North American Waterfowl Management Plan



REPORT ON CANADIAN SECOND STEP PROJECTS

FOR THE SEPTEMBER 1988 TO MARCH 1991 PERIOD

North American Wetlands Conservation Council (Canada)

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FOR THE SEPTEMBER 1988 TO MARCH 1991 PERIOD

NAWCC (Canada) Report No. 92-1

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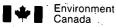
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Second Step Partners include:

- Canadian Wildlife Service, Environment Canada
- Ducks Unlimited Canada
- Ducks Unlimited Inc.
- International Association of Fish and Wildlife Agencies
- National Fish and Wildlife Foundation
- The Governments of the Provinces of Alberta, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan
- The Governments of the States of Arkansas, California, Illinois, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Washington, and Wisconsin
- Wildlife Habitat Canada
- Numerous other cooperating landowners, individuals, and agencies across Canada

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Malpeque Bay/Beach Point Marsh (Prince Edward Island)	
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EXECUTIVE SUMMARY

During the September 1988 to March 1991 period, 22 Second Step projects were funded to further implement North American Waterfowl Management Plan (NAWMP) objectives and demonstrate international partnerships in action in Canada. Five of these projects have been undertaken through the Prairie Habitat Joint Venture (PHJV) and 17 through the Eastern Habitat Joint Venture (EHJV). The following report outlines the goals, benefits and status of each of these Second Step projects.

Since initiation, a total of CDN\$ 11.02 million have been expended on these projects, with CDN\$ 4.86 million from Canadian sources and CDN\$ 6.16 million from United States sources. Of the total of Second Step expenditures in this period, 82% was directed to projects under the Prairie Habitat Joint Venture and 18% to projects of the Eastern Habitat Joint Venture. A total area of 116 246 acres (47 042 ha) of critical wetland and upland habitat have been secured and a total of 61 699 acres (24 970 ha) of waterfowl habitat have been developed. These secured and developed areas are about evenly split between western and eastern Canada. Through PHJV initiatives, some 51 207 acres (20 721 ha) of prairie wetland and upland habitat have been secured and 36 904 acres (14 935 ha) have been developed. The rest of the national total has been undertaken through EHJV initiatives such as securement of beaver pond and coastal or freshwater marsh habitat. This, however, recognizes that the particular productivity or value of individual acres from one area of the country to another is often very different. These acres are in addition to 17 735 acres (7 177 ha) of wetland and upland habitat secured and 8 371 acres (3 388 ha) developed through First Step NAWMP projects by both the PHJV and EHJV with expenditures of almost CDN\$ 9.5 million. These projects are summarized in Report No. 91-1 entitled Report on Canadian First Step Projects published by the North American Wetlands Conservation Council (Canada) in September 1991. Habitat securement, development and/or management activities in all 22 Second Step projects are continuing.

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In the history of the three nations sharing this continent, the North American Waterfowl Management Plan (NAWMP) is unprecedented. It is indeed a visionary undertaking as it will affect almost six million acres (2.4 million ha) of key wildlife and agricultural lands in Canada, the United States and Mexico. Wetland and upland areas will be conserved for a wide range of waterfowl, wildlife, soil and water, and other conservation objectives. The NAWMP has the promise of becoming one of the most extensive land use initiatives of our century and an exemplary model of sustainable wise use of ecosystem resources for the world community. Partnerships in this conservation plan between governments, the private sector, and non-government groups are providing the many millions of dollars needed to undertake NAWMP projects; however, people – individual researchers, managers, and landowners are making our dreams become a reality.

As Chair of the North American Wetlands Conservation Council (Canada) overseeing the implementation of NAWMP projects in Canada, it is my distinct privilege to work with the wide range of agencies in our nation and internationally. We all will face continuing and difficult challenges and decisions in managing wetland and wildlife resources in this decade. The Council is exceedingly grateful for the interest and participation of all its partners, in particular those in the United States. This report on Canadian Second Step projects, and its companion volume on First Step projects (published in September 1991), provide a summary of achievements. These reports outline how the initial NAWMP funds are helping us reach our collective dream of re-establishing waterfowl population levels on the continent. The report also is a part of the Council's wish to say a straightforward thank you to its many partners for their efforts and contributions.

David Brackett Chair, NAWCC (Canada)

THE NORTH AMERICAN WATERFOWL MANAGEMENT PLAN

In 1986, the Canadian and United States federal governments signed the North American Waterfowl Management Plan (NAWMP) which brings together international teams of experts and natural resource managers from federal, provincial, territorial and state government agencies as well as private conservation organizations and individuals. Partnerships called Habitat Joint Ventures are working to restore waterfowl and migratory bird populations and their habitats in one of the world's most ambitious and extensive land use plans ever developed. It will affect over 5.9 million acres (2.4 million ha) of priority wetland and upland habitat through the cooperation of three nations – Canada, the United States and Mexico during the period 1988 to 2003. The NAWMP involves over 250 participating organizations and calls for a total budget in excess of CDN\$ 1.5 billion during its implementation.

The NAWMP is a visionary and timely undertaking involving thousands of participants and builds upon decades of committed and effective work by the public and private sectors in all three nations. The NAWMP focuses on the conservation and rejuvenation of uplands and wetlands on both private and public lands through the implementation of Habitat Joint Venture plans, programs, and projects, all of which are aimed at the fulfilment of the goals and objectives of the NAWMP. There are currently three Habitat Joint Ventures underway in Canada:

(a) the Eastern Habitat Joint Venture (EHJV) (initiated 1989)

(b) the Prairie Habitat Joint Venture (PHJV) (initiated 1989)

(c) the Pacific Coast Joint Venture (PCJV) (initiated 1991).

Each Canadian Habitat Joint Venture involves a series of projects within priority areas in Canada. These include targeted sites in the Great Lakes and the St. Lawrence Valley of Ontario and Quebec, the salt marshes of the Bay of Fundy and Atlantic Coast, the estuaries of coastal British Columbia, and large contiguous areas of the central Prairies and aspen parkland of western Canada. Habitat Joint Ventures are also targeted on areas in the United States such as the prairie potholes of the mid-western states, the Central Valley of California, the Playa Lakes centred on Texas and Oklahoma, the Gulf Coast including that of Louisiana, the Lower Mississippi Valley, and the Atlantic Coast of the eastern seaboard. Cooperative international **Species Joint Ventures** on specific wildlife such as Arctic Goose and Black Duck have also been created through the NAWMP to fill monitoring and knowledge gaps that are guiding the activities of the Habitat Joint Ventures.

Joint Ventures are managed in Canada by Habitat Joint Venture Boards which provide guidance to and receive advice from Provincial Steering Committees in all Canadian provinces. Newfoundland, Prince Edward Island, Quebec, New Brunswick, Nova Scotia and Ontario are

1

represented on the Eastern Habitat Joint Venture Management Board. Similarly, Alberta, Saskatchewan and Manitoba participate in the Prairie Habitat Joint Venture Advisory Board, and British Columbia is a member of the Pacific Coast Joint Venture Management Board.

The Habitat Joint Venture Boards report to the NAWMP Committee for Canada and to the North American Wetlands Conservation Council (NAWCC) (Canada). The NAWCC (Canada) is the senior Canadian body that advises the Federal Minister of the Environment on all aspects of the development, coordination, and implementation of the NAWMP and wetland conservation initiatives of national or international scope. It also advises on the funding and evaluation of proposals for Habitat Joint Venture projects that are brought to the North American Wetlands Conservation Council (NAWCC) (USA) and the Migratory Bird Conservation Commission (MBCC) of the United States Congress for funding approval under the North American Wetlands Conservation Act (1989).

The International Association of Fish and Wildlife Agencies (IAFWA) ad hoc Committee on NAWMP Implementation was established in 1986 at the request of the IAFWA President to assist in the implementation of the NAWMP. The Committee was mandated to identify ways of obtaining funding for the Plan. It also has worked with the Legislative Committee of the IAFWA to seek Congressional authorization to make funds available. In this regard, the Committee on NAWMP Implementation has further developed funding proposals involving state, private sector, National Fish and Wildlife Foundation, Ducks Unlimited Inc., and Canadian funds. It is also the role of this Committee to advise the IAFWA on any and all matters pertaining to the implementation of the NAWMP. In March 1991, its ad hoc status was dropped and full committee status was granted in light of its continuing role in NAWMP implementation and funding activities.

The North American Waterfowl Management Plan Committee serves as the international board of directors for the Plan. This group provides policy recommendations to the government agencies charged with implementing the NAWMP. It monitors and updates the Plan, coordinates current work, reviews new proposals, and approves Habitat Joint Ventures. It provides an international forum for raising technical issues affecting the accomplishment of Plan objectives by appropriate agencies.

THE SECOND STEP PROJECTS

In order to further implement international NAWMP partnerships in action, 22 Second Step projects have been funded since 1988. These complement seven First Step projects, as summarized in NAWCC (Canada) Report No. 91-1, which were initiated in 1988. The general location of Second Step projects in Canada are shown on the map on page 4. Five of these

projects have been undertaken through the Prairie Habitat Joint Venture (PHJV) and 17 through the Eastern Habitat Joint Venture (EHJV). The EHJV projects are more highly focused geographically unlike the fewer but much larger PHJV projects described in this report.

This report presents a project description; a synthesis of the goals of each project and benefits derived or anticipated; an overview of long-term management for the project area and accomplishments to the end of March 1991; and a list of the partners in each project with a financial expenditures summary by project. Summaries of total acres and hectares of habitat securement and development (Table 1) and total expenditures to March 31, 1991 (Table 2) are presented at the end of this report. The time period covered for these projects is generally September 1988 to March 31, 1991. Habitat securement, development and management are ongoing in these Second Step projects.



Endangered species such as White Lady's Slipper are found in many of Canada's wetlands.

