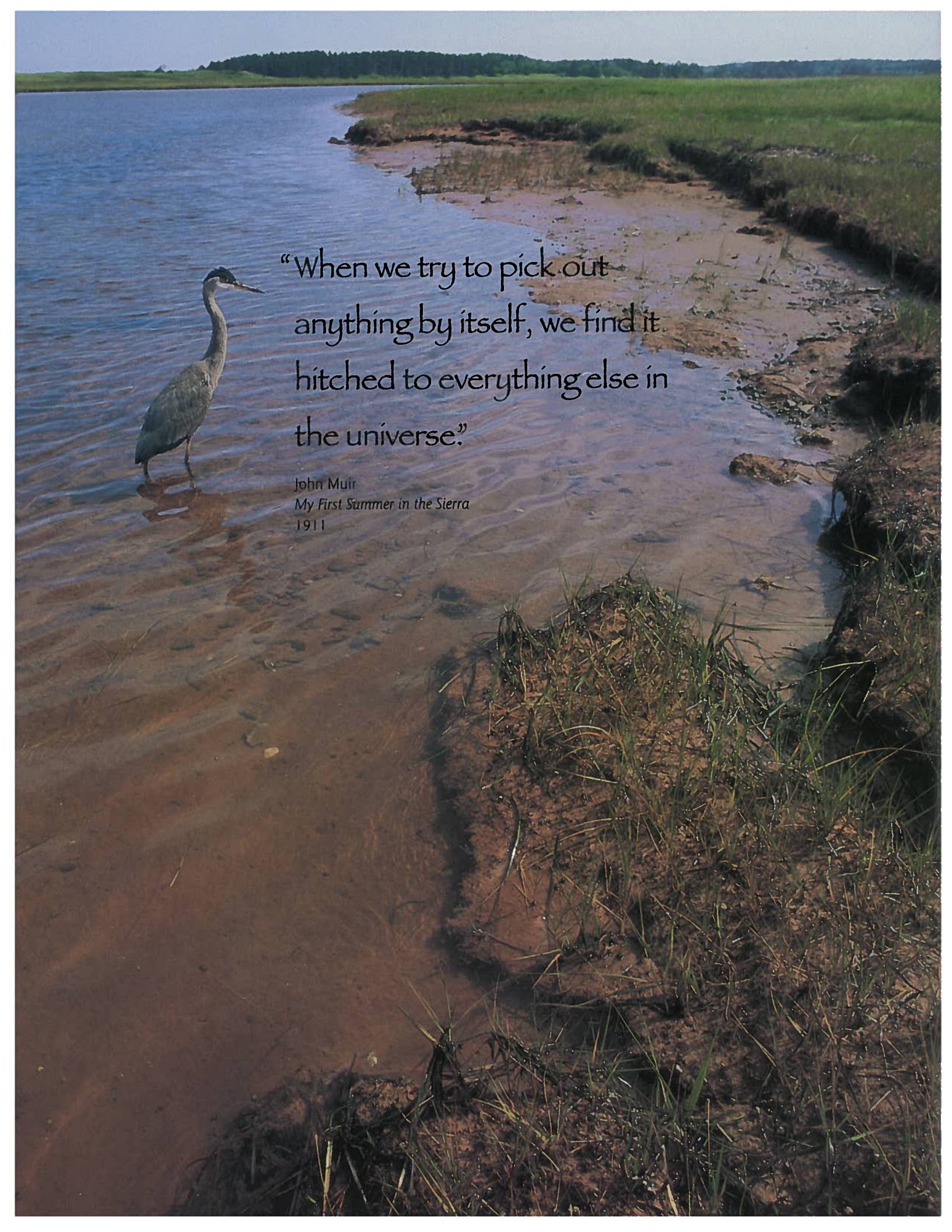




Eastern Habitat Joint Venture  
Decade of Achievement





“When we try to pick out  
anything by itself, we find it  
hitched to everything else in  
the universe.”

John Muir  
*My First Summer in the Sierra*  
1911

# Without suitable habitat, there can be no wildlife.

For waterfowl, habitat means wetlands – marshes, swamps, bogs, fens, and estuaries and the teeming communities of living organisms that inhabit them. These living landscapes are places where ducks and geese gather to feed, nest, and rear their young.

Today, it seems obvious that habitat should have an important place in wildlife conservation. Not so long ago, however, conservation of waterfowl concentrated almost entirely on regulating the harvest of certain species deemed “game birds.” Little was done to prevent the drainage, in-filling, and conversion of critical wetlands to other uses. Without suitable habitat, the number of birds declined.

Now we know better. And this knowledge – that wetland habitat is vitally important – and our actions to preserve and enhance it are bringing waterfowl back again.

