



The Coteau Legacy

Conserving Saskatchewan's Critical Waterfowl Habitat

Reporting Period: Year 1 of 2
April 2008 to March 2009

Submitted by Ducks Unlimited Canada and Ducks Unlimited Inc.,
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Ducks Unlimited Canada
Conserving Canada's Wetlands



Coteau
LEGACY

A Canadian Prairie
Conservation Initiative



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Overview



Ducks Unlimited (DU) is the world leader in wetland conservation. Since 1938, DU has invested over one billion dollars in waterfowl and wildlife habitat conservation in the United States, Canada and Mexico. In Canada alone, DU has completed over 8,100 habitat projects, securing 4.6 million acres and positively influencing 33 million acres of habitat. Numerous species of wildlife, including many threatened or endangered species, live and flourish on DU projects.



The Louisiana Department of Wildlife and Fisheries (LDWF) has contributed to waterfowl conservation on the Canadian Prairies since 1964. This partnership with Ducks Unlimited recognizes the importance of Canadian waterfowl production to the Louisiana hunter. Over the past 45 years, LDWF has contributed in excess of \$9M to this effort.

Ducks Unlimited Canada (DUC) is a proud partner of the North American Waterfowl Management Plan (NAWMP). The Prairie Habitat Joint Venture (PHJV), a partnership led by federal and provincial governments, DUC, Nature Conservancy of Canada and Wildlife Habitat Canada, has collaborated on waterfowl conservation under NAWMP in Prairie Canada since 1986. DUC leads the delivery of conservation programs and science to support NAWMP goals on the Canadian Prairies. The success of DUC's programs in Saskatchewan, particularly in the Missouri Coteau, will be critical to support the NAWMP goal of achieving sustainable waterfowl production of the 1970s level.

DUC uses the best scientific research available to direct, evaluate and modify DUC's conservation programs and practices so that DUC can most effectively meet the conservation needs of waterfowl in the Missouri Coteau. This union of science and conservation sets DUC apart from other non-government conservation organizations in Canada.

In June 2008, Ducks Unlimited presented a funding proposal to the LDWF in response to the critical waterfowl needs of the Missouri Coteau. The LDWF agreed to provide \$169,101 of funding towards DUC's conservation efforts. This funding was matched by DU Inc., and this combined total was matched by the North America Wetlands Conservation Act (NAWCA), and other partners to realize just over \$1M in support of conservation efforts in Canada. Although this funding falls short of enabling DUC to deliver on its science-based efforts for the Coteau Legacy, Ducks Unlimited has been successful in advancing several of its conservation goals in this critical landscape.

This report highlights DUC's habitat accomplishments within Saskatchewan (Missouri Coteau priority area and Saskatchewan Prairies) during the period of April 1, 2008 to March 31, 2009.

Conserving the Saskatchewan Landscape



Saskatchewan Prairies and the Missouri Coteau

The highest densities of breeding ducks in North America occur in the Prairie Pothole Region (PPR) of Canada. Located within the PPR are the Prairie and Aspen Parkland Eco-regions of Saskatchewan, which are composed of a diversity of wetland and upland habitats. These habitat characteristics make this area key to waterfowl production and provide a basis to strategically deliver conservation programs. The delivery area of focus for Louisiana funding falls within the Missouri Coteau and Saskatchewan Prairies (Figure 1).

