askatchewan

North American Waterfowl Management Plan

Saskatchewan people value their land – and depend on it – like no where else on the continent. We live on it, and we make our living from it.

In fact, the only ones who depend on this land as much as

Saskatchewan's people are its wildlife, and birds in particular.

Saskatchewan is blessed with one of the most abundant and varied bird populations in North America. Many of them migrate here year after year, attracted by our large wild patches of native prairie and our many lush

wetlands, or "prairie jewels" as they're known to visitors. These birds raise their young here, continually adding to the natural wealth of this province and North America as a whole.

Over the past 19 years, Saskatchewan people have taken a lead role in protecting and enhancing this shared wealth through an innovative international habitat conservation plan — the North American Waterfowl Management Plan (NAWMP).

Just how important is Saskatchewan in terms of providing habitat for North America's bird population, you might ask? Of the 810 bird species found in North America north of

Mexico, over 350 species can be found in the province. More than 15 species of shorebirds nest in Saskatchewan, while numerous others stop over briefly en route to their breeding grounds in Arctic Canada and their wintering grounds in South America.

It isn't an exaggeration to say that Saskatchewan is the cradle of life for a variety of North American bird species. Many of them flock to Saskatchewan during the breeding season, hatch their young and later migrate to an array of areas across Canada, the United States and Mexico. Just as Saskatchewan exports any number of goods and services, Saskatchewan is a leading exporter of birds throughout the continent. This province, in short, is the "bird factory" of North America!

Take the Northern Pintail as an example. This bird, one of Saskatchewan's signature bird species, has experienced marked population declines. In a given year almost half of all Pintails in the Canadian and U.S. prairies may nest in Saskatchewan. Migratory tracking shows that Northern Pintails

which have been banded in Saskatchewan annually migrate throughout North America, as far south as Mexico.

And it's all due to Saskatchewan's abundance of natural habitat. Over 23 per cent of Saskatchewan's original native prairie still remains, with large patches in the Missouri Coteau and southwestern portions of the province. In terms of wetland habitat, spring

air surveys indicate that Saskatchewan supports almost the same number of prairie wetlands as Alberta, Manitoba, Montana and North and South Dakota combined.

It is important to recognize that the habitat that makes Saskatchewan so

attractive to these birds must be conserved if they are to thrive. And there are many things that organizations and individuals can do, and are already doing, to mitigate threats to that habitat. What we need to do, then, is to find a balance between conservation and socioeconomic development. This is where the North American Waterfowl Management Plan comes in.





The NAWMP sets population goals for 17 species of ducks, geese and swans totaling 41.5 million individuals. In 1999, population estimates for these species totaled 51.1 million individuals. However, of concern are the Northern Pintail and the Lesser and Greater Scaup, three species found in Saskatchewan which remain below NAWMP goals.

What is the North American Waterfowl Management Plan?

Back in the mid-1980s, drought hit the prairies – and it hit them hard. Crops wilted in the field, dugouts dried up, and the northern forests were ravaged by fire. Everybody was feeling the effects, including the ducks. With their wetland habitat dried out, it didn't take long for duck populations to take a nose-dive.

That was a wake-up call for the architects of the Plan, who decided to do something to increase duck populations,

which of course was easier said than done. All they would have to do was: 1) affect the habitat for waterfowl that migrated over the entire North American continent; 2) coordinate hundreds of organizations to a single purpose; and 3) find the vast

Photo courtesy Saskatchevan Environment

amounts of money required to effect change and get it into the right hands. Clearly this would not be easy to do.

The Plan set out an ambitious goal: to return waterfowl populations to the levels found in the 1970s. That meant increasing the numbers by more than a handful – some bird populations

had seen decreases in the millions. Nevertheless, Canada and the United States signed the Plan in 1986. Mexico joined in 1994, making it a truly continental effort.

Obviously, the governments wouldn't be able to carry out the Plan on their own – the money and the manpower simply didn't exist to do something that big. A partnership between the public and private sectors needed to

be forged. So a partnership (which is still growing today) of federal, provincial/state and municipal governments, non-governmental organizations and private companies, as well as many individuals, was brought together and included in the NAWMP.

