

HabitatMatters

2014 Canadian NAWMP Report

NAWMP Canada is pleased to bring you the 2014 issue of *Habitat Matters*. The 2014 issue features a change to the annual reporting for *Habitat Matters* to an April 1st – March 31st time frame. Previously, *Habitat Matters* reported annually on a calendar basis. This change will better align with the organizational reporting time frames of Canadian partners.



Title:
“Sun-kissed Cinnamon –
Cinnamon Teal” from the
2014 Canadian Wildlife
Habitat Conservation
Stamp series.

Artist:
Lori Boast, Winnipeg, Manitoba

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Canada has made tremendous progress towards the goal of conserving waterfowl and wetland habitat. Since the signing of the North American Waterfowl Management Plan (NAWMP) in 1986, over \$2 billion CAD has been invested in Canada to secure 19.8 million acres (8.0 million hectares) and enhance 3.5 million acres (1.4 million hectares) of wetland and associated upland habitat. Not only do these accomplishments contribute to the NAWMP goal of maintaining the long-term average of breeding waterfowl, but they also provide numerous benefits to both the environment and society. These benefits include improving water quality, regulating water quantity, and providing habitat for many wetland-dependent non-waterfowl species. The enormous, multifaceted impact of these accomplishments demonstrates why the NAWMP is regarded as one of the most successful conservation programs in the world.

Over the past year, NAWMP partners have been active throughout Canada’s four habitat-focused and three species-focused joint ventures to deliver the NAWMP through Canada’s programmatic approach. NAWMP partners integrate planning, science, governance, partnerships, and implementation into their waterfowl conservation work to ensure a common approach towards achieving NAWMP goals in Canada. This programmatic approach has proven to be successful with the Canadian Intermountain Joint Venture reaching the milestone of 10 years of conservation activity in 2013 and the Eastern Habitat Joint Venture achieving 25 years of conservation activity in 2014.

The successful implementation of Canada’s NAWMP program has been enabled by the continuous support of partners in both Canada and the United States, including federal, provincial, and state governments, non-governmental organizations, and individuals. In particular, funding received under the United States’ *North American Wetlands Conservation Act* has been integral to the success and longevity of the Canadian program.

Published in 2014



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

National Overview

Total NAWMP Accomplishments in Canada 1986–2014 (millions of acres)

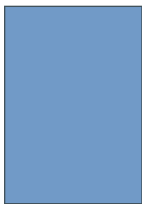
Over the course of 2013–2014, the Canadian Habitat Joint Ventures secured 122,892 acres (49,733 hectares) and influenced 11,994,305 additional acres (4,853,927 hectares) through stewardship activities. These protection activities are targeted within each joint venture at the highest priority landscapes that have been identified through the use of long-term monitoring datasets and models. To support these protection activities, 21,731 acres (8,794 hectares) were enhanced over 2013–2014 through habitat improvements such as restoring wetlands and building nesting structures. Finally, 571,621 acres (231,327 hectares) of previously secured habitat were actively managed during 2013–2014.

In addition to their active engagement at the landscape level, the Pacific Coast, Prairie Habitat, and Eastern Habitat Joint Ventures have been developing new implementation plans, which will be published later in 2014. These implementation plans are being developed to incorporate new waterfowl population, habitat, and human dimensions objectives from the 2012 Revision. The new implementation plans will feature a standardized tracking and reporting system for joint ventures, called common language (described on page 3), and other standardized implementation plan terminology. Finally, the new implementation plans will be developed with the common end point of 2020. These changes to standardize certain elements of the Canadian NAWMP program will help to facilitate the national roll-up of program goals and habitat objectives, as well as simplify future reporting of accomplishments against long-term habitat objectives.

Influenced: 114.7



Secured: 19.9

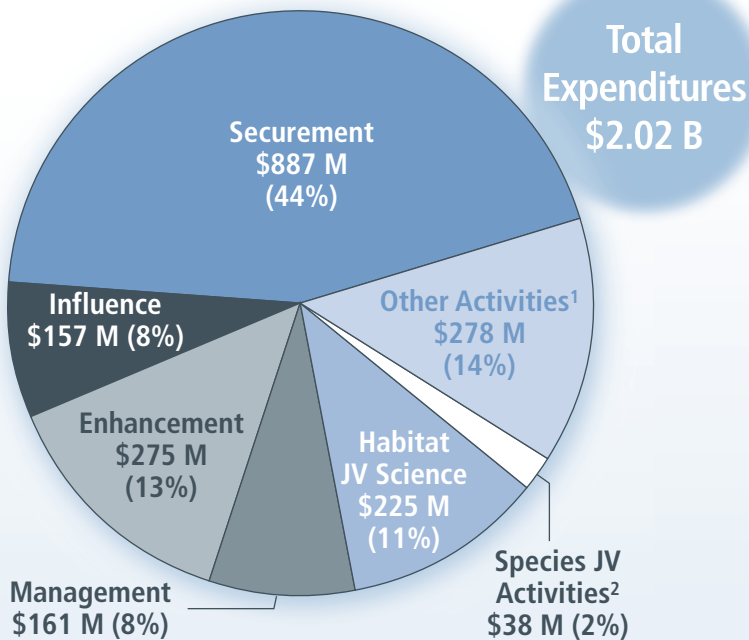


Totals include acres from Habitat Joint Ventures and Western Boreal Forest

Based on 2012 data, to achieve long-term goals in Canada, NAWMP partners need to conserve an additional 20 million acres (8.1 million hectares) from 2012 to 2032 at a cost of \$2 billion, and in addition, the present function of the existing habitat base must be retained. Canadian partners are working to meet these long-term goals in Canada and retain existing habitat through a mixture of traditional and non-traditional programs.

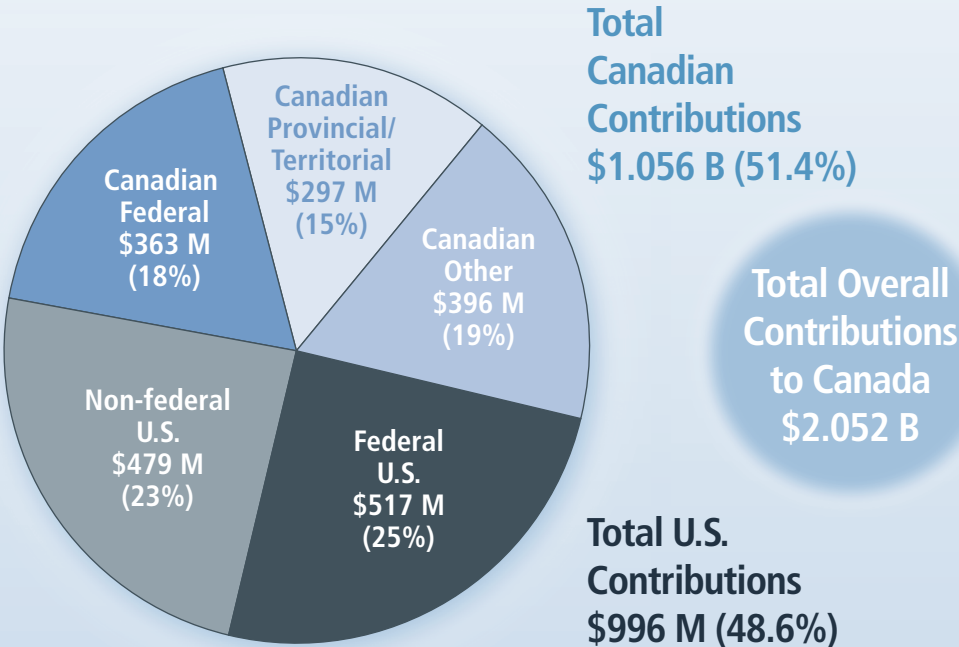
While Canadian NAWMP partners are proud of the significant accomplishments made to date, more remains to be done; continued and expanded support will be critical for ongoing success.

Expenditures (\$CAD) by Activity 1986–2014 (all Joint Ventures)



- 1 Coordination, communication, policy, and crop damage
2 Banding, survey, and research

Total Contributions (\$CAD) in Support of the NAWMP in Canada (1986–2014)



Total Canadian Contributions \$1.056 B (51.4%)

Total Overall Contributions to Canada \$2.052 B

Total U.S. Contributions \$996 M (48.6%)

Terminology used in this report

Management
Activities conducted on secured wetland and/or upland habitats to manage and maintain their carrying capacity for wetland-associated migratory birds and other wildlife.

Enhancement
Actions carried out on secured wetland and/or upland habitats to increase their carrying capacity for wetland-associated migratory birds and other wildlife.

Influence
Direct actions taken by landowners, land managers, or conservation agencies that protect or enhance wetland or associated upland habitats without legal or binding agreements. These direct actions result in applied land-use changes.

Securement
The protection of wetland and/or upland habitat through land title transfer or binding long-term (minimum 10-year) legal agreements with a landowner.

Habitat Joint Ventures

A common language for Canadian NAWMP Habitat Joint Ventures was developed in response to the need for setting national habitat and financial goals for the Canadian NAWMP program. In 2011, the North American Wetlands Conservation Council (Canada) (NAWCC (Canada)) requested a number of actions be undertaken to strategically position Canadian Habitat Joint Ventures for the future. These requests included determining 20-year (2012–2032) habitat needs and associated financial needs.

