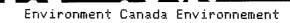
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CANADIAN WILDLIFE SERVICE ATLANTIC REGION BRIEFING BOOK

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April 1987



Briefing book

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A NATIONAL PROFILE

CANADIAN WILDLIFE SERVICE

The Canadian Wildlife Service (CWS) is responsible for the protection and management of migratory birds through development of regulations, habitat management, and supporting research and surveys. With the provinces and territories, the Service undertakes programs of research and management related to other wildlife where there is a national interest and advises other federal agencies on wildlife matters. CWS participates in international agreements and programs on wildlife conservation.

Administratively, CWS is one element of Environment Canada's Conservation and Protection Service with regional Headquarters in Halifax. National program direction and support is received from CWS Headquarters in Hull.

The Canadian Wildlife Service (CWS) derives its mandate from Acts, Treaties or Conventions, various agreements and national/international obligations; and sectors of DOE priority Integrated Programs which relate to wildlife (e.g. toxic chemicals and LRTAP).

Acts

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Canada Migratory Birds Convention Act (1917):

- places principal legislative authority and responsibility with Environment Canada regarding migratory birds protection.

Canada Wildlife Act (1973):

- provides enabling authorities with priorities to habitat, National Wildlife Areas and endangered species - all in a national and international context.

Canada Game Export Act (1950s, implemented by province/territory over time):

- created initially at the request of provinces - now proposed to be revised to apply to all wildlife import, export interprovincial transport and to include regulatory control of Convention on International Trade in Endangered Species (CITES).

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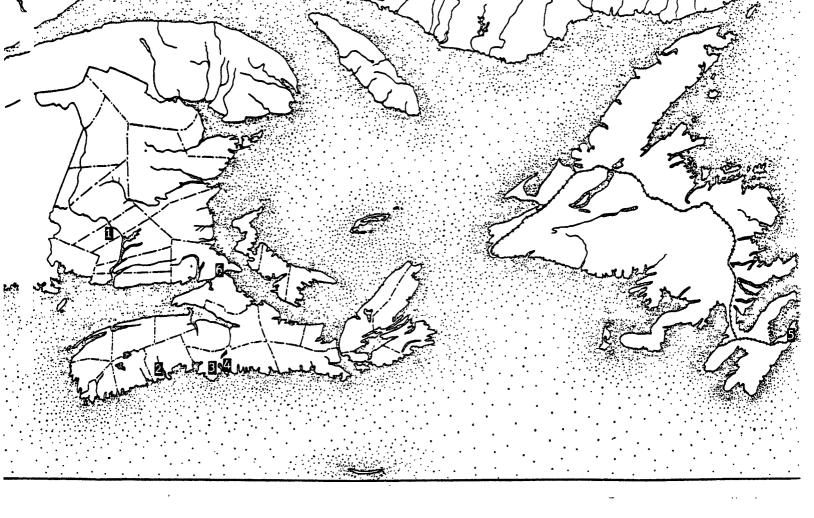
Conventions and Treaties

- Britain/Canada/USA Migratory Birds Convention (1916)
- North American Waterfowl Management Plan (1986)
- International Polar Bear Conservation Agreement
- Convention on International Trade in Endangered Species Flora and Fauna (CITES) (1975)
- Convention for the Preservation of Wetlands of International Importance (RAMSAR) (1971). Canada became signatory in 1981
- Latin American Program Letters of Arrangement with various Latin American countries
- Whooping Crane Memorandum of Understanding with the U.S. Fish and Wildlife Service (1985)
- International Porcupine Caribou Agreement

Client Groups

Eighty-five per cent of Canadians express a direct and active interest in/or interaction with wildlife. The wide variety of photographers, hunters, hikers, tourists and recreation industry operators are formally represented by many organizations with the key national ones being the Canadian Nature Federation, Ducks Unlimited, the Canadian Wildlife Federation, Wildlife Habitat Canada, the World Wildlife Fund, and the Nature Conservancy of Canada. The activities of Canadians result in an annual expenditure of \$4.2 billion and creation of 185,000 jobs.

