

CANADIAN WILDLIFE SERVICE

ATLANTIC REGION

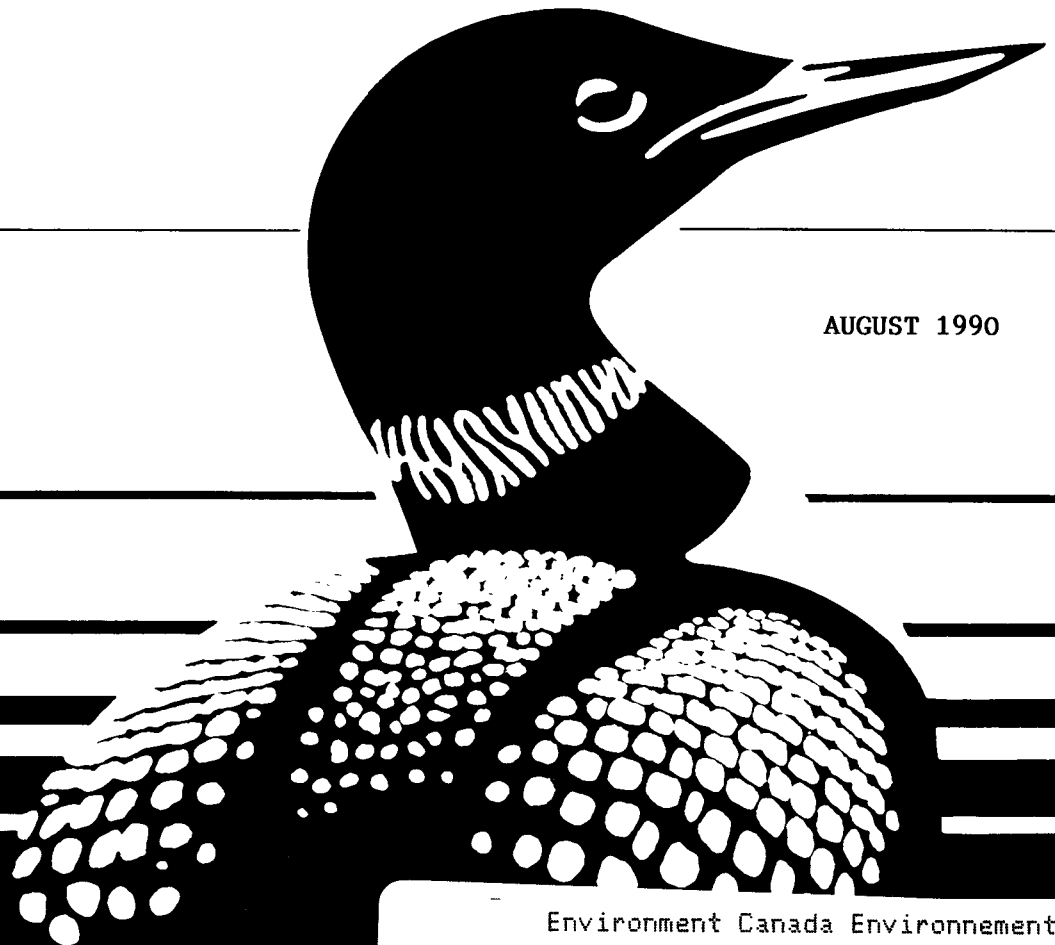
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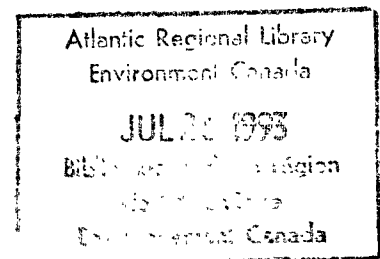
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AUGUST 1990



CANADIAN WILDLIFE SERVICE

NATIONAL PROFILE

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 Dartmouth. National program direction and support is received from CWS Headquarters in Hull.

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

CWS has the lead nationally on State of Environment (SOE) Reporting and the promotion of the philosophy of sustainable development. Regionally, the director, CWS, chairs the SOE Steering Committee, although the principal coordination rests with the Environmental Protection branch.

Conventions, Treaties, and Agreements

- Britain/Canada/USA Migratory Birds Convention (1916)
- North American Waterfowl Management Plan (1986)
 - Joint Venture Agreements (1989)
- 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
- Western Hemisphere Shorebird Reserve Network (1986)
- Federal-Provincial Migratory Bird Management Agreements

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 name 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. 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.

ATLANTIC REGION

The Atlantic Region of the Canadian Wildlife Service (CWS-AR) covers the four Atlantic provinces: New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland. The regional headquarters is located in Sackville, New Brunswick, and there are three field offices located in Fredericton, New Brunswick, Dartmouth, Nova Scotia, and St. John's, Newfoundland. Fredericton is slated to be phased out in 1991.

Waterfowl are important game species in the region, especially in Prince Edward Island where there are no big game species. Major game species are the Black Duck, Canada Goose, and seaducks, especially the eider. There are about 50,000 registered migratory bird hunters in Atlantic Canada.

Newfoundland and Labrador have had a long tradition of hunting seabirds, and a very significant hunt of murres continues. Approximately 15,000 hunters take an estimated 750,000 birds annually. Due to vagaries of the legal regime, control of that hunt is currently inadequate.

Illegal hunting remains a significant problem in many areas. In some of the Maritimes, spring hunting remains a tradition. In Newfoundland, there was no consistent enforcement effort until very recently, and thus compliance to regulations was generally poor. Enforcement in Labrador remains sporadic.

Native people hunt migratory birds in numbers only in Labrador to our knowledge where there are demands for a legalized spring hunt as in other parts of Canada. Recent court cases have put the legal issues surrounding native hunting into some doubt and elevated the profile of this problem.

Marine birds represent by far the most important group of birds numerically in the region. In Newfoundland, there are huge colonies of Common Murres, puffins, gannets, petrels, and other species. Colonies of gulls and terns dot the coastline. The tidal mudflats of the Bay of Fundy are invaded by millions of shorebirds each summer during their southward migration. Phalaropes in equal abundance congregate at the mouth of the Bay en route to eastern Africa. The offshore provides winter feeding grounds for millions of birds which nest in Canada's Arctic, Greenland, Iceland, and points east. In our summer, the Grand Banks are the home to shearwaters from the South Atlantic during their winter.

Thick-billed Murres are thought to be under pressure from over-harvesting. All seabirds suffer from pollution of their environment, especially with oil and plastics. Fishery practices also impact on populations, most notably through gill-netting close to colonies or draft-netting. Commercial fisheries of capelin may be in direct competition with some seabirds.