Reaching such an ambitious goal meant making some revolutionary changes in the way conservation programs across the continent were designed and delivered. In the past, conservationists usually operated at a local scale, often improving habitat by buying land and managing it exclusively for wildlife. They would work in their own backyard – a refuge, a park, etc. – but didn't look over the fence to see what their neighbour was doing. It was an

expensive and labour intensive way to do business, and it only allowed for small improvements to the overall landscape. For the Plan to have an impact at the continental level, the approach had to change.

Of course, birds don't just nest on the land owned by the various governments and conservation agencies. So for this idea to work the Plan had to involve the people who own most of the land – private landowners. That often made it

necessary to go beyond the security of longestablished wildlife programs and relationships – some of which had been up and running for decades – and embrace new programs and policies. It also meant bringing together the priorities of conservationists and the owners of the land – two groups that often had different ideas about how a piece of land should be used. This is one way that the Plan was unique – it brought the two groups to the same table to figure out ways to use the land that would

benefit both wildlife and the landowners.

From the beginning, it was clear that this would have to be done from the ground up. Trying to directly control all the conservation efforts going on throughout the three nations would have been

impossible. Instead, the Plan coordinates hundreds of groups delivering site-specific habitat management programs and projects, basically providing a largescale goal for everyone. Add all the projects up, and the result is population responses on a continental scale.

Today, these efforts are starting to bear fruit. Since the implementation

of the Plan, several factors have combined to bring waterfowl populations remarkably close to their 1970 levels. By working to a common goal, partners have indirectly affected a much larger portion of the continent's landscapes than what could have been accomplished through direct conservation projects alone.



What do the Plan Partners do?

To meet the goals of the Plan, the partners undertake conservation projects. The projects are strictly voluntary, and focus on the conservation of habitat and maintaining the landscape conditions needed to sustain waterfowl.

There are a lot of different ways that partners can help conserve habitat. To give one simple example, a landowner in Saskatchewan could volunteer to manage their pastures, such as a parcel of native prairie or some property beside a wetland, to provide nesting habitat. This not only gives the birds a chance to get their young ones out of the nest and out on their own, it also allows landowners to make more effective use of their land, refine their forage system and increase their livestock's weight gains.

At first glance, it may seem that protecting one relatively small piece of habitat does not make much of a difference in the bigger picture. But these simple changes in the way we use the land, when combined with the many other projects throughout the

province, have a significant international impact. By focusing on action at the local level, the North American Waterfowl Management Plan has come to be considered one of the most successful conservation initiatives in the world.







Message from the Chair

This truly is an exciting time to be involved with the planning and delivery of the North American Waterfowl Management Plan in Saskatchewan. The Saskatchewan steering committee is dedicated to moving toward a sustainable landscape for both wildlife and agriculture. While plenty of good work has been done in the province over the past number of years, we continue to explore new prospects to help meet our goals.



Who oversees the North American **Waterfowl Management Plan?**

The Plan is co-ordinated at the continental level by wildlife managers from the three countries working together. Within Saskatchewan, the delivery of the Plan is directed by a steering committee that co-ordinates activities with Alberta and Manitoba. This steering committee includes representatives from various federal and provincial government departments as well as from a range of non-governmental organizations.

The overall strategy of the Plan in Saskatchewan is to encourage land use practices on private and Crown lands, which will benefit waterfowl and wildlife species by providing upland and wetland nesting cover. This is accomplished through a number of programs that are delivered in the province, which will be detailed later. The Plan also seeks to change attitudes and policies recognized as important in the maintenance of upland and wetland areas.

To that end, the Plan partners are working together through a blend of policy, extension, modified agricultural use and wildlife habitat management, based on the best science available. This work is crucial to our goal of protecting and enhancing Saskatchewan's valuable biodiversity. We are also committed to promoting the sound management of Saskatchewan's watersheds and aquifers, which are so vital to maintaining our landscape. And as always, we are seeking to broaden our partnerships, bringing together more of the people and the resources needed to achieve our goals.

What really drives the Plan forward is the individual landowner's interest and decision-making. Without the support of the people that manage the land, this Plan would not have achieved its current level of success.

How is NAWMP funded?