In addition to the above values, the commercial use of wildlife (guiding, trapping, subsistence harvest by native people, Canadian wildlife safari tours, etc.) add significant real values yet to be documented. The CWS is well recognized as an organization by the Canadian public thanks principally to long-standing promotional campaigns such as Hinterland Who's Who. the work of its researchers is well known and respected internationally.

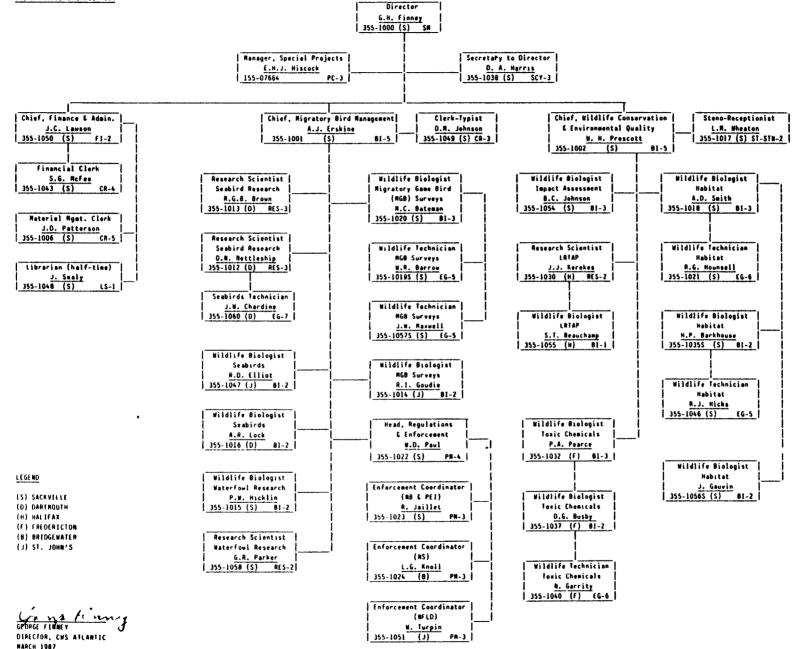


Canadian Wildlife Service - Atlantic Region

Offices	Person-Years
l) Fredericton	3
2) Bridgewater	1
3) Halifax	2
4) Dartmouth	5
5) St. John's	3
6) Sackville	20.5
	21. 5

<u>Staff</u>

- 16 Scientists and Wildlife Managers
- 5 Technicians
- 4 Enforcement Coordinators
- 9.5 Management & Administration

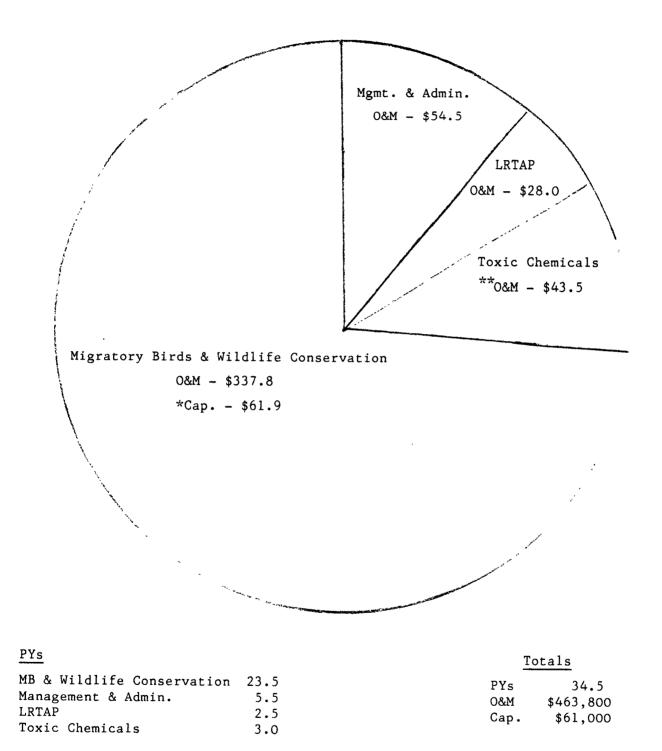


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A-Base



*Capital registered under Migratory Birds and Wildlife Conservation Program but made available as requested to other programs.

