the point. The peculiarities of the flora and fauna and the desirability of such a reservation are fully discussed in a memorandum submitted to the Commission by Mr. P. A. Taverner, ornithologist of the Geological Survey, in 1915 and published in the Sixth Annual Report of the Commission, pp. 304-307. Not only is it the most southerly point of Canada, geographically, and in the character of its birds, trees and plants, but it constitutes one of the concentration points in the northern and southern journeys of our migratory birds. In the spring and in the autumn, enormous numbers of birds of all species in their migratory journey to and from Canada concentrate at this point, and its reservation, therefore, would be an important factor in ensuring the protection of our migratory birds. The area includes a marsh several square miles in extent which forms a favourite resort and
breeding place for wild fowl, but excessive shooting has reduced its value as a breeding place. Pine, oaks, red cedar, black walnut, and hackberry grow in profusion on the narrow strip of land running down the west side of the point and make it a tract of singular beauty to the lover of trees and shady groves. Its scenic value, the southern nature of its birds and plant life, its importance as a main route for migratory birds and the exceptional opportunities it affords for the protection and encouragement of wild fowl, insectivorous and other birds, all combine to make it an ideal area for a national reservation."

From the foregoing account it will be seen that the Dominion National Parks comprise a total area of 8,917 square miles. In this area the wild life is afforded absolute protection. It is difficult to express in words what this means in relation to the perpetuation of our big game and fur-bearing animals, game-birds, wild fowl, and other species of our wild life, but the maintenance of such a policy is calculated to contribute more than anything else to the conservation of our wild life.

Even in those parks which have been established mainly or entirely on account of the magnificent scenic attractions within their confines, the wild life will play no small part in contributing to the beauty of such scenery, for what forest glade is not made more beautiful by the presence of a few deer or wapiti, what mountainside is not rendered more attractive to the eye by the presence of our magnificent mountain sheep or agile goat? It is the presence of mountain sheep that gives an added charm to the landscape, and the decorative value of our wild life makes a special appeal to the tired dwellers of our cities seeking refreshment in the wild solitudes of our national and provincial parks.

Speaking in Ottawa in 1913 on the subject of our national parks, His Royal Highness, the Duke of Connaught, said: "I do not think that Canada realizes what an asset the na-

RESERVES FOR WILD LIFE IN CANADA

All the provinces of Canada with the exception of Prince Edward Island and Nova Scotia have now established game reserves for the protection of their game and fur-bearing animals and wild life generally.

New Brunswick Game Reserve.—In New Brunswick such excellent conditions existed for the creation of a game reserve in the central portion of the province, and the need of such a means of maintaining an area where absolute protection might be provided for wild life became so great, that the Commission of Conservation actively promoted the establishment of such a provincial reserve, and the proposal received the unanimous approval of the sportsmen and the strong support of the New Brunswick Guides' Association.

It is gratifying, therefore, to be able to include the province of New Brunswick among those provinces possessing game reserves, for in the spring of 1919 the New Brunswick government passed a "Game Refuge Act," providing for the setting aside of a suitable tract of land not exceeding 400 square miles, "as a refuge for game animals, birds and fish of the Province." In this provincial game reserve the law forbids trespassing, hunting, or trapping, and provision is made for the protection of the timber and the prohibition of fishing.

The tract of land selected as the New Brunswick Game
Reserve lies in the northwestern part of the county of Northumberland. It has a general width from east to west of 16 miles and from north to south it is 27 miles long. It embraces approximately 400 square miles of territory, inhabited by moose, deer, caribou, and fur-bearing animals. We hope that the provision of this reserve will assist in preventing the disappearance of the caribou from New Brunswick, an event which undoubtedly will occur within a comparatively few years unless much greater protection is afforded this animal.

Within the reserve are a number of lakes, the largest of which are Serpentine and Mitchell Lakes, and rivers which have their origin in the reserve flow into the Tobique, Nipisiguit, and Miramichi Rivers. The protection of the headwaters of such important rivers will not be the least of the many useful functions this reserve will perform if it is effectively administered.

Quebec

Gaspesian Forest, Fish, and Game Preserve.—In the central region of the Gaspe Peninsula of Quebec an area of about 25,000 square miles was set aside by the provincial government in 1905 as a forest reservation, fish and game preserve, and public park. It includes a section of heavily timbered and hilly territory, in which numerous rivers, running north, east, and south into the Gulf of St. Lawrence, have their origin. The regulations regarding the hunting and fishing privileges are similar to those in force in the Laurentides National Park.

Trembling Mountain Park.—About seventy miles northwest of Montreal lies Trembling Mountain, the highest point in the whole Laurentian range in this part of Canada, attaining a height of 2,474 feet above sea-level, and 1,713 feet above the lake which lies at its foot. In 1894 this mountain
1. Port Joli Reserve for Wild Geese, Nova Scotia
2. New Brunswick Game Reserve (Provincial reserve: cancelled in 1920)
3. Gaspesian Forest, Fish, and Game Reserve, Quebec
4. Laurentides National Park (Provincial), Quebec
5. Trembling Mountains Park (Provincial), Quebec
6. Algonquin National Park (Provincial), Ontario
7. Quetico Forest and Game Reserve (Provincial), Ontario
8. Point Pelee National Park (Dominion), Ontario
9. Rondeau Provincial Park (Provincial), Ontario
10. Bonaventure Island and Perce Rock Bird Reserves (Dominion and Provincial)

MAP OF GAME RESERVES IN EASTERN CANADA
and adjoining land, to the extent of 14,750 acres, or about 23 square miles, was set aside as a special forest reserve. The mountain is of great interest from a geological standpoint, being “sculptured out of a great mass of gneiss, uniform in character from base to summit” (F. D. Adams). The Indian name is manilouge sootana, meaning Spirits’ or Devils’ Mountain. Indians state that low rumbling noises frequently proceed from it, and that it has sometimes been felt to shake by those who have accidentally been upon it. The Indian belief has established its French and English names.

*Laurentides National Park (Plate XVIII).*—In 1895 an area comprising 2,531 square miles of the wild, forest-clad mountainous country north of the city of Quebec, and southeast of Lake St. John, was set aside by the provincial government as “a forest reservation, fish and game preserve, public park and pleasure ground.” Subsequently the area was increased to about 3,700 square miles by the withdrawal of further land from sale or settlement. The park contains the headwaters of a number of rivers running north and south of the mountains—“the blue Laurentian hills”—which attain a height of about three thousand feet. On the west it is approached by the Lake St. John Railway, on the south by the old Jacques Cartier road, and on the east by the St. Urbain road.

The wild life in the park is abundant, and, owing to the protection it receives, it is increasing, in spite of the depredations of the wolves which, from time to time, prove a serious menace, particularly to the caribou. In November the caribou congregate in hundreds in the Grand Jardin des Ours, the largest of the moss-covered barrens in the park, embracing an area of about 100 square miles. Being timid animals and harassed by wolves, they apparently migrated to the northeast, but a few remained, so I am informed by Mr. W. C. T. Hall, the superintendent of the park, and they
are slowly increasing in numbers. The wolves appear to have migrated westward. Before the park was established moose were almost exterminated, but, owing to the increased protection given to them, they are now abundant, and it is no uncommon experience to see three or four during a day's travel in the park. The antlers of these Quebec moose are not as large as those of the New Brunswick animals, any having a spread of over fifty-five inches being considered a large head. Mr. Hall informs me that there are a few red deer, a profusion of beaver, many black bear, and a full complement of the fur-bearing animals. These facts I was able to confirm when I visited the northern region of the park in 1911. The lakes are teeming with splendid trout.

The policy adopted in administering the hunting privileges in the park is an excellent one from the point of view of conserving the wild life. On those borders of the park that are most open to the inroads of poachers, such as the eastern side, moderately sized areas are leased for five-year periods to individuals or clubs. The lessee is required to appoint a guardian approved by the department, and to have the leased area adequately and properly protected. The guardian thus becomes a useful servant of both his employer and the government. Formerly the game and fish on the eastern and western borders of the park suffered severely from the inroads of poachers, but, owing to the method of leasing areas, a series of clubs and private holdings now very effectively protect those borders. Not only has the game in the leased areas increased, but it has spread into the other areas, to the general benefit of the interior of the park.

Some years ago in certain sections of the park bears had nearly disappeared, now they are abundant; beaver were almost exterminated, now they are a nuisance in certain areas.
Ontario

Algonquin Park.—This magnificent area of land covers 2,741 square miles, and was set aside as a provincial park in 1893. Within this area numerous rivers have their headwaters, including the Madawaska and Petawawa, and the whole region is densely timbered with pine, spruce, and other conifers, and such hardwoods as poplar, birch, and maple add the richness of their fall colourings to the scenery. Innumerable lakes facilitate travel by canoe, and being well stocked with fish they provide food for the traveller.

The wild life in the park is protected during the whole of the year, with the result that such animals as moose, red deer, black bear, wolf, lynx, fox, beaver, otter, fisher, marten, mink, muskrat, raccoon, skunk, porcupine, ermine, squirrels, and lesser animals are very abundant. Wolves are killed by the park rangers whenever possible, and a certain quantity of fur, principally beaver, mink, otter, etc., is taken on government account and sold in Toronto at public sale. In 1917 the government realized over $2,400 from the sale of furs. With a view to supplementing the meat supply, 650 deer were killed in 1917, weighing altogether 66,215 pounds.

The regulations respecting the park have as their special objects the prevention of fire, the maintenance of health, the protection of timber and vegetation generally, and also of fish and wild life, and the prevention of the pollution of all waters in the park. Islands and parcels of land in the park are leased for summer cottage sites and resort purposes; not more than two acres are leased to one person, but areas not exceeding five acres may be leased for summer schools and other similar purposes. The leases are for twenty-five years and are renewable. Hunting, trapping, or taking game or other animals or birds of any kind is absolutely prohibited. Wolves, bears, wolverenes, wildcats, foxes, or
hawks may be killed by special authority. Fishing is permitted under license. In so far as hunting is prohibited, the policy adopted in this park differs from that carried out in the provincial parks of Quebec, where the lessees may hunt in the areas leased and protected by them. In the case of the Ontario parks the protection is absolute, and controlled solely by the provincial government through its own park rangers; in the Quebec parks the protection of the game is carried out, as we have seen, on a co-operative basis.