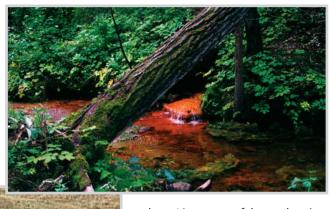
Naturally, setting up these kinds of conservation projects involves spending some money. NAWMP partners recognize that Saskatchewan's rich habitat produces benefits beyond the province's borders. So these partners also share the responsibility for paying for its activities.

Through the United States' North American Wetlands Conservation Act (NAWCA), the United States government authorizes funding for partnership projects that protect,

restore, enhance and manage wetlands and other habitats for migratory birds, fish and wildlife in Canada and Mexico. However, the U.S. government doesn't want to fund this work alone, and has ensured that other partners pull their weight too.

To secure NAWCA funding, Saskatchewan

organizations must raise an equal amount from state governments and private agencies in the U.S. So for every dollar that comes from the NAWCA, a matching amount has to come from other U.S. partners. In addition, the governments of Canada and Saskatchewan must contribute



at least 10 per cent of the total project cost each, and Canadian nongovernmental organizations are responsible for the final 5 per cent.

In the last 19 years, partners have contributed over \$1 billion to enhance 2.3 million hectares (5.8 million acres) of waterfowl habitat in Canada. Large-scale partnerships between many public and private groups have been established across

Canada to help facilitate activities in key waterfowl habitat areas. Saskatchewan, Alberta and Manitoba belong to the Prairie Habitat Joint Venture. A total of almost 700,000 hectares (or over 1.7 million acres) of habitat have been improved in Saskatchewan.



The following partners deliver programs in conjunction with the North American Waterfowl Management Plan in Saskatchewan:



The Saskatchewan Watershed Authority co-ordinates North American Waterfowl Plan activities and delivers the Prairie Shores Program in Saskatchewan. The focus of the Prairie Shores program is on breeding waterfowl, but direct benefits accrue to threatened and endangered species, shorebirds, grassland songbirds, and colonial water birds. Prairie Shores encourages sustainable land use for the benefit of both people and wildlife. The program is delivered by the Authority in cooperation with various partners. In addition, the Authority has initiated a planning model focused on developing source water protection plans tailored to particular watersheds or aquifers. Local leaders from municipal governments, First Nations and other organizations work with technical experts from the federal and provincial governments through the model to protect and manage Saskatchewan's water.



Ducks Unlimited Canada (DUC) is a private, not-for-profit organization that conserves, restores and manages wetlands and associated habitats for the benefit of North America's waterfowl. DUC delivers a full complement of conservation programs including traditional conservation and restoration projects as well as broader-based programs that include extension efforts, policy initiatives, government relations and educational activities. The wide range of programs DUC is able to deliver is critical to meeting our long-term habitat conservation and waterfowl population goals. DUC focuses on five streams of program delivery: Habitat Retention, Wetland Restoration, Upland Restoration, Habitat Asset Management, and Industry and Government Relations.



Saskatchewan Environment

The Fish and Wildlife Development Fund (FWDF) complements the efforts of the NAWMP in Saskatchewan. Hunters, trappers and anglers support the FWDF through a portion of their license fees. This FWDF receives 30 per cent of the revenue generated from all fur, angling and hunting licenses sold in the province. The FWDF is administered by Saskatchewan Environment, governed by *The Natural Resources Act* and is used to protect, monitor and improve both fish and wildlife resources and habitat throughout Saskatchewan.



Agriculture and Agri-Food Canada Agriculture et Agroalimentaire Canada

Agriculture and Agri-Food Canada (AAFC) works with producers, provincial and territorial governments, industry and other partners to help reduce environmental risks and improve the profitability of Canada's agriculture sector. By providing the sector with timely and relevant information, programs, research and technology, AAFC promotes on-farm practices aimed at effective land management, sustainable water protection, greenhouse gas reduction, and the enhancement of our natural biodiversity and wildlife habitats. AAFC is working to improve the health of the environment and strengthen the sector's capacity for sustainable growth, and through these programs and services, continues to support the NAWMP objectives.