**Assumes addition of \$25.0K from Pesticides Action Plan.

***Dollars in thousands

Canadian Wildlife Service - Atlantic Region

Supporting Non A-Base Resources 1987-88

Project	Amount	Source	Status
Wildlife '87	\$20,000	DG, C&P Atlantic	approved
Latin American Program — Brazil Wetland Studies	\$6,500	CWS-HQ	approved
Goose Banding	\$3,000	USFWS	approved
Duck Banding	\$56,000	U.S. Atlantic Flyway	approved
Black Duck Monitoring	\$48,000	CWS-HQ/USFWS	approved
Harlequin/Peregrine Surveys — Labrador	\$30,000	Nfld. Wildlife Division World Wildlife Fund	approved
Seabird Banding — Coburg Island	\$13,200	Polar Continental Shelf	approved
- Coates Island	\$5,500	Project CWS-HQ	approved
Black Duck Coastal Studies	\$20,000	CWS-HQ/USFWS	approved
Oiled Seabird Research	\$13,000	EPS/NRC/U of Saskatchewan	pending
Forest Bird Research	\$10,000	Baseline Studies	pending
Wetland Mapping	\$30,000	CWS-HQ	pending
Acquisition of Portobello Creek NWA	\$75,000	Wildlife Habitat Canada	approved
- survey costs	\$25,000	CWS-HQ	pending
Peregrine Falcon Recovery	\$35,000	World Wildlife Fund	approved
Acid Rain Studies	\$70,000	CWS-HQ	approved
Total Approved	\$432,200		

April 8, 1987

CWS Atlantic Region

Issues and Initiatives (1987-88)

Migratory Birds Conservation

* Regulate the harvest of murres and eiders off Newfoundland to arrest population declines

Approach: - public information

- improved survey estimates of populations and harvest
- negotiate amendments to MBC to make the murre a game bird
- provide protective status for key areas
- continue cooperative approach with Newfoundland governments
- * Protect Machias Seal Island's seabirds
 - <u>Approach</u>: develop and enforce regulations to restrict visitation and minimize disturbance
 - implement permitting requirements
 - work cooperatively with External Affairs & Customs
 - monitor breeding populations
- * Protect areas of national significance in Atlantic Canada to migratory birds
 - Approach: work cooperatively with Habitat Canada and provinces to protect approximately ten additional sites - designate Portobello Creek NWA (1987)

* Protect wetlands in the Maritimes

- <u>Approach</u>: map and rate the important wetlands and provide to regional planning offices
 - negotiate with provinces and other federal departments to designate most important wetlands for restricted development
- * Protect intertidal mudflats of the Bay of Fundy important to shorebirds
 - <u>Approach</u>: designate Shepody Bay as Hemispheric Sister Reserve for shorebirds (1987) and negotiate for inclusion of other Bay of Fundy sites with government of Nova Scotia

* Protect seabirds in anticipation of offshore oil developments

<u>Approach</u>: - research and surveys on seabird distribution and ecological interactions

- provide advice to developers and regulators in planning stages
- participate in environmental impact hearings
- establishing baseline data on colony size and do periodic monitoring

* Management of hunted species

<u>Approach</u>: - introduce surveys to improve estimates of common waterfowl species

