

if the environment is fully stocked the annual increment need only replace the losses. All extra is surplus, only part of which is taken by predators and part, if the animal is a game species, by man.

As a natural resource, wildlife within the provinces comes under the jurisdiction of the respective provincial governments.* Wildlife on federal lands and certain problems of national or international interest with respect to research and management are the concern of the Federal Government and are dealt with mainly by the Canadian Wildlife Service as described under the next heading. Following this is a special article describing the variety of animal life in Canada today, prepared by scientists of the National Museum of Canada.

The Canadian Wildlife Service.—The Canadian Wildlife Service deals with most wildlife problems coming within the jurisdiction of the Federal Government. It was organized in 1947 to meet the growing need for scientific research in wildlife management and is now a Branch of the Department of Indian Affairs and Northern Development. The Service conducts scientific research into wildlife problems in the Northwest Territories, Yukon Territory and the National Parks, advises the administrative agencies concerned on wildlife management and co-operates in the application of such advice. It administers the Migratory Birds Convention Act, 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 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. The Canadian Wildlife Service is responsible for recommending the annual revision of the Migratory Birds Regulations, which govern open seasons, bag limits and hunting practices for migratory game birds. The Act and Regulations are enforced by the Royal Canadian Mounted Police and, in both administration and enforcement, co-operation is received from provincial authorities. There are 93 migratory bird sanctuaries in Canada, having a total area of 44,941.6 sq. miles. 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.

A national wildlife policy and program was tabled in the House of Commons in 1966 after comprehensive discussions with the provinces and citizens' conservation organizations. This policy provides for co-operative research and management with the provinces on common problems and establishes guidelines and goals for federal research programs.

The serious decline in the numbers of barren-ground caribou revealed in surveys of 1948-49 and 1955-56 continues to cause grave concern. In 1965 the herds numbered about 250,000 animals. Excessive human kill, the destruction of winter range by forest fires, and poor calf survival during years of bad weather are the major causes of the decline. In April 1966 the Service began an intensive two-year study of herds in Keewatin and northern Manitoba to provide data for management. Studies of wolf-caribou relationships and of the arctic fox were completed in 1966. Studies were continued on mink, muskrat, beaver, and polar and grizzly bear. Big game mammals in the National Parks were the object of continued study, special attention being given to mountain sheep and elk in the Mountain Parks. In Wood Buffalo National Park, investigations into the problems of disease and low reproductive rates among bison were continued. Studies of the relationship between forests and wildlife were continued in New Brunswick.

The loss of wetlands to drainage and filling for agricultural and other purposes poses a serious threat to the waterfowl resource. The Service is participating with the provinces

* The conservation of wild fur-bearing animals in the different provinces is discussed in the Fisheries and Furs Chapter, Part II, and information on provincial conservation of fisheries resources is given in Part I of the same Chapter, together with data relating to the work of the Fisheries Research Board of Canada and to international fisheries conservation (see Index).