## NAWMP's Joint Ventures

### Habitat Joint Ventures

Atlantic Coast Joint Venture  
 Central Valley Habitat Joint Venture  
**Eastern Habitat Joint Venture**  
 Gulf Coast Joint Venture  
 Intermountain West Joint Venture  
 Lower Mississippi Valley Joint Venture  
**Pacific Coast Joint Venture**  
 (international)  
 Playa Lakes Joint Venture  
**Prairie Habitat Joint Venture**  
 Prairie Pothole Joint Venture  
 Rainwater Basin Joint Venture  
 Upper Mississippi River–Great Lakes  
 Region Joint Venture

### Species Joint Ventures (International)

**Arctic Goose Joint Venture**  
**Black Duck Joint Venture**  
**Sea Duck Joint Venture**

Joint Ventures in bold are Canadian.

### Eastern Habitat Joint Venture ...

is a partnership of federal and six eastern provincial governments, Ducks Unlimited Canada, and Wildlife Habitat Canada dedicated to improving wetlands for waterfowl and other wildlife in Eastern Canada. The Eastern Habitat Joint Venture is one of many partnerships set up to advance the goals of the North American Waterfowl Management Plan.

# Continental Vision

By 1985, many of North America's waterfowl populations were in trouble and some were in rapid decline. Since the late 1970s, persistent drought and accelerated habitat conversion had reduced the estimated continental population from 100 million to 55 million birds. The need for corrective action was urgent, and because waterfowl migrate across international borders, only an international response would work.

In 1986, Canada and the United States launched an ambitious plan for recovery – the North American Waterfowl Management Plan (NAWMP). The goal was to restore waterfowl populations to levels found in the 1970s. With the joining of Mexico in 1994, the Plan became the largest environmental conservation partnership in history.

The key to the Plan's success is an approach that uses regional partnerships. These Joint Ventures provide a framework within which governments, businesses, conservation organizations, and individuals collaborate to secure and improve wetland habitat. This approach has proved immensely successful, reaping huge benefits for waterfowl and the many other plant and animal species which depend on wetlands. Six joint ventures are presently under way in Canada, dealing both with regional habitat conservation and with research and management of particular species.

Geese and sea ducks – managed by species Joint Ventures



# Ten Percent...

Eastern Canada's wetlands are crucial to waterfowl conservation in North America and the world. Representing almost 10% of the world's remaining wetlands, they contribute to the well-being of waterfowl and other wildlife in many important ways:

- ☛ produce millions of waterfowl, including black ducks, mallards, wood ducks, widgeon, teal, and many other birds which depend on wetlands
- ☛ provide 75% of the continent's breeding habitat for Canada geese
- ☛ include the important Lower Great Lakes/St. Lawrence Valley marshes – key nesting and staging areas for many species of waterfowl and other migratory birds
- ☛ contain extensive areas of coastal marshes, estuaries and islands which support breeding, staging, and wintering waterfowl and other seabirds
- ☛ sustain biodiversity and provide economic, educational, and recreational opportunities.

BUT ... Eastern Canada also contains 65% of the country's human population. From St. John's, Newfoundland and Labrador, to the growing metropolis of Toronto, Ontario, urban sprawl, industrial development, and intensive agriculture have greatly reduced wetland habitat. By the late 1980s, two-thirds of the wetlands of the Lower Great Lakes/St. Lawrence Valley and more than half the salt marshes in the Maritime Provinces had been lost or degraded. This was the situation facing federal and provincial Ministers responsible for eastern Canada's wildlife when, on November 15, 1989, they signed the agreement launching the Eastern Habitat Joint Venture (EHJV).

## Our Major Goal: Conservation of Priority Habitat

To meet its major goal, Eastern Habitat Joint Venture focuses on three key objectives:

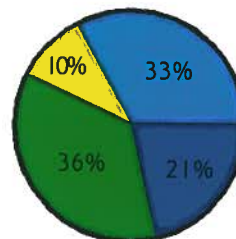
- ☛ to directly secure over 600,000 ha of prime wetland habitat for enhancement or restoration
- ☛ to maintain integrity of 1.6 million ha of estuaries, marshes, and waterfowl breeding/staging areas
- ☛ to reduce agricultural impacts and enhance wildlife values on farmland.



EHJV = 10% of the world's remaining wetlands

## EHJV funding sources to end of 1998

Canada federal  
\$11,999,387 Cdn.



United States  
\$39,439,963 Cdn.

Canada NGO/private  
\$25,525,504 Cdn.

Canada provincial  
\$42,644,542 Cdn.

# Ten Years

Eastern Habitat Joint Venture partners are proud of a decade of accomplishments. Founding partners were the six eastern provinces (Ontario, Québec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador), Environment Canada's Canadian Wildlife Service, Ducks Unlimited Canada, and Wildlife Habitat Canada. Many other agencies, corporate sponsors, municipalities, local conservation groups, landowners, and concerned individuals have since added their support. Contributions take many forms, from cash grants to stewardship agreements, scientific research, and volunteer labour. The success of Eastern Habitat Joint Venture is a testimonial to co-operation and a common purpose.