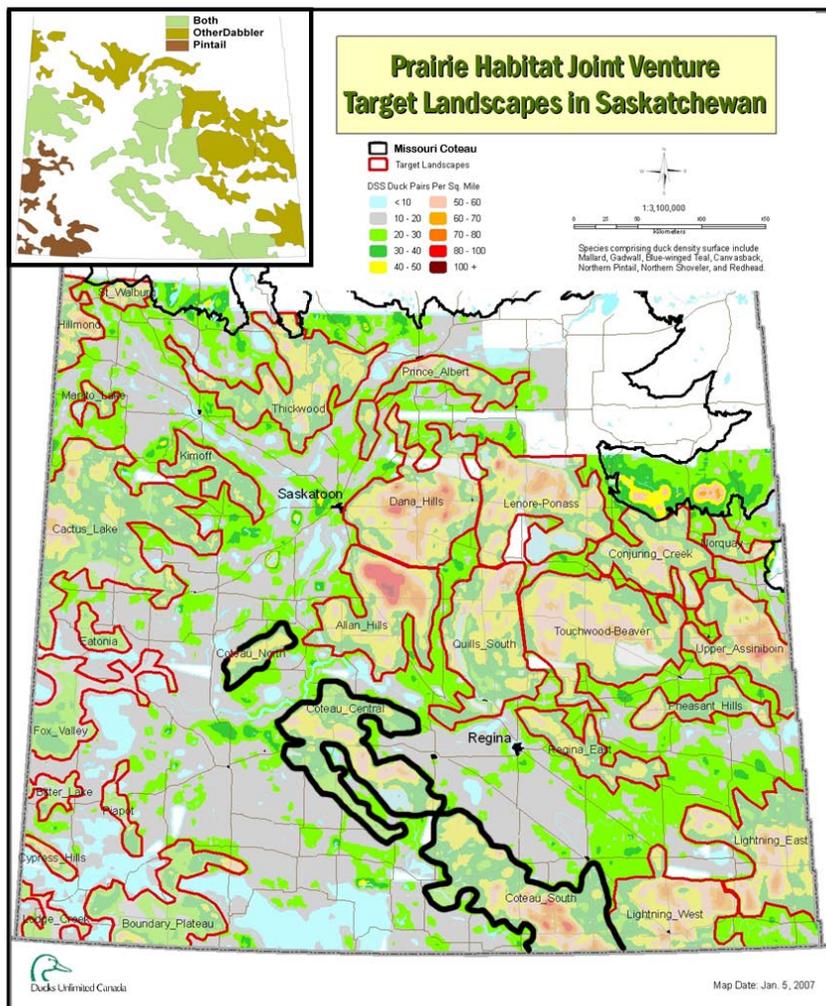


Figure 1. Location of target landscapes within the PHJV delivery area of Saskatchewan. Target landscapes represent areas of ≥ 30 pairs/mi² of the seven primary breeding waterfowl species, and ≥ 6 pairs/mi² of pintails. The black outline highlights the Missouri Coteau region.

Based on the U.S. Fish and Wildlife Services survey data, the Missouri Coteau and several other Saskatchewan landscapes stand out as the 'best of the best' breeding habitat in North America. However, the values of these habitats have been degraded.

Delivery based on Science

Ducks Unlimited Canada led an 11-year investigation into waterfowl breeding success as related to habitat conditions on the prairies as part of a PHJV Assessment. This study allowed DUC to develop a Waterfowl Productivity Model which relates duck production to habitat condition. The model allows us to ask the following questions:

- How have changes in habitat conditions due to agricultural activity impacted duck production?
- How do our habitat programs contribute to waterfowl productivity?

The answers enable us to prescribe habitat interventions that will restore duck production on these habitats over the long term.

Based on the Waterfowl Productivity Model, DUC has defined waterfowl needs for all landscapes in the Canadian Prairies and specifically, habitat actions needed to restore duck populations within these critical Saskatchewan landscapes. These needs are represented in the habitat objectives set out in the PHJV Implementation Plan. Our 2008 Coteau Legacy proposal defined a partnership opportunity for LDWF to support conservation in these landscapes to sustain waterfowl populations that are vital to the Louisiana hunter.

Waterfowl

Waterfowl band recovery over the past 17 years has established a clear link between waterfowl produced and banded in the Missouri Coteau of Canada and subsequently harvested in the Mississippi Flyway. Saskatchewan and the Missouri Coteau in particular, stand out as the primary Canadian source of ducks harvested in Louisiana (Figure 2)

