Silent Passage – Mallards, from the 2004 Wildlife Habitat Canada Duck Stamp Series

Artist: Michele Clarkson, Penetanguishene, Ontario

# Canadian HabitatVlatters



**Mallard**Gwen Williams

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North American Waterfowl Management Plan Plan nord-américain de gestion de la sauvagine Plan de Manejo de Aves Acuáticas Norteamérica



Environment Canada

Environnement Canada

ird migration is one of the natural world's truly unifying phenomena.

Migratory birds link ecosystems and communities, crossing borders in the process. In Canada this is no exception. With four flyways and thousands of shared species of breeding, migrating and wintering birds, one third of the world's boreal forest and 25 percent of its wetlands, it is only natural that Canadians consider migratory bird conservation to be fundamental to socio-economic and environmental planning.

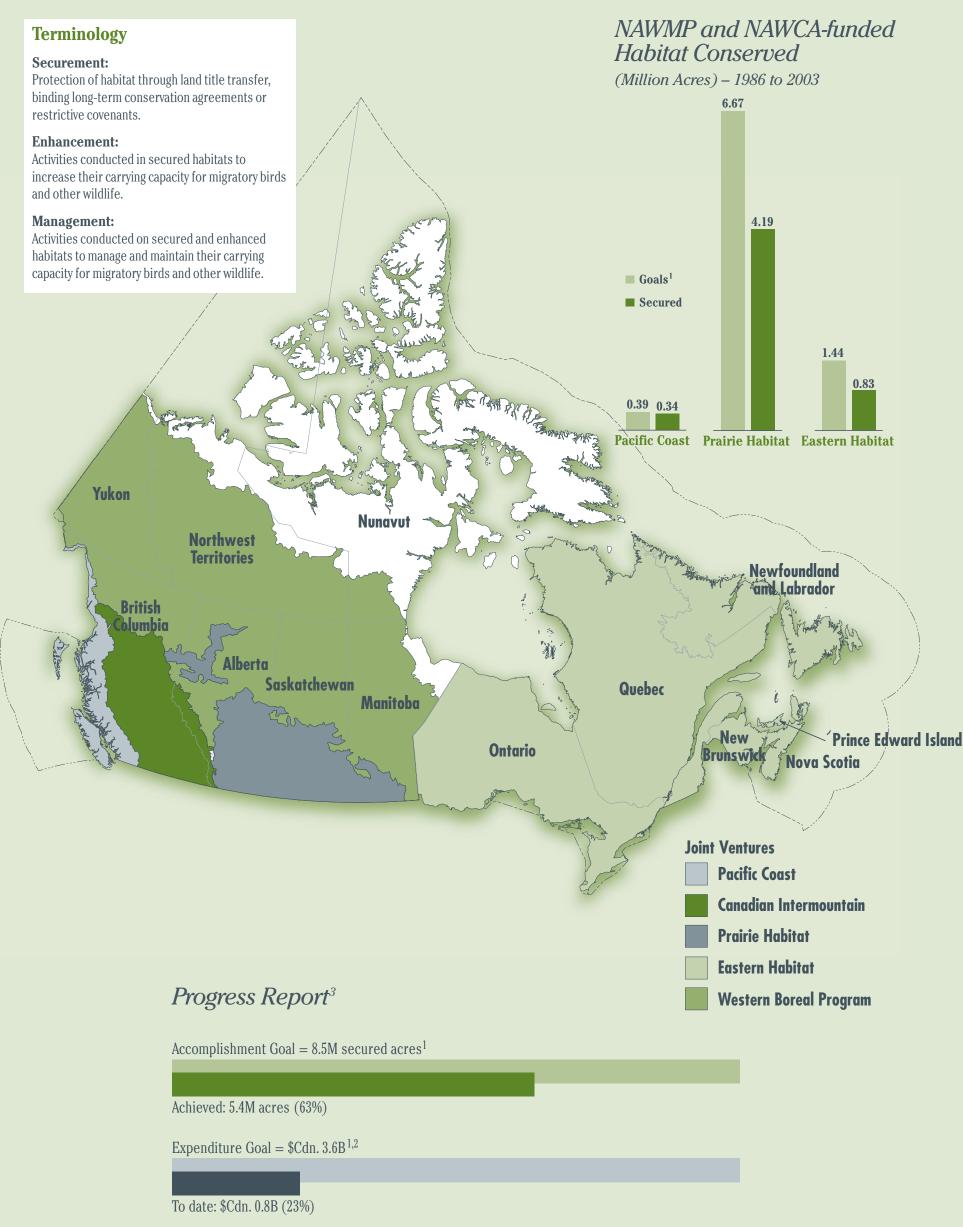
Enter a revolutionary conservation plan. In 1986, an innovative means of implementing waterfowl conservation across the continent came into force when Canada became a signatory to the North American Waterfowl Management Plan (NAWMP). Shaped by government and nongovernmental agencies and corporate partners from across Canada, the United States and Mexico, NAWMP challenged Canadian waterfowl conservationists to develop waterfowl programs at an unprecedented scale. These programs fostered the formation of unique partnerships (joint ventures) capable of delivering

diverse and often challenging landscape-scale projects. For the first time, waterfowl managers undertook a coordinated approach towards delivering on-the-ground projects that would directly benefit international migratory bird habitat. From the privately owned lands in Canada's south, to the vast, and often unexplored terrain of the north, Canadian partners have conserved over 2 million hectares (5 million acres) of wetland and other migratory bird habitat and have invested close to one billion dollars towards conservation efforts across the country. As a direct result, millions upon millions of birds have reaped the benefits.

The Canadian program has become so successful that partners across the country have expanded their efforts to include working closer with shorebird, landbird and waterbird managers via the formation of the North American Bird Conservation Initiative (NABCI). With the evolution of NABCI, national and international management plans for these species have been completed or are in development. At the NABCI provincial level, the Canadian Wildlife Service-Quebec Region is leading the way, having developed an implementation plan for integrated bird conservation. Other provinces are not far behind.

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## National Verview



<sup>1.</sup> These goals are under revision as per the 2004 NAWMP Update.

<sup>2.</sup> Based on \$Cdn. = \$U.S. 0.68.

<sup>3.</sup> Data includes PHJV, PCJV and EHJV only.

#### continued from cover

Now more than ever, migratory bird conservation has become interdependent on a multitude of factors scientific research, new management techniques, diverse partnerships, landscape-scale program implementation, voluntary stewardship and comprehensive evaluation planning, generating effects that span across continents and species alike. Our Canadian partners are well positioned and willing to tackle the conservation challenges that lie ahead. The NABCI/North American Wetlands Conservation Council (Canada) includes representatives from the Forest Products Association of Canada, the Canadian Mining Association, the Canadian Federation of Agriculture, all Canadian provinces and numerous other public and private organizations. Conservation in Canada has never been so diverse and exciting, nor has it ever been as demanding. To maintain our success, Canadian partners must work harder than ever to meet our goals, forge new partnerships and seek out and maintain new and existing funding sources.

Conservation in Canada has never been so diverse and exciting, nor has it ever been as demanding. To maintain our success, Canadian partners must work harder than ever to meet our goals, forge new partnerships and seek out and maintain new and existing funding sources.

There are many Canadian conservation highlights for the year 2003. One such example is the development and implementation of Canada's Federal Agricultural Policy Framework (APF). The APF has five main elements: business risk, food safety, environment, sector renewal and science. Together, these elements foster a framework for aiding the Canadian agri-food industry in encouraging wildlife-friendly farming practices across the country.

In Canada's east, the Eastern Habitat Joint Venture (EHJV) has formed a partnership with Canada's mining sector. This partnership has not only become a funding source for wildlife conservation, it promises to change the way mining companies develop their long-term management plans regionally and around the world.