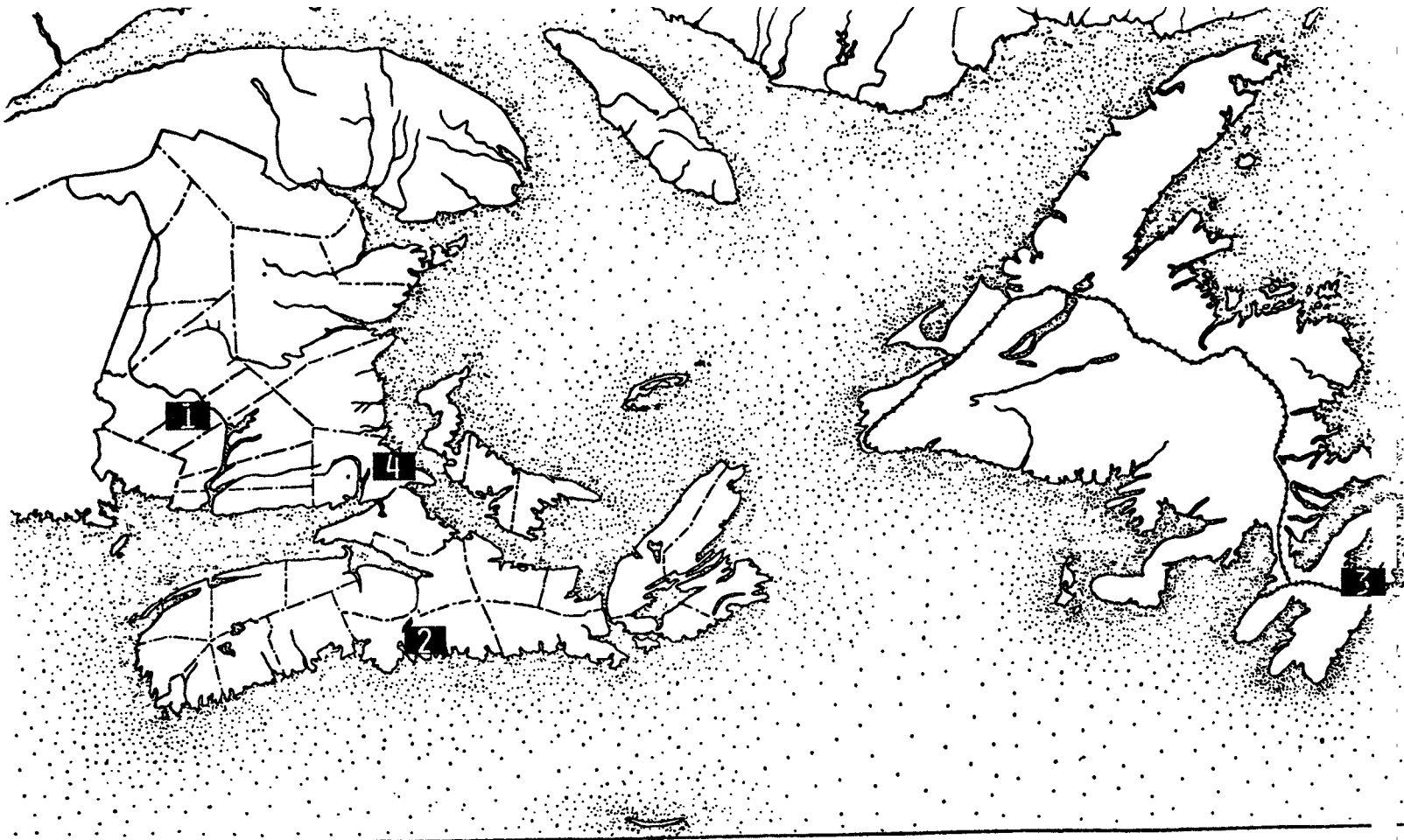
Land-based, non-game species are most influenced by broad based habitat changes. Forestry is an extremely important industry in Atlantic Canada, and provincial governments are moving towards integrating wildlife values in forestry management practices. Implementation of the policy remains a challenge.

CWS-AR manages thirteen National Wildlife Areas and fourteen Migratory Bird Sanctuaries. Most were acquired or designated to complement the waterfowl conservation program with some notable exceptions (e.g. Mary's Point for shorebirds). Provincial governments have the principal responsibility for habitat conservation. With the aid of Ducks Unlimited and Wildlife Habitat Canada, provincial programs for wetland conservation have become much more active in the Maritimes during the last decade. The CWS role here has evolved to become one of coordinator of regional activities, cooperator in some federal-provincial projects, and influencer of programs and policies of other federal agencies. CWS-AR has the lead in implementing the new Eastern Habitat Joint Venture, a cooperative program worth \$2.8 million in Atlantic Canada in 1991.

In Newfoundland, provincial habitat conservation activities for migratory birds has focussed principally on the major seabird colonies, many of which are ecological reserves. Wetland programs are just beginning with the stimulus of the Waterfowl Management Plan and Ducks Unlimited agreements.

The principal endangered or threatened bird species in the region are the Peregrine Falcon, Harlequin Duck, Piping Plover, and Roseate Tern. Several other species are rare and warrant careful attention. Many species are believed to be well below optimal numbers such as the Common Eider in Newfoundland and Common and Arctic Terns. The eider has apparently suffered from over-exploitation, while the terns appear to be victims of a burgeoning gull population and, more particularly, invasion of the Black-backed Gull from Europe.

General degradation of the environment has its impacts on wildlife as well as other resources and the economy. Acid precipitation has clearly impacted fish-eating aquatic species such as the Common Loon. The wide-scale application of pesticides and herbicides has in the past had dramatic impacts on some species such as the hawks, eagles, and falcons. A wide array of those chemicals are in use, particularly in forestry and agricultural application, and careful monitoring of their effects is prudent. The loading of surface and coastal waters with toxics and nutrients is of particular concern in some areas of the region.



Canadian Wildlife Service - Atlantic Region - 1990-91

<u>Offices</u>	<u>Person-Years</u>
1) Fredericton	1
2) Dartmouth	7
3) St. John's	4
4) Sackville	24.7
	—
	36.7*

Staff

- 19.0 Scientists and Wildlife Managers
- 5.0 Technicians
- 5.0 Enforcement
- 8.0 Management & Administration

