



## prairie habitat joint venture

The Prairie Habitat Joint Venture (PHJV) partnership implements the North American Waterfowl Management Plan (NAWMP) in Prairie Canada.

Since 1986 NAWMP addresses the continental needs of waterfowl habitat conservation through science-based programming and strong commitment from the United States, Canada and Mexico.

North America's Prairie Pothole Region, found largely in Canada, is recognized as the most important breeding area for continental waterfowl and it is important for many other bird populations.

Significant habitat, population and environmental gains are being achieved based on over 20-years success in PHJV program delivery with 17,000 landowners and 400 partners.

The PHJV's broad-based partnerships and conservation activities are crucial to achieving the continental NAWMP goal of restoring waterfowl populations to the levels of the 1970s.

### PRIORITY GOALS

- Sustain average waterfowl population number of the 1970s.
- Stop further wetland loss.
- Stop further loss of native lands, especially native grasslands.
- Restore lost wetlands, especially small basins.
- Restore function of upland habitats in landscapes conducive for maintenance of bird populations.

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June 2008



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

## PHJV Achievements

The Prairie Habitat Joint Venture (PHJV) envisions a healthy prairie, parkland and boreal landscape that supports sustainable bird populations and that provides ecological and economic benefits for society.

***“In the future, Plan success or failure will continue to be linked to long-term trends in waterfowl habitat conditions in the prairie pothole region.”***

*From 2004 North American Waterfowl Management Plan Update*

***Since 1986, the PHJV has secured\* 4.4 million acres and influenced\* 5 million acres.***

***PHJV partners manage\* an additional 1.7 million acres of wetland habitat, which were secured within the NAWMP delivery area prior to 1986.***

***A total of 11 million acres benefit from PHJV programs.***

***The total investment in PHJV programs to date is \$718 million.***

*\* See NAWMP Definitions at back of fact sheet.*



## PHJV Gets Results

The PHJV continues to enjoy great success through the conservation of targeted wetland and upland habitats.

### Secured acres

Almost 700,000 acres of land are permanently secured and managed through a combination of land purchases, easements, Crown land transfers and land donations.

An additional 3.7 million acres are secured through long-term agreements\*. Examples include conservation agreements on private and Crown (public) lands, cooperative land use agreements with private agricultural producers and the lease of private lands.

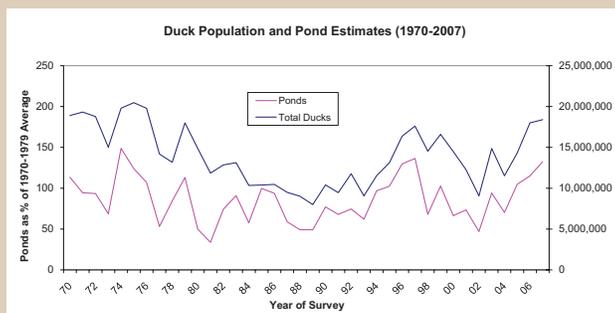
Within the PHJV's focus area, 1.7 million acres of wetlands were secured prior to the launch of NAWMP in 1986 and are managed as an integral part of NAWMP. These wetlands provide important breeding and migration habitat for waterfowl and other birds.

### Influenced acres

In addition to the 6 million acres that have been secured on private and Crown lands, the PHJV has influenced land use and habitat conservation on 5 million acres. These influenced acres result from PHJV activities related to stewardship\* and government policy support for sustainable land management.

# Setting the Table

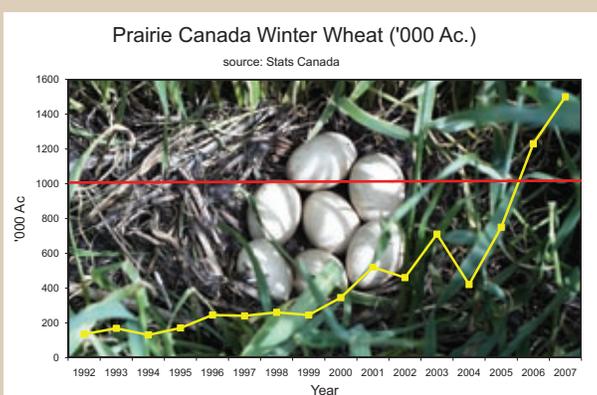
## PHJV Total Pond and Duck Estimates (1970 to 2007, Environment Canada and United States Fish and Wildlife Service).