On the prairies, Alberta's Integrated Watershed Management Strategy strives to ensure healthy, sustainable watersheds by focussing on water quality and quantity issues, thereby benefiting wildlife populations and humans. This is one of several provincial watershed management strategies in Canada. Ideally, it will help serve as a model for other provinces to follow.

In British Columbia, the establishment of the Canadian Intermountain Joint Venture (CIJV), characterizes the country's first all-bird joint venture, and is its fourth habitat joint venture. The CIJV landscape is as varied as its list of partners, not to mention its 373 bird species, 1,500 species of native vascular plants, 43 species of native freshwater fish, 29 amphibian and reptile species and 94 species of mammals — all within the British Columbia interior.

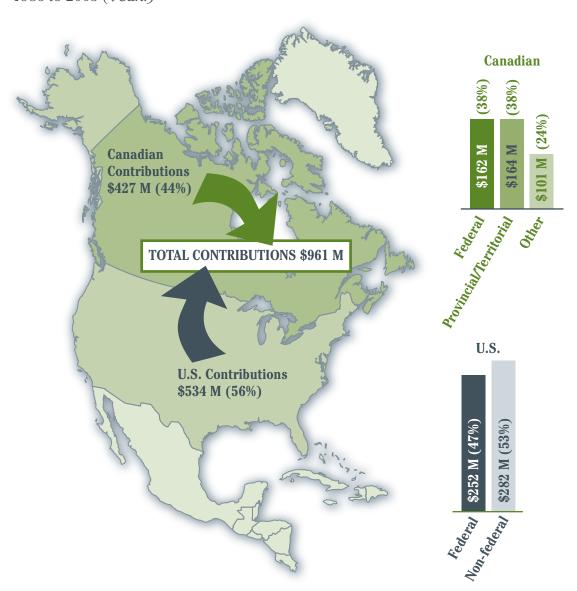
These NAWMP and NABCI programs, combined with other federal initiatives, such as Canada's Species at Risk Act and the Federal Wetlands Forum, are helping to ensure the long-term conservation of Canada's migratory birds.

These NAWMP and NABCI programs, combined with other federal initiatives, such as Canada's Species at Risk Act and the Federal Wetlands Forum, are helping to ensure the long-term conservation of Canada's migratory birds. In addition, Environment Canada is leading the development of a national plan to address invasive alien species threats by working with other federal departments and the provincial and territorial governments.

Woven into each of Canada's programs are comprehensive evaluation plans that focus on habitat and population objectives. These plans emphasize the evaluation of our waterfowl conservation efforts. The impacts on non-waterfowl species, biodiversity and socio-economic issues are also considered. The 2004 NAWMP Update: Strengthening the Biological Foundation, iterates the ongoing need for Canadian partners to continually improve upon waterfowl population targets, while keeping in mind potential benefits and impacts to other bird groups and wildlife species.

This report highlights Canada's many 2003 conservation accomplishments and challenges. The continued support of the North American Wetlands Conservation Act and other U.S. and Canadian funding partners is instrumental to our program planning, implementation and evaluation. Canada needs the continued support and dedication of our continental partners to successfully implement our extensive migratory bird conservation programs. We appreciate the efforts of our ongoing partnerships and credit the thousands of individuals and organizations for helping to achieve Canada's conservation goals.

### Total NAWMP and NAWCA Contributions to Canada 1986 to 2003 (\$Cdn.)



Water source protection through integrated watershed management planning will help to reverse declining northern pintail populations.

Ducks Unlimited Canada



## Habitat Joint Ventures

#### **Prairie Habitat Joint Venture**

Prairie Habitat Joint Venture (PHJV) partners are taking stock of achievements, reviewing habitat objectives and testing new ideas to meet NAWMP's long term-vision. Even with the PHJV's major accomplishment of securing 4 million habitat acres (1.6 million hectares), the need continues for direct habitat programs and innovative landscape and policy-based initiatives that will have far-reaching benefits across this crucial 141-million-acre (57-million-hectare) landscape.

While significant gains have been made through the PHJV program, partners continue to face challenges on the Canadian prairie landscape. Habitat programs are being adjusted and a range of opportunities are being explored.

With a strong research base, PHJV population data are being scientifically linked with habitat objectives to improve the effectiveness of habitat programs. Studies show that while these programs are having a positive influence on populations, a few species, such as the northern pintail, remain significantly below NAWMP

objectives. In response to recent prairie-wide droughts, downward population trends are occurring for mallard and other total duck numbers.

The \$5.2 billion Agriculture Policy Framework (APF), developed to significantly transform agricultural production in Canada, emphasizes the importance of sustainable land management and the environment. It includes the \$110 million Greencover Canada Program that promotes a 4-million-acre (1.6-million-hectare) increase in perennial forages on marginal agricultural land. Another \$100 million will be invested in environmental farm planning. The PHJV partners are working to influence the APF to benefit wetlands, waterfowl and all wildlife by developing beneficial management practices, establishing biodiversity principles and delivering ecological goods and services for Prairie Canada.

Water is another important environmental concern for Canadians and links directly to PHJV habitat objectives. Provincial water management strategies for Alberta, Saskatchewan and Manitoba will soon be implemented. These strategies offer tremendous opportunities for the PHJV to positively influence watershed and wetland management in ways that will ensure quality drinking water and meet Prairie Canada's wetland and upland habitat objectives. The PHJV partners are aligning themselves as key players in the delivery of effective water management strategies to significantly improve the environmental benefits for migratory birds.

The APF and the provincial water management strategies provide viable solutions to some of the larger prairie landscape challenges. It is anticipated that an intricate complement of environmental landscape policies and finely tuned habitat programs will make the NAWMP vision a reality.

Contact Deanna Dixon, Prairie Habitat Joint Venture Coordinator, (780) 951-8652, deanna.dixon@ec.gc.ca.

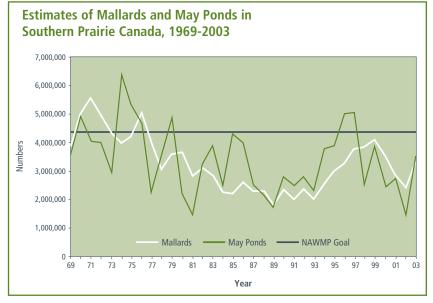
#### Contributions (\$CN)

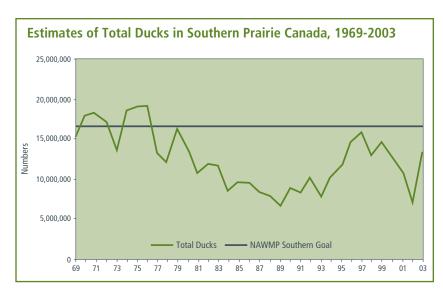
	2003 1	Гotal (1986-2003)
U.S. Federal 2	0,330,332	178,696,055
U.S. Non-Federal 2	2,128,677	197,028,605
Canadian 1	5,826,306	203,401,846
Total 5	9,285,315	579,126,506

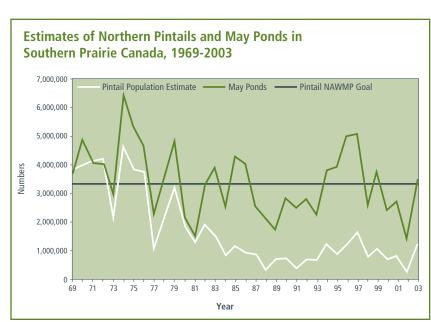
#### Accomplishments (Acres)

	2003	Total (1986-2003)
Secured	543,560	4,187,053
Enhanced	150,862	1,699,635
Managed	189,707	3,184,252
Total*		4,187,053

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.