*includes 2.0 PYs from Ottawa

Chart Title:
Conservation & Protection
Atlantic Region
Canadian Wildlife Service

ORGANIZATION CHART

Effective Date: September 1, 1990

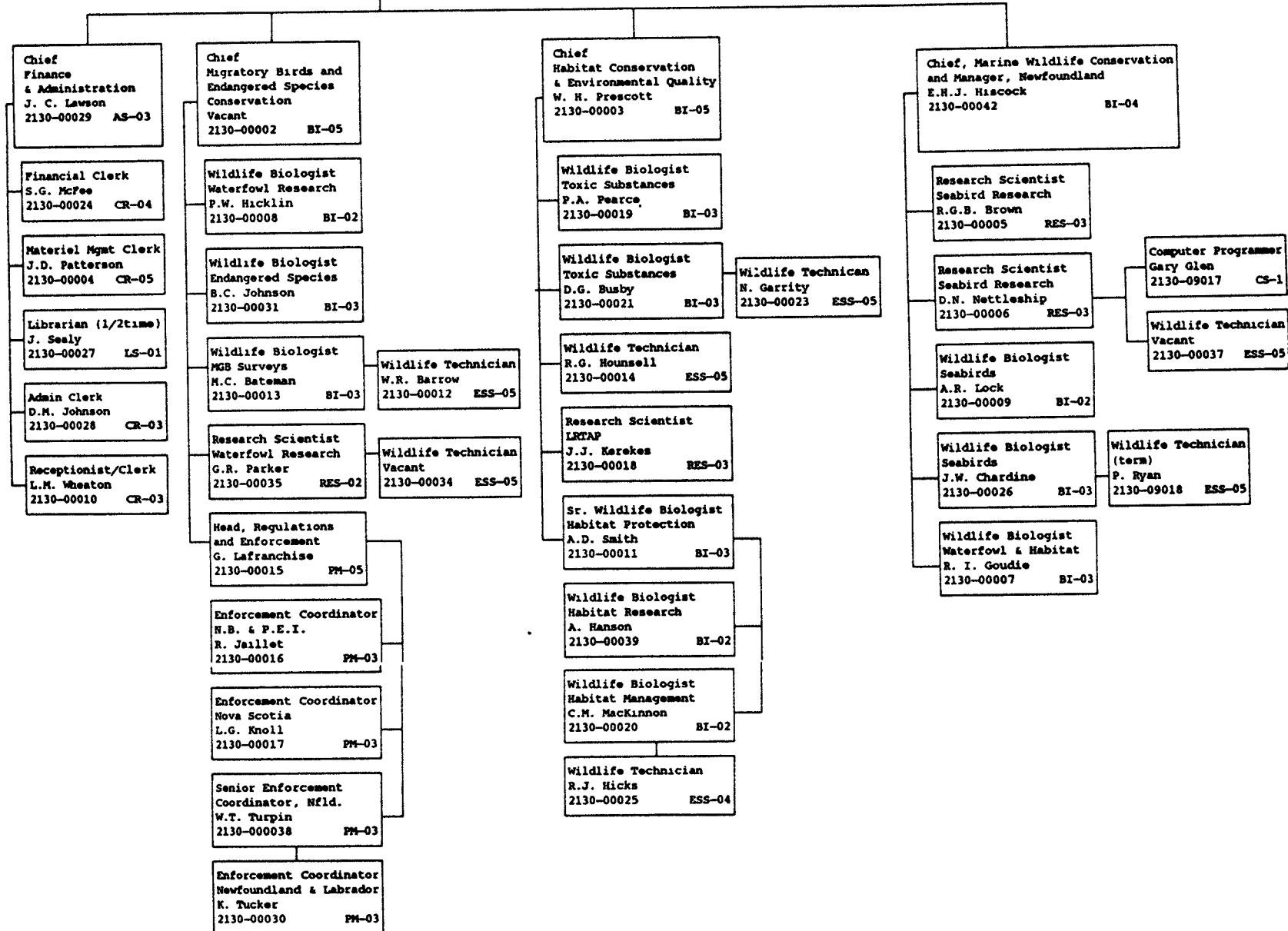
Approved by: Dr. George Finney

Director General
J. E. Vollmershausen
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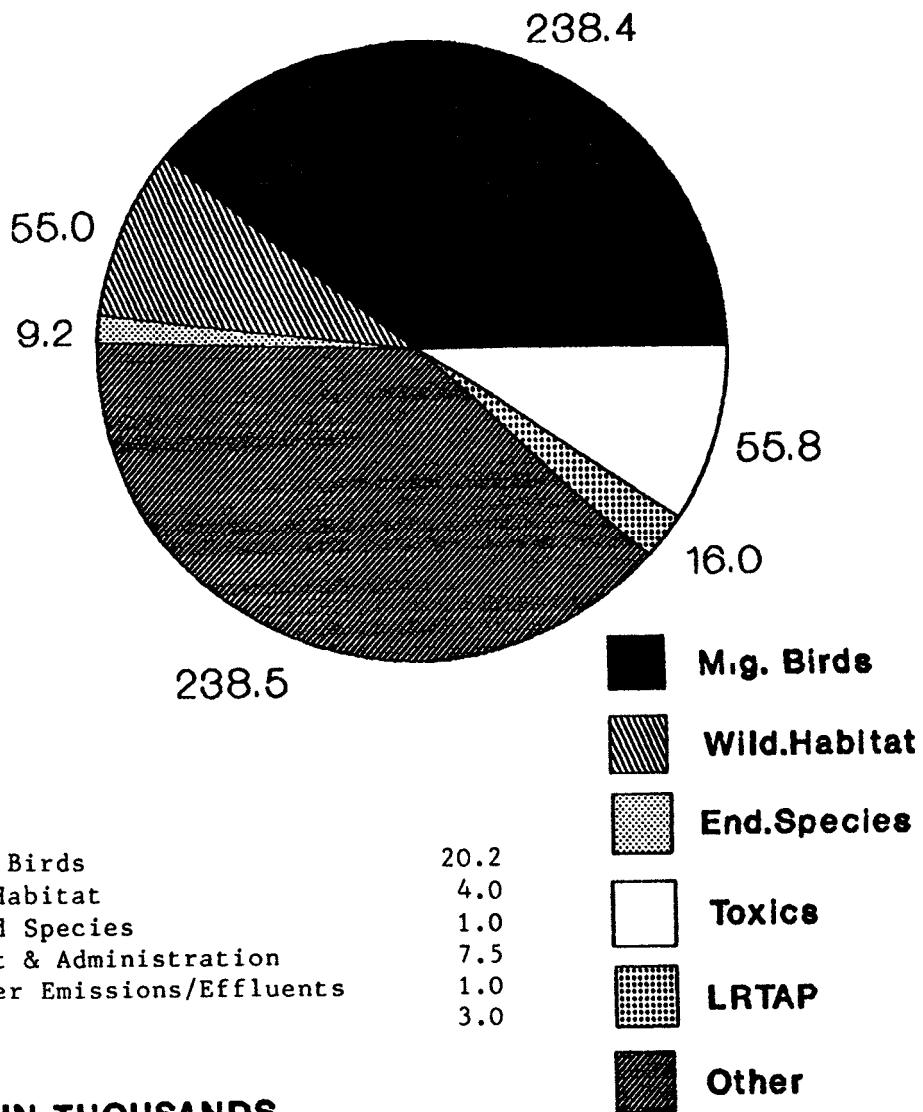
Special Wildlife Advisor
A. J. Erskine
355-0007W SAPP