Photo: J.P. Morgan, Manitoba

PHJV Second Step projects are:

- 1 Prairie Care (Alberta)
- 2 Prairie Care (Saskatchewan)
- 3 Prairie Care (Manitoba)
- 4 Habitat Enhancement Land Use Program (Manitoba)
- 5 Heritage Marshes (Manitoba)

EHJV Second Step projects are:

- 6 Matchedash Bay (Ontario)
- 7 Lake St. Francis/St. Lawrence River (Ontario)
- 8 Beaver Pond Enhancement (Ontario)
- 9 Cacouna (Quebec)
- 10 Île-du-Milieu (Quebec)
- 11 McLaurin Bay (Quebec)
- 12 Saint-Barthélemy/Saint-Joseph-de-Maskinongé (Quebec)
- 13 Saint-Gédéon (Quebec)
- 14 Malpeque Bay/Beach Point Marsh (Prince Edward Island)
- 15 Mount Hope Marsh (Prince Edward Island)
- 16 Mount Stewart Marsh (Prince Edward Island)
- 17 Tyron River Estuary (Prince Edward Island)
- 18 Grand Lake Meadows (New Brunswick)
- 19 Grassy Island (New Brunswick)
- 20 Salt Marsh Protection (Nova Scotia)
- 21 Stewiacke River Floodplain (Nova Scotia)
- 22 Upper Humber River (Newfoundland).

GENERAL LOCATION OF CANADIAN SECOND STEP PROJECTS

3, 5

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17. 16

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This report reflects contributions only for Second Step initiatives under the NAWMP. Additional funds and supporting activities by the NAWMP partners have also been expended for the implementation of other ongoing elements of the overall NAWMP in Canada. The relative percentages of Canadian and United States contributions to the total contributions for each Joint Venture project are noted on the tables accompanying each project description that follows.

Canadian contributors to these projects include the Canadian Wildlife Service of Environment Canada, nine Provincial Governments, Ducks Unlimited Canada, Wildlife Habitat Canada, and a variety of other groups. The contributions of these partners, totalling over CDN\$ 4.86 million, are listed below:

Canadian Wildlife Service, Environment Canada	CDN\$ 1 400 700
Department of Agriculture, Canada	Staff Support
Ducks Unlimited Canada	1 918 180
Island Nature Trust (PEI)	16 650
Nature Conservancy of Canada	Staff Support
Province of Alberta	80 000
Province of Manitoba	222 600
Province of New Brunswick	15 000
Province of Newfoundland	47 520
Province of Nova Scotia	62 700
Province of Ontario	517 500
Province of Prince Edward Island	48 700
Province of Quebec	115 200
Province of Saskatchewan	Staff Support
Quebec Wildlife Foundation	Staff Support
Saskatchewan Wildlife Federation	Staff Support
Wildlife Habitat Canada	415 317
	CDN\$ 4 860 067

American contributors to these projects include 22 State Governments and Ducks Unlimited Inc. with the support of the National Fish and Wildlife Foundation. The financial contributions of these partners total US\$ 6 000 000 as listed below. The following Second Step report outlines expenditures against these United States contributions of over CDN\$ 6 160 000 (see Table 2). Approximately CDN\$ 1 075 000 (US\$ 890 000), which included interest earned on US funds since they were initially received, remained unexpended but committed for Second Step expenditures as of March 31, 1991.

,	Ducks Unlimited Inc.	US\$ 3 000 000	•
	National Fish and Wildlife Foundation	Staff Support	
	State of Arkansas	100 000	
	State of California	500 000	
	State of Illinois	100 000	
	State of Kentucky	60 000	
	State of Louisiana	100 000	
	State of Minnesota	150 000	
	State of Mississippi	25 000	
	State of Missouri	100 000	
	State of New Jersey	50 000	
	State of New York	100 000	
	State of North Carolina	60 000	
•	State of Ohio	28 182	
	State of Oklahoma	8 000	,
	State of Oregon	25 000	
	State of Pennsylvania	100 000	
	State of Rhode Island	25 000	
	State of South Carolina	400 000	
	State of Tennessee	718 818	

(cont.)

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State of Texas State of Utah State of Washington State of Wisconsin

Since publication of the NAWCC (Canada) Report No. 91-1 summarizing First Step initiatives, additional data which update and clarify the information in that report have become available. A summary of American contributions to Canadian First Step projects (page 6) and Table 3 (page 24) in that document detailing funds committed for expenditure after December 31, 1990 on First Step projects are updated in this Second Step Report as an Appendix, entitled "Addendum to Report on Canadian First Step Projects, NAWCC (Canada) Report No. 91-1."

ACCOMPLISHMENTS: PRAIRIE HABITAT JOINT VENTURE

PRAIRIE CARE, ALBERTA

Project Description: Prairie CARE (Conservation of Agriculture, Resources and the Environment) provides a mechanism which allows society to share the costs of securing and developing wildlife habitat while providing the landowner with economically viable land use alternatives. The program is designed to pay farmers in pothole areas to set aside parcels of land as natural habitat or to change management practices so that wildlife can exist in harmony with agriculture. Land cover, reduced tillage and retained wetlands are the key elements of this initiative. Prairie Care in Alberta is focused on the central Parkland, the Peace River Parkland and the southern



Seeding for a Prairie Care dense nesting cover project northeast of Viking, Alberta.

Photo: R. Bryan, PHJV

Prairie zones. These stretch from High Level to Grand Prairie in the northwestern part of the province and from Lac La Biche to Calgary and to the entire southeast portion of the province.

The program is being applied through the use of Habitat Land Leases for 10-year terms providing for exclusive wildlife usage on parcels of at least 40 acres (16 ha) and implementing modified and compatible land uses such as delayed haying, planned or delayed grazing, and altered cropping practices. In some cases, direct land purchases are undertaken. The program also undertakes on-farm demonstration of conservation farming practices such as stubble mulching, direct seeding, chemical fallow, planned grazing, and fall seeding. Specific water development projects are also considered.

Goals: For this Second Step project, two long-term goals were established as listed below. Habitat securement, development and management are ongoing.

(1) Deliver a comprehensive land management program to preserve small wetlands and provide secure upland nesting habitat.

(2) Promote recognition of small wetland and upland habitat areas as key waterfowl production habitat in Alberta.

Benefits of Project: Perennial land cover and reduced tillage help farmers to control erosion, sustain organic matter in the soil, counter the effects of salinization, and increase soil moisture. Retaining wetlands helps to control flooding, trap sediments, filter pollutants, recharge groundwater and improve moisture recycling which enhances summer precipitation. The financial elements of Prairie Care can offer predictable cash flow to landowners for the 1990s. Demonstrations of new technology are making conservation farming a practical alternative. Upland grass cover and secured wetlands are the key to water, soil and habitat protection. Prairie Care in Alberta complements other programs such as the provincial Wetlands For Tomorrow and the Landowner Habitat Programs, the Canada - Alberta Soil Conservation Initiative, and the Canada - Alberta Research and Technology Transfer Program.

Long-term Management: Management plans for each parcel of land are developed through contracts with the landowner. Plans for productive grass cover are arranged with Prairie Care staff and the landowner in each case. Title to all lands purchased under this project will be held by Ducks Unlimited Canada (DUC). These lands will be managed by DUC and Alberta Forestry, Lands and Wildlife staff solely for the purpose of wildlife habitat. Lands leased from farmers will be managed in a similar manner in cooperation with the landowner. All aspects of holding title and administering leases will be the responsibility of DUC on behalf of the Prairie Habitat Joint Venture. Properties being managed by the landowner under a management agreement with Ducks Unlimited Canada will be periodically inspected by field staff to ensure compliance with the terms of these agreements.

Accomplishments to March 31, 1991:		•
(a) Habitat Development:		e .
Upland Habitat Development	8 950 acres	(3 622 ha)
Total Habitat Development	8 950 acres	(3 622 ha)

(b) An information booklet entitled "Alberta Prairie Care" and various Prairie Care Fact Sheets were published.

PARTNERS	CONTRIBUTIO	N (CDN\$)
Canadian Wildlife Service	145 000	
Province of Alberta	80 000	
Private Sector:		· .
Ducks Unlimited Canada	964 700	:
Canadian Contributions (Subtotal)	1 189 700	(42%)*
United States Contributions	1 618 300	(58%)

Total (CDN\$)

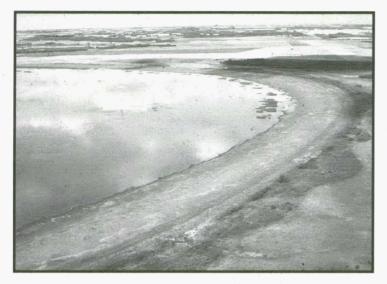
\$ 2 808 000

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* Percent of total contributions.



PRAIRIÉ CARE, SASKATCHEWAN



Goose staging habitat near Strawberry Lake, Saskatchewan.

Photo: Saskatchewan Wetland Conservation Corporation

Project Description: The Prairie Care Program was initiated in Saskatchewan in June 1989. While initially targeted on 11 rural municipalities in three key NAWMP areas (the Allan/Tiger/Minichinas Hills, Cutknife Hills, and Missouri Coteau), the program was subsequently expanded to include the Thickwood Hills and Quill Lakes/Touchwood Hills/Beaver Hills areas.

Focusing on upland nesting habitat around pothole complexes, Prairie Care includes soil and water conservation demonstrations, grazing systems development, marginal land conversion and modification, leasing of hayland and pasture, inter-pothole habitat restoration,

and delaying of hay cutting on existing hayfields or converted croplands. Purchased and leased lands are being converted to dense nesting cover for exclusive upland nesting habitat. Preferred wetland size is a maximum of 25 acres (10 ha) but larger water bodies are also considered. Upland parcels of a minimum of 40 acres (16 ha) (excluding water area) are preferred for the program.

Goals: For this Second Step project, two long-term goals were established as listed below. Habitat securement, development and management are ongoing.

(1) Deliver a comprehensive land management program to preserve small wetlands and provide secure upland nesting habitat.

(2) Promote recognition of small wetland and upland habitat areas as key waterfowl production habitat in Saskatchewan.

Benefits of Project: The combination of direct land management activities (e.g. establishment of dense nesting cover on marginal cropland) and indirect land use adjustment programs (e.g. incentives to promote delayed haying) of the Prairie Care Program are compatible with those of agricultural soil conservation initiatives. These include the Permanent Cover Program being delivered by the Prairie Farm Rehabilitation Administration.

Many prairie soils are highly fragile and are subject to wind and water erosion once broken and intensely cultivated. Re-establishment of perennial grasses and forbs will reduce degradation of these soils while at the same time restoring some of the organic matter content lost as a result of years of cultivation for annual crops.