## Oscar Lake, Northwest Territories Ducks Unlimited Canada

Home to tens of millions of breeding, staging and molting waterfowl and millions of shorebirds, the wetland areas of the forest are also critically important to bears, beavers, wolves, woodland caribou, moose and more than 3 billion landbirds.

#### **Western Boreal Program**

anada's boreal forest drapes across the broad shoulders of our nation like a huge green shawl. From the west, the great forest enters Canada at the border of Alaska and the Yukon, extends into much of the Northwest Territories, and sweeps southward across the northern regions of British Columbia and the prairie provinces before dipping across Ontario. Swinging back north across Quebec, Canada's boreal forest crosses into the far reaches of Newfoundland and Labrador.

The boreal forest has seen many changes over the past 25 years, and not all have been habitat alterations. Scaup and scoters breed primarily in the boreal forest and their continental breeding season populations have declined by about 40 percent and 60 percent respectively.

Ducks Unlimited Canada

This vast and magnificent sweep of land contains almost one-quarter of the world's remaining intact forests and holds more fresh water in its wetlands, lakes and rivers — the foundation for a rich diversity of life — than any other place on Earth. Home to tens of millions of breeding, staging and molting waterfowl and millions of shorebirds, the wetland areas of the forest are also critically important to bears, beavers, wolves, woodland caribou, moose and more than 3 billion land birds. Ducks Unlimited Canada's (DUC) Western Boreal Program is actively pursuing planned conservation of water, wetlands and associated upland habitat in Canada's boreal forest.

DUC's boreal program incorporates several components that support the conservation of wetlands, water and associated upland habitat. At this stage in the program's evolution, most of the work takes place in the west where the inventory of wetlands and uplands involves a sophisticated Earthcover Mapping Program that defines and describes the wetland habitat. DUC is assessing waterbird use of the boreal wetland habitat based upon an inventory of waterbirds using stratified data collection and predictive modeling at the regional level. Regional water chemistry surveys, riparian bird surveys and invertebrate surveys are also being conducted at selected sites throughout Canada's western boreal forest in 2004.

The Western Boreal Program has engaged several researchers in academia to study water science issues in the western boreal forest. DUC's geographic information system group is also examining automated methods of mapping riparian areas through remote sensing techniques across the western boreal forest. The information collected is key to advancing DUC's conservation agenda, including new protected areas and world-leading sustainable development.

Contact Gary Stewart, Manager of Boreal Conservation Programs, Ducks Unlimited Canada, (780) 489-8110, g\_stewart@ducks.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	2,037,013	5,208,402
U.S. Non-Federal	4,482,453	8,954,133
Canadian	5,549,117	20,341,401
Total	12.068.583	34.503.936

#### Accomplishments (Acres)\*

	2003	Total (1986-2003)
Secured	_	6,227,214
Enhanced	214	214
Managed	214	214
Total*		6,227,214

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.





Lafarge North America's Brookfield, Nova Scotia cement plant is not only vital to the local economy, it is one of several Canadian mining companies setting unprecedented standards for incorporating wildlife habitat management strategies into their business plans. Many wildlife species benefit from the habitat conservation work being undertaken by companies such as Lafarge North America—black duck, Canada geese, spotted sandpiper and piping plover to name a few.

Glen Parsons, Nova Scotia Department of Natural Resources

#### **Eastern Habitat Joint Venture**

round-breaking partnerships with resource-based industries are expanding horizons for the Eastern Habitat Joint Venture (EHJV). These partnerships are providing new investment into the joint venture's programs and have initiated innovative activities with impacts reaching far beyond the local area of program delivery.

As a new foray into non-traditional partnerships with the Mining Association of Canada and Maritimes Northeast Pipelines Limited, the EHJV considered this type of endeavour an ideal response to the three visions of the 1998 NAWMP update. Over the short term, about \$500,000 (partly from North American Wetland Conservation Act funds), is being injected into EHJV programs. Industry partners are financing a wide range of new and existing programs, including landscape-oriented habitat activities such as securement, enhancement, management and stewardship. These new partners are also investing valuable time and monetary resources into sciencerelated programs, including directed studies, evaluation, monitoring and inventories, to ensure that their efforts and contributions are backed by sound science.

One project proposal offers not only habitat benefits, but economic and employment spin-offs as well. Aboriginal people trained as environmental technicians, will work at the mine site conducting bird and habitat monitoring. This will employ local people and give them some biological understanding of what is happening on their lands.

Resource extraction operations such as mining and petroleum development are finite, and subsequently, they are often heavily regulated. Many mines do not have a large site footprint, but the extraction and processing operations may have significant environmental impacts. Raw product is not always processed on site and can be transported huge distances by train or boat, often through sensitive and important wildlife habitat.

One of the companies involved with the Mining Association, the Iron Ore Company of Canada, is exploring how habitat conservation concepts being implemented at their Canadian mine site can be expanded to their operations in other countries. This concept supports a new vision for resource-based companies with broad international networks carrying their habitat conservation initiatives far beyond the local levels associated with the EHJV partnership.

Innovation is the guiding principle behind this new partnership. Many of the projects to date, such as the aboriginal training initiative, are never-before-tried concepts that could have far reaching, long-term benefits for habitat conservation. In fact, some of the projects being developed have windows of operation extending a quarter of a century or more into the future.

Contact Reg Melanson, Eastern Habitat Joint Venture Coordinator, (506) 354-5036, reginald.melanson@ec.gc.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	4,994,936	46,120,004
U.S. Non-Federal	5,901,344	49,179,806
Canadian	8,059,519	123,802,178
Total	18,955,799	219,101,988

#### Accomplishments (Acres)

2003	Total (1986-2003)
25,648	831,750
12,938	494,170
12,649	504,951
	831,750
	25,648 12,938

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

#### **Pacific Coast Joint Venture**

California, and including Hawaii, the Pacific Coast Joint Venture (PCJV) is the only habitat joint venture led by an international management board. Canadian board members include representatives from federal and provincial agencies with responsibilities for the environment (Federal Departments of Environment and Fisheries and Oceans, and the British Columbia Ministry of Water, Land and Air Protection) and numerous nongovernment organizations including Ducks Unlimited Canada, the Nature Trust of British Columbia, the Nature Conservancy of Canada and the Land Trust of British Columbia.

Canadian PCJV partners are addressing emerging threats such as potential impacts of expansion of aquaculture in British Columbia, impacts of oil spills on marine birds and impacts that could arise if the current moratorium on oil and gas in British Columbia is lifted. The board has agreed to expand the focus from wetland-dependent species to the NABCI allbird vision. The Canadian PCJV board members recently agreed to update their Strategic Plan to more effectively consider emerging conservation pressures and to better address the broader suite of bird species.

A major success for PCJV partners this year was the acquisition of Northy Lake South Farm, almost 60 hectares (148 acres) of wetland, agricultural and forested upland on Vancouver Island's east coast. The farm is located within the Black Creek Watershed, an important watershed for fisheries, agriculture and wildlife. The combination of fish habitat and agricultural production creates an important habitat for migrating and wintering waterfowl of the Comox Valley. At least 10 percent of the world's trumpeter swan population winter in the Comox Valley and another 230 bird species use the watershed.



PCJV partners have secured Northy Lake, an important roosting area for trumpeter swans, by acquiring half of the lake and placing conservation agreements on the remaining area.

Ducks Unlimited Canada

Background Image:

With 14 species, the CIJV area has the highest owl diversity of any ecozone in Canada.