Director
G. H. Finney
2130-00001 EK-01

Secretary to Director
D. A. Harris
2130-00022 SCY-03



BUDGET 1990-91 A-BASE OPERATING AND MAINTENANCE*



Person-Years

1.1 Migratory Birds	20.2
1.2 Wildlife Habitat	4.0
1.3 Endangered Species	1.0
2.1 Management & Administration	7.5
3.2 Air & Water Emissions/Effluents	1.0
3.3 Toxics	3.0

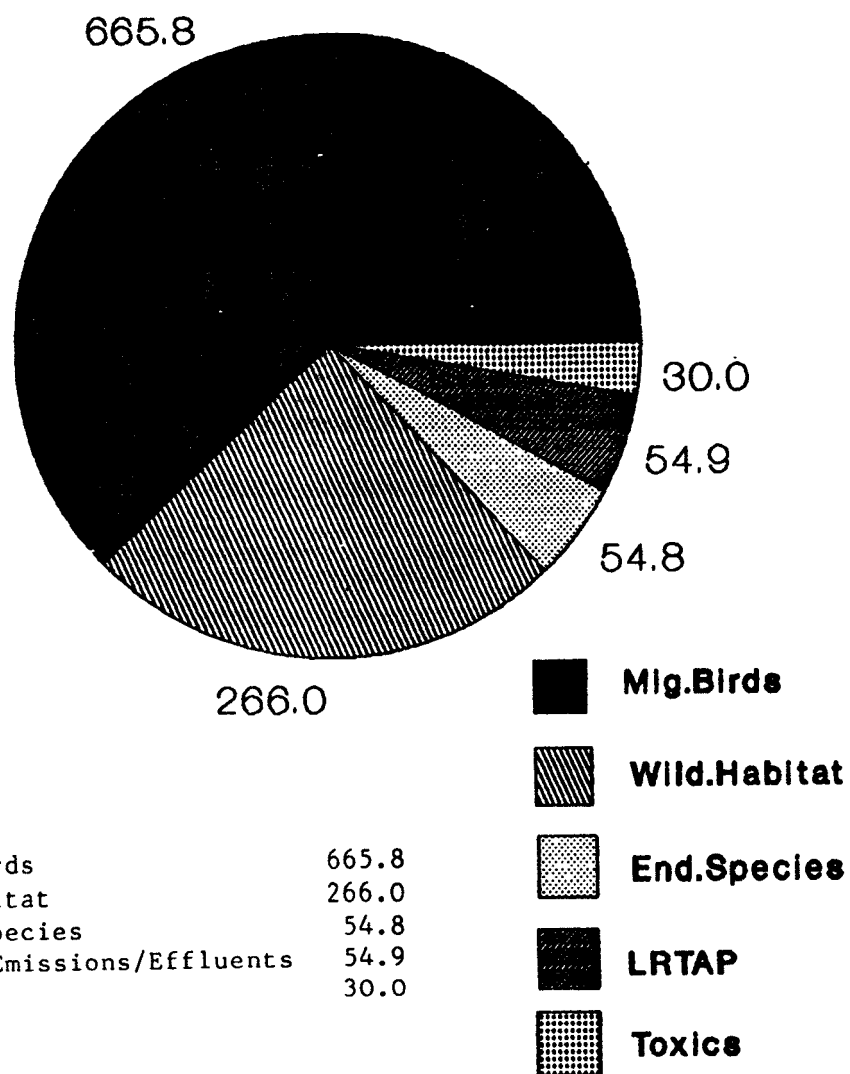
***DOLLARS IN THOUSANDS**

Totals

PYs	36.7 **
O&M	\$612.9*
Capital	\$151.5

*includes additional planned support of \$67K from C&P
 **includes 2 PYs from Ottawa

SUPPORTING NON A-BASE RESOURCES 1990-91*



1.1 Migratory Birds	665.8
1.2 Wildlife Habitat	266.0
1.3 Endangered Species	54.8
3.2 Air & Water Emissions/Effluents	54.9
3.3 Toxics	30.0

*DOLLARS IN THOUSANDS

Canadian Wildlife Service - Atlantic Region

Supporting Non A-Base Resources 1990-91

<u>Project</u>	<u>Amount</u>	<u>Source</u>
Duck Banding	\$ 40,000	U.S. Atlantic Flyway
Black Duck Monitoring	126,000	Black Duck Joint Venture CWS-HQ/USFWS
Black Duck Research	55,000 12,500	Black Duck Joint Venture US F&W
Eider Enhancement - Hare Bay	180,000	Ducks Unlimited Canada, CEIC, EPF
Peregrine Recovery Project	35,000 7,000 6,000 2,000	World Wildlife Fund Parks ESRF NB DNRE
Toxic Chemical Assessment	30,000	CEPA
Acid Rain Studies	54,900	C&P-HQ
Habitat Research	50,000	Ducks Unlimited Canada
Habitat Protection	216,000	Eastern Habitat JV
Technical Training Project	103,000	Sackville Rotary Club (CEIC)
Phalarope Surveys	10,000 5,000	US Fish & Wildlife C&P Baseline Studies
Piping Plover Surveys	3,750	End. Spec. Recov. Fund
Roseate Tern Surveys	1,000	End, Spec. Recov. Fund
Latin American Program	29,800	CWS-HQ
Non-Game Surveys	1,500	CWS-NWRC
Murre Harvest Surveys	8,000	CWS-HQ
Beached Bird Surveys	<u>95,000</u>	CEIC, NLEA
TOTAL APPROVED	\$1,071,450	

CWS Atlantic Region

Issues and Initiatives (1990-91)

Migratory Birds Conservation

- * Regulate the harvest of murres off Newfoundland to arrest/prevent population declines

Approach:

- promote assignment of murre to game bird status or other parliament legal remedy
- provide information to public
- upgrade enforcement to reduce selling of birds
- monitor population trends at Arctic breeding colonies
- undertake research to support management strategies

- * Ensure proper management of game species

Approach:

- maintain improved breeding pair surveys of inland duck species
- undertake population management research (e.g. distribution of species, impact of hunting mortality, etc.)
- improve enforcement, especially in areas with large chronic problems (e.g. northeastern New Brunswick - in spring); South and East Shore, Nova Scotia; Newfoundland - in winter; Labrador)
- modify regulations as required
- implement provisions of provincial Waterfowl Management Plans
- coordinate program to reintroduce eiders to Newfoundland in the context of an Atlantic Eider Management Plan
- implement specific regulations and policies to accommodate special native harvesting rights and conservation programs

- * Protect and rehabilitate endangered, threatened, and vulnerable species

Approach:

- implement a regional recovery plan for Piping Plovers with all governments and interested NGOs
- aid Parks in protection of birds at Prince Edward Island and Kejimikujik National Parks
- continue mass hack program in Bay of Fundy for Peregrine Falcons
- develop recovery plans and recovery teams for Roseate Tern, Harlequin Duck, and the Eastern cougar

- * Protect areas of national significance in Atlantic Canada to migratory birds

Approach:

- designate Portobello NWA (1991)
- declare Green and Shepherd Islands, Newfoundland as Migratory Bird Sanctuaries
- develop management plans for Newfoundland seabird sanctuaries (provincial) with Newfoundland Parks Service