Securing the habitat base of small, very productive wetlands will ensure breeding habitat for a wide range of avian upland species, small mammals, and other wetland-dependent wildlife. The establishment of perennial cover on adjacent uplands also will benefit upland nesting waterfowl and a wide range of other ground-nesting migratory birds and local mammals.

Prairie Care in Saskatchewan complements the provincial Save Our Soils Program, the Heritage Marsh Program, the SUPER programs, the Acres for Wildlife Program, and the Habitat Trust of the Saskatchewan Wildlife Federation.

Long-term Management: Title to all lands purchased under this project will be held by the Saskatchewan Wildlife Federation. These lands will be managed for the purpose of enhancing wildlife habitat quality and other wildlife-compatible uses. Lands leased from farmers will be managed for these purposes in cooperation with the landowner by Ducks Unlimited Canada (DUC). All aspects of administering leases will be the responsibility of DUC on behalf of the Prairie Habitat Joint Venture. Properties being managed by the landowner under a management agreement with Ducks Unlimited Canada will be periodically inspected by field staff to ensure compliance with the terms of these agreements.

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Accomplishments to March 31, 1991:

(a) Habitat Securement:

Acquisition	2 623 acres	(1 061 ha)
Leases	6 151 acres	(2 489 ha)
Management Agreements	17 361 acres	(7 026 ha)
Total Habitat Securement	26 135 acres	(10 576 ha)

(b) Habitat Development:

Upland Habitat Development	7 046 acres	(2 ⁸⁵² ha)
Total Habitat Development	7 046 acres	(2 852 ha)

(c) An information booklet entitled "Prairie Care in Saskatchewan" and various Prairie Care Fact Sheets were published.

PARTNERS

CONTRIBUTION (CDN\$)

5taf <u>f Support</u> 802 900 1 938 819	(29%)* (71%)	•
Staff Support	(29%)*	•
412 900	. <u>.</u>	
412 900		
Staff Support		
390 000		•

* Percent of total contributions.



PRAIRIE CARE, MANITOBA

Project Description: Prairie Care is focused in 48 rural municipalities totalling 5 300 sq. mi. (13 700 sq. km.) in the pothole region of the southwestern part of the province. The area has the highest density of breeding waterfowl in the province. Wetland and upland habitats in this area have been highly degraded by intensification of agriculture and continue to be vulnerable to further deterioration.

The program focuses on increasing waterfowl nesting success as well as waterfowl production. This is being done through changes in agricultural land use practices and by pro-



Wetland creation project in southwestern Manitoba.

Photo: Manitoba Habitat Heritage Corporation

tecting wetlands. The area is used heavily by nesting ducks such as Mallard and Blue-winged Teal and other marsh and upland nesting species. The latter include Eared Grebe, American Coot, Black Tern, Wilson's Phalarope, Sharp-tailed Grouse, Clay-colored Sparrow, and Western Meadowlark. Other mammal species including muskrat, mink, and white-tailed deer are also common users of these habitats. Wetland leases and purchased lands of a minimum of 25 acres (10 ha) are preferred with a desired ratio of three leased upland acres to one wetland acre. Hence, upland lease size is governed by the type and size of associated wetlands that have been secured. Goals: For this Second Step project, four long-term goals were established as listed below. Habitat securement, development and management are ongoing.

(1) Improve waterfowl recruitment and promote soil and water conservation through the delivery of extensive and intensive land management applications.

(2) Secure uplands associated with key wetland pothole complexes to permit their restoration as nesting cover.

(3) Establish landowner agreements to promote wildlife-compatible agricultural practices including delayed hay cutting, rotational grazing, and underseed fallow and chemical fallow.

(4) Promote on-farm conservation tillage demonstrations through the provision of financial and technical assistance to existing farming organizations established under the Farming for Tomorrow Program of the Federal/Provincial Soil and Water Conservation Accord.

Benefits of Project: The wide range of nesting ducks, marsh and upland birds, and mammals using these habitats will directly benefit by their securement through leasing and acquisition initiatives. Purchase of lands with high densities of wetlands will provide high quality nesting cover and feeding areas for waterfowl and other species as project development is undertaken. Land leasing and the creation of management agreements will also benefit wildlife. On-farm demonstrations to promote conservation farming will further enhance habitat by improving cover and reducing disturbance to wildlife. Soil and water conservation will benefit prairie farmers as well. Prairie Care in Manitoba complements the provincial Farming For Tomorrow and Heritage Marsh Programs, as well as the Canada - Manitoba Soil and Water Conservation Agreement.

Long-term Management: Purchased lands that are being held in title by Ducks Unlimited Canada (DUC) will be developed to ensure creation of high quality cover for nesting waterfowl and other wildlife. All landowner leases and agreements and annual landowner payments are being managed by DUC for this project. Where title remains with the landowner, DUC staff are responsible for development and management of habitat, Agreements between DUC and farming groups under the Conservation Farming Demonstration Program will be maintained. A Land Management Committee made up of representatives of the NAWMP partners is being established in cooperation with the Manitoba Habitat Heritage Corporation (MHHC). In addition, the MHHC is leading the establishment of local committees comprised of area farmers providing grassroots feedback on NAWMP implementation.

Accomplishments to March 31, 1991:	•••	
(a) Habitat Securement:	• • •	
Upland/Wetland Purchase	2 801 acres	(1 133 ha)
Leases and Management Agreements	10 179 acres	(4 119 ha)
Total Habitat Securement	12 980 acres	(5 252 ha)
(b) Habitat Development:		
Habitat Development	7 315 acres	(2 960 ha)
(c) Other Agreements:		
Conservation Farming Demonstrations	9 570 acres	(3 873 ha)
Total Habitat Development and	•	
Other Agreements	16 885 acres	(6 833 ha)

(d) An information booklet entitled "Manitoba Prairie Care" and various Prairie Care Fact Sheets were published.

PARTNERS		CONTRIBUTION (CDN\$)	
Canadian Wildlife Service	· · ·	345 300	
Agriculture Canada		Staff Support	
Province of Manitoba		Staff Support	
Private Sector:			
Ducks Unlimited Canada		(-246 700)*	
Canadian Contributions (Subtotal)		98 600 (5 %)**	
United States Contributions		2 039 500 (95 %)	
Total (CDN\$)		\$ 2 138 100	

* The negative value here indicates a commitment of funds reimbursed beyond the reporting period.

** Percent of total contributions.



HABITAT ENHANCEMENT LAND LISE PROGRAM MANITOBA



Preparing nest baskets for the upcoming season in southwestern Manitoba.

Photo: Manitoba Habitat Heritage Corporation

Project Description: The Habitat Enhancement Land Use Program (HELP) is focused on devising, implementing and evaluating innovative wildlife habitat maintenance, incentive, and development techniques. These are designed mainly for contemporary farming operations on private lands in the prairie pothole district of southwestern Manitoba. The program centres on the Rural Municipality of Shoal Lake and is a cooperative pilot project by Wildlife Habitat Canada, Ducks Unlimited Canada and the Manitoba Department of Natural Resources.

Goals: For this Second Step project, four longterm goals were established as listed below. Habitat securement, development and management are ongoing.

(1) Protect small wetlands with significant waterfowl production capability.

(2) Lease and manage, under long-term agreements (from five to seven years each), 9 000 acres (3 642 ha) of adjacent uplands for nesting by waterfowl and for soil and water conservation benefits.

(3) Encourage landowners to undertake conservation farming techniques beneficial to wildlife by means of incentives and on-farm demonstrations.

(4) Evaluate the success of habitat

maintenance and develop initiatives relative to waterfowl productivity and landowner acceptance.

Benefits of Project: HELP takes an holistic approach to wildlife habitat maintenance and management in the heart of the pothole district. The program will maintain and develop habitat for various species of waterfowl and wildlife. Incentives supporting the adoption of "wildlifefriendly" farming practices will provide additional benefits to soil and water resources.

A total of 9 304 acres (3 765 ha) of wetland habitat are now secured under long-term leases with over 70 landowners. Two pasture management projects have been developed with cooperating landowners. Over 640 acres (259 ha) of purchased habitat are being developed as dense nesting cover. Electrified predator-exclusion fencing across a small peninsula on the west side of Shoal Lake has been installed as an experimental, intensive waterfowl production site.

Long-term Management: Lease Agreements are being monitored; when they reach their term, each will be evaluated for renewal under the NAWMP. In most cases, purchased acreage is being developed as dense nesting cover for waterfowl and other wildlife. Such areas will be managed in perpetuity for wildlife under provincial designation as Wildlife Management Areas.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Long-term Lease with Landowners Total Habitat Securement	9 304 acres 9 304 acres	(3 765 ha) (3 765 ha)
(b) Habitat Development:		
Land Purchase for Dense	· · · ·	· · · · · ·
Nesting Cover	640 acres	(259 ha)
Pasture Management Agreements	480 acres	(194 ha)
Total Habitat Development	1 120 acres	(453 ha)

PARTNERS	· · ·	CONTRIBUTION (CDN\$)
Canadian Wildlife Service		75 000
Province of Manitoba		160 600
Private Sector:		
Ducks Unlimited Canada		160 600
Wildlife Habitat Canada		333 317
Canadian Contributions (Subtotal)		729 517 (100 %)*
United States Contributions	• •	
·	· · · · · · · · · · · · · · · · · · ·	

Total (CDN\$)

* Percent of total contributions.

\$ 729 517



HERITAGE MARSHES, MANITOBA



Establishment of waterfowl nesting habitat in the Minnedosa pothole region, Manitoba.

Photo: Manitoba Habitat Heritage Corporation

Project Description: Manitoba's Heritage Marshes are critical as waterfowl moulting and staging areas. They also provide a refuge for waterbirds during drought periods. However, despite their large size and permanent nature, the condition of these marshes and even their existence is threatened by agricultural encroachment, drainage, and hydro-electric flooding activities. Four high priority areas were initially the focus of this Second Step project: Whitewater Lake, Lynch Point, Oak and Plum Lakes, and Big Grass Marsh Heritage Marshes. Big Grass Marsh has since been replaced by the Netley Libau Heritage Marsh. These areas are chosen for securement and subse-

quent protection and restoration. They are key moulting areas for Mallard, Blue-winged Teal, and Redhead. A variety of other ducks, staging shorebirds, Canada Goose, Snow Goose, Sandhill Crane, and Tundra Swan also frequent these marshes during spring and fall migration.

