

wildlife problems in the Northwest Territories, Yukon Territory, and the National Parks of Canada, advises the administrative agencies concerned on wildlife management and co-operates in the application of such advice. It provides co-ordination and advice in connection with the administration of the Game Export Act in the provinces, deals with national and international problems relating to Canada's wildlife resources, and co-operates with other agencies having similar interests and problems in Canada and elsewhere.

The Migratory Birds Convention Act was passed in 1917 to give effect to the Migratory Birds Treaty signed at Washington in 1916. It provides a measure of protection for numerous species of birds that migrate between the two countries. The Canadian Wildlife Service is the federal agency responsible for administration of the Act and for the annual revision of the Migratory Bird Regulations, which govern such matters as open seasons and other waterfowl hunting details, taking and possession of migratory birds for scientific or propagating purposes, eiderdown collecting, etc. The Royal Canadian Mounted Police is responsible for enforcing the Act and Regulations. In both administration and enforcement, provincial authorities co-operate with the Canadian Wildlife Service.

There are 98 migratory bird sanctuaries in Canada with a total area of more than 6,000 sq. miles. A sanctuary may be established on the initiative of the Department or of a provincial or municipal government, or on petition by a private person or organization. Bird banding provides valuable information on the migration of birds and their natural history and is especially useful in waterfowl management. Serially numbered bands supplied by the United States Bureau of Sport Fisheries and Wildlife are used in Canada as well as in the United States.

Investigations of barren-ground caribou in the Northwest Territories and Yukon Territory have continued since 1948. The herds that migrate into parts of the Prairie Provinces adjacent to the Territories have been the object of co-operative studies by the federal and provincial governments. These studies have designated causes for the disastrous decline in caribou numbers, with human utilization heading the list of mortality factors. Studies of fire damage to caribou winter range, and investigations of the impact of predatory animals on caribou numbers have been started recently. More conservation education is essential as is the development of more effective game law enforcement while recognizing fully the problems and needs of the people of the area.

Other recent and current projects of the Service include long-term studies of the muskrat of the Mackenzie Delta, beaver in the Mackenzie District, white fox in the Eastern Arctic and musk-oxen on the Arctic islands. The large herds of bison in Wood Buffalo National Park have been studied to determine the effects of disease on their health and growth. Biologists of the Service make detailed studies of birds and mammals in the National Parks and advise the National Parks Service, on the basis of the scientific information obtained, concerning the management of these national resources. Damage to cereal crops by wild ducks and cranes has received intensive study. Murres, sea birds of importance to many inhabitants of Newfoundland, have been investigated to determine the effects of human activity on their numbers. Much time has been devoted to other species greatly reduced in number or in danger of extinction such as Ross's geese, trumpeter swans and whooping cranes.

The present research staff includes 39 university-trained wildlife biologists stationed at various centres throughout Canada. Ornithologists are located at Vancouver, Edmonton, Saskatoon, Winnipeg, Ottawa, Maple, Ont., Quebec City, Sackville, N.B., and St. John's, Nfld. Mammalogists are stationed in the Northwest Territories at Yellowknife, Fort Smith and Aklavik, and at Edmonton and Ottawa. Two limnologists are located at