## THE CANADIAN WILDLIFE SERVICE—ITS FUNCTIONS AND SCOPE

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The Canadian Wildlife Service is a Division of the National Parks Branch, Department of Resources and Development. It deals with wild life questions coming within the jurisdiction of the Federal Government of Canada, except certain matters handled by the National Museum and some other matters closely related to Indian Affairs. Its responsibilities may be grouped in the following items:—

To advise the National Parks Service and to co-operate with it in dealing with fish and wild life problems in the National Parks of Canada,

To advise the administration of the North-West Territories and to co-operate with it in dealing with wild life problems in those Territories.

To administer the Migratory Birds Convention Act, in conjunction with the Royal Canadian Mounted Police and in co-operation with provincial game authorities.

To carry on scientific research in order to obtain reliable fundamental information necessary for formulating advice with respect to wild life in the National Parks and the North-West Territories and for administering the Migratory Birds Convention Act.

To carry on publicity and instructional activities relating to wild life and its conservation and management.

To provide co-ordination and advice in connection with administration of the Game Export Act and its application by the provinces.

To maintain oversight over the management of wild life as a resource of importance to the national welfare.

To cope with Canadian aspects of international wild life problems.

The National Parks of Canada are large and important wild life sanctuaries. They preserve some kinds of wild life from extinction, maintain stocks of accessible wild life for the pleasure and recreation of the public and are in a very real sense outdoor museums, where living wild life and the interrelationships of different forms may be observed and studied. Owing to the depletion of many native species in extensive areas of Canada, these functions of the National Parks have

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assumed special importance. The activities of the National Parks with respect to wild life are based on and guided by advice provided by the Canadian Wildlife Service and that advice is derived from consideration of factual information obtained by modern scientific research. In carrying on that research, as well as in the application of its results, the staff of the Canadian Wildlife Service works in close co-operation with the superintendents, wardens and other personnel of the National Parks. The aim is to maintain native wild life in a natural habitat, with the various species in their normal proportions, and to exercise direct control only where necessary to avoid extermination or overcrowding or excessive predation or other detrimental conditions.

Fishing in waters within the National Parks appeals to large numbers of visitors and is maintained at an attractive level by constant attention of the Parks officials, with the co-operation and advice of the Canadian Wildlife Service. Scientific specialists of that Service, who are known as limnologists, visit the Parks frequently, study fish populations and their environment in Parks waters, organize creel censuses and submit advice regarding fish hatchery operations, the stocking of depleted waters, habitat improvement and related matters.

In the North-West Territories the role of wild life is one of outstanding importance. The livelihood of many of the inhabitants of the Territories, and often their very existence, depends on the perpetuation and wise use of this resource. Furbearing animals, such as muskrat, mink, marten, beaver and fox, as well as birds and mammals used for food, such as ducks, geese, ptarmigan, caribou and moose, are protected and utilized under the provisions of the North-West Game Ordinance. The Canadian Wildlife Service, through its staff of mammalogists and ornithologists, investigates the numerous problems that arise in managing the widely dispersed wild life of the North-West Territories and advises the Administration of the Territories with respect to the regulations contained in the Game Ordinance and their application, and also with respect to allied matters, such as restocking and the control of predators, parasites and diseases. During the time when the Indians and Eskimos of the North-West Territories were developing their own special cultures they had no occasion to give heed to conservation of wild life and it is now necessary to take special measures to educate them to be careful of what they have, so as to make prudent provision for the future.

Migratory birds, as their name implies, make regular journeys

back and forth between their summer breeding grounds and their accustomed wintering grounds. As a result a large proportion of them spend part of each year in Canada and part of it in the United States. Experience has shown that purely local conservation of these creatures that move at regular intervals from one jurisdiction to another is inadequate. Each jurisdiction tends to give primary attention to providing for its own requirements, and the attention given locally to perpetuation of the wild life stocks involved falls short of the necessary minimum.

Under such conditions wild ducks and geese and other migratory birds of North America were declining in numbers until the situation was met in 1916 by adoption of the Migratory Birds Treaty. This was a special treaty between His Majesty, acting with the consent and approval of the several provinces of Canada, and the United States of America, for the protection of migratory birds common to Canada and the United States. It was made effective in Canada by a federal statute known as the Migratory Birds Convention Act, which was adopted in 1917. The Minister of Resources and Development is responsible for the fulfilment of Canada's obligations under this treaty. The Act and the Regulations thereunder are administered by the Canadian Wildlife Service, with the aid of the Royal Canadian Mounted Police and in consultation and co-operation with the provincial game authorities. Enforcement of the Act has been a regular function of the Royal Canadian Mounted Police since 1932.