Goals: For this Second Step project, four long-term goals were established as listed below. Habitat securement, development and management are ongoing.

(1) Secure 850 acres (344 ha) of upland and wet meadow habitat at Whitewater Lake to permit subsequent enhancement of wetland and nesting cover.

(2) Secure 625 acres (253 ha) of upland and wet meadow habitat at Lynch Point on the west end of Delta Marsh to permit subsequent enhancement of wetlands.

(3) Secure 430 acres (174 ha) of upland and wetland habitat at Oak and Plum Lakes to protect the area against further agricultural encroachment.

(4) The original goal to secure 500 acres (202 ha) of upland habitat at Big Grass Marsh to permit their further protection and subsequent enhancement has been replaced by a project area with similar habitat enhancement at the Netley Libau Heritage Marsh.

Benefits of Project: Securement of Heritage Marshes will preserve these ecologically important wetlands and permit their subsequent restoration and/or enhancement. Their function as key moulting, staging, and migratory habitat for waterfowl and shorebirds and as refugia for breeding waterbirds during drought will be maintained. Many other species of wildlife will also benefit. For example, spawning and rearing areas for important fish species such as northern pike, walleye, and shiner minnow will be conserved. Muskrat, mink and raptors such as Osprey and Northern Harrier which depend on these marsh habitats will also benefit by their securement.

Long-term Management: Following the securement of the project areas, ongoing restoration and development will take place as sufficient parcels of lands are assembled. Title to secured areas (except Crown land which will remain under provincial title) will be held by Ducks Unlimited Canada in cooperation with the Manitoba Wildlife Federation's Habitat Trust Foundation. A multi-agency Task Force is currently preparing development plans for Oak and Plum Lakes and Big Grass Marsh while Ducks Unlimited Canada is preparing preliminary development plans for future activities at the Netley Libau Marsh. Development plans for Whitewater Lake and Lynch Point are complete. Securement initiatives for Big Grass Marsh are still being developed.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Land Purchase (Oak and Plum Lakes)	885 acres	(358 ha)
Land Purchase (Lynch Point)	783 acres	(317 ha)
Land Purchase (Whitewater Lake)	1 120 acres	(453 ha)
Total Habitat Securement	2 788 acres	(1 128 ha)

(b) Upland Development: .

Crown Land Transfer and Upland Development (Netley Libau Marsh)

205 acres

(83 ha)

21

Total Habitat Development and Other Agreements	2 903 acres	(1 175 ha)
Whitewater Lake	546 acres	(221 ha)
(d) Pre-existing Free Easement Agreement:		
Whitewater Lake	1 997 acres	(808 ha)
Lynch Point	155 acres	(63 ha)
(c) Pre-existing Crown Land Transfers:		· · · · ·

PARTNERS		CONTRIBUTION (CDN\$)
Province of Manitoba		62 000
Private Sector:		
Ducks Unlimited Canada		398 500
Wildlife Habitat Canada	· · ·	52 100
Canadian Contributions (Subtotal)		512 600 (87 %)*
United States Contributions		72 800 (13 %)

Total (CDN\$)

* Percent of total contributions.

\$ 585 400

22

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ACCOMPLISHMENTS: EASTERN HABITAT JOINT VENTURE

MATCHEDASH BAY, ONTARIO

Project Description: The Matchedash Bay project area, located at the southeast end of Severn Sound on Georgian Bay, was chosen because it is a high risk area for wetland habitat loss, has high potential for production of waterfowl and other wetland-dependent wildlife, is a critical staging area for migrating waterfowl, and development and management of this area for waterfowl is highly compatible with other existing wetland values and uses. The area has a wide range of fish, waterfowl and wildlife including the greatest diversity of amphibians and reptiles known in Canada. The project area covers a total of 5 381 acres (2 178 ha) and includes a provincial Area of Natural and Scientific Interest (ANSI). The area also includes several Class 1 and 2 wetlands



Matchedash Bay is one of the most productive waterfowl areas in Ontario.

Photo: Canadian Wildlife Service

as identified in the Ontario Wetland Evaluation Program.

Goals: Four long-term goals were established for this Second Step project as listed below. These are in addition to the 1 199 acres (485 ha) secured under First Step initiatives at Matchedash Bay. Habitat securement, development and management are ongoing.

(1) Secure and manage 4 239 acres (1 715 ha) of wildlife habitat in the project area and integrate other important resource interests.

(2) Restore and develop 3 527 acres (1 427 ha) of habitat for waterfowl and other wetland-dependent wildlife in the area.

(3) Increase waterfowl production in the flyway through maintaining and enhancing 1 091 acres (442 ha) of habitat for staging waterfowl.

(4) Produce 2 450 waterfowl including 880 Mallard, 210 Black Duck, and 1 360 other waterfowl of various species.

Benefits of Project: The project will protect this important production and staging area from pressures for marina, cottage and drainage developments as well as other activities that are not compatible with wetland conservation. Securement and management of this area will lead to the protection of over 560 species of vascular plants (of which 20 are of provincial or regional

significance); 20 species of waterfowl that use the area in spring or fall periods; 150 species of other birds including wetland breeders such as Least Bittern, American Bittern, Sora, Black Tern, Pied-billed Grebe, American Coot, Virginia Rail, Common Moorhen, Marsh Wren, Sedge Wren, and local visitors such as Double-crested Cormorant, Osprey, and Caspian Tern; 28 species of mammals; 17 species of amphibians and reptiles including map turtle, Blanding's turtle, and five-lined skink; and 34 species of fish (of which 24 are game fish species such as northern pike, muskellunge, largemouth bass, black crappie, and yellow perch) that either spawn in the area or use it as a migration corridor to spawning sites in two rivers which feed the bay — the latter includes pickerel, salmon, and trout.

Long-term Management: A Management Plan has been prepared for the area with considerable public input and support. This approved plan serves as an official expression of the Ontario Ministry of Natural Resources Policy for the Matchedash Bay area. This plan provides for the dedication of over 2 000 acres (809 ha) of provincial Crown land to the goals of the North American Waterfowl Management Plan.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Land Purchase		647 acres	(262 ha)
Total Habitat Securement	• • •	647 acres	(262 ha)

PARTNERS	· · · ·		•	CONTRIBUTIO	N (CDN\$)
Canadian Wildlife Service			• • •	178 300	• •
Province of Ontario	· .		•	487 300	
Private Sector:			· ·		
Ducks Unlimited Canada		÷	•	22 200	· .
Nature Conservancy of Canada				Staff Support	
Canadian Contributions (Subtotal)	• •	•	•	687 800	(74 %)*
United States Contributions			•	245 500	(26 %)
Total (CDNS)	· · ·			C 022 200	• •

* Percent of total contributions



LAKE ST. FRANCIS/ST. LAWRENCE RIVER, ONTARIO

Project Description: The proposed sites for implementation of the elements of this project are located along a 12-mile (20-km) wide band along the shores of Lake St. Francis and the St. Lawrence River of eastern Ontario. These are centred on the counties of Stormont. Glengarry and Dundas. The project consists of the securement, development, and management of key waterfowl staging areas and waterfowl production habitat because little high quality habitat is under secured status in the area. Several wetlands in the project area are in danger of being drained for development or are in a low productivity state. A particular focus of this Second Step project is the securement of the wetlands of the Charlottenburg Marsh.



Shoreline swamps along the St. Lawrence River in eastern Ontario are vital wetland habitats for wildlife.

Photo: Canadian Wildlife Service

Goals: Three goals over the next five years were established for this Second Step project as listed below. Habitat securement, development and management are ongoing.

(1) Secure, develop, and where necessary manage 5 200 acres (2 105 ha) of wetlands for wildlife.

(2) Increase habitat quality and quantity to expand waterfowl production by 8 400 birds.

(3) Ensure habitat benefits for spring and fall staging and moulting waterfowl.

Benefits of Project: The implementation of this project will benefit waterfowl and other wildlife species in the area. These include Mallard, Black Duck, Wood Duck, Wigeon, Redhead, and Shoveller. Increased biodiversity will benefit a wide range of other wetland-dependent birds such as Black Tern, Double-breasted Cormorant, Green Heron, Great Blue Heron,

Swamp Sparrow, Marsh Wren, and Osprey as well as other wildlife species such as river otter. Local residents and the general public will also directly benefit from this project. The increase in healthy, diverse habitat is expected to augment the number of hunting, angling, and wildlife viewing days which will significantly enhance local use and tourism. For example, guiding services can expect a major increase in annual revenues.

Long-term Management: A Management Plan is currently being completed for this area. It will serve as an official statement of policy by the Ontario Ministry of Natural Resources for the protection and management of this area. A Project Implementation Committee, to consist of local representatives of the project's partners, will oversee the activities that will be undertaken.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Land Purchase	•	131 acres	(53 ha)
Total Habitat Securement	· · · ·	131 acres	(53 ha)

PARTNERS	<u> </u>				<u> </u>	DNT	RIBUTIO	N (CDN	\$)
Province of Ontario	•	:		· .			4 000		
Private Sector:				•					
Ducks Unlimited Canada	• .	•					34 000	· .	· •
Canadian Contributions (Subtotal)	۰.		· · · .		÷	''	38 000	(33 %)*	
United States Contributions	•			• •			77 100	(67 %)	
					• •	¢ 1	15 100	• •	

* Percent of total contributions.

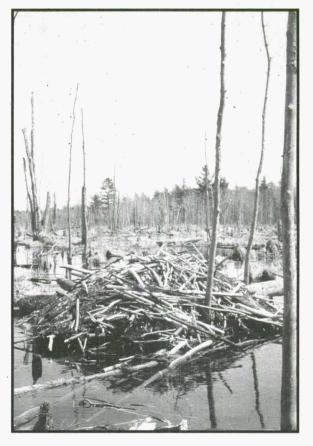


BEAVER POND ENHANCEMENT, ONTARIO

Project Description: The Beaver Pond Enhancement Project, centred on Grimsthorpe Township in Hastings County, is being implemented in the south-central area of the province. Beaver ponds are recognized as one of the most important habitats for waterfowl in Ontario and much of eastern Canada. The activities in this project are designed to accelerate the natural life-cycle of beaver ponds so the ponds remain productive for as long as possible. Project elements include the drawdown of old and unproductive ponds, the installation of structures to facilitate water level control, and the regeneration of poplar stands close to pond areas to entice beaver to return to abandoned ponds. Nesting boxes for waterfowl will also be installed where necessary. The combination of activities at each pond will vary according to site requirements.

