

management where a co-operative program has been developed between a major pulp company and the Department.

Migratory bird management is shared jointly by the Canadian Wildlife Service and the provincial Wildlife Division. Established programs relevant to population inventories, banding, harvest levels, etc., are conducted on an annual basis by the Division. All major waterfowl areas in the province have been carefully evaluated, including the off-shore islands which possess unique ecological features, with the objective of retaining them for the benefit of future generations, and several large waterfowl areas are now owned by the province. The role played by Ducks Unlimited (Canada) has been extremely valuable in establishing a successful program of waterfowl habitat improvement in Nova Scotia. Various techniques are employed annually to determine population levels and other factors of upland game species that are essential in formulating proposals aimed at the wise use and management of the resource.

There are 19 federal and provincial areas in Nova Scotia totalling about 500,000 acres of land and water where wildlife is protected. Among them is the Provincial Wildlife Park at Shubenacadie, where a program of studies relating to parasites and disease and the rearing of wildlife for release is a feature additional to its function as a recreational and educational park. Mention should also be made of the very important role of Acadia University in the provincial wildlife program. Various research programs conducted by that institution and the free exchange of ideas between the two agencies have greatly enhanced the resource management efforts in Nova Scotia.

New Brunswick. Big-game management in New Brunswick is the responsibility of the Department of Natural Resources. Biological studies of white-tailed deer, moose and black bear are carried out each year in an attempt to control the utilization of these valuable wildlife species. Data indicate that the deer, moose and bear populations have improved significantly under the current hunting programs. Fourteen deer environment units form the basis for the deer management program. Studies include aerial censuses of wintering areas to assess the severity of winter and yarding conditions throughout the province.

In 1972, moose management zones were established in an attempt to control the distribution of hunting pressure and moose harvest. Moose licences are restricted to resident hunters and the limited number of licences are awarded at a public drawing. Biological studies indicate that the moose populations have improved in numbers and condition under the current management program. Beaver, muskrat and bobcat are the three most important fur-bearing animals in the province. Each autumn aerial surveys of active beaver colonies are conducted throughout the province to keep a continuing record of population trends.

Grouse, ducks, geese and woodcock are the most important game birds in the province. For each, information is gathered annually on the number of hunters, number of days in the field and the size of the harvest. Several surveys are conducted during the year to determine the well-being of these bird populations. They include population censuses, measures of production and aerial observations of the distribution of waterfowl. Co-operative programs are undertaken on migratory birds with the Canadian Wildlife Service as management responsibilities are shared by both levels of government.

Quebec. The management and protection of wildlife within Quebec is the responsibility of the Fish and Game Branch of the Department of Tourism, Fish and Game. The Branch has two Services, one dealing with wildlife management and the other with conservation. The Wildlife Service is responsible for management, particularly of those species of interest to hunters and fishermen. The work of staff biologists, who are assigned to geographical units known as management districts, includes the collection of precise data on animal populations and habitats in the respective areas. In connection with the management of the fisheries resources, wildlife managers have recourse to the services and resources of the Fish Hatchery Division and the Technology and Engineering Services Division; the former operates six provincial hatcheries, inspects commercial hatcheries, and controls imports of fish eggs and species of salmon brought in for propagation. The Wildlife Service also administers and maintains the Quebec Zoological Gardens. The Conservation Service works closely with the Wildlife and Parks Services and is responsible for enforcing fishing and hunting regulations and for informing the public of the existence of such regulations and of their scope and importance. The Wildlife Conservation Act, which came into force in December 1969, is intended to protect fish and wild animal species within the province.