Regulations set up under authority of the Migratory Birds Convention Act are of two kinds, the Migratory Bird Regulations and the Migratory Bird Sanctuary Regulations. After extensive annual scientific field investigations, the Migratory Bird Regulations are revised each summer. The provincial and federal authorities concerned confer at length with respect to these Regulations before the amendments are agreed on. Close contact and friendly co-operation is also maintained between the Canadian Wildlife Service and the United States Fish and Wildlife Service, both in carrying on field investigations and in developing conservation and management measures based on the data obtained. The two Services publish annually a single joint report on their field investigations of migratory game birds.

The Migratory Bird Regulations govern matters, such as open seasons, hours and methods of hunting and bag and possession limits, which are connected directly with the hunting of migratory birds. They also provide for issue of permits for

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propagation of migratory birds, for collecting migratory birds for scientific purposes, for control of migratory birds when they damage agricultural or other interests, for carrying on the business of a taxidermist, for collecting eiderdown and for introduction of foreign migratory birds. These Regulations prohibit pollution of waters frequented by migratory waterfowl.

The Migratory Bird Sanctuary Regulations provide for the establishment and administration of bird sanctuaries for migratory birds. Such sanctuaries may be established on the initiative of the Department of Resources and Development or at the request of provincial or municipal authorities or of private persons or organizations. Before a migratory bird sanctuary is established the area involved is examined and approved for the purpose by an officer of the Canadian Wildlife Service and the proposal is approved by the appropriate provincial authority and by any Federal Department that may have interests in the area. If the area includes private property the consent of the owners is obtained. There are now eightyeight bird sanctuaries established in Canada under the Migratory Birds Convention Act and administered by the Canadian Wildlife Service. Their total area is about 1,800 square miles. A number of these sanctuaries, which are specially important and particularly exposed to possible violation of the Regulations, are protected by resident salaried caretakers.

A special and important means of investigating the natural history of birds is bird banding, that is, the marking of individual birds with numbered recorded metal bands or rings, usually placed around the bird's foot just above the toes. Such marking makes it possible to identify each bird individually at any place in the world where it may be found. In North America the Canadian Wildlife Service and the United States Fish and Wildlife Service administer a single joint system of bird banding, in order to avoid confusion and duplication of numbers. The official Canadian Bird-banding Records are maintained in the office of the Canadian Wildlife Service, at Ottawa. They may be consulted at any time by any responsible person seriously interested in them. All those who place bands on native Canadian birds must be qualified to identify the birds with which they work and to keep the necessary records and submit the required reports. Many of them are voluntary workers, furnishing necessary equipment at their own expense, but all must operate under authority of an appropriate federal permit. All persons who find bands on birds are requested to report them promptly to the Canadian Wildlife Service or the United States Fish and Wildlife Service, stating the place and time of the discovery of the band, how the banded bird was obtained or found and other pertinent details.

The Canadian Wildlife Service maintains a general interest in conservation and utilization of wild life as a Canadian national resource. It collects data on all phases of this subject; carries on continuously scientific research on important wild life problems; co-ordinates, and often supplies leadership in, studies of wild life problems by provincial authorities and others interested; exchanges information with provincial and foreign game authorities respecting wild life matters of mutual interest, and handles national and international questions relating to Canadian wild life.

In order to ensure adequate exchange of information about wild life and its administration, harmony in treatment of wild life administrative matters and full discussion of Canadian wild life problems of general interest, the Canadian Wildlife Service arranges an annual conference of provincial and federal wild life officials, convened in Ottawa by the Minister of Resources and Development. Invitations to send representatives to these conferences are sent to the Governments of the United States and Mexico. These conferences, which began in 1922, have proved to be of exceptional value in promoting co-operation between the federal and provincial wild life authorities, in improving Canadian wild life administration and in stimulating scientific research in the wild life field.

It has been found that administration by the Federal Government of all wild life under its jurisdiction is improved by pooling the knowledge of federal officials with special training and experience, either scientific or administrative, in wild life matters. To this end there was established in 1916 an interdepartmental organization known as the Advisory Board on Wildlife Protection. Officials from several Departments of the Federal Government whose work has to do with various aspects of wild life management and conservation are appointed to this Board by the Governor-General in Council. The Board expresses its findings in the form of resolutions and submits them to the Departments concerned, but it has no enforcement powers. Several of its members are officers of the staff of the Canadian Wildlife Service. The Board continues to discharge, with benefit to the Public Service and to Canada, the functions for which it was set up.

Among the more important projects carried out by the Canadian Wildlife Service are: an intensive study of barren-

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ground caribou; a long-term study of muskrats in the far north; field investigations of northern faunas in Yukon Territory, the James Bay region, the North-West Territories, and Labrador; and intensive studies of bison in Wood Buffalo Park. In the National Parks this Service makes regular investigations of stocks of fish and large mammals. The Canadian Wildlife Service also takes a large part in the annual joint waterfowl survey and assessment of the woodcock population, carries on special studies of waterfowl hunting, investigates means of preventing ducks and cranes from damaging grain crops, studies the effect of modern insecticides on wild life, and cooperates with the Department of Fisheries in Research on the relationships between mergansers and salmon in New Brunswick.