

Stewards in training: Introducing young conservationists to the outdoors on B.C.'s Gulf Islands



Ducks Unlimited Canada

Conservator

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THE
SCIENCE
IS CLEAR

**A CONSERVATION
CASE STUDY IN
SOUTHERN ONTARIO**


THE
WATER
IS NOT

Golden Years

**NAWMP CELEBRATES
A QUARTER CENTURY**

**Creating
Connections**

**LANDOWNERS KEY FOR
CONSERVATION SUCCESS**



THE SCIENCE IS CLEAR

Ducks Unlimited Canada (DUC) recently completed a business case for the conservation of southern Ontario wetlands. The research examined both the ecological values of wetlands and the economic impacts of wetland loss in the Black River subwatershed of Lake Simcoe.

The results were astounding. **DUC learned that if all remaining wetlands in this area were lost, phosphorous loading would increase by 891%.**

What does that mean? It's the equivalent of dumping 220,000 bags of lawn fertilizer into the river every year.

The science is clear. We've got a problem we can't ignore.

photos courtesy of LSPCA (2)

by JOANNE BARBAZZA

“You don't have to look hard to see the affects of wetland loss,” says Jamie Fortune, acting chief executive officer with DUC. “In highly developed areas of Canada, wetland loss is reducing available waterfowl habitat, causing biodiversity declines and dropping water quality within many watersheds. The unprecedented flooding in the Prairies this spring was a harsh, and costly, reminder of what happens when wetlands are continuously drained.”

AS A SCIENCE-BASED ORGANIZATION, DUC's research looks at the importance of wetlands to the environment, economy and our daily lives. Their scientific studies show how wetlands help control erosion, store water to lessen impacts of flooding and droughts, curb climate change and contribute to a healthy economy. On top of this, wetlands provide clean and abundant water supplies and support outdoor activities like wild-

life viewing, hiking and waterfowling. Despite all the reasons to keep them around, wetland loss continues. In Canada, we lose an average of 80 acres of wetlands every day.

In 2008, DUC completed research that examined the impacts of wetland loss and associated drainage activity in southwestern Manitoba's Broughton's Creek watershed. DUC learned that wetland drainage contributes to Manitoba's widespread water quality and algae



THE WATER IS NOT



Above: A thick mat of algae coats the shoreline in the Black River subwatershed. Studies by DUC and the Lake Simcoe Region Conservation Authority reveal that wetland drainage leads to increases of excessive nutrients flowing into the watershed.

problems, especially in Lake Winnipeg. The estimated value of wetland benefits associated with the nutrient removal and carbon sequestration lost between 1968 and 2005 as a result of wetland drainage is \$430 million. To replace the environmental benefits lost in Manitoba in 2005 alone would cost approximately \$15 million.

This number will increase to \$19 million by 2020 if wetland drainage is not stopped. These estimates are for southwestern Manitoba alone and do not account for wetland drainage across the entire province. Numbers would be staggering if the impact of all wetland loss was determined.

In 2010, DUC once again teamed up with the University of Guelph's Watershed Evaluation Group. This time, the focus was studying how wetland loss affects water quality in the Black River subwatershed of the Lake Simcoe basin by measuring levels of phosphorous, nitrogen and sediment loss. The research also investigated how wetland loss might impact groundwater recharge and flooding.

THE BLACK RIVER SUBWATERSHED IS A REPRESENTATIVE watershed sharing similarities with most of southern Ontario. What this means is, what DUC learned through its research should apply to other areas of the Lake Simcoe watershed and across southern Ontario. After compiling the environmental data the results were handed off to the University of Alberta. The faculty there worked on putting together a business case for wetland conservation to show the economic impacts of both wetland loss and restoration.

Owen Steele, manager of conservation programs with DUC in Ontario says, "The study confirms wetlands stop phosphorous from entering Lake Simcoe and are critical to meeting the phosphorous reduction objectives of the Lake Simcoe Protection Plan. The Black River's remaining wetlands provide almost \$300,000 in annual benefits in terms of their role in phosphorous reduction alone. Further loss of wetlands will significantly diminish net benefits of existing and planned financial investments in improving Lake Simcoe's water quality."