Quetico Forest Reserve.—About ninety miles due west of Fort William, in the Rainy River district, an extensive tract of land adjoining the State of Minnesota was set aside as a provincial park in 1913. The park, known as the Quetico Forest Reserve, contains 1,560 square miles. On the south it is bounded by the international boundary; the western and northern boundaries include the Quetico River and Long, Pickerel, and other lakes; the east side by the Thunder Bay district. The area includes the territory known as Hunters Island. It is well timbered, and a large portion of it consists of long, sinuous lakes. Moose are specially abundant, and this area will serve as an excellent breeding-ground for moose for the territory adjoining the park. The protective policy in force in this park is similar to that of Algonquin Park; hunting is prohibited absolutely, and fishing is only permitted under license.

Rondeau Provincial Park.—On the north shore of Lake Erie in Kent County the sandy peninsula which runs out from the mainland and forms one side of Rondeau Harbour has been reserved as the Rondeau Provincial Park. It contains about 5,000 acres. About one-half of the park is under forest, and wild life, which includes deer and other animals, is protected; but muskrats, skunks, and weasels are not protected. Recommendations have been made that the muskrats in this park be protected, and, in view of their increasing value as fur-bearers, their inclusion, for a period of years at least, among the animals enjoying protection is worthy of serious consideration.

Provincial Game Reserves in Manitoba

In Manitoba the provincial government has established game reserves on the Dominion forest reserves; in certain cases the entire forest reserves are created game reserves, but where the forest reserves are very extensive, as in the case of the Riding Mountain and Duck Lake Mountain Forest Reserves, only the central portion is set aside for the protection of wild life.

The distribution of the game reserves of Manitoba is shown in the accompanying map, and their areas are as follows:

<table>
<thead>
<tr>
<th>Reserve Name</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riding Mountain Game Reserve</td>
<td>216 sq mi</td>
</tr>
<tr>
<td>Spruce Woods</td>
<td>108 sq mi</td>
</tr>
<tr>
<td>Turtle Mountain</td>
<td>912 sq mi</td>
</tr>
<tr>
<td>Duck Mountain</td>
<td>432 sq mi</td>
</tr>
<tr>
<td>Peonan Point</td>
<td>72 sq mi</td>
</tr>
<tr>
<td>Red Deer Point</td>
<td>39 sq mi</td>
</tr>
<tr>
<td>Doghead Point</td>
<td>225 sq mi</td>
</tr>
<tr>
<td>Grindstone Point</td>
<td>42 sq mi</td>
</tr>
<tr>
<td>Lake St. Martin</td>
<td>240 sq mi</td>
</tr>
<tr>
<td>Reindeer Island</td>
<td>65 sq mi</td>
</tr>
<tr>
<td>Cedar Lake</td>
<td>2,978 sq mi</td>
</tr>
<tr>
<td>Birch Island</td>
<td>57 sq mi</td>
</tr>
<tr>
<td>Lake Winnipegosis</td>
<td>587 sq mi</td>
</tr>
</tbody>
</table>

Altogether these game reserves comprise an area of 5,160 square miles. In all of them, with the exception of the Cedar Lake Reserve, hunting or trapping and the carrying of firearms is absolutely prohibited. In the Cedar Lake Reserve, however, only the hunting or killing of wild fowl and other game-birds is absolutely prohibited; as this reserve comprises some of the most important breeding and feeding places for many species of ducks and also geese in the whole of western Canada, its value in maintaining an abundant
supply of wild fowl in Manitoba cannot be overestimated, and the influence of the protection given to the birds in this area will by no means be confined to the province.

If we add to the area of the Cedar Lake Reserve the area of the adjoining Lake Winnipegosis Reserve, in which both game-birds and mammals are protected, we have a wildfowl reservation of 3,565 square miles in extent, constituting, perhaps, the most important protected breeding-grounds for ducks and geese on the North American continent.

The Riding Mountain Game Reserve is one of the most important of the provincial reserves in Manitoba, as it contains the largest number of wapiti or elk to be found in any one region in Canada (see p. 28).

**Provincial Game Reserves in Saskatchewan**

When the provincial government of Saskatchewan first undertook the wise establishment of game reserves, legislation was passed which provided that all Dominion forest reserves automatically became game reserves. This system worked admirably until the Dominion Government set aside such extensive areas in the province as forest reserves that it soon became undesirable to continue such a policy. The game laws were accordingly amended, and the areas set aside as game reserves were revised so as to conform more nearly with the existing requirements. Certain of the former reserves were reduced in size, some were withdrawn altogether, and others were added to the number.

The following is a list of the Saskatchewan game reserves, with their areas, and their distribution is shown in the accompanying map:

<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moose Mountain Game Reserve</td>
<td>150 square miles</td>
</tr>
<tr>
<td>Cypress Hills</td>
<td>75</td>
</tr>
<tr>
<td>Beaver Hills</td>
<td>100</td>
</tr>
<tr>
<td>The Pines</td>
<td>160</td>
</tr>
</tbody>
</table>
In addition to the above game reserves, which include altogether a total area of 3,825 square miles, there are a number of reserves set aside chiefly as wild-fowl reservations, whose extent cannot be so accurately defined. These are as follows:

**Wascana Game Reserve.**—Comprising the waters of Wascana Lake and Creek at Regina.

**The Isle of Bays Reserve.**—Situated in Lake Johnston.

**North and South Saskatchewan Rivers Game Reserve.**—This comprises all the land and lands covered by water lying between the right and left banks of the North and South Saskatchewan Rivers, respectively, between the western boundary of the province and the easterly boundary of township 49, range 22, west of the second meridian, and all land lying within 200 yards of either bank of these rivers between the aforementioned limits.

Mr. F. Bradshaw, chief game guardian of Saskatchewan, has correctly defined what the policy should be with regard to game reserves. He says: "It is not enough, however, simply to set aside vast areas for the purpose and then think there is nothing further to be done. If the reserves are to mean anything more than a mere enactment of the statutes, they should be staffed by efficient resident game guardians, whose duties should comprise not only the systematic patrol of the reserves for the enforcement of the game-laws, but also the work of destroying the vermin which preys upon the game."
In view of the fact that the Dominion Government has established national parks on a very extensive scale in Alberta, the provincial government has not undertaken the establishment of game reserves on an extensive scale.

In 1918, however, the Alberta government established as game reserves two of the Dominion Forest Reserves, namely, the Cooking Lake Forest Reserve and the Cypress Hills Forest Reserve.

**Cooking Lake Forest and Game Reserve.**—This reserve is situated about twenty miles east of Edmonton. It covers an area of 95.5 square miles. Immediately north of and adjoining the reserve lies the Dominion Elk Island Park, so that the combined area of game reserve is about 112 square miles. The country included in this reserve is similar on the whole to that of the Elk Island Park. The land is gently rolling, the portion to the north of Tawayik Lake being a little more hilly than the region to the south. North of this lake there is a heavy growth of poplar, which forms excellent cover for deer and moose. To the south there is a large amount of open country, with occasional areas of aspen. Willows grow along the creeks and around the shores of the lakes, which are also bordered by considerable areas of hay meadow, forming excellent pasturage. The chief lakes are Tawayik Lake, Goose Lake, and Flying-shot Lake. All these lakes constitute good breeding and feeding places for wild fowl.

**Cypress Hills Forest and Game Reserve.**—This reserve is situated about fifteen miles south of Maple Creek, Sask., and about twenty-five miles southeast of Medicine Hat. It is composed of several separate blocks; of the total area of 178.5 square miles, 81 square miles lie in Alberta. It is situated on a high plateau with deep river valleys and steep slopes. The soil is sandy, and the reserve is partly covered
PROVINCIAL GAME RESERVES

1. Cooking Lake Game Reserve, Alta.
2. Cypress Hills Game Reserve, Alta.
3. Elk River Reserve, B.C.
4. Yalakom Game Reserve, B.C.
5. Sir Martha Park, B.C.
6. Mount Robson Park, B.C.
7. Clearwater and Smoky Rivers Game Reserve, B.C.

DOMINION PARKS

9. Rocky Mountains Park, Alta.
10. Waterhen Lakes Park, Alta.
11. Elk Island Park, Alta.
14. Yoho Park, B.C.
15. Glacier Park, B.C.
16. Revelstoke Park, B.C.

NATIONAL BIRD RESERVES IN ALBERTA

17. Birch Lake
18. Big Bay Lake
19. Miquelon Lake
20. Oliver Lake
21. Minstik Lake
22. Pakowki Lake
23. Many Island Lake (Gaskil and Greasewood Lakes)
24. Buffalo Lake.

Dominion Reserves are Nos. 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.
with white spruce and jack pine. Other portions are covered with poplar, and there are quite large areas of open grazing land. This reserve appears to be well adapted to the preservation of wapiti, which were formerly found there.

**British Columbia**

Comprising as it does one of the finest big-game territories on the North American continent, it is a hopeful sign for the future conservation of our big-game and wild-life resources that the British Columbia Government, during the past decade, has taken steps to set aside considerable tracts of undeveloped land, consisting largely of mountain and forest, as game reserves. The total area comprised in the five provincial game reserves—exclusive of the Ashnola reserve for mountain sheep—is nearly 2,867 square miles. These reserves, arranged according to the date of their reservation, are as follows:

**Elk River Reserve.**—This reserve, which was established in 1910, comprises an area of 234 square miles, and is situated in the southeastern corner of the province, to the west of the Elk River. It commences about fifteen miles north of Michel, on the Canadian Pacific Railway, and includes some of the finest Rocky Mountain goat and sheep country in that portion of the province. Grizzly bears and wapiti are also to be found in this area of magnificent mountain and forest scenery.

**Yalakom Game Reserve.**—In 1910 an area of 280 square miles, adjoining the North Fork of the Bridge River, was set aside as the Yalakom Game Reserve. The south end of the reserve is about twenty-three miles northwest of Lillooet. It comprises excellent country for goat, sheep, and deer. When the reserve was established these animals were plentiful, but since 1912 it has been estimated that they have been reduced in numbers by about 80 per cent. This reduction is ascribed partly to excessive hunting by
the Chilcotin Indians, but chiefly to the depredations of cougars, which have increased throughout that region; the sheep have been so reduced in numbers as to necessitate a close season of five years in the Lillooet region. A few years ago an endeavour was made to introduce a few wapiti into this reserve, but they were liberated on the Bridge River before the reserve was reached. Both grizzly and black bears are to be found in fair numbers in this reserve, and with adequate protection of the game and the destruction of its predatory enemies the reserve should constitute one of the finest game areas in the province.