From the assessment of program needs, it was recognized that the development of long-term needs statements was hampered by the lack of common habitat terminology among Canada’s four Habitat Joint Ventures (JVs): Pacific Coast (PCJV), Canadian Intermountain (CIJV), Prairie Habitat (PHJV), and Eastern Habitat (EHJV). While three of the four Habitat Joint Ventures had five-year implementation plans (CIJV: 2010–2015, PHJV: 2007–2012, EHJV: 2007–2012), these plans were based on different terminology or had different definitions for the same terminology, and they were based on different timeframes.

In response to the need for a common habitat terminology, NAWCC (Canada) directed a working group to develop harmonized terms for use across the Habitat Joint Ventures. Most of them were about to start preparing new five-year implementation plans, so the timing was right to synchronize that work and the timelines of those plans with the common language work.

The new common language of conservation terms is primarily based on terms used in the 2007–2012 PHJV Implementation Plan, the most recent joint venture to update its conservation language. Building on the experience of the PHJV, representatives of each Habitat Joint Venture devised a common set of terms that met their unique circumstances as well as the common need. EHJV had particularly complex issues because of the numerous provincial plans that required consideration in developing a common language. Other problematic issues were the treatment of stewardship and policy tools and their relation to multiple possible outcomes.



The Nature Conservancy of Canada’s Baie Verte Nature Preserve, New Brunswick.

Nature Conservancy of Canada

In July 2013, NAWCC (Canada) approved the reference document titled the Common Language for Canadian NAWMP Habitat Joint Ventures. This document established harmonized conservation terms for NAWMP activities across Canada’s four Habitat Joint Ventures. Establishing a common language of conservation terms provides several program benefits including:

- Facilitating the roll-up of program goals and habitat objectives into a more refined national habitat needs statement;

- Allowing future tracking of accomplishments against long-term habitat objectives;
- Enabling national roll-up and comparison of program activities and accomplishments among all Canadian Habitat Joint Ventures; and
- Supporting coordinated action and progress towards meeting continental NAWMP waterfowl population objectives.

To obtain a copy of the Common Language for Canadian NAWMP Habitat Joint Ventures, visit the NAWMP Canada website: www.nawmp.wetlandnetwork.ca



Habitat Joint Ventures

Pacific Coast

Canadian Intermountain

Prairie Habitat

Western Boreal Forest (PHJV)

Eastern Habitat



At the announcement to expand the Parksville-Qualicum Beach Wildlife Management Area on Vancouver Island. From left to right: Steve Godfrey and Tom Reid (Vancouver Island Conservation Land Management Program), Tim Clermont (Crown Land Securement Partner Program), and Jasper Lament (The Nature Trust of British Columbia).

The Nature Trust of British Columbia



Pacific Coast Joint Venture

www.pcjv.org

The Canadian portion of the international Pacific Coast Joint Venture (PCJV) contains tidal wetlands and floodplains that provide habitat and food for migrating and overwintering waterfowl. In 2013–2014, the PCJV and its partners were involved in a broad range of projects, a selection of which are detailed here.

Working to secure Crown land

Because British Columbia's (B.C.) lands are more than 94% public, working with the provincial government is key to conserving bird habitat in an efficient and cost-effective manner. The Crown Land Securement Partner Program (CLSPP) is a conservation partnership administered by the Nature Trust of B.C., and it provides resources to the Province of B.C. and their conservation partners for the expansion or designation of Wildlife Management Areas (WMAs). The CLSPP also identifies private land adjacent to WMAs for conservation partners to purchase. Past

investments to secure and restore key parcels of private land on the coast came from the partners of the PCJV's Pacific Estuary Conservation Program.

On Vancouver Island, 230 acres (93 hectares) were added to the Parksville-Qualicum Beach WMA, bringing it to an overall size of 3,076 acres (1,245 hectares). The new land includes a three-mile (5-km) stretch of riparian habitat along the Englishman River. On northern Vancouver Island, the newly established Quatse Estuary WMA conserves 388 acres (157 hectares) of river estuary in an area that provides wintering habitat to thousands of migratory birds.

Funding for the Quatse Estuary project came in part from Wildlife Habitat Canada. The Habitat Conservation Trust Foundation also contributed funding to help with the designation, as well as funds that go toward the day-to-day management of WMAs.

The variety of initiatives undertaken by PCJV partners in 2013–2014 indicates the breadth of work involved in achieving the NAWMP's vision and goals. Sustaining abundant waterfowl populations and habitats can only be achieved through the collaborative efforts of landowners, citizen scientists, conservation organizations, companies, and all levels of government.

In addition, under the CLSPP, 136 acres (55 hectares) were conserved as a wildlife reserve to further protect estuary foreshore habitat in Nanoose Bay adjacent to the estuaries comprising the Nanoose Unit of the Qualicum National Wildlife Area.

Enhancing tidal habitat at Sturgeon Banks

In the 2012 issue of *Habitat Matters*, we reported on the purchase by Ducks Unlimited Canada (DUC) and the City of Richmond, B.C., of a 126-acre (51-hectare) tidal habitat in the Sturgeon Banks area of the Fraser River Delta from the Grauer family. This conservation partnership expanded in 2013 to include Fisheries and Oceans Canada, which enhanced approximately 12 acres (5 hectares) of the tidal habitat. The project involved a combination of redistributing logs, constructing channels, and creating barrier islands and terraced areas that will create a multitude of habitats for fish and wildlife species.

Restoring wetlands at Pitt Marsh and Cheam Lake

PCJV partners conducted wetland restoration projects at two significant B.C. wetlands in 2013. DUC replaced many of the water control structures at Pitt Marsh, which, at 3,316 acres (1,342 hectares), is the largest freshwater wetland along the B.C. coast. The work improved the water management capability of the wetlands for waterfowl and other migratory birds. Upgrades were also completed for the water control and fish passage structures at the 124-acre (50-hectare) wetland at Cheam Lake. This wetland had been restored from a historical marl quarry in the early 1990s.



Logs that were redistributed as part of the tidal habitat enhancement work at Sturgeon Banks in the Fraser River Delta.

Ducks Unlimited Canada



Gathering logs for redistribution at Sturgeon Banks.

Ducks Unlimited Canada



The Englishman River in the Parksville-Qualicum Beach Wildlife Management Area.
The Nature Trust of British Columbia

DID YOU KNOW?

Scope: In B.C., there are 54 million acres (21.9 million hectares) of landscape, 113.2 million acres (45.8 million hectares) of seascape, and 19,000 miles (30,285 km) of shoreline. The PCJV is an international joint venture that includes portions of B.C., Alaska, Washington, Oregon, California, and Hawaii and covers Bird Conservation Region 5. The PCJV falls within the North Pacific Landscape Conservation Cooperative.

Major Habitat Types: The B.C. coast is a complex of inlets, bays, islands, straits, and fjords rising to a diversity of near-shore, intertidal, and forested habitats. The coastline has over 440 estuaries, which contain tidal wetlands and adjacent floodplain habitats. Generally, intertidal areas are provincial Crown lands, but many floodplains are privately owned and often highly modified for agricultural and other human uses. These modified landscapes can provide significant habitat and food supply for migrating and wintering waterfowl.

Key Waterfowl Species: Over 1.2 million waterfowl winter along B.C.’s coastline and another 400,000 in its estuaries. Key species include the Wrangel Island Snow Goose (nearly half of the population) and the Pacific Coast’s Trumpeter Swan (half of the population), American Wigeon, Cackling Goose, and the Western High Arctic Brant.



A pipe liner inserted during restoration work at Cheam Lake in 2013.

Ducks Unlimited Canada

A pipe installation done in 1992.

Ducks Unlimited Canada



In both the Pitt Marsh and Cheam Lake wetland restorations, DUC used a relatively new technique of installing a pipe liner rather than digging up the old pipe and disturbing a significant amount of material.

Eradicating invasive cordgrasses

PCJV partners have participated in the BC Spartina Working Group for several years, mechanically eradicating invasive intertidal cordgrasses along B.C.’s shoreline. In 2013, the group worked with partners from the state of Washington to employ the same methods and herbicides used successfully in the state to treat targeted patches of *Spartina spp.* Because of the lack of regulations on herbicide use in Canadian marine environments, partners were unable to use this method until now. Monitoring is taking place and further treatments will be used to eliminate this invasive species and protect bird habitat in the intertidal zone.

Enhancing and managing coastal areas

The Nature Conservancy of Canada (NCC) undertook several projects in the PCJV during 2013. Enhancement work included planting native wetland species and protecting them from deer browsing and Canada Goose grazing on the wetlands at the Quamichan Garry Oak Conservation Area and the Campbell River Estuary, both on Vancouver Island. Additional enhancement work, including weed control, was done on associated uplands in the Rivers Inlet area along

the central coastal of B.C. NCC also conducted management planning and community partnership meetings for the Kumdis Estuary located on Haida Gwaii. This work included updating inventories and assessing upland habitat conditions to ensure conservation goals are being achieved.

Involving citizen scientists to study Western Sandpiper

In 2013, Bird Studies Canada started a three-year collaborative project with Simon Fraser University in Burnaby, B.C., to study Western Sandpiper abundance and behaviour in the Salish Sea and Vancouver Island region with help from citizen scientists. The purpose is to understand site characteristics important to shorebirds in site selection, and how changing

conditions, such as increased predator presence or human disturbance, affect these decisions. The project aims to develop leading indicators and test model predictions across multiple Western Sandpiper stopover sites. Surveys were conducted in 2013 by volunteer surveyors at 35 sites in B.C. and four sites in Washington, with plans to repeat this effort for two more years.