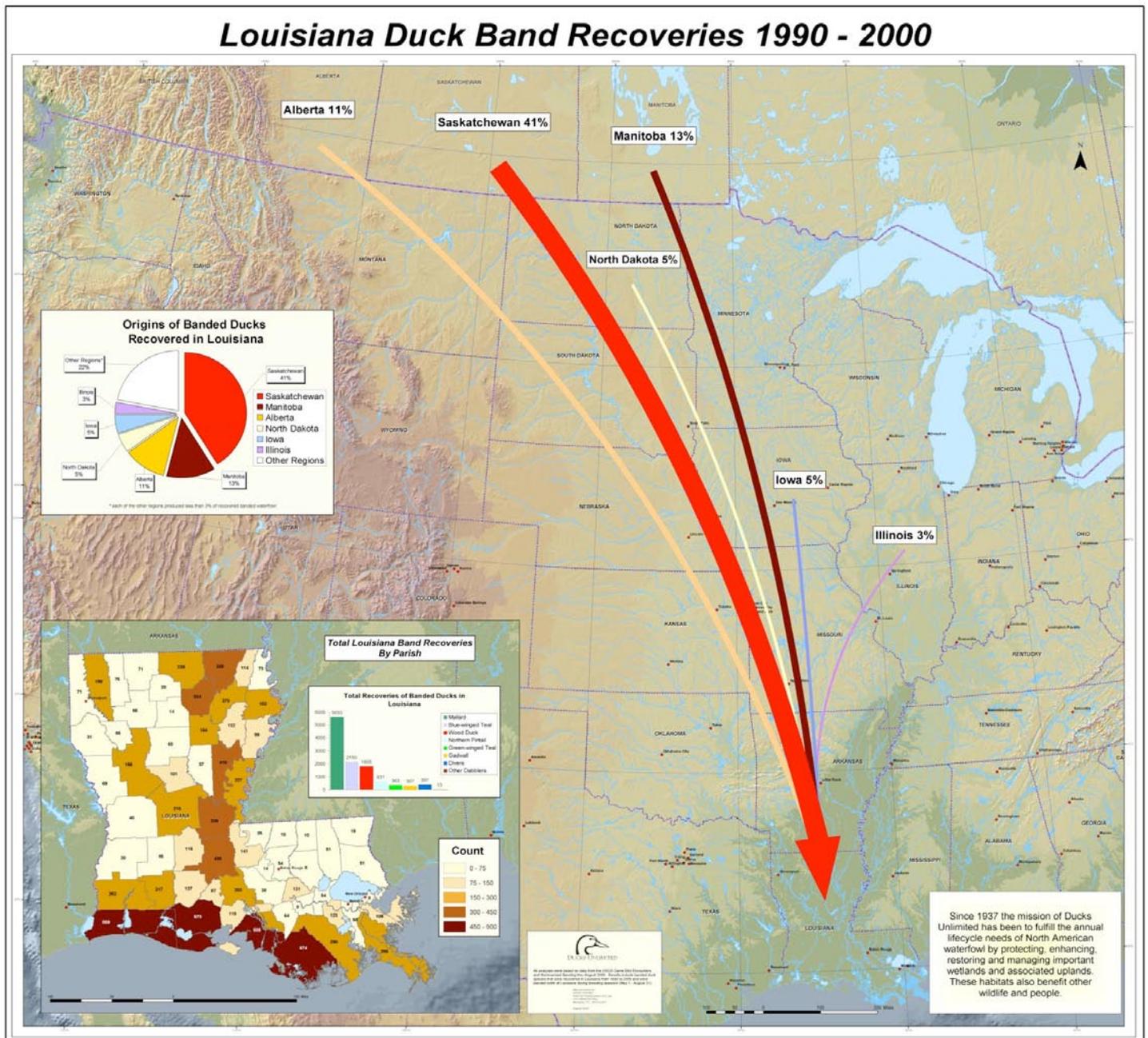


Figure 2. Origin of ducks harvested in Louisiana from 1990-2000. Note that this data is not corrected for banding effort.

Program Accomplishments



Based upon DUC's waterfowl science and assessment of the effectiveness of our conservation programs, DUC has adapted a suite of conservation initiatives to maximize waterfowl benefits. In the 2008 Coteau Legacy Conservation Plan, DUC proposed to deliver against specific objectives for these habitat initiatives in Saskatchewan. See Table 2 for specific accomplishments.

Initiatives

Habitat Retention

Drainage of wetlands and breaking of native uplands continues to be the most significant activities negatively impacting waterfowl. DUC uses a variety of program tools to protect these remaining critical habitats, which are vital to the long-term productivity of the waterfowl production landscape.

- 1) **Conservation Easements and Agreements** protect habitats on private lands through programs offering financial incentives for varying levels of protection. All Conservation Easements are perpetual, most of which are in partnership with provincial and federal government agencies. Conservation agreements are a minimum of 10 years.
- 2) **Rangeland stewardship** programs are designed to positively impact the majority of native grasslands in the Missouri Coteau under the control of private ranches. To protect these lands from loss, unique partnerships with ranchers are employed. Conservation agreements addressing the protection of existing native prairie habitats while offering incentives for environmentally sound improvements are the main focus.

Wetland Restoration

Most wetland restoration work has to occur on private lands. Nearly 70 years of program delivery has taught us that it takes a combination of intensive and extensive programs to successfully work with producers. The nature of the Missouri Coteau is that most wetlands are difficult to drain and many wetlands are valued by landowners. As a result much of the wetland base is intact in the Missouri Coteau and surrounding prairies. DUC is currently using other programs such as land purchase to initiate efforts to restore wetlands. Goals for wetland restoration have not been set in this proposal due to reduced opportunity. However, DUC will certainly pursue any wetland restoration opportunities that come available during the next year.

Upland Restoration

Duck nest success is one of the most influential factors impacting continental waterfowl populations. Improving nest success in the Missouri Coteau will require the restoration of grass. DUC will focus significant efforts on restoring perennial cover in the Missouri Coteau and the Saskatchewan Prairies through two primary efforts:

- 1) **Forage conversion** programs will provide incentives to landowners to convert cultivated land to perennial cover to provide waterfowl nesting benefits and support the beef industry.
- 2) **Winter wheat** programs focus on the agronomic and economic benefits of the crop to the producer. Approaches vary from supporting research to developing new varieties that are more successful in the Canadian Prairies, to working more directly with the producers through incentive or extension programs. DUC's research has confirmed that there are 24 times more ducks hatched in winter wheat compared to spring wheat on a per acre basis because both nest success and density increase. This is particularly beneficial to northern pintails, a species that has experienced steady declines since the late 1970s. Historically, northern pintails have been an important species to Louisiana waterfowlers.
- 3) **Habitat Asset Management** focuses on the additional attention and maintenance required for completed projects to ensure their long-term production value.