Goals: Three long-term goals over the next five years were established for this Second Step project as listed below. Habitat securement, development and management are ongoing.

(1) Secure and enhance 100 000 acres(40 470 ha) of beaver pond habitat(one third as wetlands and the rest from surrounding uplands).



Enhancement of beaver ponds is securing valuable waterfowl habitat in eastern Ontario.

Photo: C. Rubec, NAWCC (Canada)

(2) Secure and enhance 1 700 beaver ponds.

(3) Increase the annual production level of waterfowl from 12 000 to 25 500 birds.

Benefits of Project: The securement, enhancement and management of beaver pond habitat has the potential to have a significant effect on the achievement of NAWMP goals in Ontario. Waterfowl production and staging targets will be enhanced for many species including Mallard, Black Duck, Wood Duck, Blue-winged and Green-winged Teal, Ring-neck Duck,

Wigeon, and Hooded Merganser. Other wildlife species will also benefit including ungulates, furbearing mammals, passerines, raptors, shorebirds, rails and herons.

Long-term Management: The time period during which waterfowl and wildlife benefits from these projects can be expected will vary according to the specific enhancement and management activities undertaken on each site. This generally will range from 10 to 20 years, but the cycle can likely be repeated as long as pond enhancement activities and funding continues. Habitat securement is in the form of 99-year agreements for Crown land and an average 30-year term for agreements on private land.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

62 948 acres	(25 475 ha)
62 948 acres	(25 475 ha)
447 acres	(181 ha)
1 339 acres	(542 ha)
5 752 acres	(2 328 ha)
17 257 acres	(6 984 ha)
24 795 acres	(10 035 ha)
	62 948 acres 447 acres 1 339 acres 5 752 acres 17 257 acres

PARTNERS	CONTRIBUTION (CDN\$)
Province of Ontario	26 200
Private Sector:	
Ducks Unlimited Canada	79 700
Canadian Contributions (Subtotal)	105 900 (100 %)*
United States Contributions	—
Total (CDN\$)	\$ 105 900

* Percent of total contributions.



CACOUNA, QUEBEC

Project Description: The large tidal marshes of the Estuary and Gulf of St. Lawrence are important staging areas for migrating waterfowl. Approximately 700 acres (283 ha) have already been lost to agriculture and other forms of development. The Cacouna project area, located on the south shore of the St. Lawrence Estuary, is considered one of the six best and still unprotected sites for Black Duck in the province. The 750 acres (306 ha) of remaining Spartina marsh is threatened by seaport expansion and dyking for agricultural purposes.



Wetlands at the Cacouna project area, Quebec.

Photo: R. Sarrazin, EHJV

Goals: Three long-term goals were established for this Second Step

project as listed below. Habitat securement is ongoing.

(1) Secure 1 200 acres (485 ha) of prime habitat.

(2) Develop 700 acres (283 ha) to increase wildlife production through construction

of impoundments and water-level control structures.

(3) Promote conservation farming practices beneficial to waterfowl production.

Benefits of Project: The Cacouna project will protect this important Black Duck production and other waterfowl staging area from development pressures. The wildlife species that will benefit from this project include Black Duck, Greater Snow Goose, Peregrine Falcon, Bald Eagle and close to 100 species of other migrating birds. The project will also secure nesting habitat for Sharp-tailed Sparrow which is a provincially rare species. There are fewer than 500 pairs of this species in Quebec, all located in the high salt and brackish marshes of the Estuary.

Long-term Management: A Project Management Team has been established composed of members of all participating agencies. A Management Plan is currently being formulated and approved for the project area and will include additional impoundments and design for public access to facilitate interpretation.

Accomplishments to March 31, 1991:

(a) Surveys and land appraisals were completed.

PARTNERS			CONTRIBUTION (CDN\$)		
Canadian Wildlife Service	,			83 500	
Canadian Contributions (Subtotal)			-	83 500 (100 %)*	
United States Contributions	• •	· · ·		<u> </u>	

Total (CDN\$)

\$ 83 500



ÎLE-DU-MILIEU, QUEBEC

Project Description: Île-du-Milieu is part of the Lac St-Pierre archipelago. This island has very high potential for breeding waterfowl and other birds, as well as for spawning of several species of fish. However, this potential has been limited by agricultural activities, pasturing, and summer-period drying out of the marsh habitat. Swamps and marshes cover 26% of the island and agricultural uses cover the remainder. A commune owns 500 acres (202 ha) of pasture; another 250 acres (102 ha) is cultivated by a single landowner. A local conservation organization owns an additional 400 acres (162 ha).



Aerial view of Île-du-Milieu, Quebec. Photo: R. Sarrazin, EHJV

Goals: Two long-term goals were established for this Second Step project as listed below. Habitat securement is ongoing.

(1) Secure and manage 1 150 acres (465 ha) of agricultural lands and wetlands to improve wildlife production.

(2) Develop 160 acres (65 ha) of habitat for waterfowl and other wetland-dependent wildlife in the area.

Benefits of Project: Securement and management of this island will protect and improve an important portion of this staging area for Canada Goose and several species of dabbling ducks; a population increase of 600 additional ducks per year; and optimization of reproduction and fry development of several fish species. The project will also promote better land use for both agricultural and wildlife purposes and enhance public recreational and educational uses.

Long-term Management: A Project Management Plan has been endorsed by all participating agencies. This Plan will be implemented under the supervision of the Quebec Wildlife Foundation.

Accomplishments to March 31, 1991:

(a) Surveys and land appraisals were completed.

PARTNERS		CONTRIBUTION (CDN\$)
Canadian Wildlife Service	•	2 300
Province of Quebec	• • • •	16 200
Private Sector:		
Ducks Unlimited Canada	· · · · · ·	13 500
Canadian Contributions (Subtotal)		32 000 (100 %)*
United States Contributions		

\$ 32 000

Total (CDN\$)

* Percent of total contributions.

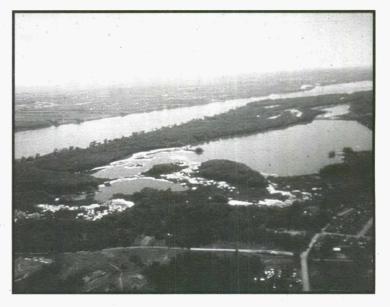
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MCLAURIN BAY, QUEBEC

Project Description: The McLaurin Bay project area is located on the north shore of the Ottawa River, close to the important urban area of Gatineau. It covers 1 000 acres (405 ha) of exceptionally rich habitat essential to a wide variety of fish and other wildlife species. This area comprises 69% privately owned land and 31% provincial Crown land. Like many other wetlands in the Ottawa River Valley, this site is threatened by urban and cottage development. It is located in the municipality with the highest rate of expansion of residential development in the province.

Goals: Five long-term goals were established for this Second Step project as listed below. Habitat securement is ongoing.



Wetlands along the north shore of Ottawa River at McLaurin Bay, Quebec.

Photo: R. Sarrazin, EHJV

(1) Secure and manage 1 000 acres (405 ha) of wildlife habitat in the project area.

(2) Develop 150 acres (61 ha) of habitat for waterfowl and other wetland-related wildlife in the area.

(3) Erect nest baskets to increase nesting success and overall waterfowl production.

(4) Restore degraded shorelines.

(5) Develop public access and wildlife interpretation facilities.

Benefits of Project: This project will protect this important production and staging area from residential and cottage development pressures. Securement and management of this area will also lead to the protection of several species of waterfowl and 22 species of other birds. The latter include two provincially rare species (Least Bittern and Black Tern). Some 15 fish species (including northern pike, yellow perch, largemouth bass, and brown catfish); several species of mammals (including muskrat, beaver and mink); and amphibian and reptile species such as the rare stinkpot turtle will also benefit.

Long-term Management: A Project Management Plan has been endorsed by all participating agencies. This has received considerable support from local management authorities and the public. Following completion of the securement phase of the project (e.g. the acquisition of private lands and dedication of provincial Crown lands), it is expected that the area will be declared a Provincial Wildlife Refuge in order to optimize activities such as public access for hunting and fishing and to facilitate nature interpretation.

Accomplishments to March 31, 1991:

(a) Surveys and land appraisals were completed.

PARTNERS	CONTRIBUTION (CDN\$)
Canadian Wildlife Service	30 500
Province of Quebec	12 400
Private Sector:	
Ducks Unlimited Canada	8 800
Canadian Contributions (Subtotal)	51 700 (100 %)*
United States Contributions	
Total (CDN\$)	\$ 51 700



SAINT-BARTHÉLEMY/SAINT-JOSEPH-DE-MASKINONGÉ, QUEBEC

Project Description: This project is located on the north shore of Lac St-Pierre near St-Barthélemy west of Trois-Rivières. The site is rated as the second most important spring staging area for waterfowl along the St. Lawrence River. Despite very high capability ratings for both agriculture and wildlife, a number of constraints limit the potential use of this site. The persistence of highlevel floodwaters delays seeding while low-level floodwaters or rapid water retreat reduces waterfowl and fish production potential. Dyking for exclusive agricultural use has threatened to reduce waterfowl and fish habitat. This NAWMP project



Shoreline flooding at Saint-Barthélemy, Quebec.

Photo: R. Sarrazin, EHJV

focuses on habitat protection and development for both wildlife and agricultural objectives. This is to be accomplished through two mechanisms: (i) securement through fee title acquisition of 800 acres (323 ha) belonging to 60 separate landowners, and (ii) Crown land dedication, development and management of 1 725 acres (698 ha) through the creation of permanent impoundments and water level control structures. Agricultural needs will continue to be met while respecting those of wildlife.

Goals: Three long-term goals were established for this Second Step project as listed below. Habitat securement is ongoing.

(1) Secure 1 725 acres (698 ha) of valuable floodplain habitat to support existing breeding and migrating wildlife populations.

(2) Develop 300 acres (121 ha) to increase waterfowl production.

(3) Develop and manage 600 acres (243 ha) to meet agricultural development needs while respecting those of wildlife.