Taking care of Important Bird Areas

The Canadian Important Bird Areas (IBA) Program has over 60 volunteer Caretakers who dedicate an estimated 14,000 hours annually in B.C. to monitor and report, raise awareness, and support conservation initiatives at IBAs. Caretakers also play a key role in helping collect and compile information to update IBA site summaries. In 2013, BC Nature received a grant from Mountain Equipment Co-op to hold a series of regional training workshops for Caretakers to share successes and challenges at their sites. Feedback from the workshops and a 2014 survey indicated the significant value gained from the Caretaker network and helped to identify ways to strengthen it.

The variety of initiatives undertaken by PCJV partners in 2013–2014 indicates the breadth of work involved in achieving the NAWMP’s vision and goals. Sustaining abundant waterfowl populations and habitats can only be achieved through the collaborative efforts of landowners, citizen scientists, conservation organizations, companies, and all levels of government.

For more information, contact Tasha Sargent, Pacific Coast Joint Venture Coordinator, (604) 350-1903, tasha.sargent@ec.gc.ca.

Contributions (\$CAD) ¹			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Total	2,143,164	1,507,357	200,362,978

Accomplishments (Acres) ⁴			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Secured	685	4,396	129,005
Enhanced	124	2,910	94,636
Managed	1,196	4,439	125,055
Influenced	16,056	2,823,458	6,729,697

- 1 Contributions include U.S. federal, U.S. non-federal, Canadian, and other countries.
- 2 Consists of the April 1, 2013 – March 31, 2014 time frame.
- 3 Due to the change in reporting time frame for *Habitat Matters*, the 2014 edition features one extra reporting quarter, 2013Q1. 2013Q1 includes activities that occurred from January 1, 2013 – March 31, 2013.
- 4 Secured, enhanced, and managed acres are not additive. Acres are first secured, may then be enhanced, and are subsequently placed under management. Influenced acres are mutually exclusive of secured, enhanced, and managed acres.

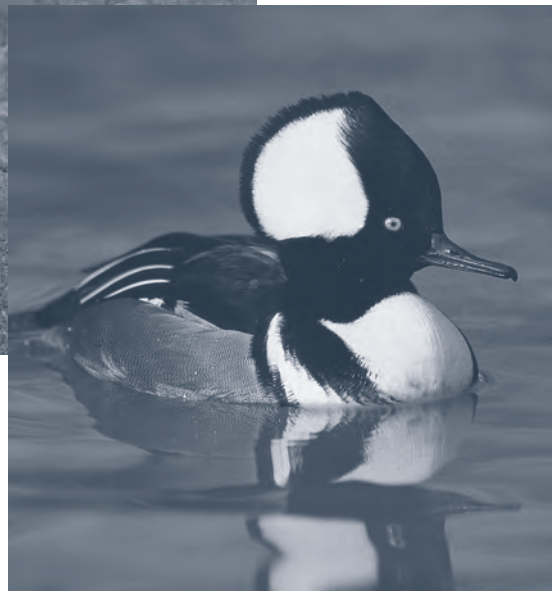


Snow Geese at Sturgeon Banks in the Fraser River Delta.
Ducks Unlimited Canada



148 Mile Marshes in the Cariboo region.

Katharine VanSpall, Ducks Unlimited Canada



Hooded Merganser.

Ducks Unlimited Canada

Canadian Intermountain Joint Venture

www.cijv.org

The Canadian Intermountain Joint Venture (CIJV) contains extremely productive wetlands in fertile floodplains of valley bottoms and in grassland plateaus at mid and low elevations. However, these areas experience significant pressure from development and other land uses. Therefore, the CIJV works with a broad range of partners, including landowners, local governments, and conservation organizations, to achieve effective conservation for all bird species in these vital habitats.

Securing Crown land

The Crown Land Securement Partner Program (CLSP) worked during 2013–2014 to expand and designate new Wildlife Management Areas (WMAs) in the CIJV. At Valemount in the Robson Valley, the Province of British Columbia (B.C.) created the Cranberry Marsh/Starratt WMA. The 788-acre (319-hectare) area combines Crown land, Nature Trust of B.C. properties, and privately donated land. About two-thirds of the

new WMA was donated in 1971 by the estate of Robert W. Starratt to create the R.W. Starratt Wildlife Sanctuary. Since 1980, Ducks Unlimited Canada (DUC) has worked to restore the wetland habitat on the Starratt Sanctuary with dykes, nesting islands, and water control structures. Known as Cranberry Marsh, the wetland has become a major stopover and breeding area for migratory birds.

The CIJV presents unique conservation challenges due to the diversity of habitats and large amount of Crown (public) land. However, the CIJV partners have worked closely together to further the NAWMP goals in this area, and they will continue to work towards improving habitat conditions for all birds, as well as other wildlife species.

The existing South Okanagan WMA, established in 1994, was expanded in 2013 with the addition of several parcels of land between the towns of Oliver and Osoyoos. The addition of about 1,270 acres (514 hectares) more than doubled the size of the WMA to 2,230 acres (903 hectares). The lands represent riparian and upland habitats important for many wildlife including several species at risk such as Lewis's Woodpecker.

Funding for the new WMAs in the Robson Valley and the South Okanagan came in part from Wildlife Habitat Canada. The Habitat Conservation Trust Foundation also contributed funding to help with designations, as well as funds that go toward the day-to-day management of WMAs.

Tracking wetlands in the South Okanagan

Conservation partners in the CIJV have long acknowledged the lack of wetland habitat tracking as a serious deficiency in conserving wetlands at small scales in a changing climate. With funding support from the Great Northern Landscape Conservation Cooperative, the CIJV Science and Technical Team completed a Wetland Trends Tracking project in the



Tautri Creek, southwest of Quesnel, provides diverse wildlife habitat and a White Pelican feeding area.

Carl MacNaughton, The Nature Trust of British Columbia



Ruddy Duck family.

Ducks Unlimited Canada



At the announcement to create the Cranberry Marsh/Starratt Wildlife Management Area near Valemount. From left to right: Tim Clermont (Crown Land Securement Partner Program), Jasper Lament (The Nature Trust of British Columbia), Shirley Bond (Member of the Legislative Assembly of B.C. for Prince George-Valemount), and Bruce Harrison (Ducks Unlimited Canada).

The Nature Trust of British Columbia

South Okanagan Valley to assess wetland losses and to develop an approach for future monitoring projects.

This area, which is largely grassland and desert, has seen tremendous wetland losses over the last 75 years. Using satellite imagery, the team detected a significant degree of wetland conversion and loss over a 22-year period, despite increasing conservation activity in the area. Agriculture and urban development played major roles in the loss of wetlands and justified the CIJV’s designation of this area as one of regional significance for conservation efforts. The study methods showed good potential for wider application throughout the CIJV.

Continuing involvement in Cariboo/Chilcotin wetlands

The Cariboo/Chilcotin area is a large working landscape of mostly Crown ranch lands, where DUC has enhanced and conserved many wetland complexes for breeding and migrating waterfowl. Species of note include Barrow’s Goldeneye, which has a significant breeding population in the area, and Eared Grebe, which has a nesting colony on one of the wetlands in the 428-acre (173-hectare) Paxton Valley Complex. This area received significant repairs to aging structures in 2013–2014.

DUC also replaced two aging water control structures in the Rayfield River Complex. This project was built in 1980 by DUC in cooperation with private landowners and water licensees, as well as the Wildlife Branch of the B.C. Ministry of Environment. The 165-acre (67-hectare) complex was originally built to stabilize water levels during the waterfowl nesting and brood-rearing season and to improve wetland edge and insular nesting sites for waterfowl. Recent evaluations concluded that four of the basins in the complex provide exceptional waterfowl breeding habitat. DUC has chosen to maintain its involvement in these specific basins for a further 30 years through newly signed agreements and rebuilds of water structures.

Cranberry Marsh/Starratt Wildlife Management Area near Valemount.

The Nature Trust of British Columbia



DID YOU KNOW?

Scope: The CIJV covers an area of 123.5 million acres (50 million hectares) in the central/southern interior of B.C. and the eastern rocky mountain portion of Alberta, and covers Bird Conservation Regions 9 & 10. The CIJV falls within the Great Northern Landscape Conservation Cooperative.

Major Habitat Types: The CIJV encompasses a diverse landscape from valley bottom to mountain top: grasslands, dry and moist coniferous forests, riparian areas and wetlands, alpine tundra, and even pocket desert. Climate change and greater human pressure on water sources are increasing the importance of wetlands in maintaining biological diversity, particularly in semi-arid landscapes.

Key Waterfowl Species: Twenty-four waterfowl species breed in the CIJV with an estimated population of 1.45 million birds, representing 70% of B.C.’s and roughly 4% of Canada’s breeding waterfowl population. The CIJV supports 20–25% of the world’s breeding population of Barrow’s Goldeneye, 1–2% of the continental population of Mallard, over 15% of the continental breeding population of Hooded Merganser, and 5% of the continental breeding population of Ruddy Duck.

Waterfowl staging area at Chilcotin Marsh, southwest of Quesnel.

Carl MacNaughton, The Nature Trust of British Columbia

Conserving land in the Creston Valley

The Nature Conservancy of Canada has an ongoing project, called the Frog Bear Conservation Corridor, in the ecologically rich lowlands of the Creston Valley. This corridor was created for Grizzly Bears and other animals with large ranges to have safe passage and to protect B.C.’s only known breeding location of the endangered Northern Leopard Frog. It also protects important wetlands used by migratory waterfowl and several rare or at-risk water birds, including Great Blue Heron and American Bittern. This project is adjacent to the Creston Valley Wildlife Management Area, which is a DUC flagship project. Over 40 years ago, DUC built 18.6 miles (30 km) of dykes and 31 water controls with the help of conservation partners to control water flow across the marsh. In 2013–2014, DUC completed major repairs to the dykes and a water control structure to ensure this waterfowl-rich area continues to thrive.