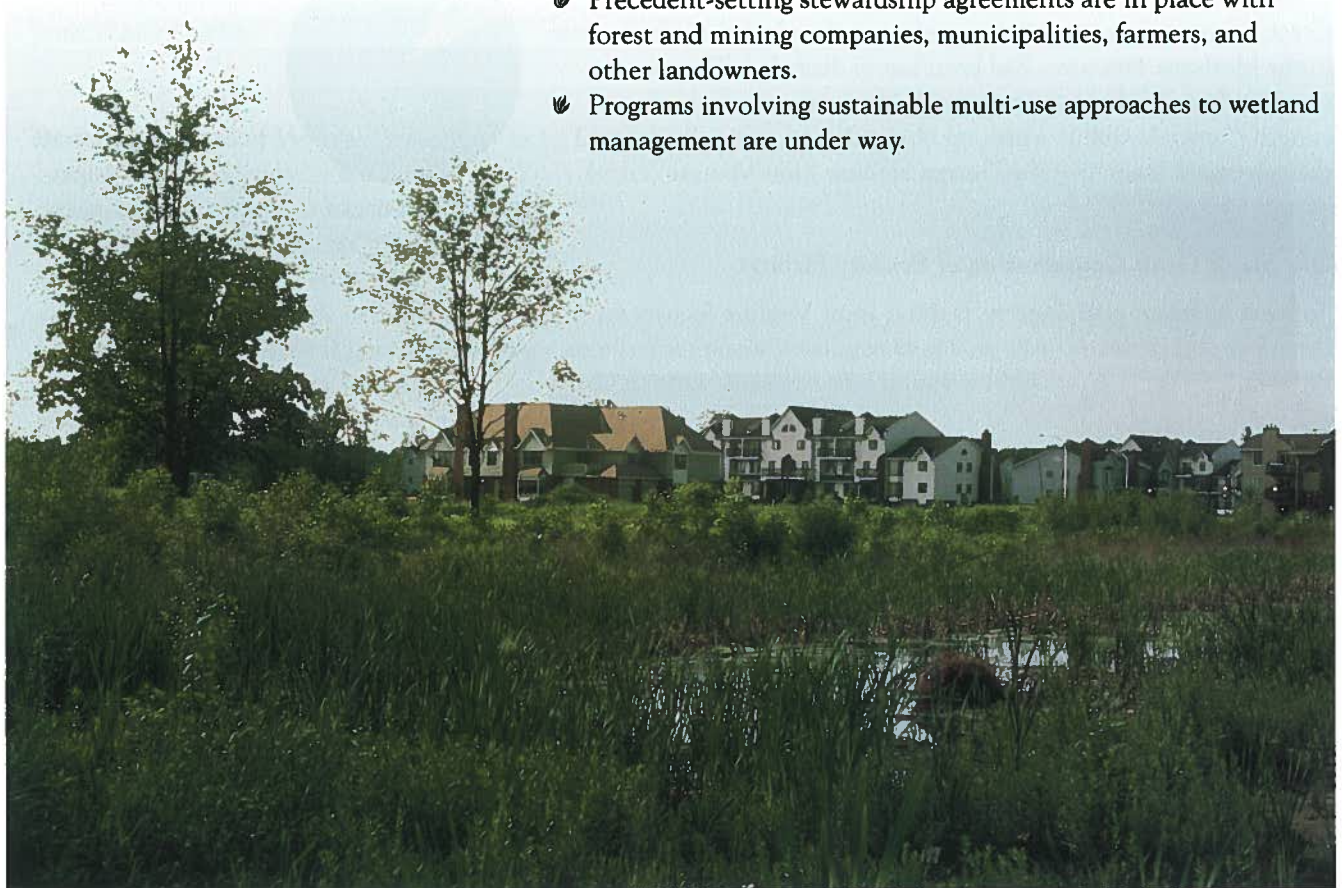
## Achievements of the Eastern Habitat Joint Venture

The Joint Venture's success over the past decade is measured by the quantity and quality of habitat involved: 203,796 ha secured, 1,830,936 ha influenced, and 115,380 ha enhanced.

In addition:

- ☛ Key wetlands in the six participating provinces have been secured and sound management practises are in place.
- ☛ Precedent-setting stewardship agreements are in place with forest and mining companies, municipalities, farmers, and other landowners.
- ☛ Programs involving sustainable multi-use approaches to wetland management are under way.