- introduce special Black Duck studies
- improve woodcock surveys
- develop with provinces and other interested parties, Waterfowl Management Action Plans
- amend regulations as required
- improve enforcement and education efforts to improve compliance
- * Protect and rehabilitate endangered species
 - <u>Approach</u>: develop a regional recovery plan for Piping Plovers with all governments and interested NGOs
 - aid Parks in protection of bird at Prince Edward Island National Park
 - prepare status report on Harlequin Duck and undertake surveys of Labrador breeding sites
 - prepare an endangered species display for P.E.I. National Park
 - launch mass hack program in Bay of Fundy for Peregrine Falcons
- * Develop inter-governmental agreements to facilitate cooperation
- Approach: pursue federal-provincial agreements with New Brunswick and Nova Scotia
 - develop federal-provincial mechanisms for cooperating with Wildlife Habitat Canada ... develop joint submissions, where possible
 - pursue agreements with France and Denmark for management of migratory birds, i.e. St. Pierre et Miquelon
 - develop a Newfoundland federal-provincial Habitat Protection Plan

- * Minimize the negative impacts on wildlife from the use of pesticides to control forest pests
 - <u>Approach</u>: experimentally monitor the impact on wildlife of pesticides proposed for registration
 - provide advice to Agriculture Canada, the provinces, and industry

* Monitor persistent toxic chemicals in the environment

Approach: - once every four years sample seabird populations - spot checks and other surveys - improve monitoring capability

* Assess the impact of acid rain on the wildlife and the ecosystem

Approach: - participate in DOE multi-disciplinary study on the Kejimkujik Watershed to provide information and effects on the biota

* Enforce hunting and sanctuary regulations

<u>Approach</u>: - identifying chronic or acute problem areas (e.g. Acadian Peninsula, N.B.; Port Joli and Port Hebert Sanctuaries) - attempt to get cooperation of RCMP and provincial agents for

- enforcement
 - organize and participating in patrols
- * Control the impact of expanding gull populations on people and other bird species

Approach: - develop a gull management strategy

- surveys to confirm population status and trends
- carefully monitor impacts of gulls on other species and man
- public consultations and communications
- pilot programs to assess effectiveness of various control techniques
- * Build wildlife values into the management of forests
 - <u>Approach</u>: research on habitat requirements in order to prescribe desired management practices
 - advice to provincial management agencies

HIGHLIGHTS OF REGIONAL ACTIVITIES: 1986-87

Atlantic Region

Regulations and Enforcement

Illegal spring hunting of Canada Geese and seaducks increased in NE New Brunswick. A total of 45 charges were laid during the spring of 1986. Enforcement was made more difficult because of certain provisions of the new N.B. Varmint Act. After lengthy discussions the province has remedied the problem and it is hoped that the spring of 1987 will see the beginning of improved compliance.

A task force comprised of members of the RCMP, provincial Lands and Forests personnel and federal Fisheries officers have been highly effective in combating illegal waterfowl hunting along the south coast of Nova Scotia. Dozens of charges were laid for seaduck hunting at night and, after an intensive operation, a group of well organized poachers were apprehended and convicted for jacking Canada Geese in Port Joli Sanctuary. Each was fined \$2300.

Following intensive public information efforts on migratory bird regulations in Newfoundland, a successful coordinated enforcement effort by CWS, RCMP, and provincial Rangers was launched in several communities where the sale of Murres and other seabirds was reported. Charges have been laid against 17 individuals known to be major venders of murres. Ongoing enforcement efforts related to waterfowl hunting netted one group with 650 seaducks over limit plus many less spectacular charges. Approximately 130 charges were laid between September 1986 and March 1987.

Habitat Protection and Management

Seven new sites were recommended to be listed under RAMSAR as wetlands of international importance. Data sheets were compiled on all seven sites and three of them; Shepody Bay, New Brunswick; Grand Codroy, Newfoundland; and Musquodoboit Harbour, Nova Scotia will be officially listed in 1987.

A Wildlife Habitat Canada proposal for completion of acquisition at the Portobello Creek National Wildlife Area was submitted and approved. Land purchases at the site will proceed over the next four years to a total of \$400,000.00.