Benefits of Project: The project will provide integrated wildlife - agricultural activities that allow for the creation of new, permanent marshes as well as the continuation of farming activities compatible with the needs of resident and migrating waterfowl. This project will directly benefit waterfowl species including Pintail, Black Duck, Mallard, Green-winged Teal, and migrating Canada Goose and Greater Snow Goose. Other bird species to benefit are Black Tern, Least Bittern, Horned Grebe, Cooper's Hawk, Marsh Wren, Yellow Rail, Sedge Wren, and Wilson's Phalarope. Fish species, such as northern pike and yellow perch, and nine species of frogs and turtles (two of which are rare in the province – the pickerel frog and the map turtle) will also benefit.

Long-term Management: A Management Plan has been prepared for the area with compatible input and support from several interested government and non-government organizations. Land acquired will be held by the Quebec Wildlife Foundation (Government of Quebec) and the project will be developed and managed by Ducks Unlimited Canada.

Accomplishments to March 31, 1991:

(a) Surveys and land appraisals were completed.

PARTNERS			CON	TRIBUTIO	N (CDN\$)
Canadian Wildlife Service		·		32 500	· .
Province of Quebec				79 000	
Private Sector:	,	÷. *		۰.	1 X X
Ducks Unlimited Canada	· · ·			36 000	· ·
Canadian Contributions (Subtotal)		· ·		147 500	(100 %)*
United States Contributions	· · ·		• • •		· .
Total (CDN\$)			\$	147 500	



SAINT-GÉDÉON, QUEBEC

Project Description: The Saint-Gédéon Marsh project area is located on the east shore of Lac St-Iean near Alma. It is the most productive waterfowl habitat around this major lake, mostly for Black Duck. However, wetland productivity is greatly reduced by artificial water level control for hydro-electricity production and by the encroachment of cottage and urban development. The area has a wide range of fish and wildlife and is the most important waterfowl spring staging area of the Saguenay/ Lac St-Jean region.



Goals: Two long-term goals were established for this Second Step

Saint-Gédéon Marsh, east side of Lac St-Jean, Quebec.

project as listed below. Habitat securement is ongoing.

(1) Secure 300 acres (120 ha) of wildlife habitat through fee title acquisition of

150 acres (60 ha) and dedication of an additional 150 acres (60 ha).

(2) Develop suitable portions of the area to increase waterfowl recruitment and other wetland-related wildlife.

Benefits of Project: Securement of the area will ensure spring migration habitat for some 30 species of waterfowl including Canada Goose, Black Duck, and Pintail. A variety of other birds (173 species have been surveyed) will also benefit from the project, including the only colony of Black Tern in the region. Other wildlife found in the area are 17 fish, seven amphibian and reptile, and 14 mammal species.

Long-term Management: The titles of the acquired lands will be held by the Quebec Wildlife Foundation (Government of Quebec) and local non-profit wildlife conservation societies. Development projects will be undertaken and managed by Ducks Unlimited Canada.

• Accomplishments to March 31, 1991:

(a) Surveys and land appraisals were completed.

PARTNERS	CONTRIBUTION (CDN\$	
Canadian Wildlife Service		4 600
Province of Quebec	· ·	7 600
Private Sector:		
Ducks Unlimited Canada	· · · ·	12 500
Canadian Contributions (Subtotal)		24 700 (100 %)*
United States Contributions		· · · ·

\$ 24 700

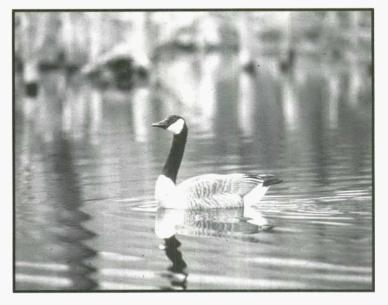
Total (CDN\$)



MALPEQUE BAY/BEACH POINT MARSH, PRINCE EDWARD ISLAND

Project Description: The Malpeque Bay/Beach Point Marsh project area, located on the north shore of Prince Edward County, was designated as a Ramsar Site in 1988 for its importance to migrating Canada Goose, Black Duck and shorebird species. However, to date the area has not been secured for conservation purposes. The bay itself is an undeeded shallow tidal area with extensive eelgrass flats. These tidal waters are under federal jurisdiction, but the surrounding uplands and tidal marshes are privately owned. The project involves securement of tidal marshes and development of a lesser area for brood rearing habitat.

Goals: Two goals were established for this Second Step project as listed below. Habitat securement and development are ongoing.



Malpeque Bay on Prince Edward Island is an important area for Canada Goose.

Photo: Canadian Wildlife Service

(1) Secure 150 acres (61 ha) of brackish marsh.

(2) Develop 50 acres (20 ha) of marsh as brood habitat.

Benefits of Project: Securement of this area will protect the shoreline of this important waterfowl and migratory birds site. Development of the high marsh area will increase Black Duck production and provide a source of freshwater to migrant species.

Long-term Management: Following the completion of the acquisition and development phases of this project, the area will be managed to benefit migrating and breeding waterfowl and shorebirds. This management will be undertaken by the Prince Edward Island NAWMP Steering Committee.

Accomplishments to March 31, 1991:

- (a) Habitat Securement:
- Habitat Purchase from Private Owners 100 acres
- Total Habitat Securement

100 acres	(40 ha)
100 acres	(40 ha)

\$ 26 140

PARTNERS		CONTRIBUTION (CDN\$)
Canadian Wildlife Service		18 000
Province of Prince Edward Island		7 100
Private Sector:		
Ducks Unlimited Canada		1 040
Canadian Contributions (Subtotal)		26 140 (100 %)*
United States Contributions	• • •	· · · · · · · · · · · · · · · · · · ·

Total (CDN\$)

MOUNT HOPE MARSH, PRINCE EDWARD ISLAND

Project Description: The Mount Hope Marsh project area, located on the St. Peters River floodplain on the north shore of Kings County, has one of the largest privatelyowned wetlands in the province. The area is comprised of 60% wetlands, 30% forest, and 10% agricultural land use. Due to partial impoundment by highway development and subsequent stream sedimentation from agricultural run-off, the marsh has become overgrown and has lost much of its wildlife potential. Current land tenure and land use practices are accelerating this habitat deterioration.



Recreational opportunities for all generations are a valued component in wetland conservation initiatives across Canada.

Photo: P. Lang, Ducks Unlimited Canada

Goals: Three goals over three years were established for this

Second Step project as listed below. Habitat securement and development are ongoing.

(1) Acquire 300 acres (121 ha) of wetland and associated upland habitat.

(2) Develop 160 acres (65 ha) of wetland habitat.

(3) Establish Mount Hope Marsh as a Provincial Wildlife Management Area.

Benefits of Project: Acquisition of the project area will simplify a complex ownership pattern and establish wildlife conservation as the primary land use for the area. Development leading to restoration of the wetland habitat will increase production of birds including Black Duck and Ring-necked Duck, and other species such as speckled trout and muskrat.

Long-term Management: Upon completion of the acquisition and restoration phases of the project, the partner agencies will establish a Project Management Committee for the area to maximize wildlife benefits. The area is proposed for designation as a Provincial Wildlife Management Area.

Accomplishments to March 31, 1991:	· · · ·
(a) Habitat Securement:	
Land Acquisition	37 acres
Total Habitat Securement	37 acres

PARTNERS	CONTRIBUTION (CDN\$)
Canadian Wildlife Service	4 400
Province of Prince Edward Island	7 180
Private Sector:	
Ducks Unlimited Canada	504
Canadian Contributions (Subtotal)	<u>12 084</u> (100 %)*
United States Contributions	· · · · · · · · · · · · · · · · · · ·

(15 ha) (15 ha)

\$ 12 084

. .

Total (CDN\$)

MOUNT STEWART MARSH, PRINCE EDWARD ISLAND

Project Description: The Mount Stewart Marsh, located northeast of the Village of Mount Stewart in Kings County, is a 600 acre (243 ha) tidal wetland partially impounded by an abandoned railroad bed. Associated uplands consist of 150 acres (61 ha) of forested scrub and 50 acres (20 ha) of agriculture hay fields. The marsh covers the head of the tidal area on the Hillsborough River. Proximity to the Gulf of St. Lawrence makes this marsh one of the most critical waterfowl production and staging areas in the province. Since the railroad line is now abandoned, there is potential for breaching of the railbed leading to the return of full tidal flooding of this area.



Mount Stewart Marsh on the Hillsborough River, Prince Edward Island.

Photo: K. McAloney, EHJV

Goals: Three goals over four years were established for this Second Step project as listed below. Habitat securement and development are ongoing.

(1) Acquire 800 acres (324 ha) of freshwater and brackish marsh.

(2) Develop 160 acres (65 ha) of marsh impoundments.

(3) Establish a Provincial Wildlife Management Area for the production and staging of waterfowl, shorebirds, pheasants, and other wildlife.

Benefits of Project: Securement will promote the protection of the habitat in this area and facilitate the development of marsh impoundments to increase wildlife production. This will also permit management of adjacent uplands including reduction of the amount of spring burning that is detrimental to habitat values. Species that will benefit from the project include waterfowl such as Black Duck, Wigeon, and Pintail and non-game bird species such as Yellowlegs, Willet and sandpipers.

Long-term Management: Upon completion of the acquisition and impoundment development phases of the project, the partner agencies will establish a Project Management Committee for the area to maximize wildlife benefits. The area is proposed for designation as a Provincial Wildlife Management Area.

Accomplishments to March 31, 1991:

(a) Habitat Securement:		
Wetland Acquisition	42 acres	(17 ha)
Upland Acquisition	53 acres	(21 ha)
Wetland Crown Land Dedication	95 acres	(38 ha)
Upland Crown Land Dedication	12 acres	(5 ha)
Total Habitat Securement	202 acres	(81 ha) ⁻

PARTNERS	·· .	CONTRIBUTION (CDN\$)
Canadian Wildlife Service		26 000
Province of Prince Edward Island		31 350
Private Sector:		
Ducks Unlimited Canada		976
Canadian Contributions (Subtotal)	•	58 326 (100 %)*
United States Contributions		<u> </u>

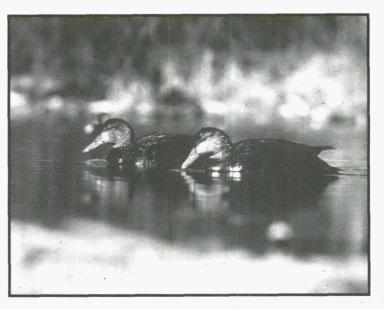
Total (CDN\$)

\$ 58 326

TYRON RIVER ESTUARY, PRINCE EDWARD ISLAND

Project Description: The Tyron River Estuary, located on the south shore of Prince County near the Village of Tyron, is a key migration area for Canada Goose and Black Duck. The tidal estuary area of 448 acres (181 ha) is Crown land but 295 acres (119 ha) of salt marshes, 711 acres (288 ha) of agricultural fields, and 135 acres (55 ha) of small woodlots are privately owned. Siltation and chemical run-off into the estuary and marshes are reducing the wildlife carrying capacity of the area.