Great-horned Owl

Larry Halverson, Parks Canada

Another major success in 2003 was restoration work undertaken on the Chemainus Estuary (Vancouver Island's east coast). The diversified habitat of the Chemainus Estuary supports a wide variety of birds, mammals and fish. In combination with the nearby Cowichan Estuary, it forms a habitat complex of international importance to waterfowl and other birds. An average of 1,000 waterfowl daily use the estuary during the migration and wintering periods. Of 154 estuaries on Vancouver Island, the Chemainus Estuary is one of only 6 areas given the highest rank of importance in a joint British Columbia Ministry of Environment and Ducks Unlimited Canada inventory completed in 1982. Project partners include Ducks Unlimited Canada and TimberWest.

Contact Saul Schneider, Canadian Intermountain Joint Venture Coordinator, (604) 666-2342, saul.schneider@ec.gc.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	3,845,052	15,703,413
U.S. Non-Federal	2,557,682	16,858,354
Canadian	1,806,267	42,768,111
Total	8,209,001	75,329,878

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	185,106	342,762
Enhanced	1,430	100,441
Managed	1,430	98,058
Total*		342,762

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

#### Canadian Intermountain Joint Venture

In recognition of the importance of the Canadian Intermountain region to waterfowl and other birds, conservation partners formalized and coordinated their efforts in the Canadian Intermountain region into a joint venture. The partners' early efforts focused on developing the Canadian Intermountain Joint Venture Biological Foundation and Prospectus. Recently endorsed by the Canadian NABCI/NAWCC (Canada) Council, CIJV partners are developing a more specific implementation plan to guide their actions. The challenge of the plan will be to capture the needs of all birds as well as broader biodiversity values.

The CIJV partnership has already enjoyed numerous successes. Lignum Limited and Ducks Unlimited Canada have signed an agreement that encourages the conservation of bird habitat and forest management practices that increasingly enhance bird populations on Lignum Limited's forest management area in the Cariboo-Chilcotin. Lignum Limited and Ducks Unlimited Canada have agreed to collaborate on two projects that will achieve conservation and sustainable resource-management objectives.

The first project is a habitat-management approach that focuses on the production and maintenance of the forest structures needed by groups of wildlife species rather than a single species. The results of this "Lifeforms" Program are promising and it is now an integral part of Lignum Limited's ecosystem management planning for its operations.

The second successful project was the securement of over 260 hectares (640 acres) of wetland habitat within 5,100 hectares (12,600 acres) of rangeland and forests in the Tunkwa Watershed. The wetlands play a

significant role, increasing the heterogeneity and biodiversity of the landscape, and providing important breeding, migration and staging habitat for waterfowl. This project addresses range-management practices and water-supply management by integrating the diverse needs of a wide array of land users, including ranching, forestry, angling and outdoor recreation; all rely upon the water and wetlands within the Tunkwa Watershed.

Partners in the CIJV include Ducks Unlimited Canada, the Land Trust of British Columbia, the Nature Conservancy of Canada, the Nature Trust of British Columbia, the British Columbia Ministry of Water, Land and Air Protection, Canadian Wildlife Service-Environment Canada, Parks Canada, Grasslands Conservation Council of British Columbia, Teck Cominco Ltd., the Ktunaxa-Kinbasket Tribal Council, the University of British Columbia, the University of Northern British Columbia, Lignum Limited, the BC Cattlemen's Association, BC Hydro, the Federation of British Columbia Naturalists and British Columbia Field Ornithologists.

Contact Saul Schneider, Canadian Intermountain Joint Venture Coordinator, (604) 666-2342, saul.schneider@ec.gc.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	636,277	636,277
U.S. Non-Federal	163,179	163,179
Canadian	6,253,143	6,253,143
Total	7,052,604	7,052,604

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	19,952	19,952
Enhanced	1,671	1,671
Managed	1,471	1,471
Total*		19,952

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management

Cattle ranching operations are an important component of the working landscape in the Columbia Valley making rancher participation in CIJV initiatives integral to the joint venture's success.





# Species Joint Ventures



he Arctic Goose Joint Venture (AGJV) partnership sets research and monitoring priorities and funds scientific investigations pursuing its vision of better understanding and managing Arctic nesting geese. To date, \$23 million has been leveraged for banding, research and surveys, supporting 60 projects, with less than 1 percent spent on coordination. The AGJV encourages multi-partner and multi-jurisdictional programs designed to develop an understanding of many aspects of goose populations, including their interactions with other birds and their environments.

Thousands of geese are banded every year. The resulting information is essential for making informed management decisions. In 2003, AGJV projects across the Canadian Arctic cooperated in a U.S. Fish and Wildlife Service reward banding program for geese. For the first time, estimated rates of hunter band reporting will be available for geese. This provides an integral component for modeling population dynamics and the subsequent management of geese populations.



**Perdue White Geese** Ray Alisauskas, Canadian Wildlife Service

Another example of the cooperative nature of Arctic goose programs is a study to address the drastic decline in Atlantic Canada geese. Nearly 50,000 geese have been banded, with 10,000 banded in 2003 alone. This information allowed for the re-establishment of a hunting season for the Atlantic Population of Canada geese, and is an essential monitoring component to ensure the population's long-term stability.

Recent surveys have uncovered a new breeding area for lesser snow geese. Air Force Island, only discovered in 1948, is an extension of habitat on Baffin Island. It was surveyed in the mid 1990s and showed a population of 17,000 breeding snow geese. Last year's surveys estimate the total population to be over 200,000. This figure emphasizes the need for an aggressive science program in order to stay ahead of rapidly changing goose-habitat interactions.

The AGJV focus is on critical information gaps that could not easily be addressed without a multitude of partners. The direct link with federal, state and provincial wildlife agencies provides the mechanism to enhance the science-based management of North America's geese. The AGJV is poised to expand partnerships in Mexico, where high priority goose populations over-winter.

Contact Deanna Dixon, Arctic Goose Joint Venture Coordinator, (780) 951-8652, deanna.dixon@ec.gc.ca.

#### Contributions (\$CN)\*

	2003	Total (1986-2003)
U.S. Federal	689,037	3,743,490
U.S. Non-Federal	675,327	6,408,688
Canadian	1,035,423	12,723,998
Total	2,399,787	22,876,176

\*These contributions contain no NAWCA funding



#### Sea Duck Joint Venture

onsiderable progress was made in 2003 towards acquiring the information needed for sea duck management under the Sea Duck Joint Venture (SDJV). U.S. Congressional appropriations increased to \$347,000 of which \$260,000 (U.S.) was made available as seed money for sea duck projects. This generated matching funds of \$1,156,760 (U.S.) to support 11 projects along both the Atlantic and Pacific coasts, Alaska and the Canadian Arctic. Several other projects that could not be funded this year were endorsed by the Sea Duck Joint Venture as meeting sea duck information needs.

Canadian projects supported by the SDJV concentrated on northern common eiders and the three species of scoters as these are the populations experiencing the steepest declines. Satellite radio telemetry work defined the importance of the Beaufort Sea as a migration corridor for eiders breeding in Canada and wintering in Alaska and Russia. This work delineated the Greenland and North American wintering areas for common eider nesting in the eastern Canadian Arctic, determined the breeding, moulting and wintering grounds of black scoter which spring stage in Baie Chaleur, New Brunswick, and tracked scoter movements on British Columbia's coast in relation to aquaculture developments and herring spawn. Preliminary work to determine the breeding grounds of long-tailed ducks wintering on the Great Lakes also began. White-winged scoter breeding biology was studied in the MacKenzie Delta to assess the effect of recruitment rate on population trends. A smaller scale study on surf scoter breeding ecology was continued in Northern Quebec.