In 2008, the Sutton Water Pollution Control Plant (WPCP) removed a total of 2,480 kilograms of phosphorous from entering Lake Simcoe. If we lose approximately 25 per cent (2,088 hectares) of the remaining wetlands in the subwatershed, phosphorous loading would increase by the same 2,480 kilograms each year.

Interestingly, the proposed \$3.8 million upgrade to the Sutton WPCP would remove an additional 62 kilograms of phosphorous each year, which is equivalent to the services provided by 52 hectares of wetlands. Clearly, wetlands make economic sense and we're not talking about pocket change.

photo courtesy of LSRCA

"The biggest challenge has been making the public and decision makers aware of the benefits wetlands provide. The health of our watershed's natural environment is strongly linked to the health and well-being of the watershed population."

— Mike Puddister
Director, restoration and stewardship,
Credit Valley Conservation

"Wetlands are one of the most productive ecosystems in the world and can absorb nutrients and other contaminants at very high rates," says Steele. "These natural filters play a critical role in keeping our lakes and rivers clean. When we lose wetlands to urban expansion or agricultural development, this filtering ability is also lost and water bodies suffer because of it."

THE LAKE SIMCOE REGION CONSERVATION Authority (LSRCA) is a long-standing DUC partner. For nearly 60 years, they have actively been pursuing the acquisition of privately-owned land for the purpose of protecting the public, wildlife habitat and water quality. They understand the business case for wetlands.

In 2008, a report entitled *The Value of the Watershed's Ecosystem Services** supported by the LSRCA, identified wetlands as one of the highest value forms of natural capital, providing an estimated \$435 million in ecological goods and services to the watershed each year.

"Given the ongoing pressures of urban development across the Lake Simcoe watershed, it's always a challenge to ensure the protection of delicate wetland ecosystems," says Kevin Kennedy, land securement officer with the

Authority. "By preserving and protecting wetlands, we support the rich biodiversity and natural function of a wetland, which has a positive impact on the health of Lake Simcoe and our watershed."

Credit Valley Conservation (CVC) is another Conservation Authority with expertise in the environmental goods and services of wetlands (such as flood control, climate regulation and water treatment). CVC research results align with those of DUC and the LSRCA, where in the Credit River watershed wetlands provide annual benefits worth a minimum of \$187 million per year.

CVC's recent Wetland Valuation Study found that households in the watershed were willing to pay up to \$250 million or approximately \$259 annually, per household, over the next five years for wetland retention and restoration programs.

"The biggest challenge has been making the public and decision makers aware of the benefits wetlands provide," says Mike Puddister, director of restoration and stewardship for Credit Valley Conservation. "The health of our watershed's natural environment is strongly linked to the health and well-being of the watershed population. This relationship is now being recognized by health care professionals as well."

* *The Value of the Watershed's Ecosystem Services* – 2008 Sara J. Wilson, Natural Capital Research & Consulting – submitted to: The David Suzuki Foundation, The Friends of the Greenbelt Foundation & The Lake Simcoe Region Conservation Authority.

right: © DUC



Above: Lake Simcoe is the largest southern Ontario lake completely within provincial boundaries, and provides drinking water for eight municipalities.





DUC'S SCIENCE DEMONSTRATES THAT WETLANDS are more beneficial, both environmentally and economically, if they are left intact rather than drained or destroyed. DUC continues to push provincial governments for stronger policies to protect wetlands.

"As a society, we need to take proactive steps to stop wetland loss and prevent further deterioration of our water resources," says Jim Brennan, DUC's manager of provincial operations in Ontario. "In Ontario specifically, we need a greater commitment from all levels of government to make the protection and restoration of our wetlands a priority. Failure to do so will be costly for all Ontarians and negatively affect their quality of life."

Rob Hare, Keswick resident and past president of the Ontario Federation of Anglers and Hunters says, "As a local resident of the Lake Simcoe watershed, I am not only concerned about what is happening here in my own community, but what is happening in other watersheds across the province. I think more people need to better understand what is actually happening with our water sources and the wetlands that support them."