The number of breeding ducks found in the Prairie Pothole Region of North America is highest when the number of ponds on the landscape is at its peak. PHJV programs are designed to achieve a landscape condition that “sets the table” to maximize waterfowl productivity. When pond conditions are at their peak, PHJV habitats produce a bounty of waterfowl.

During the 1980s, the number of ponds in the PHJV program area was generally below 1970 levels, hitting a record low of 10 million ducks. By the mid-1990s, increased pond numbers resulted in higher numbers of ducks, rebounding to over 18 million ducks by 2007. However, under normal pond number fluctuations, the current landscape condition is not capable of sustaining duck populations at the average level observed during the 1970s. But we are getting closer. The PHJV continues to challenge itself through unwavering partner commitment and sound science to build a sustainable prairie landscape for waterfowl.

## Winter Wheat Seeded Acreage in Prairie Canada (1992 to 2006, Statistics Canada)



Winter wheat helps create habitat for nesting birds because there is no disturbance from tilling in the spring and early growth provides concealment for nests. Thanks to efforts of PHJV partners, the amount of land seeded with winter wheat has increased from 135,000 acres to over 1.1 million acres. With nest survival double that in most habitats; the number of ducks hatching nests is greatly improved in landscapes where winter wheat is part of the crop rotation.

**“Ducks Unlimited Canada involvement in the 1990s revived a program that went on to produce winter wheat cultivars that presently occupy over 90 percent of the winter wheat acres in western Canada.”**

Dr. Brian Fowler, College of the College of Agriculture and Bioresources, Crop Development Centre, University of Saskatchewan

# PHJV Achievements

The PHJV has conserved 11 million acres in the Canadian Prairie Pothole Region, which supports a conservative estimated average of 30 pairs of ducks per square mile annually. Many other species also benefit from PHJV activities.

## Enhancement\* and Management\*

The PHJV partners have enhanced over 2 million acres of secured habitat, with activities like wetland restoration and upland nesting cover establishment. All acres under the PHJV programs are managed in order to maintain optimal habitat for waterfowl.

**Table 1. Summary of PHJV acre accomplishments**

Data are net acres compiled from the Canadian NAWMP National Tracking System and Partner record as of March 31, 2007.

CONSERVED ACRE TYPE	UPLAND (Acres)	WETLAND (Acres)	TOTAL (Acres)
<b>SECURED ACRES</b>			
<b>Permanent</b>			
Land purchase	381,773	55,853	437,626
Conservation easement	171,564	50,609	222,173
Crown land transfer	24,004		24,004
Land donation	2,337	1,149	3,486
Subtotal	579,678	107,611	687,289
<b>Long-term Agreement</b>			
Cooperative Land Use Agreement <sup>1</sup>	1,798,881	181,332	1,980,213
Conservation Agreement <sup>2</sup>	1,070,530	602,822	1,673,352
Lease	29,433	6,517	35,950
Subtotal	2,898,844	790,671	3,689,515
<b>Acres secured prior to 1986</b>		1,681,274	1,681,274
<b>TOTAL SECURED ACRES</b>			<b>6,058,078</b>
<b>INFLUENCED ACRES (STEWARDSHIP)<sup>3</sup></b>			<b>4,940,290</b>
<b>TOTAL CONSERVED ACRES</b>			<b>10,998,368</b>

**Notes:**

- (1) Includes cropland acres converted to perennial cover by Agriculture and Agri-Food Canada through Greencover Canada (425,169 acres) and the Permanent Cover Program (436,792 acres), and remaining acres are secured under other partner programs.
- (2) Includes 679,351 acres of Crown land secured under conservation agreements between Ducks Unlimited Canada and the provinces (Manitoba: 24,104 acres, Saskatchewan: 245,047 acres Alberta/British Columbia: 410,200 acres). The remaining acres are under PHJV agreements with private landowners.
- (3) Includes:
  - 2,765,600 acres of Crown lands designated under the Wildlife Habitat Protection Act, administered by the Saskatchewan Ministry of Environment
  - 1,107,000 acres seeded to winter wheat
  - 1,067,690 acres of cultivated lands converted to grassland under the Conservation Cover Program of the Saskatchewan Ministry of Agriculture and Food (no securement agreement).