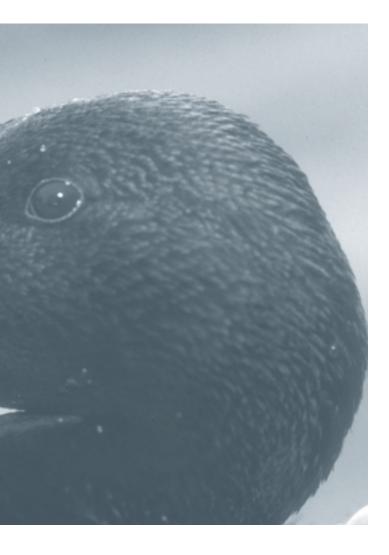
Contact Keith McAloney, Sea Duck Joint Venture Coordinator — Canada/East, (506) 364-5013, keith.mcaloney@ec.gc.ca, www.seaduck.org.

Background Image:

Perdue White Geese

Dana Kellett,

Canadian Wildlife Service



Male black scoters recuperate following satellite transmitter implant in Restigouche, New Brunswick.

Matt Perry, U.S. Geological Survey

#### Contributions (\$CN)\*

	2003	Total (1986-2003)
U.S. Federal	356,978	744,978
U.S. Non-Federal	130,769	130,769
Canadian	771,784	1,839,413
Total	1,259,531	2,715,160

<sup>\*</sup>These contributions contain no NAWCA funding.

Canadian projects supported by the SDJV concentrated on northern common eiders and the three species of scoters as these are the populations experiencing the steepest declines.

#### **Black Duck Joint Venture**

he boreal region of eastern Canada has been surveyed by Canadian Wildlife Service (CWS) biologists since 1990 as part of the Black Duck Joint Venture (BDJV). During the month of May and into early June, CWS conducts helicopter surveys of 25-square-kilometre plots across Ontario, Quebec and the Atlantic Provinces in order to assess black duck population levels (Figure 1).

The results of the 2003 surveys show that black duck numbers are down compared to recent years. This decline was found to be consistent for all survey strata across the range (Figure 1). According to CWS survey biologists at a recent BDJV Technical Committee meeting in Avalon, New Jersey, the explanation for this drop is likely due to low waterfowl productivity in 2002 associated with dry conditions in much of eastern Canada. Increased winter mortality of black ducks, due to the

cold temperatures recorded on the wintering grounds, may have also contributed to the decline.

Despite the dip in the numbers observed this year, the good news is that over the long-term (1990-2003) the black duck population is increasing significantly across its range (Figure 2).

Contact Brigitte Collins, Black Duck Joint Venture Coordinator, (613) 952-2408, brigitte.collins@ec.gc.ca.

#### Contributions (\$CN)\*

	2003	Total (1986-2003)
U.S. Federal	100,000	1,314,360
U.S. Non-Federal	173,000	2,824,850
Canadian	321,240	5,541,145
Total	594,000	9,860,355

<sup>\*</sup>These contributions contain no NAWCA funding.

Figure 1 CWS Black Duck Helicopter Survey Plot Locations-2003

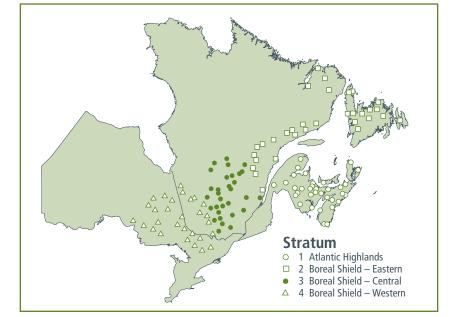
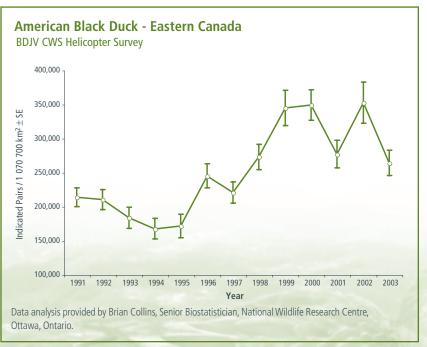


Figure 2 Total Indicated Pairs of Black Ducks Range-wide (1990-2003)



#### Background Image:

Almost 70 percent of the world's black duck population breeds in Canada's eastern boreal forest.

Daniel Bordage, Canadian Wildlife Service

#### **British Columbia**

Pritish Columbia is one of the most biologically diverse provinces in Canada. It supports the country's highest densities of wintering waterbirds, shorebirds and raptors. However, the Province also supports a large and growing human population resulting in significant pressures on the landscape. The Canadian Intermountain and Pacific Coast Joint Ventures have been established to work towards achieving a balance between the needs of birds and other wildlife and the socio-economic values of the landscape.

Provinces

Associated association and also been compared to the compared to th

provincial wetland inventory to monitor positive or negative changes to wetlands over time. These activities will be undertaken in consultation with stakeholders.

On behalf of Pacific Estuary Conservation Program partners, the British Columbia Ministry of Transportation, the British Columbia Ministry of Water, Land and Air Protection, the Nature Trust of British Columbia and Ducks Unlimited Canada, secured numerous high priority properties along the recently constructed Vancouver Island Highway. The properties contain wetlands that are a mix of open water, riparian and stream habitats. The securement was part of the compensation work in the highway's construction. Significant enhancement features have also been completed for fish, waterfowl and other

riparian species. This ongoing work is made possible by North American Wetlands Conservation Act funding, as well as by numerous other U.S. and Canadian funding sources.

Contact Saul Schneider, Canadian Intermountain Joint Venture Coordinator, (604) 666-2342, saul.schneider@ec.gc.ca.

#### **Contributions** (\$CN)

	2003	Total (1986-2003)
U.S. Federal	5,047,922	19,215,224
U.S. Non-Federal	6,184,456	24,250,299
Canadian	8,028,092	50,029,086
Total	19,260,470	93,494,609

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	209,276	382,603
Enhanced	5,379	112,924
Managed	5,179	109,763
Total*		382,603

\* Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

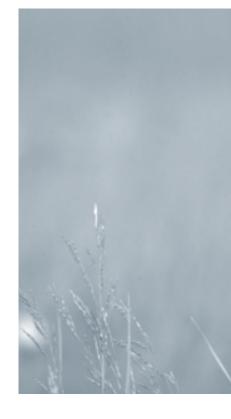


Employees of BC Hydro help students install an osprey nesting platform on their school yard. Ospreys occupied the platform 2 days after installation.

Larry Halverson, Parks Canada

British Columbia supports the country's highest densities of wintering waterbirds, shorebirds and raptors.

In the fall of 2002, a Wetland Working Group was formed to address wetland loss and conservation in British Columbia. Comprised of government, nongovernmental organizations and industry, the group has prepared a "Wetland Action Plan" to help prioritize and direct the Province's wetland conservation efforts. Some priority activities include developing best management practices to guide development on urban and agricultural land, assisting with education and stewardship programs to encourage wetland conservation and creating a





Integrated watershed management planning ensures that water source quality and quantity is a landscape planning priority. This leads to improved riparian health thereby benefitting nesting waterfowl and biodiversity.

**Ducks Unlimited Canada** 

#### **Alberta**

lberta is taking advantage of many opportunities presented by new federal and provincial initiatives. The Province has signed on to the Federal Agricultural Policy Framework.

Alberta's new Water for Life Strategy is nearing implementation and Species at Risk Programs are up and running both federally and provincially. All three programs are funded by and complement Alberta

North American Waterfowl Management Plan goals.