Goals: Three goals over two years were established for this Second Step project as listed below. Habitat securement, development, and management are ongoing.



Black Duck is one of the species to benefit from wetland conservation in Prince Edward Island.

Photo: Canadian Wildlife Service

(1) Acquire 295 acres (119 ha) of salt marsh habitat.

(2) Develop two brood rearing impoundments totalling 54 acres (22 ha).

(3) Designate 1 589 acres (643 ha) as a Wildlife Management Area through stewardship agreements with private landowners.

Benefits of Project: Acquisition of the salt marsh will protect waterfowl staging habitat and reduce the impact of conflicting land uses such as cattle grazing. Development of impoundments will increase Black Duck production and permit the establishment of more shorebird migration habitat. Stewardship agreements for agricultural lands will reduce soil and wind erosion and the impact of chemical run-off on wetland habitats.

Long-term Management: Project partners, in cooperation with the Island Nature Trust, will establish a Wildlife Management Area to benefit migrating wildlife and increase waterfowl production.

Accomplishments to March 31, 1991:

(a) Habitat Securement:	 ·	
Land Purchase	27 acres	(11 ha)
Total Habitat Securement	27 acres	(11 ha)

(b) Wind breaks have been planted to control erosion and to provide wildlife cover.

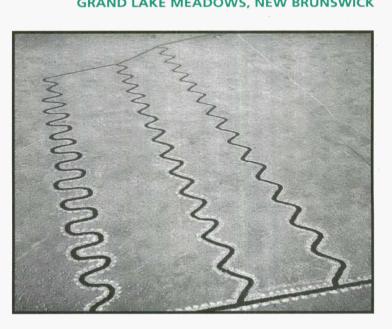
PARTNERS	CONTRIBUTION (CDN\$)
Province of Prince Edward Island	3 070
Private Sector:	
Wildlife Habitat Canada	8 500
Island Nature Trust	16 650
Canadian Contributions (Subtotal)	28 220 (100 %)*
United States Contributions	

Total (CDN\$)

\$ 28 220

GRAND LAKE MEADOWS, NEW BRUNSWICK

Project Description: The Grand Lake Meadows project area is a complex of diverse floodplain habitats including open lakes. sedge meadows, flooded hardwood swamps, and oxbow ponds with some agricultural use of higher interval lands between the river and the meadows. Annual spring flooding provides ample migration and pairing habitat. Flood waters recede to leave dry meadow habitat during the brood rearing period. The area is deemed one of the most valued waterfowl production areas in the province. It is the site of the only colony of Yellow Rail in Maritime Canada, Possible conflicting land uses in the area include highway development, conversion to cranberry bog production, and



Ditching enhancements at Grand Lake Meadows, New Brunswick.

Photo: K. McAloney, EHJV

intensive harvesting of hardwoods. The latter would limit habitat for cavity nesting species.

Goals: Two goals over five years were established for this Second Step project as listed below. These continue from First Step NAWMP Project goals which led to the securement of 2 350 acres (951 ha) and level impoundment and ditching development initiatives in this project area. Habitat securement, development, and management are ongoing.

(1) Secure an additional 750 acres (303 ha) of valuable floodplain habitat to support existing breeding and migrating wildlife populations.

(2) Secure the remainder of the 12 000 acres (4 856 ha) of Grand Lake Meadows and have the area designated as a Provincial Wildlife Management Area.

Benefits of Project: Securement of the area will ensure the protection of existing breeding habitat for Black Duck, Goldeneye, Wood Duck, Osprey, Bald Eagle and Black Tern and wintering habitat for moose and deer as well as the spring migration habitat for dabblers and Canada Goose. Government ownership will facilitate future habitat development to increase breeding populations of existing species which use the area and for pioneering species such as Wigeon and Ring-necked Duck.

Long-term Management: Following the completion of the acquisition phase of the project, the area will be declared a Provincial Wildlife Management Area. A Management Plan is currently being formulated and will include additional impoundments and nesting structures and design for public access to facilitate interpretation.

Accomplishments to March 31, 1992:

(a) Habitat Securement:

Land Acquisition	•		484 acres	(196 ha)
Total Habitat Securement			484 acres	(196 ha)

PARTNERS	CONTRIBUTION (CDN\$)
Province of New Brunswick Private Sector:	10 000
Wildlife Habitat Canada	10 000
Canadian Contributions (Subtotal)	20 000 (25 %)*
United States Contributions	58 600 (75 %)
Total (CDN\$)	\$ 78 600

GRASSY ISLAND, NEW BRUNSWICK

Project Description: Grassy Island, a 100 acre (40 ha) island located in the Saint John River, is located 40 miles (64 km) downstream from Fredericton. The island was owned by an agricultural cooperative which leased the grazing rights of the area to a beef farmer. However, the area has not been in use since about 1987, permitting the establishment of permanent cover and a pioneering colony of Greater Scaup. During the spring freshet of the Saint John River, the island is completely flooded. This has fostered grass, forb and sedge vegetation cover. Conflicting land uses are the potential re-establishment of intensive cattle grazing or the sale of the area to tourism interests.

Goals: Three long-term goals have been established for this Second Step project as listed below. Habitat securement, development, and management are ongoing.

(1) Acquire 100 acres (40 ha) of waterfowl, shorebird, and larid breeding habitat.

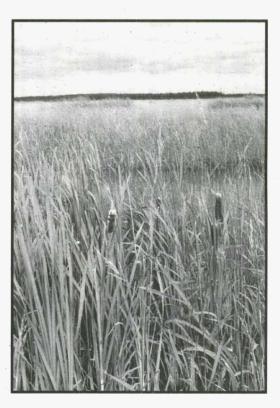
(2) Protect the 150-pair most southern North American breeding colony of Greater Scaup.

(3) Protect the only known regular breeding sites of Wilson's Phalarope in New Brunswick.

Benefits of Project: Securement of the area will ensure the maintenance of nesting cover for Greater Scaup, Wigeon, and Wilson's Phalarope. Govern-

ment ownership will facilitate restriction of human access and allow vegetation management.

Long-term Management: The New Brunswick NAWMP Provincial Steering Committee will manage this area for nesting habitat. Periodic mowing may be necessary to arrest plant succession. Nesting structures may be considered to reduce avian predation on Greater Scaup nest sites.



Brackish and freshwater marshes are vital to waterfowl and other wildlife in New Brunswick.

Photo: C. Rubec, NAWCC (Canada)

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Grassy Island and	4.52	
Floodplain Land Purchase	153 acres	(62 ha)
Hog Island Land Purchase	65 acres	(26 ha)
Total Habitat Securement	218 acres	(88 ha)

PARTNERS	CONTRIBUTION (CDN\$)
Canadian Wildlife Service	9 000
Province of New Brunswick	5 000
Private Sector:	
Ducks Unlimited Canada	8 500
Wildlife Habitat Canada	5 000
Canadian Contributions (Subtotal)	27 500 (61 %)*
United States Contributions	18 000 (39 %)
 Total (CDN\$)	\$ 45 500

SALT MARSH PROTECTION, NOVA SCOTIA

Project Description: In the last 300 years, 58% of the province's salt marshes, once covering 74 000 acres (30 000 ha), has been converted to other land uses. The remaining low salt marsh areas (the Spartina alterniflora zone) are important to the marine food chain as well as to migrating and wintering Black Duck and Canada Goose. The high salt marsh areas (the Spartina patens zone) are important for brood rearing of Black Duck and Willet. This project focuses on salt marshes in Yarmouth County in the vicinity of Halifax.



Tidal marsh and shoreline habitats are vital to many species of migratory shorebirds in Atlantic Canada.

Photo: C. Rubec, NAWCC (Canada)

Goals: Two goals for this Second Step project were established as listed below. These are in addi-

tion to First Step project initiatives that saw securement of 257 acres (104 ha) of habitat. Habitat securement, development and management are ongoing.

(1) Secure 625 acres (253 ha) of migration and wintering habitat.

(2) Develop 150 acres (61 ha) of breeding habitat.

Benefits of Project: Securement of these salt marshes will preserve the ecological functions of one of North America's most important habitat types. These areas serve as waterfowl and shorebird migration habitats, feeding areas for Bald Eagle and Osprey, and prime breeding habitat for waterfowl. Government ownership is permitting a planned approach to the integrated management of these resources.

Long-term Management: Following the completion of the securement phase of this project, a Management Plan will be completed to include designation of key salt marshes as Provincial Wildlife Management Areas. Impoundment development on selected high salt marsh portions will also increase nutrient exchange, enhance shorebird habitat, and increase waterfowl production.

Accomplishments to March 31, 1991:

(a) Habitat Securement:	· · ·	· · ·
Land Acquisition	83 acres	(34 ha)
Total Habitat Securement	.83 acres	(34 ha)

PARTNERS			CON	TRIBUTIO	N (CDN	5)
Canadian Wildlife Service				27'800	•	
Province of Nova Scotia		- · ·		50 500		•
Private Sector:			•			
Ducks Unlimited Canada	5 B		4	7 700	•	•
Wildlife Habitat Canada			· · ·	6 400	• * ·	• • .
Canadian Contributions (Subtotal)	•	• •		92 400	(90 %)*	
United States Contributions				10 700	(10 %)	
Total (CDN\$)			\$	103 100		

STEWIACKE RIVER FLOODPLAIN, NOVA SCOTIA

Project Description: The Stewiacke River Floodplain, covering 6 000 acres (2 400 ha), is located in the centre of the province southeast of Truro, Floodplain wetland habitats are the most fertile habitat in Nova Scotia, Targeted areas have been selected to promote production goals for Black Duck and other wildlife. The entire floodplain is affected by spring flood waters providing ample migrating and pairing habitat. However, little permanent water remains after the June period as suitable brood rearing habitat. Much of the area has been modified by agricultural practices.