Strathcona Park.—No more beautiful park exists in Canada than the Strathcona Park, which comprises a triangular area of 829 square miles in the centre of Vancouver Island. It includes magnificent mountains, some of which exceed 7,000 feet, flecked with glaciers and valleys of towering Douglas fir. The natural home of wapiti and deer, it was advisedly established as a game reserve in 1914, the Order in Council so creating it declaring that "no person other than park rangers, deputy game wardens and constables in the execution of their duty shall carry firearms within the limits of the said Park, and no person shall carry traps, shoot, trap or kill any animal or bird within said limits, except such persons as may be hereafter authorized to do so by the Provincial Game Warden for the purpose of killing cougar, wolves and other vermin."

Mount Robson Park.—Immediately west of and adjoining the Jasper National Park the British Columbia Government created in 1915 this park as a game reserve. It comprises an area of 640 square miles, and includes Mount Robson, 13,100 feet high. A region of high mountains and well-forested valleys, it affords an unusually good reserve for big game and other mammals and birds of that region, which have been described by Hollister and Riley, Anderson, and taverner in their respective accounts of the fauna published in the reports of the Alpine Club of Canada.

The Clearwater and Smoky Rivers Reserve.—This is the largest of the reserves in British Columbia, and includes an area of almost 885 square miles along the eastern side of the south fork of the Fraser River. In the Order in Council of September 2, 1912, creating this reserve, it is described as follows: "Commencing at a point at the junction of the Clearwater and the South Fork of the Fraser River; thence following the summit of the range on the west side of the Clearwater River, in a northerly direction to the headwaters of the Clearwater River; thence in an easterly direction following the summit of the range to the headwaters of the Little Smoky [Morkill] River; thence still following the summit of the range on the East side of the Little Smoky River, in a southerly direction to the South Fork of the Fraser River; thence following the South Fork of the Fraser River to the point of commencement."

Special Reserve for Mountain Sheep.—By Order in Council of November 11, 1913, certain lands in the Similkameen district, described as follows, were reserved as grazing ground for mountain sheep: "Commencing at a point being the junction of Juniper Creek and the South Fork of Ashnola River, thence north along the east bank of the said fork for a distance of one mile; thence in a southerly direction to the North Fork of Juniper Creek; thence in a westerly direction following said creek to the point of commencement."

Summary of Game Reserves in Canada

From the foregoing description of the areas set aside in Canada by the Dominion and provincial governments for the preservation of wild life, excluding the Dominion bird sanctuaries in western Canada, which are described in another chapter (see p. 235), it will be seen that altogether
30,304 square miles have been reserved for this purpose; that is, a total area exceeding the combined areas of the provinces of New Brunswick and Prince Edward Island. The following is a tabular statement of these areas:

<table>
<thead>
<tr>
<th>Province</th>
<th>Provincial Government Reserves</th>
<th>Dominion Government Reserves</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Brunswick</td>
<td>400 sq. miles*</td>
<td></td>
<td>400 sq. miles*</td>
</tr>
<tr>
<td>Quebec</td>
<td>5,054 &quot; &quot;</td>
<td></td>
<td>5,054 &quot; &quot;</td>
</tr>
<tr>
<td>Ontario</td>
<td>4,310 &quot; &quot;</td>
<td>25 sq. miles</td>
<td>4,335 &quot; &quot;</td>
</tr>
<tr>
<td>Manitoba</td>
<td>5,160 &quot; &quot;</td>
<td></td>
<td>5,160 &quot; &quot;</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>3,820 &quot; &quot;</td>
<td></td>
<td>3,820 &quot; &quot;</td>
</tr>
<tr>
<td>Alberta</td>
<td>176 &quot; &quot;</td>
<td>7,769 &quot; &quot;</td>
<td>7,945 &quot; &quot;</td>
</tr>
<tr>
<td>British Columbia</td>
<td>2,967 &quot; &quot;</td>
<td>1,123 &quot; &quot;</td>
<td>3,990 &quot; &quot;</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>30,704 sq. miles</strong></td>
</tr>
</tbody>
</table>

* Reserve cancelled in autumn of 1920.

PROPOSED GAME RESERVE FOR NOVA SCOTIA

Notwithstanding the existence of a comparatively rich native mammalian fauna in this province, where moose, deer, bear, and the lesser fur-bearing animals continue to exist in spite of the encroachment of settlers and the destruction of the forests by the operations of the lumbermen and by fires, no steps have been taken up to the present to establish one or more provincial game reserves where adequate protection from killing would insure a constant surplus of game and fur-bearing animals to supply the adjacent territory and thus prevent species from decreasing to a point bordering extinction.

In Nova Scotia there are excellent tracts of land that might be set aside as game reserves, and are unsuitable for agriculture. The area best adapted for such a reserve, in my opinion, would be the tract of land in the middle of the western portion of the province which includes the region where the counties of Digby, Yarmouth, Shelburne, Queens,
CHAPTER XI

THE PROTECTION OF GAME AND WILD LIFE BY
THE DOMINION GOVERNMENT

Owing to the fact that the protection of game and wild
life in the various provinces has been undertaken by the re-
spective provincial governments, the Dominion Govern-
ment, with certain exceptions that will be mentioned, has
confined its jurisdiction to the protection of the game and
fur-bearing animals and other wild life in the Northwest
Territories and the Yukon Territory. The exceptions are
the protection of migratory birds under the Migratory
Birds Convention, and the protection of the wild life in the
national parks.

The Dominion legislation governing the protection of
game and wild life comprises the Northwest Game Act, the
Yukon Game Ordinance, the Migratory Birds Convention
Act, and the Dominion Parks Act. The legislation is ad-
ministered by the Minister of the Interior, and the Com-
misioner of Dominion Parks is charged with the enfo-
rence of the provisions of these enactments, with the excep-
tion of the Yukon Game Ordinance, which comes under the
jurisdiction of the Commissioner of the Yukon.

NORTHWEST TERRITORIES

The unorganized Northwest Territories are rich in wild
life, as we have already shown, and the fur-bearing animals
of the north constitute at the present time the most valu-
able natural resource that we are able to utilize in these
vast territories. Throughout those subarctic and arctic
regions our fur-bearing animals find an environment emi-
nently suited to them, and to the production of furs of the
highest grade. The fur trade of the north is not only the
chief occupation of that immense area, but it is the only
means of livelihood and existence of the population. Un-
less the fur trade is maintained an enormous section of the
Dominion would be rendered unproductive, and the native
inhabitants would either starve to death or become a charge
on the government. Such is the significance of our northern
fur resources, as I have pointed out in another chapter.
The vital importance also of the barren-ground caribou
and musk-ox as sources of food and clothing for the people
of the north has already been emphasized, but cannot be
reiterated too often.

The protection of the game and fur-bearing animals and
other wild life in the Northwest Territories is governed by
the Northwest Game Act, which underwent a complete re-
vision in 1917. For a number of years the inadequacy of
the provisions of the former statute and the necessity of
more effectual enforcement had become increasingly ap-
parent to those in touch with the conditions of the wild
life of the north, and familiar with the factors tending to
affect adversely its conservation. In 1914 I prepared for the
Commission of Conservation a memorandum regarding the
necessity of amending the Northwest Game Act, 1906,
having particular reference to the greater protection of the
musk-ox and barren-ground caribou. A second memo-
andum on this subject was prepared in 1916, and, as a result
of further recommendations made, the Commission at its
annual meeting that year* passed a resolution urging the
amendment of the Northwest Game Act, 1906, with a view
to meeting the changed conditions and to securing adequate
protection to the game and fur-bearing animals of the north,
particularly on account of their economic importance. Soon
after the creation of the Advisory Board on Wild Life Pro-
tection the revision of this act was undertaken, and a

* Seventh Annual Report, Commission of Conservation, 1916, pp. 32-38 and
218.
new act was drafted. This was passed by Parliament in 1917.

The most important feature of the new act and regulations passed thereunder is the licensing of the fur trade. Prior to the enactment of this legislation the fur resources of the Northwest Territories were open to the unrestricted exploitation of all comers, with the result that excessive destruction was taking place, especially by certain types of foreign trappers, who have no interest, such as that possessed by the well-known fur companies, in the future of the country. The extensive use of poison and the complete "cleaning up" of territory were methods that should be immediately checked. The only means of controlling the fur industry was by the institution of a license system, and the regulations under the Northwest Game Act provide that no person may hunt, trap, trade, or traffic in the Northwest Territories without first securing a license to do so. Native-born Indians, Eskimos, or half-breeds who are bona fide residents are not required, however, to obtain licenses. The new policy will also enable us to obtain reliable statistics of the fur trade in the Northwest Territories; hitherto it has been impossible to obtain such necessary information. The possession and use of poison are prohibited. The killing of female hoofed animals, such as caribou, moose, mountain sheep, and mountain goat, or the young at foot, is prohibited.

A Proposal for the National Ownership of the Fur Resources of the Northwest Territories

In an address before the Commission of Conservation in 1917 on the conservation of the fur resources of northern Canada,* I emphasized the fact that the fur trade of the Northwest Territories is not only the chief occupation of that immense area, but that it is the only means of livelihood and existence of the population, and that, unless the fur trade is maintained, an enormous part of the Dominion would be rendered unproductive and the native inhabitants would either starve to death or become a charge on the government. That, in brief, is the significance of the problem. It was also pointed out that the Danish Government administers the fur trade of Greenland as a government monopoly. State officers trade with the natives at so-called "buying places." In this manner and through their regulations regarding trapping, it is possible to exercise an amount of control that will insure the conservation of the fur resources of Greenland to a far greater extent than is otherwise possible. An important feature of this policy is also the fact that such control protects the natives from the evil effects that result from unrestricted intercourse with outside traders.

A careful consideration of the problem of our northern fur resources and the position of the native population in relation to the exploitation of such resources serves to impress one with the fact that the taking over and administration by the Dominion Government of the fur trade of the Northwest Territories would be most desirable from all points of view. The following proposal is therefore made. The Dominion Government should take over the entire control and exploitation of the fur trade and wild life resources of the Northwest Territories by enacting the necessary legislation. This would involve the purchase of such rights as the Hudson's Bay Company have in the Northwest Territories. In order to administer the monopoly it would be necessary to establish certain government posts, such as those now maintained by the Hudson's Bay Company. This would be a great advantage in securing proper and adequate government administration in the Northwest Territories, where the need of government agents to take charge of the affairs of the Indians, the enforcement of the law, the collection of customs, and oversight of other government activities

in these territories is becoming increasingly felt, and will undoubtedly become greater with their development. These government agents would perform the work now carried on by the officers of the fur companies and the duties of magistrates, etc. They would be responsible for the proper conduct of the fur trade, the care of the natives, and the enforcement of law.

