

was started at Last Mountain Lake in Saskatchewan. In 1894, when wood bison faced extinction, laws were passed to protect them and in 1907 a nucleus herd of plains bison was established at Wainwright, Alta.

As a natural resource, most wildlife falls under the jurisdictions of the provincial governments. The federal government is responsible for the protection and management of marine species and certain migratory birds. It also plays a significant role in the conservation of other wildlife of national and international importance, such as endangered species and those transboundary populations whose well-being depends on more than one province or country.

#### 8.4.1 The Canadian Wildlife Service

The Canadian Wildlife Service (CWS) began as an agency to administer the Migratory Birds Convention Act (1917). It was expanded in 1947 to meet the need for scientific research in wildlife management and is now part of Environment Canada. The Canada Wildlife Act (1973) provides the federal government and the CWS with a legislative basis for joint federal-provincial management programs.

CWS conducts research in the Northwest Territories and Yukon on polar bear populations and is conducting long-term studies of caribou in co-operative programs with the NWT wildlife service. A co-operative program began with a number of Latin American countries to monitor and improve the wintering habitat of migratory birds.

The North American Waterfowl Management Plan, signed by the Minister of the Environment and the US Secretary of the Interior in 1986, focuses on the problem of maintaining and restoring waterfowl habitat on the continent. Four joint ventures have been developed, including one to restore 1.5 million hectares of duck breeding habitat on the Canadian Prairies at a cost of \$1 billion over the next 15 years. The cost of this project will be shared, with 75% of the funds coming from American sources. Nesting and migration habitat in the Great Lakes-St. Lawrence lowlands will also be protected at a cost of \$20 million.

CWS has an endangered species program which involves a number of activities including the establishment of the official endangered species list, and a new program, Recovery of Nationally Endangered Wildlife, which attempts to re-establish populations of endangered species. As a result of ongoing efforts, the wood bison has recently been "down-listed" to a category of less concern, and the white pelican has been removed from the

list altogether. Recovery plans have been completed and approved for whooping cranes, anatum peregrine falcons and swift foxes. The world population of whooping cranes in the wild and captivity now numbers 220, up from the 45 which existed in 1963 when the present program began. The population breeding at Wood Buffalo National Park in the Northwest Territories now stands at 132. In 1987, 25 chicks successfully migrated to Texas, a number greater than the 21 birds in the migratory flock in 1941. The convention on international trade in endangered species of wild fauna and flora was signed by Canada in July 1974, with the CWS designated the scientific and management authority for Canada. The convention, with over 90 signatory countries, protects endangered species by regulating trade in both live specimens and their parts.

As administrator of the Migratory Birds Convention Act, the CWS, in consultation with provincial wildlife agencies, recommends annual revisions of the regulations on open seasons, bag limits and hunting practices. The RCMP with CWS and provincial co-operation enforces the act and regulations.

Under a national program begun by CWS, more than 40 national wildlife areas have been set aside across Canada and more are planned. A number of co-operative wildlife areas are managed jointly with the provinces. The land, its vegetation and the wildlife it supports are the main concerns. Over 80 key nesting areas for migratory birds, many privately owned, have been declared sanctuaries under the migratory bird sanctuary regulations; in these areas, hunting is prohibited.

CWS conducts surveys of waterfowl hunters to obtain estimates of species taken and the kill of migratory game birds, of the national goose harvest, of crop damage and of waterfowl populations and habitat conditions in Western Canada. Bird-banding provides information on migration and biology of birds, and is useful in waterfowl management. CWS headquarters in Ottawa keeps continental banding records and controls activities of banders.

Research continues on the effects of toxic chemicals, including acid rain, on wildlife 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. CWS also studies toxics in species such as the herring gull, which are not threatened or harvested, but whose habits make them excellent indicators of environmental quality.