These provincial initiatives will be incorporated into Integrated Watershed Management Planning efforts underway throughout Alberta. The goal of Integrated Watershed Management Planning is to ensure that while fixing water quantity and quality issues within

It all comes back to water, the common denominator for healthy people, healthy landscapes and healthy waterfowl populations.

the watercourse itself, the entire watershed is healthy and sustainable. A demonstration watershed in a priority NAWMP area and an associated watershed stewardship group will create an Integrated Watershed Management Plan model that will access the resources available through the provincial initiatives. Most important in this process is linking the changes in the watershed with the issues that led to the creation of the watershed group. For example, groups formed to address water quality and quantity issues will be shown how wetland loss and land use have contributed to this problem. Next, goals are established for improved land-use practices, including the restoration of wetland, upland and riparian areas, and the retention of native habitat These positive actions will improve water quality and quantity and increase biodiversity.

The Agriculture Policy Framework, Water for Life Strategy, Alberta NAWMP partnership and the Species at Risk Programs provide funding, staff resources and the associated technical support and products needed to help ensure that Alberta watersheds are at their best. It all comes back to water, the common denominator for healthy people, healthy landscapes and healthy waterfowl populations.

Contact Dave Kay, Chair, Alberta NAWMP Partnership Management Committee, Ducks Unlimited Canada, (780) 489-2002, d\_kay@ducks.ca.

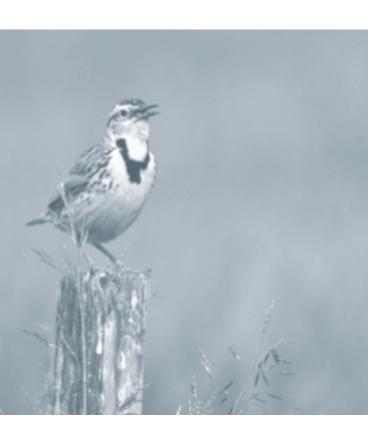
#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	9,581,318	76,616,349
U.S. Non-Federal	10,540,235	84,198,318
Canadian	11,880,179	96,673,723
Total	32,001,732	257,488,390

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	53,865	1,513,526
Enhanced	43,299	901,998
Managed	79,087	1,373,504
Total*		1,513,526

Secured, enhanced and managed acres are not additive. Acres are firs secured, may then be enhanced and are subsequently placed under management.



**Western Meadowlark**Ducks Unlimited Canada/Wolitski



#### Saskatchewan

ver the past century, the Great Plains of North America witnessed unprecedented change resulting in the loss of native grasslands, and the plant and wildlife species indigenous to the area. Fortunately, the Missouri Coteau region of southern Saskatchewan, an area covering over 2 million hectares (5 million acres), is an exception to the winds of change. Today, approximately 31 percent of the land remains in native range.

The Coteau is characterized by numerous pothole wetlands and is important not only to waterfowl, particularly northern pintail, but also to a myriad of wildlife, as well as Saskatchewan's cow-calf industry.

A number of agencies involved in NAWMP programming in the Coteau, including the Saskatchewan Watershed Authority, Ducks Unlimited Canada and the Nature Conservancy of Canada, have worked with landowners to conserve and improve the condition of remaining native habitat. Statistics clearly show their success in creating initiatives that balance economic requirements and personal goals of producers with activities that sustain the native prairie resource.

> Statistics clearly show their success in creating initiatives that balance economic requirements and personal goals of producers with activities that sustain the native prairie resource.

Approximately 243,000 hectares (600,000 acres) in the Missouri Coteau will be conserved in 2004 through Ducks Unlimited Canada's "Coteau Legacy Plan," the Saskatchewan Watershed Authority's "Prairie Stewardship Program" and the Nature Conservancy of Canada's "Conservation Easement Program," which in turn are funded by a broad spectrum of partners.

Incorporating a stewardship philosophy into extension activities has been successful for prairie partners delivering conservation strategies in the Coteau. These strategies not only reflect NAWMP objectives, but build on the region's historic land-use ethic, resulting in a legacy of sustainable native prairie habitat for future generations.

Contact Sharon Metz, Manager of Marketing and Education, Saskatchewan Watershed Authority, (306) 787-0784, sharon.metz@swa.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	8,184,309	75,096,021
U.S. Non-Federal	8,924,726	83,743,689
Canadian	5,528,033	64,202,382
Total	22,637,068	223,042,092

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	373,049	1,352,415
Enhanced	67,877	649,250
Managed	68,421	801,505
Total*		1,352,415

Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

Ranchers discuss best management practices for stock watering during a field tour in the Lake Alma area of Saskatchewan.

Tracy Harrison, Saskatchewan Watershed Authority

#### Manitoba

ike many Canadian jurisdictions, Manitoba only recently added conservation easements to the private land conservation tool kit. Manitoba NAWMP partners have embraced the opportunity and conservation easements are now the long-term securement tool of choice.

Enabling legislation for conservation easements was enacted only 5 years ago. NAWMP partners began cautiously, ensuring that their protocols and procedures were adequate. Since then, delivery has increased significantly as awareness of the conservation easement option grows. To date, over 150 conservation easements (mostly purchased, some donated) have been completed and many more continue to be processed.

With Manitoba's NAWMP target area dominated by agricultural production, conservation agencies may receive a negative reaction when they purchase large tracts of land. The easement option ensures that land remains in private hands while a conservation "interest" is registered on the habitat parcels. All easements signed to date in Manitoba are in perpetuity.

Manitoba partners have improved the coordination of easement delivery through a Conservation Easement Working Group. Processing and valuation procedures have been standardized to the greatest extent possible to ensure consistency between agencies. Partners have also developed delivery approaches that help complement the others' conservation easement field activities.

Through the Potholes Plus Program, the Delta Waterfowl Foundation and the Manitoba Habitat Heritage Corporation have delivered numerous conservation easements to date on wetland and associated upland habitats. Ducks Unlimited Canada easement delivery has also hit full stride, with a focus on its key waterfowl habitat areas. The Nature Conservancy of Canada is also using conservation easements to protect remnant tall-grass prairie as well as aspen parkland habitats within the NAWMP target area.

Contact Tim Sopuck, Manager of Operations, Manitoba Habitat Heritage Corporation, (204) 784-4357, tsopuck@mhhc.mb.ca.

#### Contributions (\$CN)

2003	Total (1986-2003)
3,473,025	27,888,400
3,008,191	29,321,821
4,315,474	53,369,999
10,796,690	110,580,220
	3,473,025 3,008,191 4,315,474

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	112,428	1,301,223
nhanced	37,408	137,575
Managed	39,921	999,009
Total*		1,301,223

\* Secured enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under

**Conservation easement** decision-making is often a family affair. The Stroeder family (pictured) donated a 70-acre conservation easement of riparian woodlot along Whitemud River in Manitoba.

Bill Stilwel



#### Ontario

unicipalities and conservation agencies in southwestern Ontario are revolutionizing drainage ditch management and restoring wetland functions, with support from Eastern Habitat Joint Venture (EHJV) partners. Drought, wetland loss and drainage lowered crop yields by reducing the landscape's ability to store and release water throughout the growing season. In response, local landowners, mainly farmers, have embraced wetland restoration projects that work toward enhancing groundwater and surface water supplies.

Resource managers and drainage superintendents are building water control structures in drainage ditches within remnant swamp forests to increase water storage and extend hydro-periods within the ditched wetlands. As a result, soils are rehydrated, surface water reappears and wetland habitat is improved.

The Norfolk Land Stewardship Council, municipal staff and the Ontario Ministry of Natural Resources (OMNR) pioneered this effort to improve water quality and quantity while enhancing fish and wildlife habitat. EHJV, OMNR and municipal staff have provided vital financial and technical support since the project began in 1999. Wildlife Habitat Canada's Ontario Wetland Habitat Fund is also a partner and has secured agreements with the municipalities for wetland restoration over the long term.

In surrounding regions, similar projects are being implemented by municipal leaders, drainage superintendents and local landowners. Working with the program's originators and new participants, Ontario EHJV partners continue to explore new ways to maximize the habitat benefits from these wetland-restoration initiatives.