Goals: Three goals over four years were established for this Second Step project as listed below. Habitat securement, development, and management are ongoing.



Wetland conservation benefits many wildlife species including moose in Nova Scotia.

Photo: Canadian Wildlife Service

(1) Acquire 1 000 acres (405 ha) of floodplain habitat.

- (2) Develop 200 acres (81 ha) of floodplain as production units.
- (3) Enhance 700 acres (283 ha) by level ditching and nesting box installation.

Benefits of Project: Acquisition of this project area will secure the habitat base for migrating waterfowl and shorebirds, wintering Bald Eagle, Osprey, and other wildlife such as deer. Development and enhancement will greatly increase waterfowl production for species such as Black Duck and Canada Goose.

Long-term Management: Partner agencies will establish a Management Plan to maintain and improve habitat carrying capacity in this area.

Accomplishments to March 31, 1991:

(a) Habitat Securement:

Land Purchase		162 acres	(66 ha)	
Total Habitat Securement		162 acres	(66 ha) _.	
•	•			

C	ONTRIBUTION (CDN\$)
•	28 500
	12 200
· · ·	1 300
	42 000 (34 %)*
	80 800 (66 %)
	<u> </u>

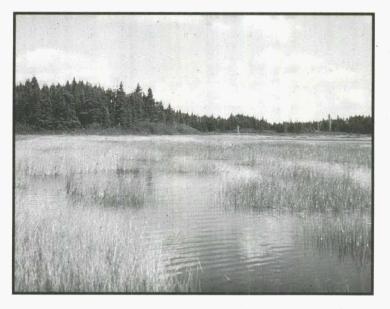
Total (CDN\$)

\$ 122 800

UPPER HUMBER RIVER, NEWFOUNDLAND

Project Description: The Upper Humber River project area. located in the northwest part of Newfoundland north of Deer Lake at Adies Pond, is one of the province's main migration and production corridors for wildlife. The project area has 30% open water, 40% wetland, and 30% forest land cover. About 1 100 acres (445 ha) are semi-impounded by an abandoned log drive dam. The area supports high densities of breeding Black Duck, Green-winged Teal, Goldeneve, and Canada Goose. It is an important area for Osprey, winter range for caribou, and a key river for Atlantic salmon.

river for Atlantic salmon. Goals: Four goals over the next four years were established for this Second Step project as listed below.



Duck rearing habitat on the Upper Humber River, Newfoundland.

Photo: K. McAloney, EHJV

Habitat securement, development, and management are ongoing.

(1) Establish a 61 000 acre (24 700 ha) Wildlife Management Area by concluding an Agreement with Kruger International Ltd.

(2) Develop four wildlife production sites covering a total of 1 280 acres (518 ha).

(3) Enhance wildlife production on an additional 3 000 acres (1 214 ha).

(4) In 1990, prepare a Pre-development Assessment Report and sign an Agreement with Kruger International Ltd.

Benefits of Project: Deterioration of the abandoned log drive dam in this area will lead to the drying out of the best known production area for Black Duck in the province. This will have a serious impact on the survival of juvenile Atlantic salmon. Management of the area by the provincial government will enable integrated resource management for the benefit of waterfowl, furbearer species, caribou, and Atlantic salmon.

Long-term Management: After the securement phase of this area is completed, a Management Plan and designation as a Provincial Wildlife Management Area are planned.

Accomplishments to March 31, 1991:

(a) A Pre-development Assessment Report and a Draft Agreement between Kruger International Ltd. and the province have been completed.

PARTNERS			CONTRIBUTION (CDN\$)
Province of Newfoundland	· · · · ·		47 520
Private Sector:	• • •		
Ducks Unlimited Canada		· · ·	1 460
Canadian Contributions (Subtotal)		· · · ·	48 980 (100 %)*
United States Contributions	•		· · · · · · · · · · · · · · · · · · ·

Total (CDN\$)

ercent of total contributions.

\$ 48 980

56

TABLE 1: SUMMARY OF SECOND STEP HABITAT SECUREMENT AND DEVELOPMENT TO MARCH 31, 1991

Project		(Hectares) ecured			Hectares) eloped	•
PHJV Projects:		. ·			•	
• Prairie Care, Alta	—			8 950	(3 622)	
• Prairie Care, Sask.	26 135	(10 576)		7 046	(2 852)	• •
• Prairie Care, Man.	12 980	(5 252)	•••	16 885	(6 833)	
• HELP, Man.	9 304	(3 765)		1 120	(453)	
• Heritage Marshes, Man.	2 788	(1 128)		2 903	(1 175)	
Subtotal PHJV Projects	51 207	(20 721)		36 904	(14 935)	
EHJV Projects:		·.				
Matchedash Bay, Ont.	647	(262)	•		·	
• Lake St. Francis, Ont.	· 131	(53)	•	· · _	· · · ·	
• Beaver Ponds, Ont.	62 948	(25 475)	•	24 795	(10 035)	
• Cacouna, Que.	·			. –	. —	۰.
• Île-du-Milieu, Que.	—	· . <u>·</u>				
• McLaurin Bay, Que.		· ·	•	··· <u>·</u>	· <u>·</u>	
• Saint-Barthélemy, Que.	. <u></u>	· · ·	• •	·	. —	• · · · ·
• Saint-Gédéon, Que.	. · —	· · ·		<u>.</u>		
• Malpeque Bay, PEI	100	(40)		· · <u> </u>	; <u> </u>	• •
Mount Hope Marsh, PEI	37	(15)	· .	•. 	<u>·</u> ,	
Mount Stewart Marsh, PEI	202	(81)	م	•	· ·	
• Tyron River Estuary, PEI	27	(11)		· , ,	· <u> </u>	•
Grand Lake Meadows, NB	484	(196)		·	· . — ·	· ·. :
• Grassy Island, NB	218	(88)	•	• • •	`	
Salt Marsh Protection, NS	83	(34)	• • • • •	·	—	
• Stewiacke River Floodplain, N	NS 162	(66)		-	<u></u>	· .
• Upper Humber River, Nfld.	· · ·	· ·	•	· · · · · ·	ب ، مستد	
Subtotal EHJV Projects	65 039	(26 321)	· .	24 795	(10 035)	•
Total Acres (Hectares)	116 246	(47 042)		61 699	(24 970)	

Project	Canadian Contributions (CDN\$)	United States Contributions (CDN\$)	Total (CDN\$)
PHJV Projects:		· · · ·	
• Prairie Care, Alta.	1 189 700	1 618 300	2 808 000
• Prairie Care, Sask.	802 900	1 938 819	2 741 719
• Prairie Care, Man.	98 600	2 039 500	2 138 100
• HELP, Man.	729 517	· _ ·	729 517
Heritage Marshes, Man.	512 600	72 800	585 400
Subtotal PHJV Projects	3 333 317	5 669 419	9 002 736
EHJV Projects:		: .	· · · ·
• Matchedash Bay, Ont.	687 800	245 500	933 300
• Lake St. Francis, Ont.	38 000	77 100	115 100
• Beaver Ponds, Ont.	105 900	· · · · · · · · · · · ·	105 900
• Cacouna, Que.	83 500	· ·	83 500
• Île-du-Milieu, Que.	32 000	<u> </u>	32 000
• McLaurin Bay, Que.	51 700	· · · ·	51 700
 Saint-Barthélemy, Que. 	147 500	··· <u> </u>	147 500
• Saint-Gédéon, Que.	24 700	·	24 700
• Malpeque Bay, PEI	26 140	· .	26 140
• Mount Hope Marsh, PEI	12 084	· · _ —	12 084
Mount Stewart Marsh, PEI	58 326	—	58 326
• Tyron River Estuary, PEI	28 220	_	28 220
• Grand Lake Meadows, NB	20 000	58 600	78 600
• Grassy Island, NB	27 500	18 000	45 500
Salt Marsh Protection, NS	92 400	10 700	103 100
• Stewiacke River Floodplain, NS	42 000	80 800	122 800
• Upper Humber River, Nfld.	48 980	<u> </u>	48 980
Subtotal EHJV Projects	1 526 750	490 700	2 017 450
Total (CDN\$)	4 860 067	6 160 119	11 020 186

TABLE 2: SUMMARY OF SECOND STEP EXPENDITURES TO MARCH 31, 1991

Addendum to Report on Canadian First Step Projects, NAWCC (Canada) Report No. 91-1

The information provided on US contributions on page 6 of the NAWCC (Canada) Report No. 91-1 entitled "Report on Canadian First Step Projects for the September 1988 to December 1990 Period" is not complete. The financial contributions of US partners, totalling US\$ 4.00 million, are as follows:

Ducks Unlimited Inc.	.US\$ 1 000 000
National Fish and Wildlife Foundation	2 000 000
State of Arkansas	100 000
State of California	150 000
State of Colorado	50 000
State of Illinois	100 000
State of Missouri	100 000
State of New Jersey	50 000
State of New York	100 000
State of Oklahoma	50 000
State of Oregon	50.000
State of South Carolina	50 000
State of Tennessee	100 000
State of Texas	100 000
	US\$ 4 000 000

(cont.)

In addition, the summary data in Table 3 on page 24 of the First Step Report was incomplete at the time of publication. This information is updated below.

Project	Canadian Contributions (CDN\$)	United States Contributions (CDN\$)	Total (CDN\$)
PHJV Projects:			
(1) Buffalo Lake Moraine, Alta.	105 000	113 744	218 744
(2) Quill Lakes, Sask.	· · _ ·	336 432	336 432
EHJV Projects:		1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	·
(3) Matchedash Bay, Ont.(4) Baie-du-Fèbvre/Nicolet, Qué.	 39 100	9 202	48 302
(5) Grovepine/Big Brook, NB	— <u> </u>	—	—
(6) Grand Lake Meadows, NB	8 500	4 700	13 200
(7) Salt Marsh Protection, NB	25 000	4 632	29 632
Total (CDN\$)	177 600	468 710	646 310

SUMMARY OF REMAINING FIRST STEP MONIES COMMITTED FOR 1991 EXPENDITURES AS OF DECEMBER 31, 1990