- * Protect important wetlands, estuaries, and coastal areas in the Maritimes

Approach:

- negotiate with provinces and other federal departments to designate most important wetlands for restricted development
- coordinate implementation of the Eastern Habitat Joint Venture in eastern Canada and Atlantic Canada
- assist in implementation of approved projects under the EHJV
- lead in development of Estuary Joint Venture to rehabilitate important estuaries and coastal areas

- * Develop and implement inter-governmental agreements to facilitate cooperation

Approach:

- implement Newfoundland/Labrador Migratory Bird Habitat Protection Plan
- pursue agreements with France and Denmark for management of migratory birds, i.e. St. Pierre et Miquelon
- promote internationally the designation of Western Hemisphere Shorebird Reserves

- * Build wildlife values into the management of forests

Approach:

- research habitat requirements in order to prescribe desired management practices
- advise provincial agencies on management practices

- * Minimize the negative impacts on wildlife from the use of pesticides to control forest and agricultural pests

Approach: - 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 and provide research related to CEPA priority chemicals

Approach: - once every four years, sample seabird populations
- spot checks and other surveys of potential trouble sites
- improve monitoring capability
- undertake and coordinate research on the biological effects of CEPA priority chemicals

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

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

- * Minimize the impacts of pollutants and fishery activity on seabirds

Approach: - undertake research and surveys on seabird distribution and ecological interactions
- participate in environmental impact hearings
- establish baseline data on colony size and do periodic monitoring
- monitor impacts of oil, plastics, and other pollutants
- research the impact of gill nets, drift nets, and commercial fisheries on seabirds
- advise Coast Guard, EP, and other regulatory agencies on the importance of mortality factors on seabirds
- participate in developing mitigation plans

-
- * Control the impact of expanding gull populations on people and other bird species

Approach:

- implement the Atlantic Gull Management Plan
- survey to confirm population status and trends
- carefully monitor impacts of gulls on other species and man
- undertake public consultations and communications
- establish pilot programs to assess effectiveness of various control techniques

- * Provide State of the Environment Reports to the public

Approach:

- oversee the regional DOE Steering Committee
- participate in preparation of the regional report

CWS ANNUAL REVIEW 1989-90

PROGRAM - 1.1 MIGRATORY BIRDS

- A2 The harvest strategy for 1989 was established. Highlights: two week delay for the opening of the Black Duck season in Prince Edward Island; major adjustments to seasons and zones in Nova Scotia; closure of harlequin seasons throughout the Atlantic Region. Proposals for the 1990 harvest season regulations have been presented to CWS-HQ and the public. Highlights include a reduction in seaduck bag limits, and a re-definition of the hunting zones in Newfoundland.

The strategy to amend the Migratory Birds Convention has been prepared. Formal discussions were held with the provinces and U.S. officials. Reclassification of murrelets will be included in the discussions on the Protocol to allow native hunting in the north.

Annual enforcement plans were prepared, discussed, and agreed upon with the RCMP and the provinces. RCMP enforcement efforts increased, as did compliance on the Acadian Peninsula in New Brunswick. New CWS enforcement staff are now on duty (PM-5 and PM-3), and training courses for the RCMP and provincial officers have been completed. Headquarters staff joined with regional enforcement staff to address the market hunting issue in Newfoundland.

The development of a regional permits strategy has been initiated based on the new National Permits Policy.

- A3 A final draft of the Newfoundland/Labrador Eider Management Plan has been submitted to the provincial Wildlife Division for ratification. The second year of the Newfoundland eider enhancement project has been successfully completed, with release of approximately 400 young birds hatched from eggs obtained from Quebec. Drafts of the Cape St. Mary's and Witless Bay management plans are complete after public consultation. Strategies for rebuilding Black Duck populations are contained in provincial Waterfowl Management Plans.

Waterfowl Management Plans have been finalized for all four Atlantic Provinces. They will guide regional initiatives under the North American Waterfowl Management Plan.

- A4 MBC Act Regulation amendments were finalized and gazetted. Draft regulations for 1990-91 have been discussed with the provinces and provided to CWS-HQ and the public for review.

A5 A very active Wildlife Week program was developed with Communications staff (report available). A brochure was produced on Black Duck seasons in Prince Edward Island. An oil/seabirds brochure is in draft form. Events including presentations by many staff members have been planned for 1990.

A6 Waterfowl breeding pair surveys were undertaken in all four provinces. Preliminary findings indicate that Black Duck populations are increasing in New Brunswick, stable in Nova Scotia and Newfoundland, and decreasing in Prince Edward Island. Survey design has been revamped for 1990 and will be supported by funding from the Black Duck Joint Venture. Canadian woodcock surveys were completed, and a report has been drafted.

Waterfowl banding field work has been completed, and two new banding stations were established. Preliminary results show a successful year, and reports are under preparation. Canada Goose banding was not very successful in Prince Edward island; however, for the first time, neck collars were placed on geese in Newfoundland (Codroy Valley). A Prospectus for Northern Eider banding was developed and commented on by the Quebec and Western & Northern Regions, and a second draft was prepared.

The Newfoundland Hunter Opinion Survey has been analyzed and shows that Newfoundland hunters generally agree with our management directions. The National Species Composition Survey and Woodcock Wing Survey have been successfully completed. The murre harvest report is available, and other reports are under preparation.

The 1988 Breeding Bird Survey report and 1988 Maritime Nest Records Scheme report have both been completed. Two thousand shorebirds were banded in the upper Bay of Fundy in 1989, and a report has been completed. Standard techniques to band larger shorebirds were generally unsuccessful, and new techniques will be developed and tried in 1990.

An analysis of gull and tern colonies in Newfoundland was completed. Surveys for phalaropes in Passamaquoddy Bay indicate a major redistribution, and plans have been made with our U.S. counterparts to attempt to locate the birds in 1990. The Seabird Colony Registry has progressed to the output stage with analyses of over 300 Ontario colonies completed.

An international Seabird Conservation Workshop and CWS Seabird Group meeting were held in St. John's, Newfoundland and a Seabird Research Strategy paper was produced. A position paper on seabird bycatch was completed and was introduced into the Marine Environmental Quality Agenda. The Seabird Distribution Atlas is nearing completion for Fundy-Georges Banks, to be followed by one for the Avalon-Grand Banks.

Funding for a Forest Bird/Habitat Study was not obtained, and a reduced program was undertaken in cooperation with the province of New Brunswick. A National Songbird Program was developed which will determine CWS project direction.

The field work for the Fundy Eider Study has been completed, and data are being analyzed. Preliminary results confirm last year's findings that predation by gulls seems to depend on the availability of alternate prey. The Black Duck Study has been completed at Lepreau, New Brunswick. Results indicate different movement patterns on managed and unmanaged marshes.