Funding and Accomplishments



The Louisiana Department of Wildlife and Fisheries contributed \$169,101 toward the priority areas in southern Saskatchewan in 2008-2009. LDWF's contribution was matched by Ducks Unlimited Inc. and the combined amount was matched with NAWCA funds totaling \$676,404. Additional funds of \$338,202 were leveraged from other contributors totaling just over one million dollars for habitat programs.

Table 1. Ducks Unlimited Canada Funding Proposed and Received

Partners	Revenue Proposed (2 year)	Revenue Received (1 year)
LDWF	\$350,000	\$169,101
DU Inc.	\$350,000	\$169,101
NAWCA	\$700,000	\$338,202
Sub-Total	\$1,400,000	\$676,404
Other Contributions	\$700,000	\$338,202
Total	\$2,100,000	*\$1,014,606

* Ducks Unlimited will match LDWF's contribution, and then this combined total is matched with federal funds under the North American Wetlands Conservation Act. A Canadian partner commitment of an additional 25% from DUC, Canadian Federal and Provincial governments and other non-governmental organizations is applied as per the NAWMP.

Table 2. Coteau Legacy Program Needs, Goals, Accomplishments and Costs based on funding received

Conservation Programs	5-year Needs (acres)	2-year Program Goals (acres)	1-year Program Goals (acres)	1-year	1 year Program Costs (\$)
1. Habitat Retention	69,600	19,000	9,177	9,156	\$499,752
2. Wetland Restoration	250	0	0	0	\$0
3. Upland Restoration	70,000	14,000	6,762	4,715	\$254,347
4. *Habitat Asset Management	*450,000	*90,000	*43,470	*43,470	\$260,507
Totals	139,850		15,939	13,871	\$1,014,606

* Habitat Asset Management acres are not incremental and are therefore not included in the total acre goals.

Securing the Legacy



The PHJV Implementation Plan has set habitat objectives to fully restore the productive capacity of the Canadian Prairies and to sustain waterfowl production to the levels of the 1970s. Continued partnerships will be the key to success. DUC values its relationship with LDWF and recognizes them as a key player in supporting NAWMP conservation efforts in Canada. However, we will need increased support from all partners if the ambitious goals of NAWMP are to be met.

The waterfowl community continues to recognize habitat programs as the primary solution to waterfowl recovery. Ducks Unlimited Canada is the primary delivery agent of the NAWMP program in Canada.



Delaying action on the Canadian Prairies means that critical waterfowl habitat will continue to be lost in the top waterfowl production area of North America. Your critical support continues to be required, as the longer it takes to act, the greater the deficit will grow and the more costly it will become to achieve our goals.

Ducks Unlimited and the Louisiana Department of Wildlife and Fisheries working together to conserve the Missouri Coteau and the Saskatchewan Prairies - ensuring strong fall flights in the Mississippi Flyway.

Appendix

The following table highlights expenditures by specific program under the general initiatives for 2008 – 2009.

Table 3. Missouri Coteau and Saskatchewan Prairies Priority Area Accomplishments

Conservation Initiatives/Programs	Direct Programs (Acres) ¹	Extension Programs (Acres) ²	FY09 Total (Acres)	FY09 Costs (\$'s)
Habitat Retention				
Conservation Easements	2,844		2,844	354,332
Rangeland Stewardship	5,683	8,236	13,919	145,420
Lease / Conservation Agmt	629	-	629	0
Sub-total	9,156	8,236	17,392	499,752
Wetland Restoration	-	-	-	-
Upland Restoration				
Conservation Forages	2,065	-	2,065	125,618
Winter Wheat	2,650	43,895	46,545	66,684
Planted Cover Establishment ⁴	148	-	148	62,045
Sub-total	4,715	43,895	48,610	254,347
Total Acres	13,871	52,131	66,002	
Habitat Management³	-	-	43,470	260,507
Total Expenditure FY09				1,014,606

¹ Direct programs – Programs whereby DUC directly impacts actions of producers, improves, or protects habitat.

² Extension programs – are programs whereby DUC extends technical advice mutually beneficial to both producers and to waterfowl habitat.

³ Habitat Management - These acres include the existing projects requiring annual management to maintain healthy habitats. The acres in this category are not included in the total of habitat accomplishments.

⁴ Planted Cover - The acres in this category were previously secured and are not included in the total of habitat accomplishments.