A proposal for cooperative funding of a wetlands protection and enhancement project on Prince Edward Island was prepared in association with the Province and Ducks Unlimited Canada.

A draft Newfoundland and Labrador Habitat Protection Plan for Migratory Birds was produced in conjunction with the provincial Wildlife Division.

The Maritimes wetland inventory was completed with the production of the New Brunswick Wetlands Atlas and its associated data summaries from the computer data base.

The numbers of visitors to Machias Seal Island Migratory Bird Sanctuary continued to increase with 1986 having the highest number of visitors (20/day) in the fourteen years that CWS has had a summer caretaker on the Island. During July 1986 there were five incidents where the regulations were violated by the American charter boat operators. An operational manual for the Sanctuary was prepared as well as a report on the 1986 visitation statistics.

Population Monitoring and Surveys

A Black Duck breeding pair survey was initiated in Nova Scotia where 45 five km x five km square plots were selected and flown. Breeding pair and brood surveys were conducted on Prince Edward Island in cooperation with the P.E.I. Fish and Wildlife Division. In 1986, long term waterfowl breeding ground surveys were in place in the three Maritime Provinces.

Waterfowl banding received major support from the Atlantic Flyway Cooperative Banding Program. A total of 5317 birds were banded in the four Atlantic Provinces including over 2500 Black Ducks.

Two thousand more thick-billed murre chicks were banded on Coats Island, and research and public awareness work continued in the winter murre-hunting season in Newfoundland. Community meetings, radio interviews and newspaper articles were used to explain the effects of the present over-harvest of murres, and to prepare murre hunters for new regulations. The public now seem convinced that some type of regulation of the hunt is necessary and it remains with us to find an effective and fair method of so doing.

The Maritimes Breeding Bird Atlas project got off to a good start, 7000 hours of field work being contributed by volunteers. Increased momentum will be required to achieve coverage targets, and additional funding needed to maintain administrative support and coordination functions.

Last summer, 2500 shorebirds (mainly Semipalmated Sandpipers) were banded at Dorchester Cape. This brings the total banded since 1981 to nearly 6000 birds with 5 recoveries of Semipalmated Sandpipers banded in 1981 and 1982. Two birds were recovered in Guyana. One recovery was made near Delaware Bay, New Jersey, in spring. These preliminary findings support the presumed migratory route of Fundy shorebirds to the northern coast of South America, their northward return to the large staging area in Delaware and New Jersey. Agreement was reached with New Brunswick to create a Hemispheric Shorebird Reserve in the Shepody Bay Area in 1987.

"Revised Atlas of eastern Canadian Seabirds. I. Shipboard Component" was published by CWS. "Part II. Aerial Component" is in active preparation. Papers were prepared on the pelagic ecology of phalaropes and storm-petrels off southern Nova Scotia. An environmental vulnerability gazetteer for seabirds and seaducks at marine sites in Atlantic Canada is in preparation; the chapter on George's Bank and the outer Bay of Fundy has been completed.

A reassessment of the size and distribution of the Northern Gannet population in North America which totals about 40,000 breeding pairs (70% breeds in the Gulf of St. Lawrence and 30% on the Atlantic coast of Newfoundland) was carried out. Population analyses of Leach's Storm-petrel <u>Oceanodroma</u> <u>leucorhoa</u> and Atlantic Puffin at Baccalieu Island were completed. Results indicate the Leach's Storm-petrel population at Baccalieu Island to be the largest colony of the species known in the world: 2-3 million breeding pairs.

Research

Translocation of 200 Atlantic Puffin chicks <u>Fratercula</u> <u>arctica</u> from Great Island, Witless Bay, Newfoundland to Eastern Egg Rock (Muscongus Bay) and Seal Island (Penobscot Bay) in the Gulf of Maine was successfully completed. Chicks were reared in captivity from about two weeks of age until they fledged at age six to seven weeks. Experiments were performed to determine responses of growing young to changes in the quantity and quality of their food supply, information inportant to understanding the possible impact of commerical fisheries on seabirds in SE Newfoundland and the Gulf of Maine. The 1986 transplant was part of a 12-year program by CWS and National Audubon on reintroducing puffins to sites in Maine where the species formerly bred.