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## Waterfowl Productivity, Habitat and the PHJV

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Building on 20 years of research in the Prairie Pothole Region, PHJV partners have developed the Waterfowl Productivity Model, which is being used to estimate the effect of PHJV programs and other landscape influences on waterfowl productivity in relation to NAWMP population objectives.

The model links landscape and habitat-specific information to hatching success of the five most common dabbling duck species: mallard, gadwall, blue-winged teal, northern shoveler and northern pintail.

Results of modeling show the effect of landscape change on waterfowl productivity. Since the 1970s upland conditions have improved for nesting waterfowl; however, wetland conditions have continued to decline. This has resulted in an estimated overall reduction of 12-13% in waterfowl productivity. The PHJV's objective is to eliminate this deficit and to return the landscape to its average productive capability of the 1970s. PHJV's programs to date have achieved 24% of this objective. If wetland losses were stopped in 1986, the result would have increased the number of hatched ducks to near NAWMP population goals. This stresses the priority to act upon policy changes for retention and restoration of wetlands.

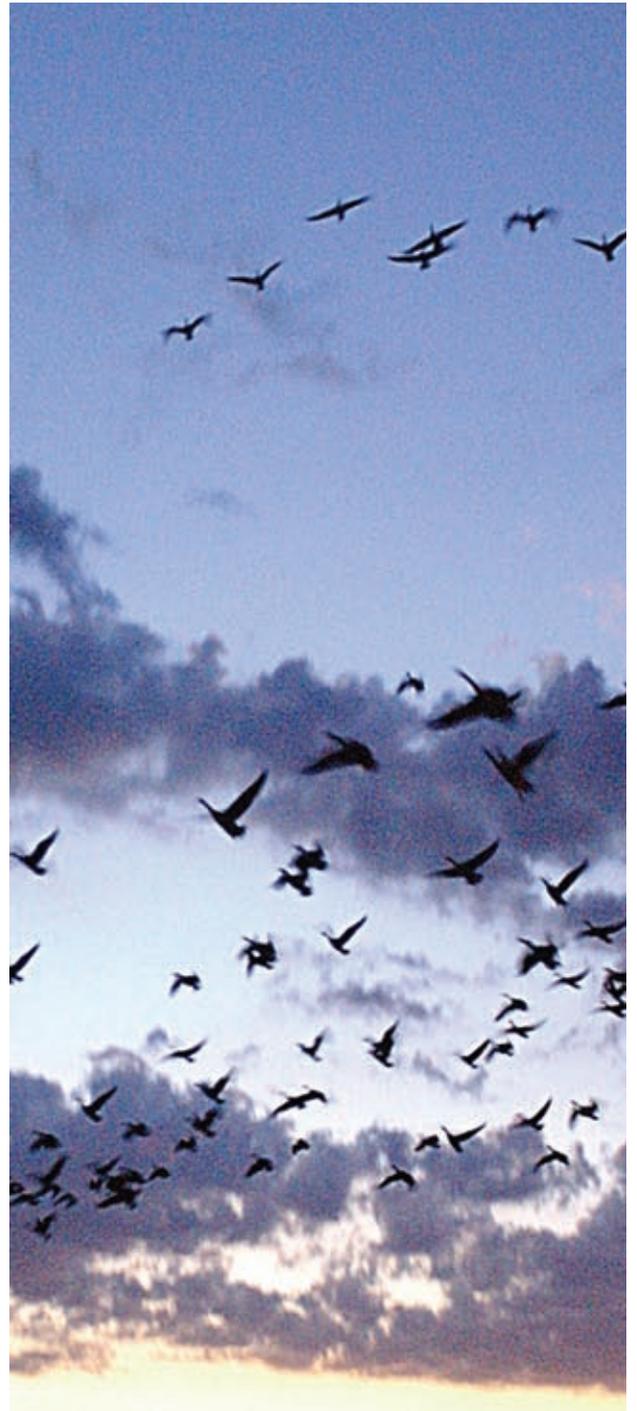
## Future Directions

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The recently completed Provincial Implementation Plans have set a clear path forward for the PHJV. These plans call for highly focused direct conservation actions coupled with increased policy and extension initiatives to achieve PHJV goals.

PHJV's highly successful adaptive management approach will address the challenges of our ever-changing Prairie landscape. Rising agricultural commodity prices, new biofuel markets created by energy demands, the longer term impacts of climate change and the ongoing loss of wetlands are some of the more significant challenges the PHJV is tackling.

The PHJV understands its role in achieving the continental success of NAWMP. The PHJV partnership is committed to achieving an abundance of waterfowl throughout North America.



***“Agricultural policies that favour retention and improvements to grasslands and wetland habitats over large areas of the prairies will be needed to achieve the Plan’s population objectives for most species of dabbling and diving ducks.”***

From 2007 Continental Progress Assessment Final Report, North American Waterfowl Management Plan.

# NAWMP Definitions

## SECUREMENT:

Securement protects target wetland and/or upland waterfowl habitats through land title transfer or binding long-term agreements (minimum of 10 years). Land can be secured through acquisition or through various other means that do not involve acquisition.

### Acquisition

Acquisition involves the transfer of the land title. There are three methods of land acquisition.