PROGRAM - 1.2 WILDLIFE HABITAT

A8 All regional regulatory requirements for the creation of two Migratory Bird Sanctuaries (MBS) for eider protection in northern Newfoundland have been satisfied, and CWS-HQ indicates designation by August 1990 at the latest. New properties have been acquired at the proposed Portabello National Wildlife Area (NWA), and the additional RIAS information required was forwarded to CWS-HQ. The documentation for the proposed Prince Edward Island sanctuaries was forwarded to CWS-HQ in 1988. Draft management plans have been prepared for Boot Island and Portage Island NWAs. A protection proposal for Grand Codroy has been completed and provided to all local residents for comment. Inspection/maintenance activities at NWAs have also been completed.

Revised harvest regimes were in place for the 1989 hunting season at Shepody and Wallace NWAs, and public consultation was continued. Land use permits on NWAs have been issued as planned. The visitor regulation at Machias Seal Island MBS was effectively administered.

A9 The Eastern Habitat Joint Venture (EHJV) Prospectus has been finalized and accepted by the North American Waterfowl Management Plan (NAWMP) Committee. Second Step proposals were developed and submitted. First Step Agreements have been signed with New Brunswick and Nova Scotia, and a partnership was developed to launch the initial Newfoundland project (Birchy Basin). A five-year operational plan for EHJV was submitted, and work has begun on a 15 year plan. A regional EHJV coordinator has been appointed, with plans for provincial coordinators developed.

Six candidate Ramsar sites (Wetlands of International Importance) have been identified, and a three year action strategy has been developed.

Cape St. Mary's management plan and Witless Bay discussion paper were completed and released for public consultation. Meetings were held with the Codroy Development Association, and protection options were explained and summarized for federal-provincial decision making. Information for the Regulatory Impact Analysis Statement on three MBSs were provided to the Office of Privatization and Regulation, Ottawa.

CWS has participated on the Steering Committee of the Prince Edward Island Watershed Management Program (1986-1990) and has assisted in the field studies.

A11 Wildlife Federation meetings in Nova Scotia, New Brunswick, and Prince Edward Island were attended, and presentations on the EHJV were made. CWS participated in the regional promotion of National Wildlife Week (report available).

A draft communication plan and popular version of the EHJV Prospectus were prepared. The plan was approved and is now being implemented.

A12 The consultant's report on a wetlands inventory for insular Newfoundland was reviewed, and it was decided to concentrate on organizing an inventory in Labrador with ACOA funding as a first priority.

Staff was not available to update the Maritime Wetland Inventory with water data as planned, however, a new habitat research biologist position has been staffed, thus increasing use and maintenance of the inventory. Inland Waters will geocode the wetland data for application to a Geographic Information System in 1990.

A Program Prospectus for a five-year cooperative waterfowl habitat research project was prepared and submitted to Ducks Unlimited Canada (DUC) for approval. The project proposal has been approved for implementation in 1990.

Proposals for wetland fertilization research, prepared by the Acadia Centre for Estuarine Research, were reviewed and funding agreements have been made between all partners (Acadia University, Wildlife Habitat Canada, EHJV, DUC, Nova Scotia Lands and Forests, and CWS). Implementation awaits funding approval.

PROGRAM - 1.3 ENDANGERED SPECIES

- A15 The first nesting of Peregrine Falcons in the region has been confirmed, with three nests discovered in New Brunswick. The release program was modified with 25 birds released in 1989 (five in New Brunswick, 20 in Nova Scotia). The regional Piping Plover Recovery Plan was complete and will be published in May. Planning for the international Piping Plover census is underway.
- A16 The endangered species display has been on exhibit at three National Parks and one National Historic Park.
- A17 The Atlantic Region contribution to the Common Tern Status Report has been completed. Key Piping Plover habitat in northeastern New Brunswick was monitored with help from the Quebec Labrador Foundation. Reported peregrine nesting activities were investigated. Three sites have been confirmed, and adults have been observed at other sites. Labrador peregrine/harlequin surveys have been completed. A status report on the Harlequin Duck has been prepared for submission to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

PROGRAM - 1.4 INTERNATIONAL WATER/WILDLIFE RESOURCES

- A21 A CWS Western & Northern biologist, under the direction of the Regional Director, CWS Atlantic, has prepared a management plan for the Bigi Pan Wildlife Area in Suriname, South America. Government approval has been obtained. An agreement has been drafted for migratory bird conservation with St. Pierre et Miquelon. A proposal for an agreement with Greenland and Iceland was submitted to CWS-HQ.

George Finney was elected to the Chair of the Western Hemisphere Shorebird Reserve Network Council; several meetings have been held. Two new hemisphere reserves have been established in Argentina and the United States.

- A23 Two hundred puffin chicks were transferred to assist U.S. reintroduction efforts, and the situation in Maine indicates that further transfers can be soon discontinued. The updated report on the Puffin Reintroduction study was completed.

PROGRAM - 1.5 NATIONAL/REGIONAL WATER AND WILDLIFE RESOURCES

- A25 Positive discussions have been held with New Brunswick officials about a Wetlands Designation Agreement, an interim steering committee has been established, and a draft agreement has been prepared and is under provincial review. Lead for designation agreements is now with IW. The agreement has been included in Annex II of the proposed New Brunswick Accord.

- A26 The Atlantic C&P Wetland Conservation Program Action Plan was delayed due to efforts to get the EHJV organized. Planning was rescheduled for 1990. Cooperative projects with provinces and non-government organizations (NGOs) were developed and implemented under EHJV and Wildlife Habitat Canada (WHC), and several ongoing projects were extended to interested cooperators, such as local Fish & Game and Naturalists Clubs.

Significant progress has been made in the development of the Atlantic Estuary Joint Venture. Three pilot areas have been targetted: the Annapolis-Cornwallis, led by the Annapolis Valley Board of Trade; the Nepisiquit River-Bathurst Estuary, for which a concept paper is being produced; and the Wilmot-Dunk Rivers, Prince Edward Island.

PROGRAM - 1.6 NATURAL HAZARDS

- A31 A report on the loss of mussels to seaducks in Nova Scotia has been completed with Federal/Provincial Fisheries Agreement funding and CWS supervision. A seminar on the subject was given to the School of Fisheries in New Brunswick, and advice has been given to Newfoundland, New Brunswick, and Nova Scotia aquaculture regulators. The Gull Management Plan has been finalized. It provides for short term controls to protect other bird species, and long term initiatives to control gull proliferation.

Airports in New Brunswick and Prince Edward Island were inspected, and advice was provided on avoidance of aircraft-bird problems. Advice and information was provided to a contractor investigating bird hazards at CFB Shearwater.

PROGRAM - 2.1 MANAGEMENT AND ADMINISTRATIVE SUPPORT

B2 DOTS training was provided to CWS staff in July 1989. Installation of DOTS equipment was completed in August 1989.

New warehouse space was provided for the Sackville Regional Office in November 1990. CWS St. John's occupied new offices in March 1990.