Surveys of populations of Northern Fulmars <u>Fulmarus</u> <u>glacialis</u> breeding in NE Baffin Island were completed.

Bird Problem Mitigation

Liaison with the Nova Scotia Department of Fisheries was initiated in an attempt to solve the problem of eider predation on cultivated mussels. This rapidly expanding aquaculture industry presents a potential conflict with existing eider colonies all along the Atlantic coast.

Rare and Endangered Species

CWS Atlantic Region in cooperation with Fundy National Park released a record of 21 young Peregrine Falcons in the Upper Bay of Fundy. A total of sixty-one birds have been released from 1981 to 1986. The initial 5 year reintroduction program ended on a positive note with a pair of falcons taking up residence at the Fundy Park site. Although they did not nest in 1986, success in 1987 is anticipated. An increased effort through "mass-hacking", a release of at least 30 birds per season, will begin in 1987 with major financial support of the World Wildlife Fund and sponsorship of Mount Allison University. An aerial survey of the former peregrine nesting sites in the Bay of Fundy was conducted by CWS in July, 1986 as part of the National five year survey. No nesting birds were found.

Assistance was given in the production of the first draft of the National Piping Plover Management (Recovery) Plan. Cooperative beach protection projects were continued with the provinces in 1986. A major beach survey was planned for 1987. Research toward a preparation of a Harlequin Duck status report for the eastern North American population. Funding from World Wildlife Fund to the Cape Shore Development Association was combined with CWS funding and direction to launch a project compiling historical and current information on the Harlequin Duck distribution and harvest in coastal Newfoundland. A report on the status of the Roseate Tern <u>Sterna</u> <u>dougallii</u> in Canada was submitted to COSEWIC resulting in the Roseate Tern being designated a THREATENED SPECIES in Canada. There are only approximately 125 breeding pairs in Canada, all nesting in Nova Scotia.

Toxic Chemicals

Pre-registration evaluation of candidate spruce budworm control agents was pursued, the data package on mexacarbate impacts on forest songbirds being completed through field studies in New Brunswick. The relevance of innovative spray technology to hazard to migratory birds was also explored in that province through a field investigation of the operational insecticide fenitrothion. Regional expertise and laboratory services were again provided in support of monitors of a hemlock looper fenitrothion spray program in Newfoundland. A regional C&P pesticides strategy and action plan was prepared with EPS and IWD. Organochlorine contamination of shorebirds was determined near Peregrine Falcon release sites in the upper Bay of Fundy. The hazards to migratory birds of industrial point sources of chemical contamination of the environment were assessed by a private consultant. A successful wildlife toxicology workshop was held in the region.

The analysis of organochlorine residue levels in high arctic colonially breeding seabirds at Prince Leopold Island and a report comparing the productivity and DDT contamination trends of gannets at Bonaventure Island, Quebec from 1967-1984 were completed.

LRTAP

The final year of field studies was completed in the Kejimkujik Calibrated Basins Study. These studies have shown that overall biological production remains high in acidic waters if external nutrient supply is maintained. The interrelationships of organic and anthropogenic acidity have been revealed. The influence of acidity on benthic nutrient retention and release is still being investigated.

The first year of a 2-year pilot study on the effects of acidity on the distribution and productivity of waterfowl in southwestern New Brunswick was completed. The study area represents an area highly sensitive to the effects of acid precipitation.

Wildlife '87

The National launching of the celebration took place in the region when the Minister participated in the Christmas Bird Count on P.E.I. Coordinating meetings were held in St. John's, Newfoundland, Sackville, New Brunswick and Charlottetown, P.E.I. to familiarize federal, provincial and non government agencies with proposed activities. The Minister's participation was suggested for several events in the Region during 1987.