If such a policy were adopted it would accomplish the following ends. A source of revenue would be created of no small value, even after the expenses of administration were paid, and it is proper that the profits accruing from the exploitation of the fur resources of these territories should go into the national exchequer. It would be the most effective method of conserving the fur resources and wild life of the Northwest Territories, as the enforcement of the law and the adoption of any necessary restrictive measures could be directly supervised. It would afford a means of attending to the requirements of the natives who stand in need of more immediate supervision, which is difficult to give at the present time. The natives, both Indian and Eskimo, would be protected to a greater degree than at present from the influence and exploitation of unscrupulous traders, which would be an advantage from the standpoint of morals and health.

The nationalization of such natural resources as forests has proved in Europe to be the most successful means of conserving such resources, and at the same time this policy has furnished a valuable source of national revenue. There is no good reason why such a policy should not be adopted in the case of our northern fur resources. The thoughtful consideration of this purpose is therefore respectfully urged.

THE YUKON TERRITORY

The game and fur-bearing animals of the Yukon Territory are protected under the Yukon Game Ordinance, which is administered by the Commissioner of the Yukon. Its enforcement is largely in the hands of the members of the Royal Northwest Mounted Police,* who are ex officio game wardens. The close seasons may be changed by a resolution of the Territorial Council.

The ordinance prohibits the use of poison. In order to prevent waste of meat a heavy penalty is provided should anyone, killing game, fail to use the meat personally for food, or cause it to be used for food, or to be sold within the territory for that purpose. Traders who purchase meat of game animals are required to keep full data regarding their purchases.

Owing to the great difficulty of taking supplies into certain sections of the territory, the Commissioner may set aside any portion of it from the operation of the ordinance for such period of time as he may deem desirable, in order to provide sustenance for isolated camps, and when any locality is so set aside the Commissioner may license one or more hunters to hunt for such district under certain restrictions. One of the chief reasons for the disappearance of game from many regions has been the fact that mining and other camps have subsisted wholly, or almost wholly, on the game in the surrounding district. This policy has been carried out in regions where the bringing in of other supplies is possible. The power of suspending the operation of the game law in exceptional cases is one that should be exercised with the greatest caution, and its abuse should be safeguarded by every possible means.

The killing of game by Indians in the Yukon, particularly moose, for the purposes of sale to traders, is a practice that should be suppressed immediately. It is unwarranted; it incites a class of men, all too eager to kill everything in sight, to kill to the limit; and its continuance will absolutely deplete the supply of moose and other game animals.

* Now the Royal Canadian Mounted Police.
Apart from the fact that certain parts of the Yukon Territory contain some of the finest moose in the Dominion, the Territory cannot afford to have its game resources unnecessarily wiped out in such a manner. The situation demands immediate and stern action before it is too late to prevent the inevitable consequences.

THE MIGRATORY BIRDS CONVENTION

For many years the numbers of our migratory birds, such as ducks, geese, insectivorous birds, and shore-birds, which class includes the plovers, sandpipers, snipe, woodcock, etc., have been decreasing. This decrease is a matter of common knowledge and observation throughout the Dominion. Certain of these migratory birds, such as the Eskimo curlew, which formerly existed in enormous numbers and was killed for the market, the Labrador duck, the passenger pigeon, and the great auk have now become extinct. Others, such as the whooping crane and the wood duck, the most beautiful of our native ducks, have become so reduced in numbers as to render their continued existence without further protection a matter of doubt.

From a national standpoint the prospect of this continued decrease involved serious economic consideration. Leaving out of account the value from an aesthetic point of view of this portion of our Canadian wild life, great as that is, and regarding it as an economic asset to the country, we were faced with the gradual reduction of our migratory wild fowl, whose value as food and as means of securing recreation is inestimable, and of our insectivorous birds, which are of even greater importance to the welfare of our agricultural interests.

Insectivorous birds constitute one of the chief natural agencies controlling insect pests affecting field crops, orchards, and forests. In field crops alone the annual loss in Canada due to the depredations of insect pests is, on a conservative estimate, not less than $125,000,000. And, with the development of the country, the damage caused by insect pests is increasing, while the numbers of insectivorous birds have been decreasing.

The chief causes of this decrease in the numbers of our migratory birds are as follows: Canada constitutes the chief breeding-place for the greater number of these birds. With the settlement of the country the breeding-places of many species have been destroyed. The clearing of the land has involved the clearing of the nesting-sites of insectivorous birds; the draining of marshy areas and the settlement of the prairies have driven wild fowl from their former breeding and feeding places. Such causes are, therefore, unavoidable to a large extent. On the other hand, while many of the provinces have excellent laws governing the protection of game, non-game, and insectivorous birds, it has not always been possible to give these birds adequate protection. The increase in the number of persons who carry guns, and the improvement of modern sporting-guns have had their effect on the abundance of wild fowl.

Even with the strictest enforcement of protective laws Canadians would have been unable to prevent the continued decrease of migratory birds unless the requisite protection were given to such birds during the time that they are in United States territory. In other words, our migratory birds cannot be adequately protected from continued decrease without co-operative protection in Canada and the United States.

It is a well-known fact that while some of the States of the Union had excellent laws, which they enforced, others failed to protect their birds. In some States the shooting of wild fowl in the spring was permitted; this involved the killing of birds, usually mated at that time of the year, on their way to their breeding-grounds in the north. This discour-
aged many Canadians, who naturally asked why they should protect their wild fowl for the market gunners of the south. The existence of such market gunners, who annually killed enormous quantities of Canadian-bred ducks and geese for the markets of the big cities in the United States, constituted one of the greatest causes of reduction and one of the chief obstacles to any rational attempt to prevent such reduction and to maintain our stock of wild fowl. Not only were game-birds affected, but insectivorous birds were likewise killed by thousands during their winter sojourn in the south; this destruction has been particularly serious in the case of the robin, one of our important cutworm destroyers.

As a result of the efforts of sportsmen, game-protective associations and other organizations interested in the conservation of the wild fowl and other migratory birds in the United States, the Federal Migratory Bird Law was enacted in 1913 for the purpose of securing more adequate protection for migratory birds which, by reason of their migratory habits, could not be successfully protected by the efforts of individual States so long as other States were derelict in the matter. The objects of the Federal regulations were to reduce the open seasons, which varied greatly in different States; to secure a more uniform open season, not exceeding three and one-half months, fixed in accordance with local conditions, so that the sportsmen would have shooting at the best time of the year; and to prevent the shooting of migratory birds in the spring. A close season for a period of years was given to certain birds, particularly shore-birds, and the shooting of insectivorous birds was entirely forbidden. The majority of the States amended their laws to conform with the Federal regulations, and, although certain States, in which the influence of the market hunter and gunners with no thought of the future appeared to predominate, objected to Federal interference, the outcome of
this increased protection and elimination of spring shooting has been a noticeable increase in the numbers of wild fowl. This increase has also been observed by Canadian sportsmen.

The results of the Federal Migratory Bird Law in the United States indicated the possibilities and served to emphasize strongly the need of international co-operation between Canada and the United States in the protection of those species of birds which migrate from one country to the other.

The importance of international co-operation in this matter had been realized for a number of years, but no official action was taken until the United States Senate adopted a resolution, on July 7, 1913, requesting the President to propose to the governments of other countries the negotiation of a convention for the protection of migratory birds. This resolution was not acted upon until the following year. In the meantime several organizations and individuals in Canada and the United States took steps to further the proposal for international action. On December 10, 1913, at the instance of the Department of Colonization, Mines, and Fisheries of the Province of Quebec, Mr. H. R. Charlton, of Montreal, introduced the subject of the proposed convention at the annual meeting of the North American Fish and Game Protective Association at Ottawa, and moved the following resolution, which was adopted:

That the executive committee be requested to place itself in communication with the various provincial governments of Canada to urge upon them the importance of soliciting the good offices of the Dominion Government in obtaining the negotiation of a convention or treaty between Great Britain and the United States, looking to the more efficient protection of migratory birds, now threatened with extinction, and following as much as possible the lines laid down in the accompanying suggested draft.

In January, 1914, the question of international co-operation was informally discussed by the writer with the Biological
Survey of the United States Department of Agriculture. Later in the same month the subject was discussed in Ottawa at the annual meeting of the Commission of Conservation, and the following resolution was passed by the commission:

Resolved, That the provincial governments of Canada be urged to solicit the good offices of the Dominion Government in obtaining the negotiation of a convention for a treaty between Great Britain and the United States, for the purpose of securing more effective protection for the birds which pass from one country to another.

The Dominion Parks Branch of the Department of the Interior also interested itself in furthering this measure.

In the following month (February, 1914) the United States Government submitted to the Canadian Government for its consideration the draft of a convention between Great Britain and the United States for the protection of migratory birds in the United States and Canada. The draft of the proposed convention was submitted to the several provincial governments for their views, as the question was of provincial concern. The provincial governments unanimously approved of the principle of the convention. As objections that were not considered to be insuperable were raised by only two of the provinces, and, as the Departments of Agriculture and of the Interior, and the Commission of Conservation strongly concurred in the opinion that the protection of these birds, as provided under the proposed convention, was most desirable, an Order in Council was passed on May 31, 1915, stating that the Canadian Government was favourably disposed to the conclusion of the proposed treaty, conditional to the adoption of certain other amendments which had been agreed to as a result of informal negotiations.

The treaty was signed in Washington on August 16, 1916, by His Majesty's Ambassador, Sir Cecil Spring-Rice, G. C. V. O., and the Secretary of State of the United States, Mr. Robert Lansing. On the unanimous vote of the Committee on Foreign Relations it was ratified by the Senate of the United States on August 29, 1916.

The full text of the convention is set forth in the schedule of the Migratory Birds Convention Act.

In the fulfilment of the agreement made in Article VIII of the convention the Migratory Birds Convention Act was passed at the next session of Parliament following its ratification, and was assented to on August 29, 1917.