Stress management seminar was provided to staff in December 1989.

PROGRAM - 2.2 ECOLOGICAL AND ECONOMIC INTERDEPENDENCE

B7 Work is progressing on schedule for the 1990 Regional DOE Report with solid support from other government departments and the provinces. The first draft of the CWS section has been completed.

CWS participated in a workshop convened by ACOA to address concerns of the Labrador Outfitters Association and adventure tour industry. Enhanced migratory bird enforcement and opportunities to expand their industry into waterfowl hunting were called for.

Staff actively participated in National Wildlife Week activities, including mall displays, wetlands and office tours, and other events such as Shearwater Air Show (55,000 visitors to display), and Islander Days at Prince Edward Island National Park (5,000 visitations). Public awareness of our mandate was enhanced through these activities.

PROGRAM - 3.1 ENVIRONMENTAL IMPACTS OF NEW INITIATIVES

C2 A mechanism has been developed for the assessment of potential environmental impacts of in-house and associated projects, such as EHJV.

An EIS on military low level flying in Labrador has been critiqued and recommendations provided.

PROGRAM - 3.2 AIR AND WATER EMISSIONS/EFFLUENTS

- C10 "Keji '88" proceedings were published in a scientific journal in January 1990.

Field surveys, data analyses, and progress report of loons and other waterfowl in Kejimikujik Calibrated Basins were completed on schedule. A paper on the use of aquatic birds as trophic indicators of lake productivity was presented at an international symposium.

A final report on the effects of acidification on the productivity of wildlife habitat and food in Kejimikujik, Nova Scotia was delayed due to key staff changes. A draft report is now completed and will be finalized in April 1990.

PROGRAM - 3.3 TOXICS

- C13 CWS initiated formation of a committee to develop CEPA research and monitoring. The committee reports to a Regional Toxic Chemical Committee. A strategy and action plan was developed and approved by management.

- C16 A report "Long term monitoring of chemical contaminants in seabirds" was published in a scientific journal.

Hunter-shot waterfowl samples were collected at five sites. Specimens were sent to National Wildlife Research Centre (NWRC) for analysis of OCs, heavy metals, dioxins, and furans. A report was prepared on those results and distributed. Development of a strategy for restrictions is progressing. Follow-up studies are being planned.

Blood samples from waterfowl collected from hunters and through the banding program were analyzed for lead levels at the Atlantic Veterinary College. Contamination levels indicated problem areas for which management options are now being developed.

CWS gave a priority to preparing technical papers on fenitrothion use based on current data. Three papers were written, submitted, and accepted by respected journals. Papers should appear in print in 1990-91.

Agriculture Canada was requested by Environment Canada, and agreed, to initiate a special, early re-evaluation of forest use of fenitrothion. This indicates that Agriculture Canada believes that there may be good reasons for Environment Canada concerns for continued use of fenitrothion.

The province of Newfoundland publicly declared that they would not use fenitrothion because of environmental concerns. They now use only B.t. for forest spraying (a small hemlock looper program).

Eggs of fish-eating birds were collected at four sites and sent to National Wildlife Research Centre for analysis of dioxins, furans, PCBs, and OCs (pesticides). Analyses are completed and reports have been circulated.

Canadian Wildlife Service
Atlantic Region
Planning Priorities
for the 1991-92 fiscal year

Context

As we enter this year's planning cycle, the government is developing its Environmental Agenda which may potentially have a dramatic and positive impact on our programs in 1991. Elements of the agenda have yet to be affirmed, however, and therefore this plan makes no assumptions of accelerated programs in areas where this is uncertain. During 1989, we increased our enforcement staff by two, and the government announced five year funding of the North American Waterfowl Management Plan which has significantly affected our programs in wetland protection and Black Duck management.

The Canadian Wildlife Service, Atlantic Region (CWS-AR) now has adequate access to capital; a very small core O&M budget continues to be a very serious problem. To augment effectiveness of our program, shared and cooperative projects have been successfully sought and have led to a role of leadership and influencing.

Additional staff are most obviously required in the following areas:

- office support for St. John's and Bedford Institute of Oceanography field offices;
- technical support for scientists and biologists;
- program officers who can deal effectively in areas such as forestry wildlife interactions, marine environmental quality, environmental assessment and joint venture coordination.

Some organizational adjustments were undertaken in 1990 and all management positions will hopefully be staffed by March, 1991. CWS-AR now has three divisions:

- Migratory Birds Management Division;
- Habitat Conservation and Environmental Quality Division;
- Marine Wildlife Conservation

Program 1.1 - Migratory Bird Conservation

The region will continue to support CWS Headquarters' strategies to amend the Migratory Birds Convention so that we can institute a regulated murre hunt in Newfoundland/Labrador.

As a part of a national initiative, consultations will begin regionally to consider MBC amendments which could provide special hunting seasons between March 10 and September 1. Also, in light of recent court decisions, it seems likely that new migratory bird conservation regimes will have to be developed to accommodate newly defined native hunting rights.

Extensive rezoning of Newfoundland hunting regulations is proposed for 1991 subsequent to public consultation. Several significant amendments to Maritime hunting regulations will also be considered for 1991.

Enforcement staff will continue to improve participation of cooperating agencies through the implementation of the regional enforcement strategy. A regional permits strategy will be developed and implemented. The new enforcement vessel, "Leslie M. Tuck", in Newfoundland/Labrador will lead to increased enforcement emphasis in northern Newfoundland and Labrador.

Waterfowl research and survey programs have been augmented with the implementation of the Black Duck Joint Venture. Improved waterfowl surveys will be continued in 1991. Black Duck mortality and productivity factors will be investigated.

Seabird research and monitoring programs in Atlantic waters will focus on advancement of the seabird colony registry, the creation of sensitivity maps for nearshore areas, and research related to significant mortality factors such as hunting, predation, and bycatch. Atlantic Region will continue to play a lead role in Eastern Arctic colony monitoring, hopefully with more active operational support from Western and Northern Region. With the cooperation of DFO, CWS hopes to undertake some research to try to find alternate fishing strategies in Newfoundland to reduce the incidental take of seabirds.

CWS will continue to sponsor the reintroduction of eiders to Newfoundland. The Tern Management Plan will begin its first year of implementation, following public consultations.

Studies will be continued to try to clarify what has happened to once abundant phalaropes in the Bay of Fundy.

Program 1.2 - Wildlife Habitat Conservation

The launching of the Eastern Habitat Joint Venture (EHJV) as a fully operational program in 1990 necessitated a substantial commitment by this region to program management and coordination. With Inland Waters, we will be actively promoting a Wetland Designation Agreement with New Brunswick and the implementation of the Atlantic Estuary

Cooperative Venture. Many new programs and cooperative projects will arise from the EHJV requiring substantial CWS regional involvement. Wetland research will focus on enhancement techniques for managed areas.