...local landowners, mainly farmers, have embraced wetland restoration projects that work toward enhancing groundwater and surface water supplies. Quebec's Forest, Wildlife and Parks Minister, Pierre Corbeil announced a 5-year, \$2.5 million commitment to Quebec wetland conservation at the joint U.S. NAWCC and NABCI (Canada) Council meeting in Quebec City in July 2003. The commitment was matched by Ducks Unlimited Canada.

**Ducks Unlimited Canada** 

A 2-year agreement between the Quebec Ministry of Environment and Ducks Unlimited Canada (DUC) for securing wetlands on private lands is nearing completion.

A Wetland Drain Restoration Project "How to"
Guide and CD are available. Contact Dave Richards,
District Biologist, Aylmer District, Ontario
Ministry of Natural Resources, (519) 773-4731,
dave.richards@mnr.gov.on.ca. A fact sheet is available
online at http://www.ontariostewardship.org/
FactSheet.pdf. For information on the Ontario
Wetland Habitat Fund contact Mark Stabb,
Program Manager, (613) 722-2090 ext 252,
mstabb@wetlandfund.com or visit
www.wetlandfund.com.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	2,509,418	22,768,469
U.S. Non-Federal	2,872,303	24,476,003
Canadian	3,950,778	78,827,893
Total	9,332,449	126,072,365

#### Accomplishments (Acres)

	2003	Total (1986-2003)
Secured	8,354	478,882
Enhanced	2,732	402,814
Managed	2,732	413,940
Total*		478,882

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.



#### Quebec

n Quebec, the Eastern Habitat Joint Venture (EHJV) efforts to protect and restore critical wetlands of the Ottawa and St. Lawrence rivers are ongoing. However, the need to secure wetlands on private lands and within the boreal forest poses a growing concern.

A 2-year agreement between the Quebec Ministry of Environment and Ducks Unlimited Canada (DUC) for securing wetlands on private lands is nearing completion. These wetlands include the salt marshes on the north shore of the St. Lawrence River, Baie St-François in Lake St-Pierre, the Lake Brompton marshes and Rivière du Sud. These critical wetlands face increasing development pressures, making the need to affect these areas of paramount importance.

A common vision for wetland conservation has been developed through a new partnership agreement between DUC, Environment Canada, Quebec Ministry of Environment and the Quebec Wildlife and Parks Agency (FAPAQ). This agreement facilitates the implementation of the North American Bird Conservation Initiative and focuses on developing wetland and upland conservation plans for each of Quebec's 17 administrative regions. The DUC/FAPAQ partnership will invest \$5 million over 5 years toward the securement of significant Quebec wetlands. The partnership will also promote greater public awareness for wetland conservation and improved coordination in the field.

At the XII World Forestry Congress held in Quebec City in September 2003, DUC announced its commitment to protect Canada's boreal forest. At the joint U.S. NAWCC and NABCI (Canada) Council meeting last July, the EHJV-Quebec launched its new website. The website lists the partners' accomplishments since the 1989 implementation of the EHJV in Quebec, and can be found at: http://www.qc.ec.gc.ca/faune/pche/pche.html.

Contact Pierre Dulude, Ducks Unlimited Canada, (418) 623-1650, p\_dulude@ducks.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	1,064,897	11,518,476
U.S. Non-Federal	1,222,489	12,237,942
Canadian	1,759,462	17,909,596
Total	4,046,848	41,666,008

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	10,922	40,699
Enhanced	6,941	23,828
Managed	6,941	26,371
Total*		40,699

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

Municipal staff are innovatively applying Ontario's Drainage Act to restoring wetlands along drainage ditches. Water control structures have been installed at 15 sites and 25 more projects are in the works.

Robert Messier, Wetland Habitat Fund





Flooded daily by the ebb and flow of the tides, coastal wetlands provide year-round habitat for a diverse array of migratory birds and other wildlife.

Laurel Bernard,

#### **New Brunswick**

cattered along the Bay of Fundy coastline of inlets and harbours are lush, green, grasslands that form the maritime salt marsh. Areas of immense biological productivity, these coastal wetlands provide important year-round habitat for wildlife. Flooded daily by the tides, they are neither land nor water, rather a bit of both.

Plant life in the coastal wetlands is dominated by tall salt marsh cord grass (Spartina alterniflora) in the daily flooded "low marsh" and salt marsh hay (Spartina patens) in the "high marsh" which is flooded only during the highest tides. These plants serve an important role to help stabilize the coastline by trapping sediments and protecting the adjacent uplands from damage due to waves, ice and wind. Coastal wetlands are one of the primary providers of food energy for the coastal environment and are thus critical to the survival of many species of waterfowl.

The coastal wetlands at Musquash are approximately 400 hectares (1,000 acres) in size and contain 4 freshwater impoundments totaling 138 hectares (340 acres), built on land that had historically been dyked for agricultural purposes. To date, 364 hectares (900 acres) of the salt marsh have been secured by New Brunswick EHJV partners. The Musquash Estuary is now being considered for designation as a protected marine area by the Department of Fisheries and Oceans while the Nature Conservancy of Canada in the New Brunswick EHJV, is working with the local community to develop a management plan for the area. The New Brunswick EHJV partnership continues to acquire headlands around the Musquash area in an effort to buffer the salt marshes from development.

Contact Todd Byers, New Brunswick EHJV Program Manager, (506) 453-2440, todd.byers@gnb.ns.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	671,609	5,120,642
U.S. Non-Federal	772,540	5,201,793
Canadian	1,017,479	7,282,611
Total	2,461,628	17,605,046

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	2,325	65,752
Enhanced	386	18,259
Managed	386	25,360
Total*		65,752

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

#### **Nova Scotia**

s part of the Eastern Habitat Joint Venture, Nova Scotia continues to develop habitat projects that will help meet North American Waterfowl Management goals. For example, the Province has recently implemented its Beaver Pond Conservation Program on the Northumberland Strait. The purpose of the program is to minimize any negative impact that beavers may have on wetland habitat. Like all NAWMP programs, the Beaver Conservation Program is a partnership effort. It is delivered by Ducks Unlimited Canada, the Trans Canada Trail, Nova Scotia Department of Natural Resources, all-terrain-vehicle clubs and Environment Canada's Eco Action Program.

The Trans Canada Trail system of the Northumberland coastal plain stretches along 126 kilometres (78 miles) of abandoned railway and is surrounded by many abundant beaver ponds. Breeding waterfowl such as black duck, green-winged teal, ring-necked duck and many other species of birds, amphibians, reptiles, fish and mammals thrive in these wetlands. However, a major problem is occurring as beaver activities tend to cause the blockage of trail culverts. These blockages cause excessive flooding and washouts thereby limiting the area's wildlife values as well as trail thruways. In some cases, water levels have been found to reach as high as 6 to 9 metres above the culverts and across the trail.

Because the Beaver Pond Conservation Program has been so successful, additional sites along the trail have recently been identified and inventoried. At these sites, water levels could be controlled without removing the beavers or destroying their habitat. The Program involved the installation of beaver-proof water control structures and overflow culverts to control water levels in the pond. These installations ensure that the beaver ponds and wildlife habitat remained intact without the threat of severe floods and washouts.

In Nova Scotia, the EHJV will continue encouraging new partners to participate in the Beaver Pond Conservation Program and other habitat conservation projects that further NAWMP goals.