It will be seen that the most important provision in the convention is Article II, providing for: (1) a close season on migratory game-birds from March 10 to September 1, with the exception given; (2) an open season of three and one-half months; and (3) a close season throughout the year on insectivorous birds. The open season of three and one-half months may be fixed anywhere between September 1 and March 10, to suit the local conditions. The restriction of the open season on wild fowl to three and one-half months will involve in some provinces a shortening of the present
open season, but in view of the objects of the treaty and the experience that such restriction in the United States is increasing the supply of birds, this change will undoubtedly meet with the support of sportsmen desirous of preventing the continued decrease in the numbers of wild fowl.

The conclusion of this convention constitutes the most important and far-reaching measure ever taken in the history of bird protection. Some years ago efforts were made to secure the international protection of birds in Europe, but, while the general movement towards better protection for insectivorous birds was thereby furthered, the requisite co-operation on the part of all the countries interested was hampered by inactivity on the part of some of the governments and a considerable diversity of interests and opinion. Fortunately many of these difficulties do not exist in North America, and in the United States and Canada there is an ever-growing sentiment in favour of preserving what is left of our former wealth of wild life which has been so seriously depleted by improvidence in the past. This international measure will affect over one thousand species and subspecies of birds from the Gulf of Mexico to the North Pole, and we may confidently look forward not merely to a cessation of the decrease but to an increase of our migratory birds, which are so valuable a national asset.

The following is the text of the Migratory Birds Convention:

Whereas many species of birds in the course of their annual migrations traverse certain parts of the Dominion of Canada and the United States; and

Whereas many of these species are of great value as a source of food or in destroying insects which are injurious to forests and forage plants on the public domain, as well as to agricultural crops, in both Canada and the United States, but are nevertheless in danger of extermination through lack of adequate protection during the nesting season or while on their way to and from their breeding grounds;

His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions Beyond the Seas, Emperor of India, and the United States of America, being desirous of saving from indiscriminate slaughter and of insuring the preservation of such migratory birds as are either useful to man or are harmless, have resolved to adopt some uniform system of protection which shall effectively accomplish such objects, and to the end of concluding a convention for this purpose have appointed as their respective plenipotentiaries:

His Britannic Majesty, the Right Honourable Sir Cecil Arthur Spring-Rice, G.C.V.O., K.C.M.G., etc., His Majesty's ambassador extraordinary and plenipotentiary at Washington; and

The President of the United States of America, Robert Lansing, Secretary of State of the United States;

Who, after having communicated to each other their respective full powers which were found to be in due and proper form, have agreed to and adopted the following articles:

ARTICLE I

The High Contracting Powers declare that the migratory birds included in the terms of this Convention shall be as follows:

1. Migratory Game Birds:
   (a) Anatidae or waterfowl, including brant, wild ducks, geese, and swans.
   (b) Gruidae or cranes, including little brown, sandhill, and whooping cranes.
   (c) Rallidae or rails, including coots, gallinules and eider and other rails.
   (d) Limicola or shorebirds, including avocets, curlew, dowitchers, godwits, knots, oyster catchers, phalaropes, plowers, sandpipers, snipe, stilts, surf birds, turnstones, willet, woodcock, and yellowlegs.
   (e) Columbidae or pigeons, including doves and wild pigeons.

2. Migratory Insectivorous Birds: Bobolinks, catbirds, chickadees, cuckoos, flickers, flycatchers, grosbeaks, humming birds, kinglets, martins, meadowlarks, nighthawks or bull bats, nut-hatchers, orioles, robins, shrikes, swallows, swifts, tanagers, titmice, thrushes, vireos, warblers, waxwings, whippoorwills, woodpeckers, and wrens, and all other perching birds which feed entirely or chiefly on insects.

3. Other Migratory Nongame Birds: Auklets, auklets, bitterns, fulmars, gannets, grebes, guillemots, gulls, herons, jaegers, loons, murres, petrels, puffins, shearwaters, and terns.

ARTICLE II

The High Contracting Powers agree that, as an effective means of preserving migratory birds, there shall be established the following close
seasons during which no hunting shall be done except for scientific or propagating purposes under permits issued by proper authorities.

1. The close season on migratory game birds shall be between 10th March and 1st September, except that the close of the season on the limicoline or shorebirds in the Maritime Provinces of Canada and in those States of the United States bordering on the Atlantic Ocean which are situated wholly or in part north of Chesapeake Bay shall be between 1st February and 15th August, and that Indians may take at any time scoters for food but not for sale. The season for hunting shall be further restricted to such period not exceeding three and one-half months as the High Contracting Powers may severally deem appropriate and define by law or regulation.

2. The close season on migratory insectivorous birds shall continue throughout the year.

3. The close season on other migratory nongame birds shall continue throughout the year, except that Eskimos and Indians may take at any season auklets, guillemots, murres and puffins, and their eggs for food and their skins for clothing, but the birds and eggs so taken shall not be sold or offered for sale.

ARTICLE III
The High Contracting Powers agree that during the period of ten years next following the going into effect of this Convention, there shall be a continuous close season on the following migratory game birds, to wit:

Band-tailed pigeons, little brown, sandhill and whooping cranes, swans, curlew and all shorebirds (except the black-breasted and golden plover, Wilson or jack snipe, woodcock, and the greater and lesser yellowlegs); provided that during such ten years the close seasons on cranes, swans and curlew in the province of British Columbia shall be made by the proper authorities of that province within the general dates and limitations elsewhere prescribed in this Convention for the respective groups to which these birds belong.

ARTICLE IV
The High Contracting Powers agree that special protection shall be given the wood-duck and the eider-duck either (1) by a close season extending over a period of at least five years, or (2) by the establishment of refuges, or (3) by such other regulations as may be deemed appropriate.

ARTICLE V
The taking of nests or eggs of migratory game or insectivorous or nongame birds shall be prohibited, except for scientific or propagating purposes under such laws or regulations as the High Contracting Powers may severally deem appropriate.

ARTICLE VI
The High Contracting Powers agree that the shipment or export of migratory birds or their eggs from any State or Province, during the continuance of the close season in such State or Province, shall be prohibited except for scientific or propagating purposes, and the international traffic in any birds or eggs at such time captured, killed, taken, or shipped at any time contrary to the laws of the State or Province in which the same were captured, killed, taken, or shipped shall be likewise prohibited. Every package containing migratory birds or any parts thereof or any eggs of migratory birds transported, or offered for transportation from the Dominion of Canada into the United States or from the United States into the Dominion of Canada, shall have the name and address of the shipper and an accurate statement of the contents clearly marked on the outside of such package.

ARTICLE VII
Permits to kill any of the above-named birds which, under extraordinary conditions, may become seriously injurious to the agricultural or other interests in any particular community, may be issued by the proper authorities of the High Contracting Powers under suitable regulations prescribed therefor by them respectively, but such permits shall lapse or may be cancelled, at any time when, in the opinion of said authorities, the particular exigency has passed, and no birds killed under this article shall be shipped, sold, or offered for sale.

ARTICLE VIII
The High Contracting Powers agree themselves to take, or propose to their respective appropriate law-making bodies, the necessary measures for insuring the execution of the present Convention.

ARTICLE IX
The present Convention shall be ratified by His Britannic Majesty and by the President of the United States of America, by and with the advice and consent of the Senate thereof. The ratifications shall be exchanged at Washington as soon as possible and the Convention shall take effect on the date of the exchange of the ratifications. It shall remain in force for fifteen years, and in the event of neither of the High
Contracting Powers having given notification, twelve months before the expiration of said period of fifteen years, of its intention of terminating its operation, the Convention shall continue to remain in force for one year and so on from year to year.

In faith whereof, the respective Plenipotentiaries have signed the present Convention in duplicate and have hereunto affixed their seals.

Done at Washington this sixteenth day of August, 1916.

(L.S.) CECIL SPRING-RICE.

(L.S.) ROBERT LANSING.

The regulations under the Migratory Birds Convention Act were passed by Order in Council on April 23, 1918, and the following open seasons for migratory game-birds in Canada were provided under Section 2 of these regulations:

<table>
<thead>
<tr>
<th>Province</th>
<th>Ducks, Geese, Brant, and Rails</th>
<th>Black-breasted and Golden Plover, and Greater and Lesser Yellowlegs</th>
<th>Woodcock and Wilson or Jack Snipe</th>
</tr>
</thead>
</table>

Most of the provinces have now amended their game laws in order that the sections relating to the protection of migratory birds may conform to the provisions of the Convention. By so doing it will be possible for the provincial governments to enforce the provisions of the Convention within their respective territories.

**PROTECTION OF GAME AND WILDLIFE**

As one of the main objects of the Canadian National Parks is to conserve the native mammals and birds, stringent regulations are in force to prevent the hunting, capture, destruction, or molestation in any way of the wild life in the national parks, which have been described in another chapter (pp. 235-243).

These regulations make it illegal to:

1. Chase, harass or pursue, hunt, shoot at, trap, take, wound, kill, capture, or destroy any game—which term includes all mammals or birds within any national park.
2. Have in possession, except as specially provided, any game, or parts thereof, killed or procured within a national park.
3. Use poison, poisonous substances, or gas for taking, injuring, or destroying game in a national park.
4. Sell within a national park guns or other weapons used for the destruction of game without a permit.
5. Carry guns or firearms of any description within a national park, except by an officer of the park, unless such guns shall have been sealed by the superintendent of the park or a duly authorized official. Any unsealed gun or firearm found in a national park is subject to forfeiture.
6. Allow dogs to run unleashed in a national park.

In addition, the regulations provide for the following:

1. The forfeiture of the outfits of all persons convicted of illegally hunting or killing any game or having illegal possession of game within a national park.

(The significance of this penalty was realized by a party of hunters who were proved a few years ago
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to have killed game within the borders of one of the national parks, and their outfits, which included a considerable number of pack-horses, were confiscated.

2. The search by a game warden of outfits, premises, tents, vehicles, or vessels for poison.

3. The capture or destruction by game wardens or officers under the parks administration of predatory or dangerous animals or noxious birds.

4. The capture or killing under proper authority of game for scientific or propagating purposes.

5. The destruction of cats, which are not allowed within the confines of a national park.

6. The registration by all guides travelling through a national park of full details regarding any hunting party travelling through such a park, and registration by the persons hunting. Such registration includes the names and addresses, date of departure and proposed duration of stay in the park, list of firearms carried and route to be travelled. (This requirement is enforced, owing to the fact that many parties of hunters choose as the point of departure such places as Banff and Jasper, where they outfit for hunting-grounds outside the boundaries of such national parks.)

It is satisfactory to be able to record that the foregoing regulations are very strictly enforced in the national parks, to the great benefit of the wild life within the parks.

