

from the breeding grounds and incubated at the Patuxent Wildlife Research Center in Maryland is continuing. Eventually, progeny from these chicks will be released into the wild but only after a sufficiently large supply of breeding birds has been developed. In 1977, eight chicks were produced and by July the total wild population was estimated to be 79 birds.

Research continues on the effects of toxic chemicals on wildlife at various sites across the country. In Alberta, a study continues on the effect of herbicides on wildlife habitat. Field work on the relation between chemical contamination of the lower Great Lakes and the breeding success of fish-eating birds was continued under a Canada-United States Great Lakes water quality agreement. Research is proceeding on the effects of differing habitat quality and chemical contamination on the reproductive success of loons in eastern and northeastern Ontario. Research on the effects of different pesticides and spraying procedures on forest song birds was intensified in 1977.

Studies continued into the health of game and fur-bearing animals and rodents in Northern Canada and into parasitism in these mammals as well as in birds. Measures were taken to control anthrax among bison in Wood Buffalo National Park and in the Northwest Territories; no outbreaks occurred in 1977.

Under the interpretation program, the CWS operates four wildlife centres across Canada. Wye Marsh Wildlife Centre at Midland, Ont. interprets the northern hardwood biotic region; Cap Tourmente and Percé wildlife centres, both in Quebec, focus on the habitat of the greater snow geese and the natural and human history of the Atlantic gulf coast, respectively; and Creston Valley Wildlife Centre highlights the Columbia biotic region. Construction is under way on an interpretation centre in Saskatchewan, which will focus on the prairie grassland biotic region.

Research on both consumptive and non-consumptive use of the wildlife resource is a growing concern. The CWS has participated in several projects to shed light on the role of wildlife in the social and economic spheres in Canada.

The CWS has been participating in the Canada Land Inventory, a federal-provincial program to gather information on how land in the settled parts of Canada is being used, and how best it could be used for agriculture, forestry, recreation and wildlife.

#### 10.4.2 Provincial wildlife management

**Newfoundland.** The functions of the wildlife division are: to preserve all indigenous species from extinction; to provide other species where suitable unused habitat exists, bearing in mind the real and aesthetic values of wildlife that are important to man; to maintain all species in the greatest number possible, consistent with the habitat needs of the species and without serious conflict with the other resource needs; and to provide and regulate the harvest surplus of wildlife populations.

The division manages game populations through changes in the hunting regulations. Research is conducted mainly on caribou and moose, but ptarmigan, arctic hare, martens, otter, mink, muskrat, ospreys and bald eagles are also being studied. Management surveys are conducted on all game species and some fur bearers. Transplant programs are carried out on the two rare animals — arctic hare and pine marten — to try and re-establish them throughout the island portion of the province.

**Prince Edward Island.** The fish and wildlife division of the environment department has full or partial responsibility for research and management of all wildlife on Prince Edward Island. All non-migratory wildlife is the responsibility of the province while management responsibilities for fish and migratory birds are shared with the federal government. A prime responsibility is the continual monitoring of game populations to assist in setting seasons and bag limits. Attempts are being made to establish a viable population of pheasants by the introduction of a new species. Beaver transplants to vacant habitat are being carried on to increase their range. Studies on black duck behaviour and red fox population are nearing completion.

Habitat improvement is of prime importance for all forms of wildlife. Fishery management consists largely of building fish ladders to facilitate fish passage and other stream improvement measures such as stream bed stabilization. Efforts are continuing to establish an early run salmon stock on the Morell River.