The CIJV presents unique conservation challenges due to the diversity of habitats and large amount of Crown (public) land. However, the CIJV partners have worked closely together to further the NAWMP goals in this area, and they will continue to work towards improving habitat conditions for all birds, as well as other wildlife species.

For more information, contact Tasha Sargent, Canadian Intermountain Joint Venture Coordinator, (604) 350-1903, tasha.sargent@ec.gc.ca.



Contributions (\$CAD) ¹			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Total	3,138,247	1,478,166	49,910,959

Accomplishments (Acres) ⁴			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Secured	22,068	203	333,185
Enhanced	658	7,293	166,002
Managed	32,776	16,056	669,082
Influenced	0	0	50,906

1 Contributions include U.S. federal, U.S. non-federal, Canadian, and other countries.

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A wetland restored in Hay Lakes, Alberta.

Ducks Unlimited Canada



Flock of Mallards.

Ducks Unlimited Canada

Prairie Habitat Joint Venture

www.phjv.org

The Prairie Habitat Joint Venture (PHJV) partners have continued their tireless efforts toward securing, restoring, and managing habitat for waterfowl and other birds in Alberta, Saskatchewan, and Manitoba. In 2013–2014, significant contributions have been made toward improving and maintaining critical wetland habitats. Among the many projects in the PHJV, one example from each province is described here.

New Alberta Wetland Policy

The provincial government’s long-awaited Alberta Wetland Policy was publicly revealed during a press conference on September 10, 2013, at Clifford E. Lee Sanctuary near Devon, Alberta. Seven years in the making, the policy is intended to replace the Interim Wetland Policy that only covered settled areas of the province. The new policy, among other things, includes all regions of the province and all types and classes of wetlands. In Alberta, equitably balancing conservation goals with economic prosperity is always a challenge, and Ducks Unlimited Canada (DUC) feels that the Alberta Wetland Policy has the potential to do just that. If properly implemented, the policy could provide the framework to protect and restore critical wetland resources.

“We see potential for this policy to protect Alberta’s wetlands throughout the province,” said Perry McCormick, provincial manager of operations for DUC Alberta. “Although the policy requires further detail, the government has committed to future stakeholder engagement to achieve its intended outcomes.”

“As a leader in wetlands conservation and restoration, we look forward to engaging in the development of the finer details in the implementation phase. We are encouraged by the government’s adaptive management approach to implementation, as it will measure and monitor progress towards defined outcomes,” said McCormick.

Here are some policy highlights:

1. Comprehensive scope, covering all areas of the province and all wetland types.
2. Priority focus on avoidance of wetland impacts.
3. Where avoidance is not possible, increased clarity on replacement (restoration) criteria (e.g., type for type) and process (e.g., emphasis on areas of high historic loss). Non-restoration options remain a minor consideration only.
4. Commitment to implement a formalized evaluation system to assess wetland values to enhance management decisions. Related performance measures, monitoring, and reporting systems will also be developed.
5. Commitment to enhance wetland inventory as a foundation to effective management of Alberta’s wetlands.

PHJV partners support the new policy and hope to see its effects spread across the Canadian Prairie region. NAWMP partners in Alberta will work closely with the Government of Alberta to lend expertise and help ensure Alberta’s wetlands are valued and protected for future generations.

Wetland restoration: A new success in the Upper Souris Watershed, Saskatchewan

Recent wet years have increased the urgency felt by farmers to drain water off their annual cropland in southeast Saskatchewan. This trend has been watched with concern by the members of the Upper Souris Watershed Association (USWA) according to local Watershed Coordinator David Pattysen. “The USWA understands and empathizes with producers as they deal with the past few years in which we have experienced excessive moisture. However, we are quite concerned about the accelerated pace of wetland drainage in the Upper Souris Basin,” he said.

Saskatchewan’s Water Security Agency (WSA) worked with local stakeholders to complete the Upper Souris Watershed Protection Plan in 2010. This plan identified wetland restoration as a priority. Wetland restoration is also a key activity for the NAWMP, of which the WSA is a Saskatchewan partner.

The USWA is an independent not-for-profit organization that has been developed to implement the key action items from the watershed protection plan. Active membership includes rural municipalities, wildlife groups, industry, and urban municipalities including the cities of Weyburn and Estevan. While the USWA has a proven track record of implementing millions of dollars of agricultural beneficial management practices, the issue of wetland drainage had never been addressed in a meaningful way.

“USWA decided to explore opportunities to offer financial incentives to restore previously drained wetlands to help mitigate the loss of existing wetlands and hopefully have a positive impact on the quality of water in the Souris River,” said Pattysen. With financial



A restored wetland in the Upper Souris Watershed, Saskatchewan.

Upper Souris Watershed Association



An 80-acre (32-hectare) wetland restoration in a formerly cultivated field, Manitoba.

Manitoba Habitat Heritage Corporation

The 45-acre (18-hectare) Beachell wetland restoration in a formerly cultivated field, Manitoba.

Manitoba Habitat Heritage Corporation



DID YOU KNOW?

Scope: We have a Texas-sized job! The PHJV encompasses 158.4 million acres (64.1 million hectares) in the traditional area of prairie and aspen parklands. Roughly the size of Texas, it includes Alberta, Saskatchewan, Manitoba, and the Peace-Parkland Region of British Columbia and covers Bird Conservation Region 11. The PHJV also covers the western boreal forest, which includes parts of British Columbia, Alberta, Saskatchewan, Manitoba, the Yukon, and the Northwest Territories.

Major Habitat Types: The PHJV comprises ecoregions of prairie and aspen parkland, as well as the western boreal forest that includes a range of wetland types from small prairie potholes to marshes and bog systems. These areas support abundant waterfowl, geese, and many other migratory bird species.

support from Environment Canada’s Lake Winnipeg Basin Stewardship Fund, the USWA partnered with DUC to pilot a wetland restoration program.

The wetland restoration program consisted of paying incentives to private landowners to have ditch plugs built to restore previously drained wetlands. Communicating the benefits of wetlands to agricultural producers and the general public was also a focus of the program. During 2013, the program assisted eight producers to successfully restore 60.1 acres (24.3 hectares) in 19 previously drained wetlands. John Gaschler, Chairman of the USWA and local cattle producer said, “We are extremely pleased with the success of this program. We could not have accomplished this without the hard work and dedication of our partner agencies and our hardworking field staff.”

Wetland restoration is a new area of work that the USWA is excited about continuing. Interest for restoration in 2013 was greater than the funds available. To grow the program, the USWA is implementing another program of similar size for 2014 that involves funds from DUC, the WSA, and the Fish and Wildlife Development Fund. These activities also contribute to achieving the Saskatchewan NAWMP Implementation Plan wetland restoration objectives of 366 wetlands in the Coteau South Target Landscape and 302 wetlands in the Lightning West Target Landscape.

Wetland restoration in the Lake Winnipeg Basin Watershed, Manitoba

New waterfowl plans, models, and partners are being incorporated into tried-and-true programs for waterfowl production in Manitoba. Pauline Bloom, one of the lead waterfowl modellers for the current round of PHJV planning, noted that, “nothing beats wetland restoration when it comes to eliminating waterfowl deficits.” But it is up to the delivery



Grebes.
Ducks Unlimited Canada

organizations, including the Manitoba Habitat Heritage Corporation (MHHC) and DUC to find and implement new ways to achieve wetland restoration.

To do this, MHHC and DUC sought additional funding from outside the traditional waterfowl funding sources. In 2013–2014, the single largest award ever provided by the Lake Winnipeg Basin Watershed Fund was given to MHHC and DUC, core members of Manitoba’s NAWMP partnership, to implement 10-year-term wetland restoration agreements. This Environment Canada fund was designed to support projects that make a demonstrable reduction in nutrient loads to local water bodies. Of course, wetlands are the original environmental multitasker, so while newly restored wetlands will sequester phosphorus and other nutrients, they will also provide valuable new habitat that will enhance waterfowl production in Manitoba.

By delivering wetland restoration projects under new 10-year-term agreements, MHHC is hoping to increase wetland restoration uptake compared to the past. “These funds directly support the development of a new wetland restoration delivery model in Manitoba,” noted Tim Sopuck, Chief Executive Officer of MHHC, “and by combining efforts with DUC, MHHC can convert their watershed-scale water quality and quantity research into on-the-ground projects that will have real benefits for Lake Winnipeg, wildlife, and waterfowl.”

As demonstrated in these three examples, the PHJV will continue its firm commitment to reducing wetland loss and restoring lost wetlands through as many avenues as possible.

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

	Prairie Habitat Joint Venture Contributions (\$CAD) ¹		
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Total	36,826,076	28,276,585	1,101,657,546

	Prairie Habitat Joint Venture Accomplishments (Acres) ⁴		
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Secured	48,145	60,153	6,760,718
Enhanced	18,710	79,249	2,667,790
Managed	292,543	222,357	8,102,429
Influenced	1,310,653	1,178,458	2,890,769

	Western Boreal Forest Contributions (\$CAD) ¹		
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Total	5,733,870	1,503,692	119,729,743

	Western Boreal Forest Accomplishments (Acres) ⁴		
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Secured	0	0	11,238,776
Enhanced	0	0	107
Managed	0	0	107
Influenced	8,064,867	7,820,612	53,484,642

1 Contributions include U.S. federal, U.S. non-federal, Canadian, and other countries.

2 Consists of the April 1, 2013 – March 31, 2014 time frame.

3 Due to the change in reporting time frame for *Habitat Matters*, the 2014 edition features one extra reporting quarter, 2013Q1. 2013Q1 includes activities that occurred from January 1, 2013 – March 31, 2013.