CHAPTER XII

A REVIEW OF PROVINCIAL GAME LEGISLATION

All the provinces of Canada have undertaken the protection of game and wild life, and have passed legislation for that purpose. In most cases the game laws are framed wisely and enforced effectively; in certain cases the administration of the game laws is not in accordance with the needs of the situation. Too often in the past political or other considerations have influenced the selection of game officers, and have prevented the impartial administration of game laws; there has been too great a desire to protect local politics rather than local game, with a disastrous effect on the latter. The protection of game and wild life demands the appointment of qualified officers and the administration of game laws without fear or favour. The co-existence of game with large populations in older countries, such as England, Scotland, and other European countries, has been due, not only to propagation of game, but to impartial administration of game laws and their strict observance by all.

Our game resources will never benefit to the extent that is necessary, and is intended by our game laws, until the administration of all game laws is completely freed from political influence or interference, and there are sufficient qualified and conscientious game wardens to meet the requirements of all parts of the Dominion. Fortunately, there has been marked and encouraging progress in this direction in recent years, and, as the needs are more widely appreciated, we may expect in Canada game laws and a standard of administration that will not be surpassed in any other
country. With game and wild-life resources unequalled by any other country in the world, it is surely incumbent upon us to secure and maintain the highest standard in wise protective policies and their enforcement. Always it should be remembered that the primary object of game legislation is to protect the interests of the game and not those of the persons who desire to exploit such resources. Of all our resources, the game, fur-bearing, and other animals are most easily destroyed, and they cannot be restored under modern conditions; it is necessary therefore that special care should be devoted to their wise protection, and that the issuing of hunting-licenses and the collection of fees should not constitute the main functions of game officers.

In the following review of provincial game legislation and its administration, an effort is made to indicate in what directions the game laws of the various provinces and their administration may be improved, with a view to securing better conservation of the animals that these laws are designed to protect.

Prince Edward Island.—The Game Act of 1906, with subsequent amendments, provides for the appointment of a game inspector for the enforcement of the act, the provisions of which are also enforced by the provincial constables, policemen, and market clerks. The members of the Prince Edward Island Fish and Game Association are appointed honorary game wardens. For some time the position of game inspector has been vacant, and we cannot but feel that the lack of such an officer will result in a laxity in the enforcement of the provisions of the provincial game act. Bag limits should be provided in the case of game-birds.

The sale of game-birds during the open season and the use of automatic and pump guns are wisely forbidden.

Nova Scotia.—The Game Act of 1912, with subsequent amendments, is administered by a chief game commissioner and two associate commissioners, who are empowered to appoint game wardens and district game inspectors. Registered guides and chief forest rangers are *ex officio* game wardens.

There appears to be an insufficient number of game wardens in the province, and a consequent failure to enforce fully the provisions of the game act. The sale of deer, caribou, and certain protected game-birds is prohibited, but such prohibition should also include moose and wild fowl.

We would also urge the indefinite continuation of the close season on cow moose and caribou, as it is certain that without such means of increasing its abundance the caribou will become a thing of the past in Nova Scotia. The desirability of establishing one or more game reserves in Nova Scotia has already been pointed out (see p. 256).

New Brunswick.—TheGame Act of 1909, with later amendments, is administered by the Minister of Lands and Mines. As a result of recent reorganization the protection of game has been combined with the forestry work, and the provincial forester is in charge of both services with a chief game guardian to superintend the enforcement of the game laws. The duties of game warden and forest ranger are combined, and there are many obvious advantages to such an arrangement. The number of *ex officio* game wardens has been greatly increased. An applicant for a game license is now required to take an oath that he will observe the game laws. This requirement should be more widely adopted; it will help to eliminate the “unfit” hunter.

Two steps taken by the Province of New Brunswick in 1918 are highly commendable. In the first place, the policy of appointing game wardens by a qualifying examination has been adopted in place of the patronage system. Such a method of securing efficient and qualified officers cannot be too highly praised, and its adoption by other governments would do more than anything else to bring about an effective conservation of our game animals. The second wise
policy is the prohibition of the sale of protected game, but we regret the retrograde action of the New Brunswick government in repealing the no-sale of game regulation after it had been in effect for one season (1918-1919). This question is discussed elsewhere (sec p. 333).

A bounty of twenty-five cents is paid for hawks and owls. While the destruction of the great horned owl and certain hawks, such as the goshawk and sharp-shinned hawk, should be encouraged, the destruction of all owls and hawks that such a bounty encourages is very unwise, and an amendment of this provision is recommended.

Owing to the scarcity of caribou in New Brunswick a close season has been established until 1921, and it will probably prove desirable to extend this close season for a further period of years.

Quebec.—The Minister of Colonization, Mines, and Fisheries administers the Quebec game laws. The Department of Game and Fisheries realizes the importance to the province of its game resources, which are being protected by a force of zealous wardens, who are apparently administering impartially the game laws.

Until recently Quebec was the only province in which a close season was established for black bear. This has no doubt been responsible for the fact that there is no scarcity of this valuable fur-bearer in Quebec. The prohibition of the sale of all protected game, the reduction in the number of caribou that may be killed, and the institution of bag limits on wild fowl are measures that are to be strongly recommended.

We would also suggest the protection of those species of owls and hawks that are known to be beneficial as destroyers of noxious rodents, etc.

In the regulation of the fur trade the Province of Quebec has made a noteworthy advance, and the enforcement of the measures now in effect will undoubtedly insure the conservation of one of the most valuable natural resources and economic assets in the province.

Ontario.—A few years ago the Ontario government created a special Department of Game and Fisheries, with a deputy minister in charge to administer the Ontario Game and Fisheries Act. The Minister of Public Works and Highways administers the department. The organization for the enforcement of the provisions of the act consists of a deputy minister, a superintendent, inspectors (not exceeding three in number), wardens who have districts, and overseers who have the authority of constables under the act.

The greatest need in Ontario is the prohibition of the sale of all protected game, which is discussed elsewhere (p. 331). In view of the fact that there are not, so far as our records show, any wild turkeys in Ontario, this bird might advisedly be placed in the category of extinct game-birds, and given at least a permanent close season instead of an open season of a fortnight as at present! The absolute close season on quail should be maintained (see p. 160). It would also be in the interests of the wild fowl, such as ducks and geese, to establish a daily limit in addition to a seasonal bag limit.

Manitoba.—The Game Protection Act of Manitoba is administered by the Minister of Agriculture, the provisions of the act being enforced by the chief game guardians, with the assistance of local game guardians.

The Manitoba government wisely prohibits the sale of all protected game, and has recently given the wapiti or elk a permanent close season. In view of the fact that antelope no longer occur in Manitoba, and are permanently protected in Saskatchewan and Alberta, where the few that remain are now to be found, the provision of an open season of three weeks for antelope in Manitoba should be repealed. A bag limit of forty ducks per day in October and November, without a seasonal bag limit, appears to us to be too large at the present time.
Saskatchewan.—The Game Act of Saskatchewan is administered by the Minister of Agriculture, and the provisions of the act are enforced by a provincial game guardian, with the assistance of local game guardians and honorary guardians.

One of the chief needs of Saskatchewan appears to be the organization of a staff of paid and qualified district game guardians, as the present system fails to meet adequately the requirements of the situation, and throws too much responsibility on the provincial game guardians for the proper enforcement of the provisions of the Game Act.

In all the Prairie Provinces the Royal Northwest Mounted Police, as ex officio game wardens, have greatly assisted in the enforcement of the provincial game acts, and perhaps this fact has been partially responsible for the failure on the part of the governments concerned to organize adequate field staffs for game protection.

It is gratifying to record that the efforts that have been made to secure a permanent close season on wapiti or elk have now proved successful. The Province of Saskatchewan is to be congratulated as one of the first provinces in Canada to prohibit the sale of protected game. As Bulletin No. 49 of the Saskatchewan Department of Agriculture, giving a synopsis of the game laws, states: "A game butcher or market hunter is an undesirable citizen and should be treated as such."

We would recommend that the close season on sage grouse be made indefinite, in view of the very restricted range of this bird in Canada and the fact that it is not likely to become abundant.

As a means of preventing accidents, hunters of big game in Saskatchewan are required, as also in Manitoba, to wear white outer suit and cap. Such a distinguishing costume might advisedly be adopted in other provinces.

Alberta.—As in the other Prairie Provinces the Game Act is administered by the Minister of Agriculture, and the provisions of the act are enforced by a chief game guardian.

The most necessary amendment that is required in the Alberta Game Act is the repeal of those provisions which legalize market hunting, and the prohibition of the sale of game. The existence in this act of an interpretation clause which states that: "The term 'market hunter' shall mean any person who hunts or shoots game for gain or profit," and the legalizing of such hunting for monetary gain by the purchase of a market hunter's license for five dollars, are not in keeping with the principles of game protection of to-day, when all authorities are agreed that the market hunter is a menace to what remains of our game resources. We would urge the Alberta Government to remove from an excellent game act that which tends, more than anything else, to defeat the objects of such legislation.

The number of mountain sheep and goat in Alberta would undoubtedly increase if the bag limit were reduced to one sheep and one goat, and if the laws were enforced in the case of Indians, who have been chiefly responsible for the reduction that has taken place in the number of these animals, which are a great asset to the province.

British Columbia.—In 1918 the game-protection service in British Columbia was completely reorganized by the establishment of a Provincial Game Conservation Board, consisting of members appointed by the Lieutenant-Governor in Council, which board is charged with the administration of the Game Act. It has been decided to entrust to the provincial police, who will be ex officio game guardians, the enforcement of the provisions of the Game Act, and the chief of the provincial police is chief game warden. A number of the experienced game wardens are retained.

The game legislation of British Columbia differs from that of the rest of the provinces by reason of the fact that the open seasons are fixed by the Lieutenant-Governor in Coun-
cil, and not by the provincial legislature. A similar policy is followed in the case of the legislation enacted by the Dominion Government for the protection of migratory birds and of game in the Northwest Territories. The method of fixing open seasons, etc., by Order in Council, has great advantages over the method generally in vogue of accomplishing this by amendments to the Game Act. Such amendments can only be made when the legislature is in session, and not infrequently it is of great importance to make a change in an open season without the delay necessitated by a postponement of such action until the legislature meets. The claim sometimes made that delegation of these powers to the Lieutenant-Governor in Council is likely to be abused has not been borne out in practice; on the contrary, it has been found that the needs of the situations that arise from time to time in wild-life protection can be more opportune met by such a policy, which is to be strongly recommended on that account.

