

Ontario. The objective of wildlife management programs in Ontario is to maximize the benefits of the wildlife resource to the residents of the province by providing high-quality recreational opportunities for hunting and viewing and by providing economic returns.

The two most important factors limiting deer numbers are the deterioration of the range and a series of severe winters. The deterioration of the range is caused by a current lengthy pause in logging and by the elimination of large fires in the last few decades, so that the vegetation needed for winter food is allowed to grow too tall for deer-browsing. Many recent winters, including the last four, were too severe for many deer to survive until the next summer or to successfully raise their young. An important aspect of the management program is the improvement and increase of existing winter range. Moose management is concentrated on intensive production and harvest inventory and evaluation of the effect of various forest practices on moose range. Ultimately, moose range and forest management will be integrated in such a way as to optimize both fibre and moose production.

Upland wildlife management programs pertain to populations of smaller animals and include habitat management on private lands through extension programs and by agreement, as well as on Crown lands. Waterfowl banding is important in developing a reasonable management program for an international resource. Re-establishment of a breeding population of the giant Canada goose in southern Ontario is a specialized part of the Ontario migratory bird program.

The wildlife management areas that have been established provide opportunities for nature study and hunting in southern Ontario, where virtually all lands are privately owned. Their existence also ensures preservation of valuable wetlands.

Increased effort is being directed to management of beaver populations in the province because of their value to some 10,000 trappers and the impact of their activities on the environment.

Some 7,000 beaver specimens were collected and analyzed during the last three years and hundreds of traplines were surveyed by air to locate beaver colonies. Monthly summaries of fur bearers taken by each trapper are now prepared through a computer program. Expansion of the use of computer data will help to provide population dynamics information, habitat evaluation and pelt priming information for use in management of the resource. The harvest of beaver, marten, and fisher is controlled by quota. On Crown lands there are some 2,300 registered traplines on which professional trappers, with assistance from specialists of the Ministry of Natural Resources, practise wildlife management not unlike animal husbandry. An increasing number of trappers engage in habitat improvements, such as planting aspen for beaver, and in feeding marten, fisher and other wildlife on their areas.

Returns to trappers from the fur harvest in 1971-72 were about \$4 million. Recent surveys indicate that many trappers, especially those in northern Ontario, also depend on the meat from certain fur bearers to supplement their family food supplies.

Staff of the Ministry of Natural Resources, with the co-operation of the Ontario Trapper's Association, conduct over one hundred trappers' meetings annually where new and humane trapping techniques are introduced and discussed, pelt preparation is demonstrated, and animal biology and management practices are taught. The Ministry also encourages use of the humane conibear trap through an exchange of traps for beaver biological material necessary for the best management of this fur bearer. About three quarters of the fur produced is sold through the Ontario Trapper's Association auction house at North Bay.

Manitoba. The Manitoba Department of Mines, Resources and Environmental Management is responsible for the management and conservation of the province's wildlife resources. Authority provided by provincial legislation (the Wildlife Act, the Predator Control Act and Regulations) allows for legal protection and management of 25 mammals, 160 birds and two reptiles that occur in the province. The Federal Migratory Birds Convention Act deals with the protection of migratory game birds, migratory insectivorous birds and migratory non-game birds. In September 1971, Manitoba became the first province to regulate the commercial harvest of amphibians and reptiles. Research and management of this resource continue.

The Department is made up of five Divisions (Mines and Departmental Services, Environmental Management, Resources Management, Water Resources and Technical Services), each responsible for one or more aspects of wildlife research and management.

Wildlife authorities manage over 50 game hunting areas, 40 trapping areas, 30 wildlife, game bird, goose and fur-bearing animal refuges and 24 wildlife management areas. The