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



Thurso Marsh in Plaisance Provincial Park was Ducks Unlimited Canada’s first project in Quebec.

Ducks Unlimited Canada



The Big Creek National Wildlife Area in the Long Point Wetland Complex, Ontario.
Ducks Unlimited Canada

Eastern Habitat Joint Venture *www.ehju.ca*



2014 represents the 25th year that the Eastern Habitat Joint Venture (EHJV) partners have been actively working together to conserve and protect habitat for waterfowl and other migratory birds throughout the provinces of Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. As a celebration of this lasting partnership, and to better communicate its successes, programs, and continuing challenges, the EHJV went digital, launching its new website and Facebook page in May 2014.

What does 25 years of conservation look like?

Since its inception in 1989, the EHJV has protected over 29.6 million acres (12 million hectares) of wetland and associated upland habitat for the benefit of migratory birds and other wildlife species. The habitat conservation projects and related initiatives undertaken by the partnership have not only contributed to the conservation of eastern Canada’s rich biological diversity but indeed to North America’s overall biodiversity.

Ontario: Long Point and Lake St. Clair – Ontario’s migration mecca

The southernmost tip of Ontario hosts three National Wildlife Areas (NWAs); a provincial park; and lands held by Ducks Unlimited Canada, the Nature Conservancy of Canada, and several other EHJV partners and conservation organizations. Big Creek NWA, established by the Canadian Wildlife Service of Environment Canada in 1978, connects to the Long Point wetlands. Internationally recognized for its extraordinary ecological and social values, Big Creek has been designated as a World Biosphere Reserve by the United Nations, a Ramsar site under the Ramsar Convention on Wetlands, and a provincially significant

wetland by the Ontario Ministry of Natural Resources. Big Creek NWA is part of the Long Point Peninsula and Marshes Important Bird Area.

Long Point NWA is recognized provincially and worldwide as a wetland area of extraordinary ecological and social importance. The Long Point wetland complex totals more than 25,000 acres (10,000 hectares) of waterfowl and migratory bird habitats and is one of the most important migratory bird stopovers within the Mississippi Flyway. In fact, 10% of the world’s Canvasback and American Wigeon populations stop over there during their migration. As a result, Long Point is recognized as a Globally Important Bird Area by Birdlife International, a Ramsar site under the Ramsar Convention, a United Nations World Biosphere Reserve, and a critical continental area under the North American Colonial Waterbird and Shorebird Conservation Plans.

St. Clair NWA lies within the extensive marsh habitat that exists from Mitchell’s Bay to the mouth of the Thames River, along the southeastern shore of Lake St. Clair. The lake and adjacent marshes are the most important staging area for waterfowl in Ontario south of James Bay. The wetlands consist mainly of cattail

marsh encircled by constructed dykes to mimic natural water-level changes. This area is located at the transition between two major migratory routes: the Atlantic and Mississippi flyways. Thousands of Tundra Swans, puddle ducks, geese, and diving ducks use this habitat as a staging area every year during migration. The area also provides important habitat for both common and rare marsh birds, reptiles, amphibians, and mammals as well as rare prairie plants. St. Clair NWA is designated as a Ramsar site under the Ramsar Convention and is part of the Eastern Lake St. Clair Important Bird Area. Peak migratory bird numbers reach 360,000 individuals in the spring and up to 150,000 in the fall.

For over 25 years, Ducks Unlimited Canada (DUC) has played a significant role in protecting and restoring wetlands associated with both Long Point and Lake St. Clair. The protection and restoration of wetland habitat in these two continentally significant waterfowl areas is a top priority of the EHJV. A total of 27 and 23 wetland conservation projects have been implemented by DUC at Long Point and Lake St. Clair, respectively, to help protect their value to waterbirds and advance EHJV goals in Ontario.

Quebec: Ottawa River – Conservation along a Canadian Heritage River

With a drainage basin of 56,000 square miles (146,000 km²), the Ottawa River is the largest tributary of the St. Lawrence River. The shores of the Ottawa River are characterized by natural and perched wetlands (marshes, swamps, Silver Maple stands, ponds, and bays) surrounded by agricultural landscapes (both pastures and hayfields) and forest parcels with lush vegetation. Waterfowl are attracted to the remarkable Ottawa River marshes that are among the principal migratory stopover areas in Quebec. Some 100,000 Canada Geese visit the shores of the Ottawa River, and dabbling and diving ducks arrive during migration—many remaining for the breeding and rearing season. Many other wetland inhabitants also thrive here, among them the Least Bittern, Black Tern, Pied-billed Grebe, and Virginia Rail.

Like the vast majority of wetlands, the Ottawa River Region’s marshes are threatened. Over the past century, many acres of wetlands have been replaced by fields, houses, and roads. One of the goals of EHJV partners in Quebec has been to restore and enhance

DID YOU KNOW?

Scope: The EHJV contains 780 million acres (315 million hectares) and spans the six provinces of Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador, encompassing one-third of Canada’s landmass. It includes six of twelve Canadian Bird Conservation Regions: 3,7,8,12,13 and 14. More than two-thirds (68%) of the Canadian population lives in the area covered by the EHJV.

Major Habitat Types: The EHJV supports 30% of Canada’s wetlands, including more than 120.8 million acres (48 million hectares) of fresh and tidal wetlands. Important habitats include coastal bays and salt marshes, lakeshore marshes, floodplain wetlands, and boreal forest wetlands.

Key Waterfowl Species: Thirteen priority waterfowl species contribute to a significant portion of the continental populations, and an additional four species are significant provincially. The 13 species include American Black Duck, Mallard, Ring-necked Duck, Common Goldeneye, Common Eider (3 races), Green-winged Teal, and Canada Goose (5 populations). The habitat within the EHJV supports 95% of the continental population of American Black Duck and 80% of the southern race of Common Eider. The Atlantic and North Atlantic populations of Canada Goose are important birds for hunters and local and aboriginal people in the Atlantic Flyway and breed exclusively within the EHJV.



has valuable habitat for many other species of birds and wildlife.

DUC has focused more than 40 years of wetland and upland conservation in this border region, focusing largely on wetland restoration to offset the greatest concentration of historical wetland loss in Atlantic Canada. To date, nearly 200 projects cover 21,000 acres (8,498 hectares) of habitat, with the largest project being the managed wetland complex at Missaquash Marsh (nearly 7,000 acres or 2,832 hectares). More recently, DUC has also begun to secure grassland habitat critical to Short-eared Owls and Northern Harriers and is involved in an extensive, collaborative fencing program designed to decrease the impact of livestock on waterways within the marshland complex.

The Nature Conservancy of Canada (NCC) has protected or has pending agreements to protect over 2,100 acres (850 hectares) on both sides of the New Brunswick/Nova Scotia border to establish a protected wildlife corridor. In Nova Scotia, NCC securement has focused on inholdings in the provincially conserved Missaquash Marsh that adjoins lands in the province’s Natural Resources Plan and Environment Parks and Protected Areas Plan (<http://novascotia.ca/parksandprotectedareas/pdf/Parks-Protected-Plan.pdf>). Most of NCC’s New Brunswick properties are adjacent to existing protected lands. Protected lands on the Isthmus include a 225-acre (91-hectare) preserve at Baie Verte, with a large expanse of salt marsh on the Northumberland Strait coast.

For more information, contact Patricia Edwards, Eastern Habitat Joint Venture Coordinator, (506) 364-5085, patricia.edwards@ec.gc.ca.

Contributions (\$CAD) ¹			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Total	27,498,997	11,640,599	494,611,034

Accomplishments (Acres) ⁴			
	2013-2014 ²	2013Q1 ³	Total (1986-2014)
Secured	51,994	3,668	1,414,139
Enhanced	2,239	968	604,458
Managed	245,106	14,106	1,584,951
Influenced	2,602,729	1,800,477	64,721,763

1 Contributions include U.S. federal, U.S. non-federal, Canadian, and other countries.
2 Consists of the April 1, 2013 – March 31, 2014 time frame.
3 Due to the change in reporting time frame for *Habitat Matters*, the 2014 edition features one extra reporting quarter, 2013Q1. 2013Q1 includes activities that occurred from January 1, 2013 – March 31, 2013.
4 Secured, enhanced, and managed acres are not additive. Acres are first secured, may then be enhanced, and are subsequently placed under management. Influenced acres are mutually exclusive of secured, enhanced, and managed acres.

the degraded wetlands on the Ottawa River while continuing to provide quality public access for outdoor activities.

Since 1973, DUC has undertaken 10 restoration projects and 31 land purchases within the Ottawa River Region. The last piece in the conservation puzzle along the Quebec shore of the Ottawa River was secured by DUC in March 2013. With the acquisition of the property at Massettes Marsh, EHJV partners have now conserved over 14,000 acres (5,800 hectares) along a 31-mile (50-km) stretch of the Ottawa River. This is a remarkable accomplishment given the population density of the two provinces bordering the river and the continued human activity in the area.