"To protect our wetlands we need to invest in them," says Fortune. "Part of the solution is getting the right government policies in place to stop wetland loss, and support wetland restoration across landscapes. To make that happen, we need help from conservation-minded people like you. Discuss the future of wetlands with your political leaders and let them know that wetland conservation must be a priority. Stop wetland loss before it is too late." ✨



The cost of loss

Read the Black River research report and listen to a radio interview by Owen Steele, manager of conservation programs with DUC in Ontario – both available online at conservator.ca

"We need a greater commitment from all levels of government to make the protection and restoration of our wetlands a priority. Failure to do so will be costly for all Ontarians and negatively affect their quality of life."

photo courtesy of LSRC

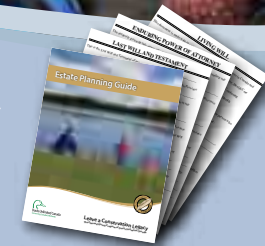
– **Jim Brennan**
Manager of provincial operations,
Ducks Unlimited Canada



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Why everyone needs a will

by GORDON D.S. BALL

Do you want to ensure the wealth you've accumulated during your lifetime ends up where you want it to? A properly prepared and regularly updated will is the only way to make sure your assets are distributed according to your wishes when you pass away.

A WILL IS THE LEGAL DOCUMENT that provides explicit instructions on how your assets are passed along to your spouse, children, grandchildren or other beneficiaries, which can include charities, friends, or anyone else you choose.

If you die without a will, your wealth could be distributed in ways you had not intended. Provincial law will govern how your assets are split amongst your spouse, children and sometimes even your siblings or parents.

Just as important as having a will, is keeping it current. A will should reflect changes in your personal life and financial situation, as well as current laws and regulations.

You should review an existing will at least once a year, as well as after significant events in your life, like marriage, divorce, the birth of a child or grandchild, changes in business ownership and inheritances.

Make sure all your beneficiaries are included – especially new additions to the family. During your review, reflect on whether your assets are split up according to your wishes, and ensure that instructions are included for the distribution of your entire estate. Your will should also include a clause specifying who is to take care of your young children.

Whether you're preparing a new will or revising an existing one, get professional help. While you can prepare your own will, a lawyer is a better bet. You don't want the reliability of your will questioned after

Gordon D.S. Ball is a lawyer in Qualicum Beach, B.C. with over 35 years of experience in wills, powers of attorney, probate of estates and related areas. If you have questions, contact at gdsball@shaw.ca

your death because it is improperly prepared or instructions aren't clear.

Before you walk into your lawyer's office, think about how you want assets distributed. You may want to leave property to certain people or institutions (i.e., a cottage to your children or your book collection to a university). Or you may wish to give percentages of your assets (i.e., 100 per cent to your spouse or a specified percentage to each of your children).

Before preparing a will, consult with your financial advisor to discuss ways of



Will wishes

A final wishes form can complement your will. Learn more online at conservator.ca

minimizing the tax impact of your death. If your financial circumstances are complex, your financial advisor may seek advice from an accountant or tax lawyer.

Finally, be sure to let your executor know where your will is kept. A will that can't be found won't be of much use. ✨



There is something special you can do today.

For information regarding leaving a conservation legacy please contact Lloyd Derry, National Planned Giving Manager. Lloyd is a member of the Canadian Association of Gift Planners.

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Golden Years

The NAWMP Enterprise Turns 25

by BARBARA ROBINSON

After years of declining waterfowl populations caused primarily by wetland habitat loss and degradation, conservation leaders from Canada and the United States took a monumental step by signing the North American Waterfowl Management Plan (NAWMP) in 1986.

THIS BI-NATIONAL PLAN LAID OUT A COOPERATIVE strategy for the restoration and conservation of North America's wetlands and associated upland habitats (e.g., grasslands) for the benefit of waterfowl. In 1994, Mexico signed on to expand the continental commitment.

The NAWMP partnership delivers landscape-level, science-based conservation projects through a collaborative approach. This year marks its 25th anniversary. Anniversaries are as much about looking to the future, as reflecting on the past. What did it take for NAWMP to become known as one of the most successful conservation initiatives in the world? And 25 years

in, what will it take to maintain this momentum and build on its foundation over the next 25 years?

Ducks Unlimited Canada (DUC) has long recognized the importance of taking a science-based, partnership-supported ecosystem approach to conservation. DUC works locally, nationally and internationally to conserve critical wetlands and associated upland habitats. DUC is a lead NAWMP partner and the main delivery agent for its Canadian conservation projects.