Suburbia meets the wetland – a common situation EHJV has addressed innovatively over the past decade



**Activities by Province**

Projects and programs reflect priority areas and issues which have been targeted for action in each province. Some of these are:

**Ontario**

- Matchedash Bay
- Hilliardton Marsh
- Wetland Habitat Fund
- Forest Management Plans

**Prince Edward Island**

- Soil Conservation
- Small Marsh Reclamation
- Cattle Exclusion

**Québec**

- St-Barthélemy/St-Joseph de Maskinongé
- Baie-du-Febvre/Nicolet-Sud
- Marais Antoine (Abitibi Region)
- Varennes (Montréal Region)

**Newfoundland and Labrador**

- Corporate Stewardship (Corner Brook Pulp and Paper)
- Grand Codroy Estuary
- Municipal Wetland Stewardship
- Eider Enhancement

**New Brunswick**

- Tabusintac Lagoon
- Grand Lake Meadows
- Hampton-Kennebecasis Marsh Management
- Tantramar Dykeland Wildlife Habitat

**Nova Scotia**

- Sanford Natural Area Conservation Easement
- Corporate Land Stewardship
- Belleisle Marsh Wildlife Management
- Riparian Management

Belleisle, a thriving marsh created in Nova Scotia's Annapolis Valley by impoundment of dykelands



# Securing Wetlands

Eastern Habitat Joint Venture secures wetlands by direct purchase and other arrangements, such as stewardship agreements and conservation easements. In its first 10 years, the Joint Venture has secured 203,796 ha of wetlands for immediate or eventual use as habitat for waterfowl and other wildlife. This total includes:

- ☛ 22,576 ha through direct purchase
- ☛ 181,220 ha through stewardship agreements, covenants, easements, etc.

Direct purchase by Eastern Habitat Joint Venture partners may sometimes be the only way to secure an important site. Often, it is better to involve landowners and other land managers in creative partnerships which permit long-term conservation goals to be met over larger areas at lower cost. Here are a few examples:

## Municipal Stewardship Agreements

In Newfoundland and Labrador, a Municipal Wetland Stewardship Program encourages municipalities with extensive wetlands to pledge to protect them from developments that could diminish their value for wildlife. At present 10 municipalities participate in the plan, protecting 16,068 ha of habitat.

## Private Stewardship Agreements

At Pointe Fortune, Québec, a pilot project to protect, improve, and enhance 750 ha of privately owned wetlands, farmlands, and woodlands is progressing rapidly. An active information/education program has resulted in completion of more than 20 separate agreements to date. Eventually, the initiative will involve the local municipality and about 38 individual landowners.



Young municipal stewardship participants in Carmanville, Newfoundland and Labrador

Landowners and local partners at Pointe Fortune, Québec, enjoy an interpretive outing in their wetland.





### Corporate Stewardship Agreements

Forest products companies are major partners in the Joint Venture under the Corporate Land Stewardship Project for Nova Scotia. The results are impressive. To date, wetland stewardship agreements with Bowater Mersey Paper Company Limited, Stora Forest Industries, and Kimberly-Clark Nova Scotia have assured the conservation and management of wetlands and stream banks on more than 1.25 million ha of private and Crown land – close to 25% of the land area of the province.

“Wetlands are significant ecological areas ... Conservation and management of wetlands complements good forestry.”

Harold Dobson, Past President and General Manager, Bowater Mersey Paper Company Ltd.

### Conservation Easements

Recent legislative changes in some provinces permit landowners to secure lands for conservation by easement – essentially a binding legal promise. An example is the Dexter and Vivian Sanford Natural Area, in Kings County, Nova Scotia. The late Mr. Sanford, a former auto mechanic, used such an arrangement to ensure that a wetland on the family property would be preserved in perpetuity.

“When I am gone, I would like the marsh to be there for my family and for wildlife, regardless of who owns the land.” —Dexter Sanford



Dexter Sanford and stewardship co-ordinator Peter MacDonald at the Sanford Natural Area, Nova Scotia

Shearstown Pond, Bay Roberts/Spaniard's Bay, Newfoundland and Labrador – habitat protected under the Municipal Wetland Stewardship Program



# Enhancing Wetlands

Not all wetland areas secured under the Eastern Habitat Joint Venture are immediately suitable for use as wildlife habitat. Abandoned farmland, rough pasture, eroded stream banks, and overgrown marshes may need repair or improvement to make them attractive to waterfowl. During its first decade, the Eastern Habitat Joint Venture has enhanced 115,380 ha of wetlands and associated uplands, employing a wide variety of techniques to restore sites to their natural values.

Impoundments restore and maintain water levels to improve wetland habitat.



## Impoundments

Construction of a dyke around a wetland which has been drained for other purposes captures and retains water. Within a few years, a thriving marsh ecosystem is re-established.