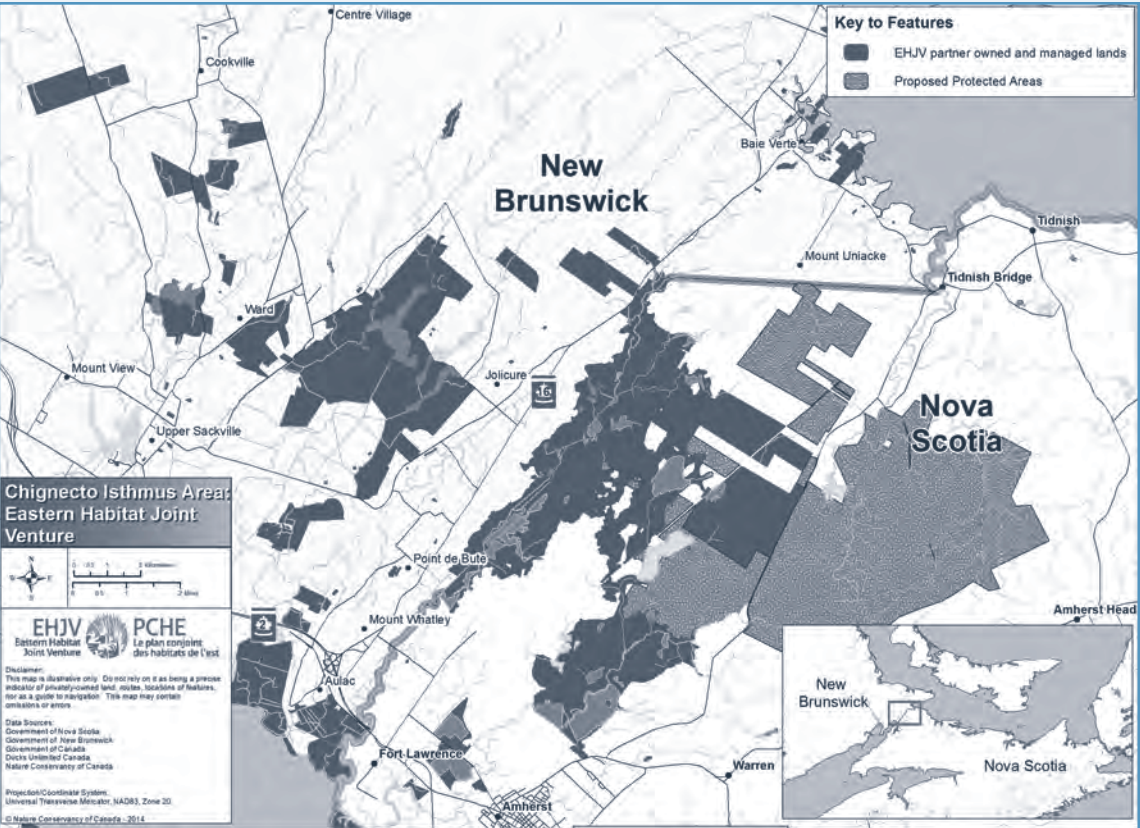
Atlantic: Chignecto Isthmus – Connecting New Brunswick to Nova Scotia and the Bay of Fundy to Northumberland Strait

The Chignecto Isthmus has been identified by national and international organizations alike as a critical biodiversity corridor. Created over 12,000 years ago by glaciers retreating from the Maritimes, the Isthmus is covered by a 34,850-acre (14,103-hectare) Acadian forest, which contains wetland-tolerant trees growing

in deep peat and mixed evergreen and hardwood forests on the higher ridges. It provides habitat for Bobcat and Northern Goshawk, and breeding sites for American Black Duck, Green-winged Teal, and Wood Duck.

The “border region” between New Brunswick and Nova Scotia has a long history of logging and farming, and the forests are a mixture of young, naturally regenerating stands, older forests, and wetlands. The combination of open water, shrub wetlands, forested swamps, and uneven-age forested areas creates ideal breeding habitat for a variety of waterfowl and song birds. The Isthmus is also the only route for terrestrial species, such as the provincially (Nova Scotia) endangered Mainland Moose and Canada Lynx, to move between the two provinces.

The Canadian Wildlife Service of Environment Canada established the Tintamarre NWA within the Chignecto Isthmus in 1978. This NWA protects 4,917 acres (1,990 hectares) of freshwater wetlands, peatlands, and upland habitats, which represent many of the Atlantic Region’s natural habitat types. The area is particularly important for waterfowl and marshbird production by providing migration and breeding habitat, and it also



EHJV conserved lands across the Chignecto Isthmus, New Brunswick and Nova Scotia.

Nature Conservancy Canada and Ducks Unlimited Canada

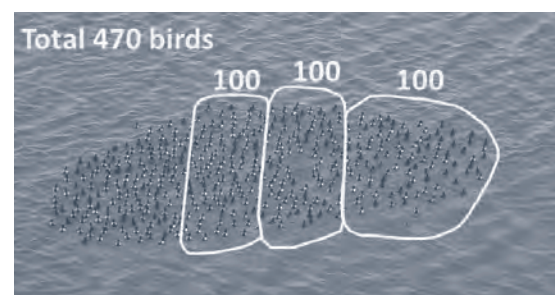
Species Joint Ventures



Species Joint Ventures are international in scope, spanning North America and including circumpolar countries. These joint ventures focus on critical science needs to inform the management of over 20 species (50+ populations) and their related habitats. Additionally, research directed through the Species Joint Ventures addresses questions for other bird species that share the habitats.

Sea Duck Joint Venture

www.seaduckjv.org



A flock of 470 Scaup, with 100-bird blocks noted.

Joe Evenson, Washington Department of Fish and Wildlife

While there are many methods by which biologists monitor bird population distribution, abundance, and productivity, waterfowl in North America are typically surveyed aerially using fixed-wing aircraft or helicopters. During these low-level flights, observers are often presented with a fleeting “bird’s-eye” view of waterfowl, making it extremely challenging to correctly identify species or count birds in flocks.

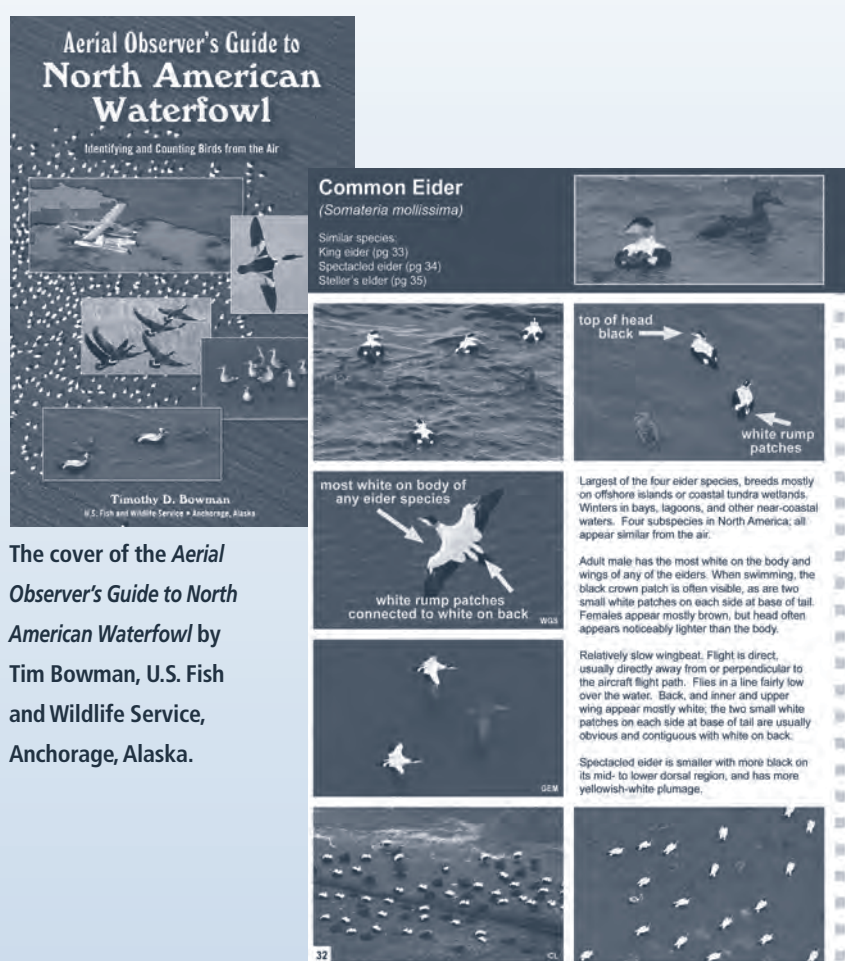
In 2014, Tim Bowman, U.S. Coordinator of the Sea Duck Joint Venture (SDJV), completed an identification guidebook to meet the needs of survey biologists to correctly identify waterfowl and some other water birds from the air. The *Aerial Observer’s*

Guide to North American Waterfowl will benefit all individuals and organizations responsible for monitoring waterfowl.