Contact Glen Parsons, Nova Scotia Program Manager, Eastern Habitat Joint Venture, (902) 679-6223, parsongj@gov.ns.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	480,152	3,720,174
U.S. Non-Federal	610,152	4,094,524
Canadian	575,386	8,957,141
Total	1 665 690	16 771 839

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	2,534	84,027
Enhanced	1,544	19,120
Managed	1,462	26,378
Total*		84,027

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

#### **The Trans Canada** Trail

The Trans Canada Trail is a non-profit, registered charity organization, whose primary purpose is to raise funds to build a recreational trail that will wind its way through every province and territory in Canada, linking hundreds of communities along its route. The target date for completion of the main trunk of the Trans Canada Trail is the fall of 2005. The primary funding source is the sale of metres of the trail to the public. It will be the longest recreational trail in the world. Canadian NAWMP partners are proud to have expanded their partnership to include the Trans Canada Trail.



Typical beaver pond habitat being conserved along the abandoned **Canadian National rail** line, now a part of the Trans Canada Trail in Northern Nova Scotia.

John Wile,

**Ducks Unlimited Canada** 



This new Wetland and Cultural Interpretation Centre located in Carmanville was constructed with non-NAWCA funds. It is one example of a direct spin-off from Newfoundland and Labrador's Municipal Wetland Stewardship Program.

Gerry Yetman, Newfoundland and Labrador Department of Environment and Conservation



#### **Prince Edward Island**

Prince Edward Island's Eastern Habitat Joint Venture (EHJV) partnership implements wetland conservation through four key program areas: agricultural, including soil conservation and livestock fencing; small marsh enhancement; wetland management; and land acquisition. Partners include Ducks Unlimited Canada, PEI Soil and Crop Improvement Association, Wildlife Habitat Canada, the Island Nature Trust, as well as the provincial Departments of Environment and Energy, and Agriculture, Fisheries, Aquaculture and Forestry.

Excessive siltation from inappropriate agricultural practices has been identified as a primary source of surface water degradation. Subsequently, considerable effort has been dedicated towards solving the problem.

A highlight of the Island's 2003 program has been the continued success of the Livestock Watering and Fencing Program, a program initiated in 1991 through the EHJV, and funded by Wildlife Habitat Canada. While the goal to have all livestock fenced from the Island's watercourses and wetlands by September 2003 was not fully realized, 85 percent of projects have been completed with the remainder scheduled for completion in 2004. The PEI Soil and Crop Association coordinated the program with funding support in recent years from Environment Canada's Eco Action Program, the Prince Edward Island Department of Agriculture, Fisheries, Aquaculture, and Forestry and local landowners. The landowners have also committed to cover the costs associated with long-term maintenance.

Contact Alan McLennan, Prince Edward Island Department of Fisheries, Aquaculture and Environment, (902) 368-4667, admclennan@gov.pe.ca.

#### Contributions~(\$CN)

	2003	Total (1986-2003)
U.S. Federal	190,560	1,930,849
U.S. Non-Federal	255,560	2,044,778
Canadian	288,636	5,815,696
Total	734,756	9,791,323

#### **Accomplishments** (Acres)

	2003	Total (1986-2003)
Secured	234	34,206
Enhanced	835	24,328
Managed	628	6,996
Total*		34,206

\* Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.

Carruther's Pond near Hamiltion, Prince Edward Island, is typical of a livestock fencing project on the Island.

Cattle have been excluded from the adjacent wetland that flows into a small marsh bordering Malpeque Bay, a designated Ramsar site.

Alan McLennan, PEI Department of Fisheries, Aquaculture and Environment

#### **Newfoundland and Labrador**

Joint Venture (EHJV), a primary focus for wetland conservation in Newfoundland and Labrador has been the Municipal Wetland Stewardship Program. This innovative program develops long term partnerships with municipal governments to encourage local stewardship of natural resources while nurturing and reinforcing an improved conservation ethic.

In an effort to evaluate the effectiveness of this program, an audit was undertaken to address the following questions: Has the Municipal Wetland Stewardship Program worked in Newfoundland and Labrador? Should the program continue? How is the program's effectiveness measured?

The audit design was completed by Dr. Catherine Roach, Associate Professor with the Deptartment of Religious Studies, University of Alabama and was led by Dr. Kathleen Blanchard, former President of the Quebec Labrador Foundation (Canada).

The audit evaluated how the program met its three specific goals: (1) to protect and enhance local wetland habitat; (2) to protect and enhance waterfowl populations; and (3) to encourage an appreciation and sense of responsibility toward wetlands.

In their report, the authors found that, "Results of the overall evaluation demonstrate substantial program accomplishment in each of the three targeted goals." The audit also identified many additional spin-off benefits to waterfowl, wetlands and conservation in general. These include positive influences on the younger generation and the extension of program reach over a greater geographic area. Subsequently, it was concluded that "Municipal Wetland Stewardship is a powerful and effective strategy for wetland conservation".

Contact Gerry Yetman, Eastern Habitat Joint Venture, Newfoundland and Labrador Program Manager, (709) 637-2013, gerryyetman@gov.nl.ca.

#### Contributions (\$CN)

	2003	Total (1986-2003)
U.S. Federal	78,300	1,061,400
U.S. Non-Federal	168,300	1,124,766
Canadian	467,779	5,009,242
Total	714,379	7,195,408

#### Accomplishments (Acres)

	2003	Total (1986-2003)
Secured	1,279	128,184
Enhanced	500	5,821
Managed	500	5,906
Total*		128,184

<sup>\*</sup> Secured, enhanced and managed acres are not additive. Acres are first secured, may then be enhanced and are subsequently placed under management.



#### Thank you to all our partners who supported us by contributing in 2003:

#### Canada

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Manitoba Conservation
Manitoba Habitat Heritage Corporation
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Minco Gas Co-op Ltd.

Ministère de l'Éducation du Québec Ministère de l'Environment du Québec Mountain Equipment Co-op Natural Resources Canada – Polar Continental

Shelf Project Natural Science & Engineering Research Council of Canada

of Canada
Nature Conservancy of Canada
Nature Saskatchewan
Nature Trust of British Columbia
Navigo Energy Partnership
New Brunswick Department of Agriculture,
Fisheries and Aquaculture
New Brunswick Department of Environment

and Local Government
New Brunswick Department of Natural Resources
New Brunswick Department of Transportation
Newfoundland and Labrador Department of
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Newfoundland-Labrador Department of Tourism,
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Nicola Tribal Association
Niven & Associates Inc.
Norcana Resource Services (1991) Ltd.
Northrock Resources Ltd. (Canada)
Nova Scotia Habitat Conservation Fund
Nova Scotia Nature Trust
Nova Scotia Department of Environment and Labour
Nova Scotia Department of Agriculture and Fisheries

Nova Scotia Department of Natural Resources
Northwest Territories Department of Resources,
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Star Oil & Gas Ltd.
Strathcona County
Suncor Energy Inc.
Sundance Forest Industries Ltd.

Sustainable Forest Management Network Syncrude Canada Ltd. Talisman Energy Inc.

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New Jersey Division of Fish & Wildlife
New Mexico Department of Game and Fish
New York State Department of Environmental
Conservation

North American Wetlands Conservation Act North Carolina Wildlife Resources Commission North Dakota Game and Fish Department Ohio Department of Natural Resources Oklahoma Department of Wildlife Conservation Paul G. Allen Forest Protection Foundation Pennsylvania Game Commission PEW Charitable Trusts South Carolina Department of Natural Resources South Dakota Department of Game, Fish and Parks Susquehanna Waterfowl Trust Tennessee Wildlife Resources Agency Texas Parks and Wildlife Department The Nature Conservancy U.S. Fish & Wildlife Service U.S. Forest Service U.S. Geological Survey – Biological Resources Division

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#### International

Conservation International Bahamas Ministry for Natural Resources of Russia Ramsar Convention Bureau Wrangel Island Nature Reserve

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Background Image:

Mallard nesting habitat

Ducks Unlimited Canada/Langhorst

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North American Waterfowl
Management Plan

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