**Fee simple purchase:** The landowner deeds all rights and responsibilities to the recipient in exchange for a sum of money.

**Crown land transfer:** The land title transfers from one federal, provincial or territorial Crown agency to another.

**Land Donations:** The landowner voluntarily transfers the land title to the recipient at no cost.

### Securement Other Than Acquisition

Securement actions that do not involve acquisition exclude transfer of title and are directed at modifying or retaining current land use through long-term agreements, which can be registered to the title. There are various ways to achieve this, including the methods listed below.

**Conservation Agreement:** No-cost agreement signed with landowners (including federal, provincial or territorial Crown agencies), as well as with land managers (including First Nations and industry groups) if they have legal rights to the land.

**Conservation Easement:** Negotiated perpetual agreement either donated or purchased from the landowner and registered to the land title. Restrictions on land use and development of the land are identified.

**Cooperative Land Use Agreement:** Modified land use is negotiated under a compensation agreement with a landowner.

**Lease Agreement:** Paid or donated lease whereby the landowner grants the lessee the right (under certain terms and conditions) to enter their property and to manage habitat on it for a specific term.

**Crown Designation:** A federal, provincial, or territorial Crown agency places a legislated, protective designation on Crown-owned land.

## Enhancement

Actions are carried out on secured habitats to increase their carrying capacity for waterfowl populations and other wildlife. Examples include but are not limited to: installation of nesting structures, water controls, fencing, seeding and application of fertilizer.

## Management

Activities are conducted on secured/enhanced wetland and upland habitats to manage and maintain their carrying capacity for migratory birds and other wildlife. Examples of management activities include but are not limited to: water-level manipulation, vegetation control, managed burns, maintenance of nesting structures, project inspections, fertilizer application, contract mowing/grazing, maintenance of fencing and signage as well as payment of land taxes.

## STEWARDSHIP:

Stewardship activities either promote or directly result in sustainable land use with the intent of conserving wildlife habitat. Accomplishments are tracked as influenced acres. Acres of land that are influenced through stewardship activities are not counted as secured acres because they do not involve a land agreement with a minimum duration of 10 years. There are two stewardship categories:

**Extension:** Includes activities such as demonstrations, education and communication, that promote adoption and maintenance of environmentally sustainable land use practices.

**Influence:** Includes direct actions that protect or enhance wetland and upland habitats and result in applied land use changes.



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[www.phjv.ca](http://www.phjv.ca)