Saskatchewan Agriculture, Food and Rural Revitalization

As the provincial government department concerned with agriculture, Saskatchewan Agriculture, Food and Rural Revitalization (SAFRR) delivers programs and policies that will achieve a thriving, environmentally sustainable, agricultural production and processing industry in support of healthy and diverse rural communities. Working with individuals, businesses, communities, and governments, SAFRR will assist farmers and ranchers, encourage higher value production and processing and promote sustainable economic and social development in rural Saskatchewan. SAFRR makes valuable contributions to the NAWMP in Saskatchewan through management of Crown lands and encouragement of forage production by private producers.



Environment Canada Environnemen Canada

Canadian Wildlife Service

Service canadien de la faune

Environment Canada/Canadian Wildlife Service (EC/CWS) is the lead federal agency for NAWMP in Canada, and its role is critical to the overall success of NAWMP in Saskatchewan. EC/CWS leads and co-ordinates national and joint venture partnerships and funding mechanisms needed to achieve our continental goals. In addition to providing direct funding to partners for habitat conservation program delivery, EC/CWS is a key player in many of the scientific programs that drive program priorities, including long-term population surveys, the PHJV Habitat Monitoring Program, the Avian Botulism Research Program, the International Pintail Action Group, and many other directed studies. The unique nature of the NAWMP partnership is built upon each partner delivering important components of the whole program as no single partner can do it all, and EC/CWS is an important part of this process.





The Nature Conservancy of Canada (NCC) is a national charitable organization that takes direct action to protect areas of significant biodiversity for the benefit of future generations. In partnership with landowners and individuals, foundations, corporations and governments in Saskatchewan NCC has conserved over 100,000 acres of critical habitat on 98 properties. Our unique approach includes the negotiation of donated or purchased conservation easements, which allows for conservation-minded landowners to continue utilizing the land while protecting it for future generations. NCC-Saskatchewan Region concentrates its conservation efforts primarily in the areas covered by the Prairie Ecozone: the Aspen Parkland and Mixed Grasslands in the southern half of the province.



All over Saskatchewan, Plan partners have implemented projects aimed at protecting and enhancing habitat for waterfowl and other species. Just take a look at a few examples . . .

Range Management

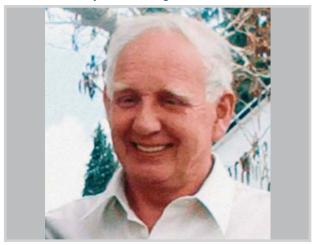


 Murray and Selena McGillivray are always anxious to try new techniques to improve the management of their cattle operation in the Radville district, particularly their native prairie grassland. With the assistance of the Saskatchewan Wetland Conservation Corporation (now the Saskatchewan Watershed Authority) and its funding partner, the Prairie Conservation Action Plan, the McGillivrays have made a number of changes in past years, including erecting crossfencing to help with livestock distribution problems, as well as developing a solar watering pumping station to improve the riparian areas. They use a rotational grazing system to move their 400 head of cattle over six separate areas, allowing some areas to be rested. This not only improves the carrying capacity of their pastures, it also helps conserve habitat for the incredible variety of birds found there, including bluebirds, killdeer and shorebirds along the sloughs.

Cropland Conversion

Two other programs have assisted producers in converting environmentally sensitive lands to forage. The first program was Agriculture and Agri-Food Canada's Permanent Cover Program. Between 1989 and 1992, more than 454,000 hectares – or 1.1 million acres – were seeded to forage under the Permanent Cover Program. Today, a similar opportunity is offered through the Land Conversion component of Agriculture and Agri-Food Canada's new Greencover Canada program. The other program was Saskatchewan Agriculture, Food and Rural Revitalization's Conservation Cover Program. The Conservation Cover program assisted in seeding over 1.3 million acres from annual crop/summerfallow to perennial forage over three years in Saskatchewan.

Watershed and Aquifer Planning



2 Tony Leeson is an alderman on St. Walburg's town council. As such, he is committed to protecting St. Walburg's supply of good quality water. So Leeson is participating in a watershed and aquifer planning initiative being led by the Saskatchewan Watershed Authority. Local leaders from municipal governments, First Nations and other organizations work with technical experts from the federal and provincial governments to develop source water protection plans tailored to the particular watershed or aquifer. The primary focus of the watershed and aquifer management planning process will be to protect and secure source water to ensure present and future safe drinking water needs are met. However, activities designed to address these issues are expected to have a positive impact on other water-related and ecological issues within the planning area.