The concept and development of the guide were enthusiastically supported by the U.S. Fish and Wildlife Service, the Canadian Wildlife Service, the U.S. National Park Service, several joint ventures including the SDJV, and all four Flyway Councils. Although the book covers all North American waterfowl species, the SDJV contributed substantially to the project to provide guidance on species

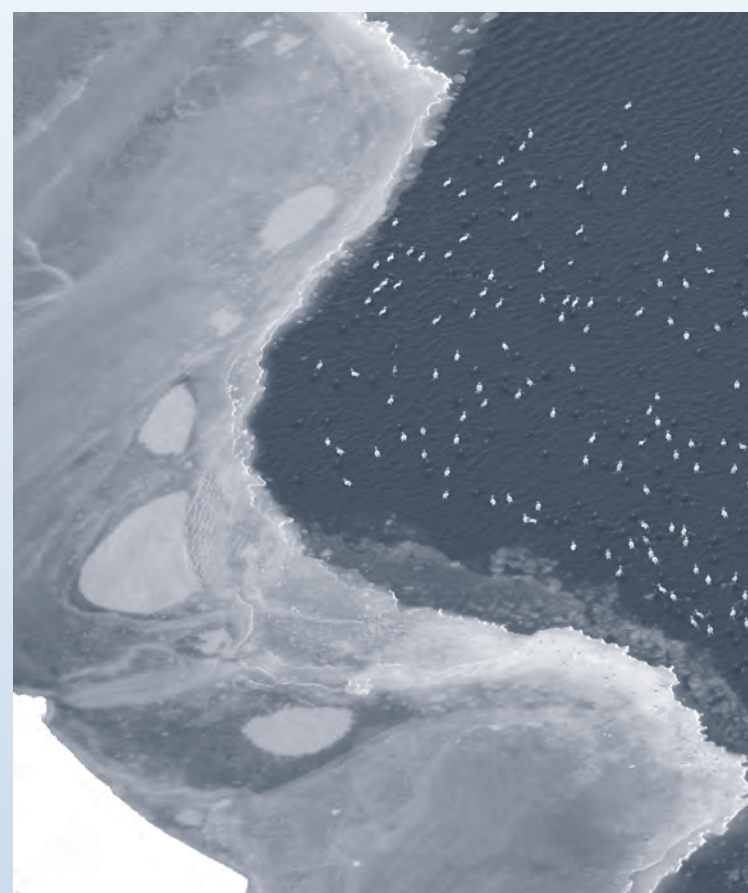
identification for several sea ducks that are particularly difficult to differentiate from the air: eiders, scoters, mergansers, and goldeneyes.

Many field guides to bird identification exist, but they typically illustrate the perspective of the ground-based observer, and rarely do they examine how to differentiate species from the air or how to count birds in flocks. This guide highlights waterfowl identification features from the uniquely top-down perspective of an aerial survey biologist, technician, pilot, or volunteer.



The cover of the *Aerial Observer's Guide to North American Waterfowl* by Tim Bowman, U.S. Fish and Wildlife Service, Anchorage, Alaska.

Page extract from the *Aerial Observer's Guide to North American Waterfowl*.



Surf Scoter flock.

Joe Evenson, Washington Department of Fish and Wildlife



Surveying waterfowl by helicopter.

Christine Lepage, Canadian Wildlife Service



The *Aerial Observer's Guide to North American Waterfowl* was developed with the principal goal of improving the accuracy and consistency of data collected during aerial surveys. It should be particularly valuable for new observers. The field guide includes: (i) a history of waterfowl surveys, (ii) standard survey techniques and recording protocols, (iii) species identification descriptions and full-colour photos, and (iv) techniques for estimating numbers of birds in flocks. In addition, high-definition, web-based video tools and interactive testing features are being developed as teaching and testing tools for identifying species and estimating numbers of birds in flocks. These tools should be available in winter 2014–2015 at www.fws.gov/waterfowlsurveys.

If you are interested in obtaining a copy, the guide can be ordered for \$10.00 USD plus shipping by submitting the form at: www.fws.gov/external-affairs/marketing-communications/printing-and-publishing/pdf/PublicationsOrderForm.pdf (Item #: FW6003).

For more information, contact Patricia Edwards, Sea Duck Joint Venture Coordinator, (506) 364-5085, patricia.edwards@ec.gc.ca.

Contributions (\$CAD) ¹		
	2013-2014 ²	Total (1986-2014)
Total	373,656	11,688,545

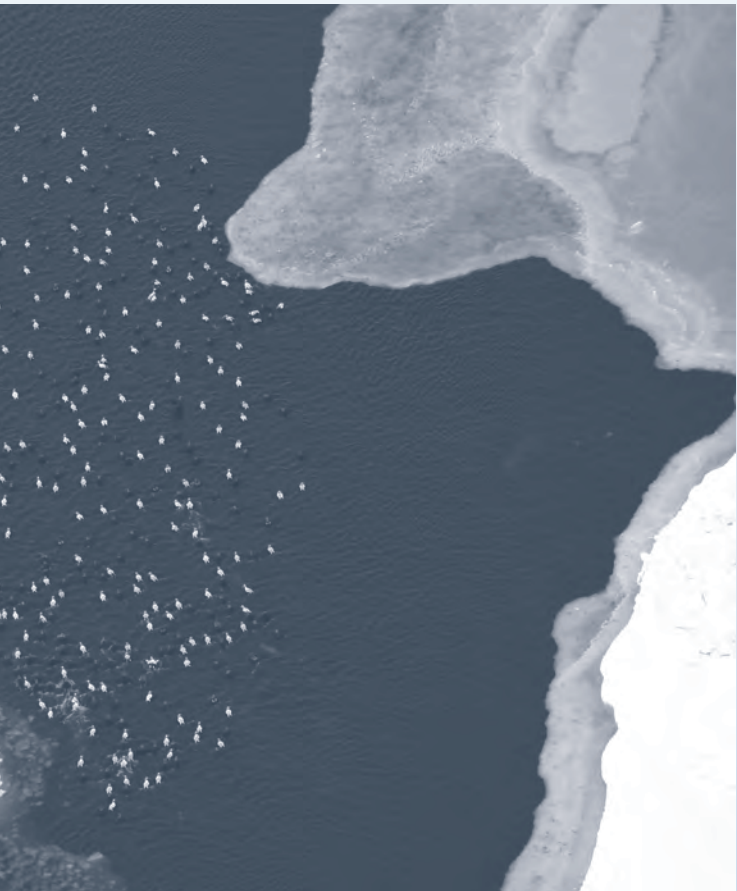
- Contributions include U.S. federal, U.S. non-federal, and Canadian. These contributions do not contain NAWCA funding.
- Consists of the January 1, 2013 – March 31, 2014 time frame. Due to the method of reporting for Species Joint Ventures, quarterly breakdown similar to Habitat Joint Ventures is not possible.

DID YOU KNOW?

Scope: All of Canada and the United States.

Species: There are 22 recognized populations among 15 sea duck species (tribe Mergini): Common Eider, King Eider, Spectacled Eider, Steller's Eider, Black Scoter, White-winged Scoter, Surf Scoter, Barrow's Goldeneye, Common Goldeneye, Bufflehead, Long-tailed Duck, Harlequin Duck, Common Merganser, Red-breasted Merganser, and Hooded Merganser.

Major Habitat Types: Sea ducks use coastal waters for migration and wintering, boreal forest and tundra for nesting.



Three species of scoters.

Tim Bowman,
U.S. Fish and Wildlife Service



A flock of 583 Spectacled Eiders with whitish males and brownish females.

Tim Bowman, U.S. Fish and Wildlife Service



The Canadian Wildlife Service, Quebec region, helicopter crew.

Canadian Wildlife Service



American Black Duck.

Ducks Unlimited Inc.

Black Duck Joint Venture

www.blackduckjv.org

In the spring of 2014, the Black Duck Joint Venture (BDJV) celebrated 25 years of eastern waterfowl surveys. The annual spring surveys of breeding waterfowl in North America are often considered the benchmark of wildlife survey programs. Prior to 1990, however, data on the American Black Duck breeding population was limited, because the traditional mid-continent breeding survey programs did not cover the breeding range of this eastern species.

In response to limited data, the BDJV funded a monitoring initiative to improve population estimates of American Black Ducks in eastern

North America. From this initiative, the Canadian Wildlife Service (CWS) BDJV helicopter survey began in 1990 and is now called the Eastern Waterfowl Survey (EWS). The survey covers parts of the boreal forest (i.e., boreal shield and maritime forest), which is the primary breeding habitat of the American Black Duck in Ontario, Quebec, Newfoundland and

DID YOU KNOW?

Scope: The BDJV includes the Canadian provinces of Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador, and fourteen eastern U.S. states.

Species: Did you know that the American Black Duck is neophobic? Because of its wary nature, the American Black Duck is intolerant of disturbance by humans, more so than other species, such as Mallard.

Major Habitat Types: Saltwater marshes, brackish and freshwater impoundments, riverine and estuary marshes, woodland wetlands, shallow lakes, and boreal bogs.

Labrador, and the Maritimes. The information collected assists with informing regulations and directing habitat conservation.

The survey originally consisted of 202 plots, each 38.6 square miles (100 km²) in size (10 km × 10 km). Over the years, the survey has been evaluated several times, and the EWS-plot survey now consists of 294 plots, each 9.7 square miles (25 km²) in size (5 km × 5 km), across eastern Canada (see map). The plots are flown by helicopters in spring (April through June) when waterfowl are paired and nests are initiated, but before clutches are complete. American Black Ducks are an early nesting species, so the survey is timed to coincide with peak nest initiation of this species, which also coincides with the peak nest initiation period of many other waterfowl in eastern Canada. All suitable habitat (e.g., wetlands, streams, rivers, etc.) within each plot is flown systematically at speeds ranging from a hover to 30 miles/hour (50 km/hour) and an altitude of 50–165 feet (15–50 metres), depending on conditions.

In 2004, the EWS-plot component (helicopter survey) was integrated with the U.S. Fish and Wildlife Service's transect component (fixed-wing survey) to reduce geographic overlap and produce a single estimate of population sizes and trends for waterfowl species breeding in eastern Canada. Composite population estimates are important in setting harvest regulations for American Black Ducks, as well as evaluating progress towards habitat and human-dimension objectives under the revised NAWMP.