New sanctuaries should be scheduled near Prince Edward Island National Park and for Green and Shepherd Islands, Newfoundland and others will be investigated.

We will continue to assist Newfoundland in the development of management plans for their ecological reserves which are significant seabird colonies.

Implementation of the CWS Wildlife Habitat Conservation Strategy will require a re-evaluation and possible reorientation of our regional habitat program. An Atlantic Region C&P Action Plan will be proposed which should act as a synthetic document related to wildlife habitat initiatives.

Program 1.3 - Endangered Species Protection

Peregrine Falcon releases will continue in the Nova Scotia sections of the Bay of Fundy and a re-survey of potential nesting habitats is planned. Implementation of the Piping Plover Recovery Plan will continue with an increased emphasis on public information. CWS-AR will coordinate the Atlantic component of the 1991 International Piping Plover Census. Recovery Plans will be completed for the Eastern Cougar, Roseate Tern and Harlequin Duck in 1991.

A research program for the Harlequin Duck will be proposed for implementation in 1991 or 1992.

Program 1.4 - International Wildlife Resources

As a member of the Western Hemisphere Shorebird Reserve Network (WHSRN), work will continue towards involving more countries in shorebird conservation. Joint programs are planned with Suriname and Mexico, and possibly other countries, in support of WHSRN and other initiatives under the Latin American Program. Migratory Bird Conservation Agreements have been proposed with St. Pierre et Miquelon, Greenland, and Iceland, and one or more will hopefully be signed in 1991 leading to subsequent cooperative research and conservation programs. A proposal for an international network of outstanding areas for shorebirds will be developed and promoted.

Program 2.2 - Ecological and Economic Interdependence

CWS-AR will actively participate in the publication of the regional State of the Environment Report.

CWS-AR will contribute to the implementation of the Nova Scotia Sustainable Development Agreement in 1991. The CWS will aim to provide an ecological perspective and to participate effectively with Forestry Canada, Agriculture Canada, and the provinces.

Program 3.1 - Environmental Impact Prevention

The high priority now given to protecting the environment will mean a greatly increased involvement by our staff in evaluation and advisory roles. In addition, we will ensure that our own operations are fully screened and approved.

Program 3.2 - Air and Water Emissions

Acid rain work will focus on the establishment of monitoring programs for sensitive bird populations and habitats.

Program 3.3 - Toxics

The CWS Wildlife Toxicology program will focus on the implementation of CEPA. As well as coordinating the Conservation and Protection CEPA Research and Monitoring Programs, several new initiatives will be launched. Final decisions will be made in 1991 on the locations of non-toxic shot zones and necessary research and surveys will be continued.

Program 3.4 - Spills and Waste Sites

CWS-AR must prepare better for possible environmental disasters, e.g. oil spills. Strategies and contingency plans will be developed to deal with chronic oil dumping and the birds affected. As follow-up to a pilot program in Placentia Bay in early 1991, CWS will, with EP and CCG, develop program proposals to effectively reduce the frequency of oil releases in Atlantic waters. Emergency bird cleaning stations will be established as appropriate.

*** MIGRATORY BIRDS MANAGEMENT DIVISION**

This Division is responsible for the management and protection of migratory birds through:

- the establishment and enforcement of Regulations under the Migratory Bird Convention Act and Canada Wildlife Act;
- the administration of a system of scientific, aviculture, taxidermy, and other permits issued under the MBC Act;
- carrying out and/or coordinating aerial and ground surveys of migratory bird populations to monitor changes and short and long-term trends;
- conducting research studies on the behaviour, movements, food and habitat requirements, and mortality of migratory birds;
- monitoring, protecting, and rehabilitating threatened and endangered wildlife species and their habitats in the region;
- consulting, negotiating agreements, and cooperating on international migratory bird management and protection programs to ensure Canadian access to transboundary populations.

*** HABITAT CONSERVATION AND ENVIRONMENTAL QUALITY DIVISION**

This Division deals with:

- the management and administration of 12 National Wildlife Areas and 12 Migratory Bird Sanctuaries, including the development and implementation of management plans, the monitoring of wildlife populations and habitat conditions and the issuing of land-use permits;
- coordinating the implementation of the North American Waterfowl Management Plan via the Eastern Habitat Joint Venture;
- developing and implementing cooperative federal-provincial agreements and programs to protect regionally, nationally, and internationally important wildlife habitats, wetlands, estuaries, and coastal areas;
- conducting studies of wetland habitat management and enhancement techniques;
- maintaining data base repositories such as wetland inventories, colonial bird nesting sites, coastal bird surveys, etc.;
- conducting and assisting in environmental reviews, assessing impacts, advising on mitigation, and monitoring controls;
- monitoring harmful and persistent toxic chemicals in the environment and studying the biological effects;
- minimizing the negative impacts of pollutants, toxic chemicals, and pesticides on wildlife and wildlife habitat;
- leading and coordinating the Conservation & Protection monitoring and research program under Canada Environmental Protection Act;
- assessing the impacts of acid rain on wildlife and ecosystems.

*** MARINE WILDLIFE CONSERVATION**

This new Division will address and provide advice on regional marine wildlife and environmental quality issues by:

- monitoring seabird populations, distribution, and movements;
- conducting research studies on the behaviour, movements, food and habitat requirements, and mortality of seabirds;
- generating plans and strategies for implementing new Regulations dealing with regulating the hunting of murres in Newfoundland;
- producing marine bird distribution and habitat sensitivity maps and data bases for impact assessment reviews and emergency response planning;
- reviewing and evaluating the environmental effects of marine projects and activities;
- developing approaches to minimize the impacts of pollution and fishery activity on seabirds;
- participating in cooperative C&P Marine Environmental Emergencies programs including emergency response and contingency planning;
- participation in the C&P Marine Environmental Quality program.
- leading in talks and negotiations with regional native groups on wildlife conservation and management;
- developing and implementing proposals for regional wildlife economic development through ACOA and other funding agencies;

This Division also supervises the delivery of migratory bird and habitat programs in Newfoundland and Labrador through administration of the Newfoundland office.

**Canadian Wildlife
Service**

**Migratory Birds
Management**

Establish Regulations

Issue Permits

Enforcement

Surveys

- waterfowl
- shorebirds
- songbirds
- herons

Research

- waterfowl
- shorebirds
- songbirds

Endangered species

International Mig.
Bird Programs

**Habitat Conservation &
Environmental Quality**

NWA & MBS Management

NAWMP & EHJV Implementation

Habitat Protection

- regional
- international

Habitat Research

Environmental Assessment

Toxics Monitoring

Toxics Research

CEPA Res. & Mon.

Acid Rain Studies

**Marine Wildlife
Conservation**

Surveys

- seabirds
- gulls & terns

Research

- seabirds
- seaducks

Murre Hunt Studies

Marine Env. Assessment

Marine Env. Emergencies

Marine Env. Quality

Native Claims

Economic Development

Mgmt., Nfld. Office