*Calhoun Marsh,  
Southeastern New Brunswick*

Located on the Bay of Fundy near the village of Riverside-Albert, New Brunswick, the Calhoun Marsh was created from 152 ha of abandoned dykeland purchased and enhanced by Eastern Habitat Joint Venture. Dykes enclosing two impoundments created 96 ha of shallow marsh with plenty of adjoining upland habitat and nesting cover for waterfowl and other wildlife. A further 17 ha have been put back into hay production using a delayed cutting approach to avoid harvest during nesting periods.

Small marsh reclamation – winter excavation leads to rebirth of a fading small wetland.



## Small Marsh Reclamation

A wetland need not be large to be productive. But small marshes often become so choked with vegetation that they are no longer useful.

*Prince Edward Island's  
Small Marsh Program*

Canada's smallest province reclaims small wetlands (up to four ha) without charge if owners agree not to alter them for 25 years. Excavating the wetland restores open water and the surplus fill can be used to build islands for waterfowl nesting and protection. Effectiveness of the Small Marsh Program is currently being evaluated to ensure the broadest possible benefits for habitat conservation.



### Protective Exclusion Zones

Giving cattle unrestricted access to wetlands and stream banks degrades habitat by causing erosion, soil loss, and poor water quality. Good fencing effectively keeps livestock away from wetlands and streams.

*Livestock Fencing and Watering Program,  
Prince Edward Island*

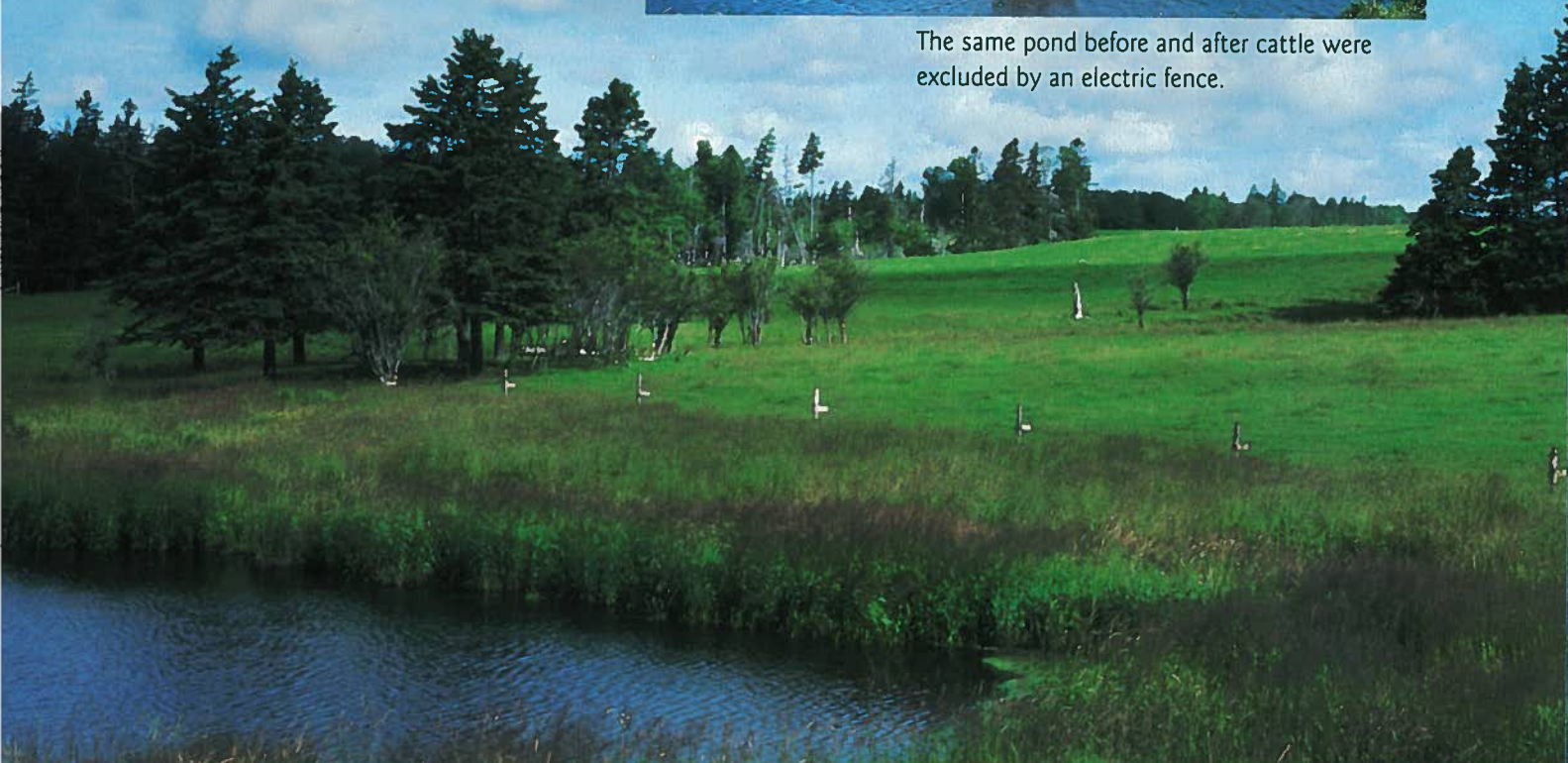
In 1991, the Province of Prince Edward Island implemented a livestock fencing and watering program to enhance wetland habitat in and adjacent to cattle pastures. Under the program, Eastern Habitat Joint Venture partners have protected 520 ha of wetlands with 67 km of fence – restricting access to wetlands for approximately 9,000 cattle. In addition to protecting the targeted wetlands, livestock exclusion has improved water quality, bringing positive benefits to approximately 2,000 ha of wetlands downstream.



