

of forest sprays on song birds in New Brunswick and the relation between chemical contamination of the lower Great Lakes and the breeding success of fish-eating birds, the last under a Canada-United States Great Lakes water quality agreement. A co-operative program began with a number of Latin American countries to monitor and improve the wintering habitat of migratory birds.

Studies continued on the health of game, fur-bearing animals and rodents in Northern Canada and parasitism in these mammals and in birds. Measures were taken to control and monitor anthrax among bison in Wood Buffalo National Park and in the Northwest Territories.

Under a wildlife interpretation program, the CWS operates five centres across Canada. Wye Marsh wildlife interpretation centre at Midland, Ont. interprets the northern hardwood biotic region. In Quebec, a centre at Cap Tourmente focuses on the habitat of the greater snow geese and one at Percé on the natural and human history of the Atlantic gulf coast. A prairie wildlife interpretation centre near Swift Current, Sask. focuses on the prairie grassland biotic region and a Creston Valley, BC, wildlife interpretation centre highlights the Columbia biotic region.

8.4.2 Provincial wildlife

A major function of provincial wildlife management is to protect wildlife from endangerment or extinction and to preserve the wildlife habitat, to maintain wildlife populations at optimal levels and to foster best use of the habitat by appropriate species. Provincial authorities promote public attitudes consistent with wildlife resources and management protection strategies, and regulate the use of wildlife by setting limits and closed seasons for hunting and fishing.

Annual inventories are taken by the provinces to monitor the population of game and non-game species. Education programs for hunters, trappers and fishermen encourage the wise use of resources. Limits are set on fishing and hunting to protect fish and game.

In Newfoundland, wildlife populations include moose and caribou, ptarmigan, ruffed grouse and snowshoe hare. Beaver are the only trapped species for which there is an active management program. Studies are under way on pine marten and arctic hare.

In Prince Edward Island a new species of pheasant has been introduced, beaver have been moved to vacant habitat, and ducks are banded to study the effects of hunting.

Nova Scotia wetlands management is conducted in co-operation with Ducks Unlimited (Canada) and biological assessment is made of lakes and streams.

In New Brunswick, principal game species are: deer, bear, moose, grouse, waterfowl and muskrat. Trappers take about \$1 million worth of furbearers

annually: beaver, fox, bobcat, muskrat and others. Angling is popular, particularly for salmon, trout and bass.

Objectives of wildlife management in Quebec are to maintain and improve wildlife through ecological balance and sound management of public hunting, fishing and trapping grounds. Research is carried out on the dynamics and habitats of the various species of wildlife, and citizen participation is encouraged in the conservation of wildlife and its environment.

In central and northwestern Ontario the deer herd has declined and is now below the carrying capacity of the range. New initiatives in deer management include: increased control of the harvest; predator control; and long-range habitat planning to increase herd size and hunting. The major effort in fur management is directed toward beaver, with aerial censuses of beaver colonies and specimen collections by trappers. The harvest of beaver, marten, fisher and lynx is controlled by quota.

In Manitoba a licence draw system is used for allocating moose, elk, woodland caribou and wild turkey hunting opportunity. A special landowner elk hunt is an incentive for landowners to retain wildlife habitat. Manitoba's commitment to humane trapping was underscored in trapper education programs and the distribution of over 10,000 humane devices to trappers free of charge. A new Wildlife Act proclaimed by the Manitoba legislature in 1980 makes it an offence to hunt or trap on private land without the permission of the landowner or lawful occupant.

In Saskatchewan, emphasis is being placed on providing supplementary feeding and shelter to winter wildlife, redirecting hunting pressure from less abundant game species to more abundant ones and improvement of habitat for about 450 species of wildlife.

Wildlife in Alberta includes ungulates, waterfowl and upland birds such as pheasant, Hungarian partridge, ptarmigan and ruffed, spruce, blue, sage and sharp-tailed grouse, as well as species of big game and furbearers.

The diverse wildlife in British Columbia includes deer, black bear, wolf, coyote, raccoon, caribou, cougar, mountain sheep, mountain goat, grizzly bear, skunk, fox, wolverine, lynx and bobcat. Ducks and snow geese are among the game birds. Rare and endangered species which may not be killed at any time are Vancouver Island marmot, sea otter, white pelican and burrowing owl. Protected species are yellow badger, mountain cottontail and white-tailed jack-rabbit.

8.4.3 Territorial wildlife

In Yukon judicious use of big-game species, upland game birds and sport fish is promoted for residents and non-residents. The Yukon wildlife branch licenses and regulates trapping of fur-bearing animals and activities of outfitters and guides. To increase