

to take migratory birds for scientific purposes; to take and possess migratory birds for propagating purposes; to collect eiderdown; to use firearms or other equipment for the control of migratory birds causing damage to agricultural, fishing or other interests; and to engage in the business of taxidermy.

The Canadian Wildlife Service plans and carries out scientific investigations concerning numbers, food, shelter, migration, reproduction, diseases, parasites, predators, competitors and uses of wild creatures in Canada. In certain of such investigations, e.g., the mid-winter waterfowl inventory, it works in close co-operation with United States authorities conducting parallel studies.

The Service is responsible for the establishment and administration of bird sanctuaries under the Migratory Birds Convention Act. On Dec. 31, 1952, there were 90 bird sanctuaries with a total area of more than 1,800 sq. miles.

The Limnology Section of the Service concerns itself with the maintenance and improvement of sport fishing, the control of aquatic and semi-aquatic insects, the control of algæ, and other biological problems that arise in regard to water areas in the National Parks. It also acts in an advisory capacity to the Northern Administration and Lands Branch in connection with aquatic biological matters.

A series of special articles with relation to the wildlife resources of Canada are being carried in the Year Book. Articles on "Migratory Bird Protection in Canada" and "Game Fish in Canada's National Parks" were carried in the 1951 and 1952-53 editions, respectively. The following article deals with the barren-ground caribou, the most important single natural resource in vast areas of northern Canada.

THE BARREN-GROUND CARIBOU

A subject receiving close study by administrators and game-management officers in the Northwest Territories is the management of the barren-ground caribou. Over a vast area, the scattered native and white population is dependent, to a large extent, on these animals for supplies of fresh meat and materials for Arctic clothing. Hunting restrictions and a vigorous educational program directed towards the white and the native hunters are among the control measures designed to preserve the barren-ground caribou so as to ensure their availability for use by this and future generations. In recent years, extensive investigations by the Canadian Wildlife Service, Department of Resources and Development, have added much to the knowledge of the status of these animals, and the investigations are continuing from year to year.

Barren-ground caribou inhabit an area of about 600,000 sq. miles in the Northwest Territories and in the northern parts of Alberta, Saskatchewan, Manitoba and Ontario. These large, rangy members of the deer family travel in loose herds of from several hundred to 100,000 or more. Their broad, concave hoofs enable them to travel over crusted snow and help them to keep their footing on ice surfaces. Their long coats of dense, light hair protect them from winter temperatures which, in some sections of their range, may fall as low as 60° below zero.

The summer coat of the caribou is a general rich clove-brown colour, with dark brown on the chest and legs and white markings around each foot, inside the hind legs, on the rump, and on the tail. A light grey strip extends down the neck and along the shoulder to the flank. During the winter months this coat wears down,