A creative alternative source of drinking water for cattle.



The same pond before and after cattle were excluded by an electric fence.



# Evaluation - Are we reaching our goals?

Eastern Habitat Joint Venture thoroughly assesses both the potential of each project and its progress towards well-defined goals. Evaluation also includes reviewing proposals, monitoring activities, and assessing results. Here are some examples:

## Assessment of Beaver Pond Management – Ontario

Beaver pond management is a major component of Eastern Habitat Joint Venture's activity in Ontario, where rehabilitating inactive beaver ponds can increase wildlife productivity on selected sites. A program was set up to assess the potential of beaver pond management for waterfowl production and other wildlife habitat values. An assessment plan was designed around three components:

- ☛ long-term monitoring of waterfowl and other wildlife by aerial surveys
- ☛ assessment of specific management techniques
- ☛ overall cost-effectiveness of beaver pond management.

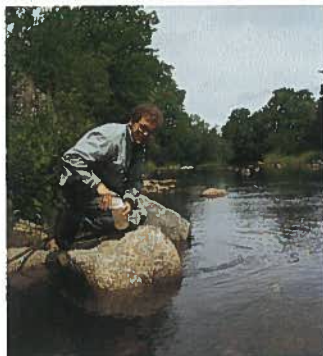
The evaluation provided information in many areas, including:

- ☛ readiness of beavers to re-occupy ponds under rehabilitation
- ☛ nest box preferences of hooded mergansers
- ☛ variable effectiveness of helicopters in waterfowl brood surveys.

Such information can help increase the efficiency and value of similar projects in the future.



BELOW – A Belleisle project team meets in the field. BOTTOM – collecting a water sample for testing in the Belleisle Marsh study area



## Waterfowl Production at Belleisle Marsh

A nagging question plaguing waterfowl managers has been whether a new management area produces more waterfowl or just relocates birds. To answer the question, a six-year study to monitor use by waterfowl and other birds both before and after enhancement of the habitat was conducted at Belleisle Marsh in Nova Scotia's Annapolis Valley. The total number of waterfowl produced on the project site increased from 9 to 114 broods. The study proved that although some birds had relocated, the net increase was genuine and significant.

### The Hampton-Kennebecasis Marsh Complex Management Plan

The 2000 ha Hampton-Kennebecasis wetland, one of New Brunswick's largest, was well worth protecting against residential, commercial, and recreational pressures. Developing a management plan was a three-year process. Beginning with a resource status report, recommendations and action steps were proposed for:

- ✦ securement of wetlands
- ✦ wetland habitat enhancement and management
- ✦ wildlife management
- ✦ use and development of adjacent lands
- ✦ recreational activities
- ✦ wetland ecology research
- ✦ development of education packages and programs.

Before adoption, the plan was circulated to stakeholders, including landowners, municipalities, and special interest groups as well as a technical review committee. Broadly based community support has accelerated actions ranging from protective zoning to shoreline tree-planting.

The Hampton Marsh Project has already carried out invaluable work in providing a database for marsh management and in consulting and educating the public about wetland conservation.”

Ian R. Cameron, Saint John Naturalists' Club



Ossekeag Creek area of the Hampton-Kennebecasis Marsh Complex

In the Ontario Beaver Pond Management Project, aerial surveys proved useful for observing beaver ponds, but only variably effective in monitoring waterfowl.

# Return on Investment

## The Many Paybacks from Eastern Habitat Joint Venture

Beyond the number of hectares of wetlands secured, enhanced, and managed, Eastern Habitat Joint Venture strives for improvements in biological productivity and diversity. Improved wetlands also provide economic benefits, both for communities and at the national and international level, as well as benefits to wildlife.

Indicators such as water quality, plant productivity, increased waterfowl populations, and survival of rare and endangered species are good gauges of success. The ultimate indicator of successful habitat conservation is the health of all biological populations, including humans, that rely on wetlands.