Conservation Easements



3 Landowners like Perry and Trevor Sawchuk of Churchbridge recognize the value of conserving our natural landscape for future generations. As landowners we perform the key role in making conservation a reality. Conservation easements offer a solution to the problem of vanishing

resources, be they habitat or historic landmarks. A conservation easement is a voluntary legal agreement between a landowner and a qualified conservation agency. Organizations often purchase conservation easements for up to 25 per cent of the land value. Under this agreement, the landowner continues to own and manage the land with benefits to both the landowner and the environment. Perry and Trevor, along with the rest of the family – parents Steve and Jeanette and sister Taneal – have signed conservation easements with Ducks Unlimited Canada on seven quarters.

Winter Cereals

4 There were a number of features that led Bredenbury-



area producer Brian Soke to include winter wheat in his crop rotation. These included the crop's ability to take advantage of the extra moisture early in the spring, a reduction in spring herbicide costs, higher overall yields when compared to spring wheat varieties, and the ability to harvest early. Recent research shows that winter wheat can provide safe, attractive nesting cover for species such as the Northern Pintail, which readily nests in sparse vegetation. Ducks Unlimited Canada has been working with producers to explore opportunities to integrate winter cereals into their crop rotation by encouraging them to compare the income of winter wheat to that of spring wheat.

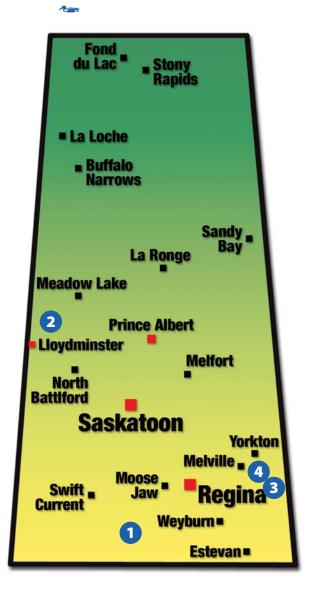
Monitoring and Research

Monitoring and research activities are associated with many of the NAWMP programs in Saskatchewan. They have provided partners with the opportunity to assess waterfowl populations and their habitats, and to evaluate the impacts of NAWMP activities on waterfowl, and other bird species. For example, how do we know the number of waterfowl that return to Saskatchewan each spring, the success of their nesting activities, and how these numbers have changed over time? Since 1955, biologists from the Canadian Wildlife Service and the United States Fish and Wildlife Service have surveyed waterfowl populations and habitat conditions

across the Prairies, counting ducks and wetlands from lowflying aircraft along transects that have been in place for 50 years. This information enables biologists to assess changes in populations over time.

NAWMP partners have also conducted waterfowl disease research, focusing on avian botulism, to determine how to best manage and control a disease that kills large numbers of ducks and other water birds every year. This research has also investigated the impacts of botulism on fall and spring waterfowl populations.

Although many of the research and monitoring activities are directed at mallards, pintails are also of interest due to low population levels and poor nesting success. Pintails are attracted to the southern Canadian prairies in wet springs, especially to spring-seeded, cereal-growing areas with abundant crop stubble, and their nests are vulnerable to destruction by predators and farming operations. Research is being conducted to determine pintail nest success in grassland-dominated and fall-seeded landscapes. Results will be used to help guide future habitat management efforts for this species.



We hope you've enjoyed our look at the North American Waterfowl Management Plan. This Plan has proven to be an invaluable resource for enhancing waterfowl habitat and increasing waterfowl populations. Since the mid-80s, we have seen some very exciting results in terms of recovering waterfowl populations. However, there is still a great deal of work left to be done.

Right from the start, Saskatchewan people have been leaders in conserving and enhancing this province's vitally important habitat. Their willingness to make changes in the way they use the land – whether it was something as simple as deferring grazing on a shoreline pasture to establishing a conservation easement – is what truly drives this remarkable initiative. We would like to encourage anyone who wants to contribute to enhancing waterfowl populations in North America to consider joining us in our efforts.

If you are interested in the North American Waterfowl Management Plan and would like more information, or if you are wondering how you can get involved, please contact any of the following partners:



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