A number of important restrictions have recently been placed on the killing of big game. The bag limit on moose has been reduced from two to one, on caribou from three to two, and on mountain goat from three to two. These were necessary and wise reductions and, with the other restrictions on big-game hunting that have been made, they undoubtedly will be a means of conserving some of our finest big game, for which the province is justly famous. In fact, there is no better big-game region on the North American continent than the Cassiar region of British Columbia.

In 1913, for the first time, a close season was established on bear, which now may be killed only from October 1 to June 30. It would be very desirable to proceed further and amend the Game Act for the purpose of establishing a bag limit on grizzly bears. Grizzlies are not so abundant now as to permit their unlimited destruction.

The sale of all protected game is advisedly prohibited throughout the province, with the following exceptions, namely: moose and caribou (bulls over one year of age only) may be sold in the northern districts—Atlin, Prince George, Omineca, and Cariboo—from October 1 to December 15, and bear throughout the province from October 1 to June 30.
CHAPTER XIII

INDIVIDUAL AND COMMUNITY EFFORT IN THE CONSERVATION OF WILD LIFE

The conservation of our wild life, from the largest of our big game to the smallest of our insectivorous birds, can only be achieved when a wider interest in the subject is created in the minds of the majority of our citizens. Our responsibilities in this matter have been indicated in a previous chapter. At the present time we depend almost entirely upon the enforcement of our game laws for the attainment of our ends. Wise game laws will do much for the protection of our wild life, particularly in the direction of checking the destructive tendencies of the market hunter and game-hog; but the proper enforcement of such laws can only be effected if the will of the people at large is behind them, and in order to secure such popular support there must be carried out a policy of education among young and old.

Education

Educational propaganda on this subject should be more easy of execution than that covering the conservation of any other resource, for this reason: no subject is more appealing to young people and to older people, whatever their vocations, than that of wild life. Further, there is an encouraging growth in the demand for information on this subject, and the increasing number of “nature” books is an indication of that demand. No subject appeals more to the average child than natural history, and the ever-growing number of our citizens who nowadays find their recreation in field and forest has naturally led to a desire for information regarding all the forms of wild life that constitute one of the great attractions of our countryside. Advantage should therefore be taken of these favourable circumstances.

In our schools instruction in natural history is advisedly receiving greater attention. The subject is so fundamental to a proper conception of the world wherein we live, and is so valuable as a means of conveying information on biological problems, particularly in relation to health, that it should be given a prominent place in every educational curriculum. If it were given, as it should be given, a place in a child’s instruction equal in importance to what are now considered the primary essentials in education, a broader, more humane, and more sympathetic mental attitude would ensue. What knowledge can be of greater interest and value than a knowledge of the world around us and of our fellow creatures?

At the end of an heroic journey, awaiting death, that most gallant and brave of British explorers, Captain R. F. Scott, in his last letter to his wife, wrote these memorable words regarding the education of his little son Peter: “Make the boy interested in natural history if you can; it is better than games; they encourage it at some schools. I know you will keep him in the open air.” What greater testimony could we have?

If natural history were taught in all our schools, and children were thus trained to understand and appreciate the meaning of our wild life, its conservation would be insured. A great responsibility, therefore, rests upon the shoulders of our educational authorities, and we fervently hope that they will not be negligent in their attention to the needs of the situation.

One of the most potent organizations that, properly directed, may be utilized in our educational propaganda, is the Boy Scouts. The far-sighted organizer of this world-
wide association of boyhood, himself a hunter and lover of open-air pursuits, realized the moral and educational value of the open air and a knowledge of woodcraft and wild life as one of the essentials of this system of training. It is impossible to conceive a greater opportunity than that afforded by this organization for creating a vast army of protectors of our wild life. We would urge those in charge of this valuable work to lay special stress upon the significance of our wild life, its rational use and proper conservation; by so doing a work of inestimable value will be accomplished.

The press of this country has repeatedly shown its interest in this subject. But it can render far greater assistance than it has afforded up to the present by taking every opportunity to lead public opinion in regard to the necessity of conserving our wild life. It is not sufficient to chronicle events, but in season and out of season the press should promote the conservation of our wild life and censure such acts and movements as tend to affect its interests adversely.

One of the most valuable educational agencies of to-day is the moving picture, and its influence is increasing. A few years ago I was informed that educational films were not popular, and that it was necessary to cater to public opinion. Fortunately, this does not appear to be true to-day. The makers of films have realized the interest that the general public takes in films depicting wild-life subjects, and there are a large number of such films now in circulation. Their preparation should be encouraged and assisted to the fullest extent possible. No better means exists for placing before the people the wealth of our wild life, and the necessity of conserving it for the enjoyment of the people of to-day and in the future. Scenes depicting the killing of big game and other animals should be avoided, on account of their undesirable effect, although hunting scenes may be so illustrated and described as to demonstrate the recreative value of wild life to the people of our cities.
PRIVATE WILD-LIFE SANCTUARIES AND GAME RESERVES

We have, fortunately, in Canada many examples of what can be accomplished by individual effort to preserve the wild life in a limited area. The value of such instances cannot be overestimated, both on account of the examples they offer of what can be achieved by individuals and their effect on the abundance of the wild life of the neighbourhood.

Mention has been made in previous chapters of instances of individual effort, such as the work of Mr. Jack Miner, in creating a wild-life sanctuary, particularly for wild fowl, near Kingsville, Ont., and of the fifteen-acre game preserve of Mr. Reuben Lloyd, a farmer at Davidson, Sask. In Ontario the Provincial Government has taken the commendable step of encouraging the establishment of wild-life preserves by individuals, and, in addition to the "Miner Sanctuary," it has recently set aside the "Peasemarsh Farm," on the shore of Georgian Bay in the county of Grey, as a bird sanctuary, at the request of the owner, Miss E. L. Marsh. We hope this example will be widely followed in other parts of the country, for nothing gives the owner so much real pleasure as the possession of a tract of land, however small it may be, in which the wild life is protected, not only from human enemies but from predatory animals, and particularly cats, the most destructive of the alien enemies of our native birds.

The owner of a private wild-life sanctuary soon gains the confidence of the creatures that enjoy his protection. Daily his enjoyment of such a sanctuary increases, as his knowledge of the wild life that he is protecting grows and as new members respond to his encouragement. The changing of the seasons is followed by changes in his wild-life community. There is a never-ending stream of new pleasures that can come only to those who are fortunate enough to possess
an area of suitable land and wise enough to assume the guardianship of the wild life that it harbours or is capable of harbouring, if protection is given by such means as may be necessary.

The abundance of game in many European countries, frequently in regions devoted to agriculture and well populated, is due in no small measure to the existence of game preserves and the careful protection of the game, in addition to its propagation and the destruction of its enemies. In Canada the absence of large estates and the ownership of the land by those who cultivate it place the responsibility in the matter of protecting the wild life on the farms largely upon the farmer in the agricultural districts.

Farmers and Game Protection.—A number of our game laws protect cultivated, cleared, or enclosed farm lands from trespass, the permission of the owner being required in order to hunt or shoot over such land. This is a just and necessary recognition of the rights of the owner to the wild life on his own land and to protection against damage to his crops and property. Much ill feeling has been aroused between farmers and hunters from the cities, owing to the failure of the latter to recognize the rights of the former, even though they be not legal rights, and to avoid inflicting damage to growing crops or other property. The creation of a hostile attitude of mind on the part of farmers towards sportsmen, through the thoughtlessness or wilful behaviour of the latter, is liable to react on the protection of the wild life, as a farmer will be less disposed to undertake protective measures, particularly in regard to game animals, if his efforts are likely to lead to increased annoyance to himself and greater damage to his property. It is essential, therefore, that sportsmen and others interested in the conservation of wild life should respect the rights and interests of farmers in the wild life and game on their farms, whether their rights are established by provincial law or not.

A sympathetic attitude on the part of farmers throughout Canada towards the conservation of wild life would be more effectual than any other factor in promoting this object. Comparatively few farmers, however, appreciate the advantages which accrue from the protection and encouragement of wild life on their own properties. The economic importance of protecting insectivorous birds on our farms has already been emphasized in a previous chapter. To the farmer the presence of a supply of game on his farm means an addition to his meat supply. Further, if he undertakes to propagate game on his farm, he would, in many cases, obtain higher prices for such game than for the domestic poultry; game propagation, however, is a special subject in itself, and should not be undertaken without some knowledge of the subject, or loss and disappointment will follow instead of profit and enjoyment. The protection of game and wild life on the farm requires neither special knowledge nor great expense. The essentials are: (1) a well-defined boundary with appropriate notices at intervals for the public; (2) plenty of cover; (3) the destruction of predatory mammals and birds; (4) as abundant a supply of water as can be provided; and (5) a little food during inclement weather.

Until the pleasures of wild life protection are enjoyed and its benefits appreciated by farmers, it is impossible for them to realize how the attraction of the farm and of farm life can be increased for them and their families. Such an added interest to the life of the farms in many parts of Canada would help to retain some portion of the youth that now finds farm life too uninteresting, and migrates to the cities, thus reducing our agricultural population and food production; this is not a hypothetical opinion but is based on experience.

Clubs.—In an account of his hunting experience in Quebec a few years ago, the late Colonel Theodore Roosevelt wrote:
"In addition to the game laws, a large part is played in Canadian game preservation by the hunting and fishing clubs. These clubs have policed and now police many thousands of square miles of wilderness, worthless for agriculture, and, in consequence of this policing, the wild creatures of the wilderness have thriven and in some cases have multiplied to an extraordinary degree on these club lands."

An account has already been given of the manner in which the co-operation of sportsmen is secured in the protection of the wild life in the Laurentides Park, in Quebec, to which the foregoing observation, no doubt, has particular reference. In other parts of Quebec also game protection has been undertaken by individuals and clubs as a result of the provision that is made in the Quebec Game Laws for such projects. The Quebec Government is empowered to establish "hunting territories," which may not exceed 200 square miles, in public lands remote from settlements. These hunting territories may be leased either by auction or private agreement to one or more persons for not more than ten years for an annual sum of not less than three dollars per square mile. The lessee is given the exclusive right to hunt in such leased lands, and to prosecute in his own name. Thus the area becomes a private game preserve.