## Biodiversity at Matchedash Bay

Habitat securement and management takes on a critical urgency in areas of high recreational use. This is especially so when a target area, such as the 1,840 ha Matchedash Bay Wetlands on Ontario's Georgian Bay, supports rich biodiversity. The wetland is a haven for life, including:

- ☛ more than 568 species of plants
- ☛ nearly 200 species of birds
- ☛ 28 species of mammals
- ☛ 34 species of fish
- ☛ 17 species of herptiles including Ontario's only lizard, the five-lined skink.

Sixteen agencies and organizations and many individual landowners have helped to secure, restore, and protect this important concentration of biodiversity in the zone between the St. Lawrence Lowlands and the Canadian Shield.



LEFT – Biodiversity in Ontario marsh plants.  
BELOW – Mallard and coot cross paths at Matchedash Bay.  
CORNER – 5-lined skink.



### Île Dupas – Evaluation of Drawdown Methods

Enhanced wetlands in flood plains provide good spawning and rearing habitat for many species of fish. If fish remain in the shallow waters until freeze-up, however, there is a high risk of winterkill. At Île Dupas, Québec, methods have been developed for evacuating fish by means of water drawdown. Although only 1% of fish were evacuated before freeze-up in 1991, the first year of the project, techniques have improved so much that in 1997, 43% left the marsh before winter.



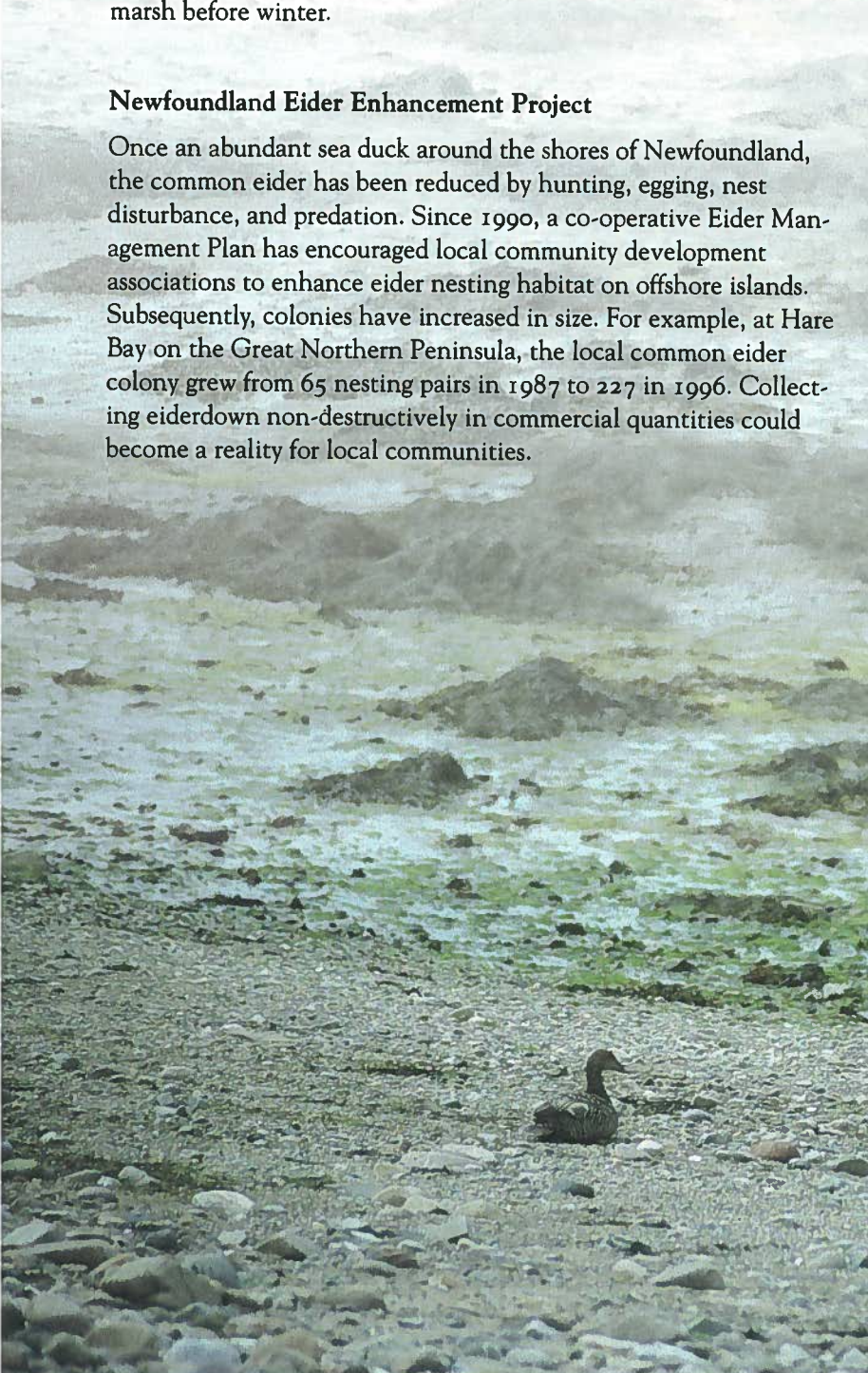
Seining the marsh at Île Dupas in order to estimate the fish populations

