

#### 10.4.1 The Canadian Wildlife Service

The Canadian Wildlife Service (CWS) began as an agency to administer the Migratory Birds Convention Act passed in 1917. It was expanded in 1947 to meet the need for scientific research in wildlife management and is now a branch of the Department of the Environment.

The CWS conducts scientific research into wildlife problems in the Northwest Territories, the Yukon Territory and the national parks. It advises agencies concerned with wildlife management and co-operates in carrying out recommendations; it advises on and co-ordinates administration of the Game Export Act in the provinces; and it co-operates with agencies in Canada and abroad in dealing with national and international problems related to wildlife resources. As administrator of the Migratory Birds Convention Act, the CWS is responsible for recommending the annual revision of the Migratory Birds Regulations which govern open seasons, bag limits and hunting practices. This it does in consultation with provincial wildlife agencies. Enforcement of the Act and Regulations is carried out by the Royal Canadian Mounted Police, with CWS and provincial co-operation.

The loss of wetlands to drainage and filling for agricultural and other purposes poses a serious threat to waterfowl and, to counteract this, the CWS co-operated with provincial agencies in a major program, started in 1967, to preserve wetlands by purchase and long-term lease. By 1972, 45,000 acres had been bought for \$4 million and 69,000 acres had been leased for \$318,000. The CWS also has charge of 79 bird sanctuaries covering 43,000 sq miles.

The CWS conducts two annual surveys of waterfowl hunters, selected from the 420,000 holders of the Canada migratory game bird hunting permits, to obtain estimates of the species and age of the major waterfowl species taken by hunters. Other continuing projects related to migratory game birds include an annual survey of crop damage in the Prairie Provinces annual surveys of waterfowl populations and habitat conditions in western Canada, a program to reduce hazards caused by birds flying near airports, and a search for a substitute for lead shot which each year causes lead poisoning and subsequent death of a large number of waterfowl. Bird-banding provides valuable information on the migration and the biology of birds, and is especially useful in waterfowl management. The CWS headquarters in Ottawa keeps sets of continental banding records and controls the activities of banders operating in Canada. Much attention has been given to species greatly reduced in number or in danger of extinction. By 1971, 21 eggs were taken from whooping crane breeding grounds and delivered for incubation to the Patuxent Wildlife Research Center in Maryland. Eventually, the progeny from these 21 chicks will be released into the wild but only after a sufficiently large supply of breeding birds has been developed. In 1972, 16 nesting pairs (a record number) laid 29 eggs, but only five chicks reached the wintering grounds. In addition, ten adults disappeared. The causes of these losses are as yet unknown. The total population by December 1972 was 51, a net loss of five from December 1971.

Research was undertaken into the distribution of toxic chemical residues and into the distribution and size of colonies of fish-eating birds in the Great Lakes. The information obtained will enable biologists to assess the extent of factors affecting breeding success and the extent of population changes from the past and to be expected in the future.

Studies continued into the health status and parasites of game and fur-bearing animals and rodents in northern Canada, and into parasites of avian hosts. Measures to control anthrax among bison in Wood Buffalo National Park and in the Northwest Territories were successful; no outbreaks occurred in 1972.

The interpretation program, begun in 1970 with opening of the Wye Marsh Wildlife Centre at Midland, Ont., progressed in 1972 with the construction of centres at Cap Tourmente and Percé in Quebec. The former will focus on the migrant greater snow goose population; the latter will interpret the natural and human history of the Atlantic gulf coast, with special attention to Percé and the nearby sea-bird colonies of Bonaventure Island. Both centres will be in operation in 1973.

The CWS has been participating in the Canada Land Inventory which is 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.

Research in limnology includes inventory and productivity of lakes and rivers in the national parks and the biology of fish and associated flora and fauna. Adequate stocks of fish are maintained through modern methods of management, where they can be applied without detriment to the values of the areas concerned.