In many cases these game preserves are proving to be a valuable means of protecting the wild life in the districts in which they are situated, and the fact that most of them are owned by clubs is an assurance that the policy of leasing such hunting territories will not result in the widespread creation of a large number of private game preserves controlled by a few persons, thereby defeating one of the main objects we have in view in conserving our wild life, namely, that all who wish may be able to enjoy it.

On the majority of these game preserves the owners have erected cabins or club-houses, and permanent guardians are employed (Plate XVIII, 1). The owners of such preserves should not only appreciate their responsibilities, but also their opportunities, and, as far as may be possible, a constructive policy should be carried out in the matter of game protection. It is not sufficient merely to pay periodical visits for the purpose of hunting and fishing, but every effort should be made to increase the wild life and improve the environmental conditions.

An incessant campaign against predatory animals and birds should be carried out; attention should be given to available food supplies and to their improvement, and the conditions with regard to cover can frequently be improved. In all such preserves the possibility of ground and other fires should always be remembered, and every precaution taken to prevent them within the reserve, or to check them should they start outside. Fires are the most destructive of all factors that adversely affect our wild life, inasmuch as they destroy everything—breeding-stock, food, and shelter—and a lifeless desolation remains.

Throughout Canada there are many areas reserved by clubs and individuals for duck-shooting. These reserves usually include marshes and small ponds and lakes, or the shores of lakes. Many of the areas to which I allude cannot be classed as game or wild-life reserves in the true sense of the word; on the contrary, they appear to be maintained chiefly for the purpose of attracting and killing the greatest number of birds with the least expenditure of trouble; the only encouragement the wild fowl receive consists of the grain that is distributed in order to secure larger bags, and the only protection existing is the protection of the rights of the owners of the reserved area. On the other hand, there are numerous private reserves which have been established chiefly for duck-shooting, in which every effort is made to attract ducks by planting suitable food-plants, to propagate them, and to protect them from their enemies. Such reserves are rendering valuable aid in conserving our
native wild fowl, and their establishment deserves encouragement.

Civic Game Reserves.—There is a type of wild-life reserve that ought to be widely adopted in Canada, but which, so far as I am aware, exists in one or two instances only and on a limited scale. This is what I would call a civic reserve. In a previous chapter the creation of community and civic bird sanctuaries has been recommended. The effect of such sanctuaries in the conservation of wild life in general would naturally be somewhat limited in its scope. A civic wild-life reserve, however, would include within its territory such native mammals and birds as might occur in the region adjoining or within easy reach of the city owning it. As an example, it may be mentioned that the creation of a national or provincial park in the region adjoining the Gatineau River, north of Ottawa, has been urged for a number of years by individuals and local organizations, and this proposal was included in the recommendations of the commission appointed (in 1913) to advise on the planning of the city of Ottawa. Unfortunately, however, no steps have yet been taken to carry out a proposal that would furnish for the adjoining cities an unsurpassed recreation area, in which all the pleasures and benefits of life in the woods and hills would be the means of enlarging the interests and sympathies of thousands of our citizens who are strangers to so many of the joys that they might share.

The idea of such a park or reserve in the country rather than within the city limits is by no means a new one. In England, within a few miles of London, one of the most thickly populated regions of the world, one may lose oneself in Epping Forest, one of the finest forest areas in England, where still may be found deer—not the semi-domesticated kind—badgers, foxes, and other species of wild life, unmolested. The city of Glasgow has a country park at Loch Argoil, and the city of Birmingham a park at the Lickey Hills. If cities in Great Britain can maintain such park areas for the recreation of their people, surely in Canada, with our incomparable opportunities for creating within easy access of our cities national parks and wild-life reserves, we should be able to make greater progress in this direction than has already been accomplished. All our larger cities have suitable areas in their vicinities; certain cities, such as Quebec, Edmonton, Calgary, Vancouver, and Victoria, already have national or provincial parks within a comparatively short distance, but, in other cases, the distance to the nearest park prohibits many, to whom the opportunities which it affords for recreation are necessary, from taking advantage of them. Few movements would be more effectual as a means of improving the health of our citizens and of increasing their capacity for wholesome enjoyment than one for the creation of such civic reserves, and for this reason their promotion should be undertaken by all civic organizations that are sincerely interested in the welfare of the communities in which they exist.

Game Protective Associations.—Among the numerous methods by which community effort to conserve our wild life may be undertaken, the formation of special associations for this purpose constitutes one of the most influential. There are already in existence in Canada a number of associations of sportsmen, guides, and also of persons interested in the protection of wild life. Although a number of such sportsmen’s organizations were primarily formed for the protection of the interests of the sportsmen rather than for the protection of the game, the majority of these associations are fully alive to the importance of adequate protection for our game animals, as evidenced by the support that many of them gave to the Migratory Birds Treaty, even though its provisions somewhat curtailed opportunities for hunting wild fowl.

Of all classes of the community the sportsmen should be,
and in my experience usually are, most interested in the conservation of our wild life. In such associations the selfish element, to whom the idea that the conservation of our wild life for the enjoyment of posterity is a duty does not appeal, is fortunately becoming rarer, though its voices may be heard from time to time. The majority of sportsmen, using the word in its real sense as excluding the game-hog and pot-hunter, in Canada, are behind any movement that tends to the conservation of our game and wild-life resources. I have invariably found this to be the case, and it is an attitude that one might expect.

We need, however, a far greater number of such local associations of sportsmen, naturalists, and others interested in the conservation of game and wild life. There should be one in every large district or county, whose chief object would be to act as trustee for the wild life in his particular region. Upon such associations should rest the responsibility of securing and making effective such protective measures as the wild life of their districts might require. The influence that such associations, when composed of men interested in the wise conservation of wild life rather than its reckless destruction, regardless of the future, would have on the citizens in their respective districts, is incalculable. Their co-operation in the protection of the wild life in their districts would be welcomed by the provincial governments; through them a real public opinion on the subject could be created; and a greater observance of the game laws would be insured. As a means, therefore, of securing the conservation of game and wild life, we would strongly recommend the formation of local associations of all interested. There is, in most districts, a sufficient number of sportsmen, farmers, nature-lovers, and others who seek recreation in the woods and fields, and who have a genuine interest in the conservation of the wild creatures which they pursue with gun, camera, or field-glass, to form such associations;

whether they are called game-protection associations or wild-life-conservation associations is immaterial, so long as their objects are those that this volume is endeavouring to promote, namely, the conservation of our wild-life resources for the benefit of Canadians of to-day and of the future.

The Attitude of the Sportsman

The term “sportsman” has a very definite meaning in the English language, owing to the fact that the predominant characteristic of British sport is “fair play,” and any person who takes an unfair advantage of opponent or hunted quarry is ruled out. It is in such a sense that the word should always be used. When applied to the hunting of game the word has a special significance in so far as the conservation of game is concerned, and for that reason it is appropriate that it should be discussed here.

One of the most noted associations of hunters in the world is the Shikar* Club of London, of which His Majesty, King George, himself a famous sportsman, is honorary president, and which includes in its membership the most noted hunters of big game. Its chief object is set forth in the following words:

To maintain the standard of sportsmanship. It is not squandered bullets and big bags which appeal to us. The test is rather in a love of forest, mountain and desert; in acquired knowledge of the habits of animals; in the strenuous pursuit of a wary and dangerous quarry; in the instinct for a well-devised approach to a fair shooting distance; and in the patient retrieve of a wounded animal.

Such should be the ethics of all who hunt game in Canada; sportsmen’s organizations should require their members to subscribe to this definition of the objects of the hunter.

In 1908, Doctor W. T. Hornaday, than whom no man has done more to promote the conservation of our wild life and

* Shikar is the Hindustani word for “hunting.”
the real objects of hunting game, realizing the need of an adequate code of ethics to govern the taking of wild game, prepared the following code as a “sportsman’s platform.” It has been formally adopted as setting forth their objects by the Camp Fire Club of America, by the North American Fish and Game Protective Association, and by numerous sportsmen’s and game-protective organizations in Canada, and its adoption may be the means of securing a true standard of sportsmanship and the conservation of our unsurpassed game resources, which it should be the object of every Canadian sportsman to promote to the utmost of his ability.

THE SPORTSMAN’S CODE OF ETHICS

1. The wild animal life of to-day is not ours, to do with as we please. The original stock is given to us in trust, for the benefit both of the present and the future. We must render an accounting of this trust to those who come after us.

2. Judging from the rate at which the wild creatures of North America are now being destroyed, fifty years hence there will be no large game left in the United States nor in Canada, outside of rigidly protected game preserves. It is therefore the duty of every good citizen to promote the protection of forests and wild life and the creation of game preserves, while a supply of game remains. Every man who finds pleasure in hunting or fishing should be willing to spend both time and money in active work for the protection of forests, fish and game.

3. The sale of game is incompatible with the perpetual preservation of a proper stock of game; therefore it should be prohibited by laws and by public sentiment.

4. In the settled and civilized regions of North America there is no real necessity for the consumption of wild game for food purposes. The maintenance of hired labourers on wild game should be prohibited everywhere, under severe penalties.

5. An Indian has no more right to kill wild game, or to subsist upon it all the year round, than any white man in the same locality. The Indian has no inherent or God-given ownership of the game of North America, any more than of its mineral resources; and he should be governed by the same game laws as white men.

6. No man can be a good citizen and also be a slaughterer of game or fishes beyond the narrow limits compatible with high-class sportsmanship.

7. A game-butcher or a market-hunter is an undesirable citizen, and should be treated as such.

8. The highest purpose which the killing of wild game and game fishes can hereafter be made to serve is in furnishing objects to overworked men for tramping and camping trips in the wilds; and the value of wild game as human food should no longer be regarded as an important factor in its pursuit.

9. If rightly conserved, wild game constitutes a valuable asset to any country which possesses it; and it is good statesmanship to protect it.

10. An ideal hunting trip consists of a good comrade, fine country, and a very few trophies per hunter.

11. In an ideal hunting trip, the death of the game is only an incident; and by no means is it really necessary to a successful outing.

12. The best hunter is the man who finds the most game, kills the least, and leaves behind him no wounded animals.

13. The killing of an animal means the end of its most interesting period. When the country is fine, pursuit is more interesting than possession.

14. The killing of a female hoofed animal, save for special preservation, is to be regarded as incompatible with the highest sportsmanship; and it should everywhere be prohibited by stringent laws.

15. A particularly fine photograph of a large wild animal in its haunts is entitled to more credit than the dead trophy of a similar animal. An animal that has been photographed never should be killed, unless previously wounded in the chase.