### Newfoundland Eider Enhancement Project

Once an abundant sea duck around the shores of Newfoundland, the common eider has been reduced by hunting, egging, nest disturbance, and predation. Since 1990, a co-operative Eider Management Plan has encouraged local community development associations to enhance eider nesting habitat on offshore islands. Subsequently, colonies have increased in size. For example, at Hare Bay on the Great Northern Peninsula, the local common eider colony grew from 65 nesting pairs in 1987 to 227 in 1996. Collecting eiderdown non-destructively in commercial quantities could become a reality for local communities.



TOP TO BOTTOM – common eider eggs nestled in eiderdown. Two types of eider nest shelter. BACKDROP – Female common eider.



# Telling the Story

Ten years of productive conservation partnerships have secured many wetlands for wildlife. Every success wins new partners and contributes to an ever-expanding conservation network across Eastern Canada.



## Ontario's Wetland Habitat Fund

Sometimes landowners are not aware of the value and opportunities associated with wetlands on their property. With this in mind, the Ontario Wetland Habitat Fund was launched in August 1997.

Objectives are:

- ☛ to promote ecologically sound landscape uses
- ☛ to encourage owners to improve, maintain, and monitor wetland habitat
- ☛ to have a positive long-term effect on wetland habitat diversity.

The program includes consultation, assistance with wetland maintenance, and the development of conservation plans for individual landowners.



## Wildlife Observation Opportunities

As interest grows in ecotourism and other nature-related outdoor activities, a growing number of Eastern Habitat Joint Venture projects encourage the public to see wildlife by providing viewing opportunities. Creating awareness of the need for wetland conservation further reinforces the partners' efforts. The following are a few of the many sites that welcome visitors:

- ☛ Hilliardton Marsh, Englehart, Ontario
- ☛ St-Barthélemy/St-Joseph de Maskinongé, Québec
- ☛ Winterland Ecomuseum, Newfoundland
- ☛ Daly Point, Bathurst, New Brunswick

Opportunities for public recreation and education abound in Eastern Habitat Joint Venture projects.



### Hunter Education at Léon-Provancher Marsh

Believing that well-trained hunters make good conservationists, Québec's Eastern Habitat Joint Venture partners conduct a waterfowl and woodcock hunter education program for young people. The program introduces 40 youngsters between the ages of 12 and 17 to good hunting practices and the benefits of habitat conservation. Combining theory, safety, and a day of hunting, the program helps participants to appreciate the importance of proper management both to habitat and to the sustainable harvesting of resources from the wild. Among organizations supporting the program are the Association des sauvagiers, Remington Canada, the Department of National Defence, the Société des établissements de plein air du Québec, and the Société Provancher d'histoire naturelle du Canada.



Hunter education in New Brunswick

### Tantramar Dykelands – an Environmental Classroom

The Tantramar Dykelands Wildlife Habitat Project involves 16 agencies and organizations, in addition to landowners and local residents, in developing a common strategy for harmonizing wildlife, agricultural, and recreational land uses in the Tantramar marshes near Sackville, New Brunswick. One noteworthy educational feature of this project is the construction of a freshwater impoundment adjacent to the local high school – a living laboratory for the school's environmental studies program.

Daly Point, Bathurst, New Brunswick



# A Productive Ten Years

Eastern Habitat Joint Venture's efforts in the past decade represent an important investment in the future of wildlife and wildlife habitat. We've acted on our knowledge that to rebuild and sustain waterfowl populations, habitat protection and enhancement are essential. The Joint Venture owes its success to this guiding principle and to our approach – bringing together diverse interests and mutually agreeing to set explicit goals. While there are many ways of measuring success, the most relevant is the quantity and quality of habitat in Eastern Canada today. Habitat, which might have been lost or forgotten without the work of Eastern Habitat Joint Venture partners.

A scenic landscape of a wetland or marsh area. The foreground is dominated by tall, golden-brown grasses. In the middle ground, there are several small, rounded islands of grassy land surrounded by a body of blue water. The background shows more of the same landscape under a clear sky.

Thanks...

to our partners and supporters  
– corporate and private landowners,  
government agencies,  
conservation organizations,  
and individuals –  
who continue to make  
Eastern Habitat Joint Venture  
a success.



Ce document est aussi  
 disponible en français.

Front cover photos:  
 UPPER – Blue-wing teal, Amherst,  
 Nova Scotia  
 LOWER – Tantramar marshes,  
 New Brunswick

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Production and design by  
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 and Nancy Roberts Design.  
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October 1999