To conserve high-priority habitats and waterfowl species, Canadian NAWMP partners formed several collaborative groups, or joint ventures. These include four habitat joint ventures (Pacific Coast, Canadian

Intermountain, Prairie Habitat including the Western Boreal Program, and Eastern Habitat) and three species joint ventures (Arctic Goose, Black Duck, and Sea Duck).

In addition, two action groups (Pintail Action Group and Scaup Action Team) direct the science and conservation planning needs of species of concern. These groups and initiatives involve some of Canada's top wetland and waterfowl scientists, as well as representatives from government, non-governmental organizations, academia, landowners, Aboriginal groups and industry. By taking this approach, NAWMP has initiated thousands of projects, forming robust partnerships and carrying out world-leading waterfowl habitat conservation.

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BECAUSE OF WORK UNDERTAKEN BY NAWMP partners, the relationship between breeding waterfowl populations and habitat is better understood. Scientists are learning that waterfowl habitat needs are more complex than originally

Often compared to tropical rain forests in terms of biological diversity, wetlands are one of the most complex ecosystems on the planet. Virtually all wildlife, including waterfowl and other migratory birds, and hundreds of plant species depend on wetlands for part, or all, of their life cycle.

In addition to their vital qualities as habitat, wetlands have fundamental environmental, social and economic benefits. They help filter and clean our water, and they remove and store greenhouse gases. Wetlands also moderate effects of climate change, erosion, droughts and floods. Just look to last summer's floods in Manitoba to get a picture of what happens when wetlands are drained.

On the social front, wetlands also provide tremendous cultural, recreational and educational opportunities for people of all ages.



thought. Habitats have been mapped, planning models developed, and the science is mostly in place to monitor and assess changes in waterfowl species and high priority habitats. The results from these efforts are allowing conservation managers to make informed management decisions.

Home to 70 per cent of the continental breeding waterfowl population, Canada has a huge responsibility when it comes to waterfowl management. Thanks in part to NAWMP efforts, waterfowl populations are generally stabilizing. Some species are even above target levels, like shoveler and gadwall. Others, such as mallard, are close to target goals, yet species like pintail, scaup, American wigeon and sea ducks are declining. The reasons why some populations are declining, while others are stable or increasing, needs more research.

How does the NAWMP enterprise move forward?

1 Broaden NAWMP's support base

The original 1986 NAWMP document states that waterfowl populations should be conserved for those who use and appreciate them. Now, NAWMP partners need to reach beyond this core group of people to broaden their support base and help others understand waterfowl and wetland values. Many Canadians

are becoming less connected with the outdoors, and therefore less concerned about the welfare of wetlands. This disconnect can be reversed through wetland education programs that include outdoor experiences.

2 Educate others about the benefits of waterfowl habitats

Natural resources like wetlands are vital to Canada's social and economic fabric. Biodiversity, carbon sequestration, groundwater recharge, flood and erosion control and improved water quality are crucial services that wetlands provide. Ecosystem services, and the benefits society receives from healthy wetlands, need to be better understood and communicated to all Canadians, including government.

3 Ensure that effective wetland policies are in place

Effective wetland policies are needed for each Canadian province and territory. Federal, provincial, territorial and municipal governments should be aware of wetland conservation issues, and must play a constructive role in wetland conservation. Effective policies should recognize the role wetlands play in reducing greenhouse gas emissions, and help foster market-based

investments and mitigation processes to encourage wetland conservation.

4 Adapt NAWMP programs

Accelerating ecological, economic and social changes bring a new set of complications into the fold. For example, major stresses such as climate change will likely have significant effects on the distribution and abundance of waterfowl, as well as the quality and quantity of wetland habitats. NAWMP partners must anticipate such changes, and adjust their programs accordingly.

THE NEXT QUARTER CENTURY OFFERS EXTRAORDINARY opportunities and challenges for NAWMP. Strong leadership is needed to bring about constructive change in the collective mindset of government, conservation managers and the public. It will be critical to carefully prioritize and integrate NAWMP programs at a landscape scale.

For example, in British Columbia 95 per cent of the land is owned by the Government of Canada. To address this, NAWMP partners initiated a Crown Land securement program in the 1990s to secure coastal habitat. The program expanded to include the entire province, strengthening linkages with other broad land-

NAWMP has successfully helped conserve over 15 million acres of critical wetlands and associated habitat in Canada, the U.S. and Mexico.

scape securement programs and leading to/resulting in additional resources.