Many dedicated CWS biologists and wildlife technicians in eastern Canada have participated in delivering this survey during its 25 years, some of them with over 20 years of experience with the program! Currently, the BDJV is developing a special publication that will feature a collection of papers capturing the evolution of this historic survey since its inception in the early 1990s.

For more information about the Black Duck Joint Venture, visit www.blackduckjv.org.

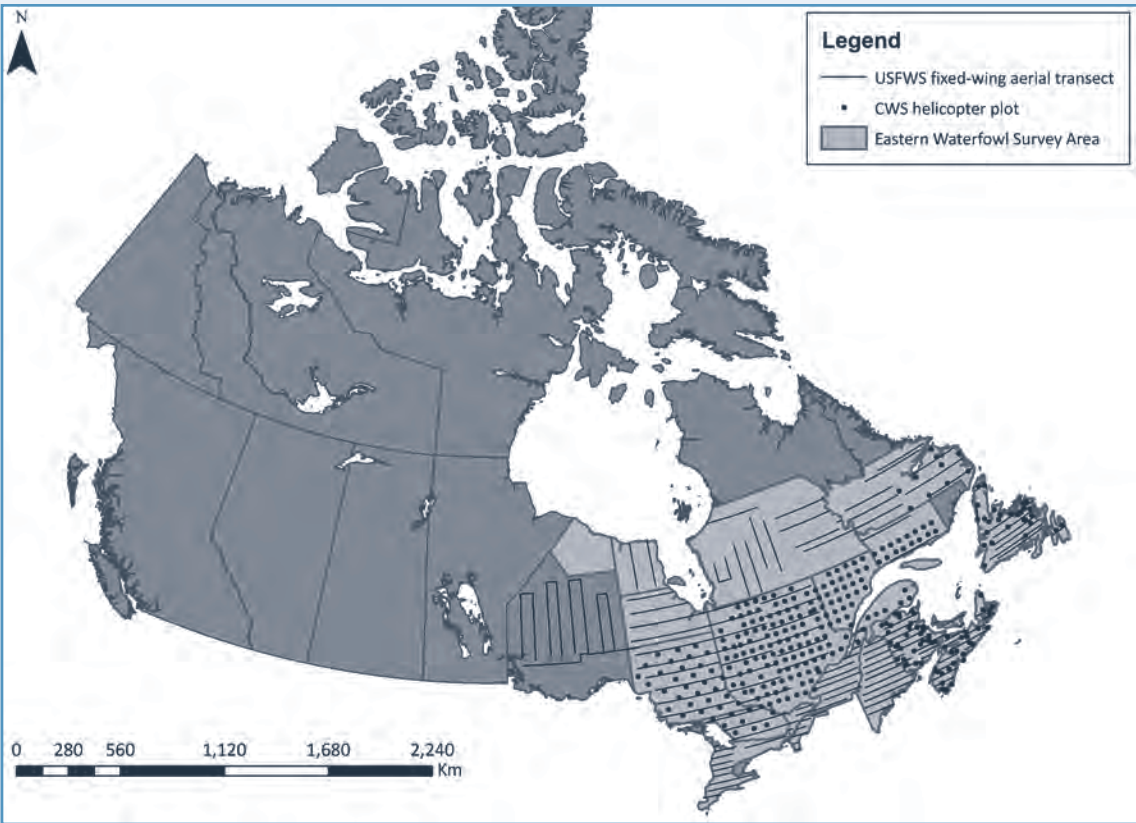
Contributions (\$CAD) ¹		
	2013-2014 ²	Total (1986-2014)
Total	670,906	17,088,933

- Contributions include U.S. federal, U.S. non-federal, and Canadian. These contributions do not contain NAWCA funding.
- Consists of the January 1, 2013 – March 31, 2014 time frame. Due to the method of reporting for Species Joint Ventures, quarterly breakdown similar to Habitat Joint Ventures is not possible.



American Black Duck.

Ducks Unlimited Inc.



The Eastern Waterfowl Survey area.
Canadian Wildlife Service



Capturing snow geese at Karrak Lake, Nunavut.
Kiel Drake

Adult and juvenile
Lesser Snow Geese,
Cape Henrietta Maria,
Ontario.
Rod Brook

Arctic Goose Joint Venture

www.agjv.ca
www.pcoa.ca
www.gansodelartico.com

The management of overabundant light geese (snow geese and Ross’s Geese) continues to be an important habitat issue with implications that extend both to North American wildlife management in general and to collaborative management between the United States and Canada. The Arctic Goose Joint Venture (AGJV) has continued to focus its efforts on this problem through a number of activities. These have included funding research projects and surveys that provide critical information on these species and publishing a report in 2012 that evaluated the effectiveness of special management measures implemented to reduce mid-continent Lesser Snow Geese and Ross’s Geese (available on the AGJV website). Most recently, the AGJV Management Board held a Structured Decision Making and Rapid Prototyping Workshop in conjunction with its January 2014 Board meeting focused around the problem statement, “*Should the AGJV Management Board recommend direct control measures of mid-continent light goose populations to the federal agencies to mitigate negative effects of Arctic Goose numbers on Arctic and sub-Arctic habitats?*”

The direct control decision is made difficult by a high degree of uncertainty with the probable outcomes of any control action for Arctic and sub-Arctic habitats, along with significant potential socio-economic costs. Using an initial prototype decision framework, together with elicited values from the AGJV Management Board participants, the Board decided that the expected gain in habitat outcomes was not

worth the currently anticipated economic and socio-political costs. Hence, they decided not to recommend broad-scale direct control action at this time, while exploring additional actions to take geese and conducting additional research on the extent of habitat damage and impacts on other species.

The AGJV is currently devoting most of its resources to support important science efforts to better understand the impacts of overabundant light geese. Some examples include continued support for Arctic Goose banding and photo-inventory surveys of snow geese and Ross’s Geese in Canada, as well as studies to look at the impacts of snow geese on other species including various species of shorebirds and Atlantic

DID YOU KNOW?

Scope: The AGJV spans North America and includes other circumpolar countries. It covers 924 million acres (374 million hectares) and encompasses Bird Conservation Regions 2, 3, 4, 6, 7, and 8.

Species: There are 28 populations among seven species: Greater White-fronted, Emperor, Snow, Ross’s, Brant, Cackling, and Canada Geese.

Brant. A new Request for Proposals will be circulated in summer 2014 to increase support for:

- Satellite telemetry to better understand migration pathways, stopover times, and location of staging in the Arctic and sub-Arctic during spring and fall migration;
- Impacts of snow geese on other species; and
- Recovery potential of freshwater habitats.

As more information becomes available, the AGJV Management Board will continue to review and consider management recommendations for snow and Ross’s Geese.

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

Contributions (\$CAD) ¹		
	2013-2014 ²	Total (1986-2014)
Total	795,100	41,066,245

- 1 Contributions include U.S. federal, U.S. non-federal, and Canadian. These contributions do not contain NAWCA funding.
- 2 Consists of the January 1, 2013 – March 31, 2014 time frame. Due to the method of reporting for Species Joint Ventures, quarterly breakdown similar to Habitat Joint Ventures is not possible.

Ross’s Geese at the McConnell River Migratory Bird
Sanctuary, Nunavut.
Jason Caswell



Thank you to all our partners who contributed in 2013–2014:

Canada

Acadia University
Advantage Oil & Gas Ltd.
Agriculture and Agri-Food Canada-
Prairie Farm Rehabilitation Administration
Alberta Fish and Game Association
Alberta Sport, Recreation,
Parks & Wildlife Foundation
Alberta Sustainable Resource Development
AltaGas Services Inc.
Apache Canada Ltd.
ARC Resources Ltd.
Atco Electric
Atco Gas
Basic Spirit Inc.
Baytex Energy Ltd.
BC Hydro
BC Ministry of Forests, Lands and Natural
Resource Operations
Birchcliff Energy Ltd.
Bluenose Coastal Action Foundation
Bonavista Energy Corporation
Boyd Petro Search
British Columbia Cattlemen’s Association
British Columbia Ministry of Environment
British Columbia Waterfowl Society
Britt Resources Ltd.
Canada West Land Services Ltd.
Canadian Natural Resources Ltd.
Canadian Superior Energy Inc.
Cenovus Energy Inc.
Central Global Resources, ULC
Centrica Canada Limited
Challenger Development Corporation
Clean Annapolis River Project
Clearwater Fine Foods Inc.
Coastal Resources Ltd.
Cochin Pipe Lines Ltd.
Columbia Basin Trust
Complete Land Services Ltd.
Compton Petroleum Corporation
ConocoPhillips Canada
Cornwallis Headwaters Society
Cossack Land Services Ltd.
Crescent Point Resources Limited Partnership
Crew Energy Inc.
Dalhousie University
Davis LLP
Dhaliwal Farms Ltd.
Ducks Unlimited Canada

East Kootenay (Regional District of)
Edmonton Community Foundation
Edwards Land (Calgary) Ltd.
EJLB Foundation
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Minnesota Department of Natural Resources
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Background Image:

Northern Shoveler.

Ducks Unlimited Canada

We are looking for your
feedback to improve *Habitat
Matters!* Please go to the
following link to fill out a short
reader’s survey on potential
changes to *Habitat Matters*.
The survey will be available
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www.surveymonkey.com/s/ZSLJ9PJ

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Map of Bird Conservation Regions

www.nabci-us.org/map.html