To date, NAWMP has successfully helped conserve over 15 million acres of critical wetlands and associated habitat in Canada, the U.S. and Mexico. Looking ahead, NAWMP is raising the bar even higher. On the Prairies alone, the goal is conserving 16 million acres of habitat by 2023. This type of conservation work goes a long way in supporting healthy environments for waterfowl and other wildlife.

Conservation is planned and delivered in a setting of ongoing economic, social and ecological change. This creates uncertainties. Now more than ever, NAWMP partners must commit to learning and adapting in the face of constant change. Fortunately, this is a hallmark of the NAWMP enterprise, and its partners are well positioned to address the evitable challenges ahead. ✦

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Creating Connections

by KRISTA ELLIOTT

When we see land as a community to which we belong, we may begin to use it with love and respect.

— Aldo Leopold, *A Sand County Almanac**

CANADA IS THE SECOND BIGGEST COUNTRY IN the world. With a landmass of over nine million square kilometers, it has some serious community power if treated properly!

Our country is divided in sections and shapes of all sizes. Its physical geography is as diverse as its citizens. So too are Canada's landowners. Property owners range from individuals to families, businesses, corporations, associations, governments; the list goes on.

Each owner is as different as their land's topography. How they see their land differs too. For some, it is a financial asset to leverage or sell. Others might see it as part of their family's heritage, perhaps a family heirloom to pass down through the generations, or a way to give back to their community.

Ducks Unlimited Canada (DUC) works in partnership with 18,500 landowners across the country to conserve waterfowl habitat. They are a varied group, and their common link is their appreciation of wetlands.

"Nature is an integral part of everyday life," says Don Wilkins, a resident of Saskatchewan. "As a farmer, I know how important it is to work with and appreciate Mother Nature, and to educate people about conservation."

Wilkins' commitment to conservation is apparent. He is passionate about the need for everybody to experience nature first-hand and protect wildlife habitat.

Landowners are proud of their wetlands. Delighted when a hen chooses to raise her brood there, or worried when cattails start growing too thickly, landowners are honoured to provide habitat for waterfowl. DUC builds on this special connection by showing landowners how their chunk of land fits into the bigger conservation picture and how it helps the environment, waterfowl populations and ultimately the health and well-being of their community.

IN ATLANTIC CANADA, ONE WAY DUC IS FURTHERING its relationship with landowners is through the Atlantic Wetland Care Program. This new program is geared to making sure Atlantic Canadian landowners have the support and resources they need as conservation partners.

"The first step was reaching out to landowners to start the conversation," says Colette Cheverie, a conservation program and landowner relations specialist with DUC. Cheverie is responsible for coordinating the Atlantic Wetland Care Program and adds, "In some cases, land changed hands and the current owners were not even aware the wetland on their property was being managed by DUC."

Different kinds of landowners have different needs. This is not surprising given the land diversity within Atlantic Canada. To learn what those specific needs



Top: A restored wetland on Saskatchewan farmer Don Wilkins' property. Above: Nova Scotia landowner Doug Bacon looks out over a small wetland project on his property near Amherst, N.S.



© DUC/Krista Elliott (3)

are, DUC went directly to the source. DUC hosted three landowner focus groups in Kentville, N.S., Sackville, N.B. and Charlottetown, PEI, and also developed a landowner telephone survey conducted by an external research group.

"The responses to the focus groups and survey made it clear that DUC landowners crave connections. Connections to DUC, connections to other landowners and connections to our conservation mission and goals," says Cheverie.

Focus group feedback indicated that landowners wanted to know what other wetland projects were located near their property and how their wetland fits in with the larger conservation picture. The survey, completed by 225 landowners, showed that landowners are pleased with DUC as an organization and its accessibility but want more direct contact with DUC.

THE ATLANTIC WETLAND CARE PROGRAM OFFICIALLY launched in June of 2011. Landowners received an introductory letter from DUC that talked about the organization and the Atlantic Wetland Care Program. Also included with the letter was the first issue of *The Pond Press*. Distributed twice a year, this newsletter talks specifically to landowners about issues that affect them and their property.

The Pond Press introduces key DUC staff and gives information about conservation agreements and how DUC restores wetlands. Furthermore, the newsletter provides details on the Atlantic Flyway and how their

wetland contributes to that crucial journey. Future issues will profile individual landowners and wetland regions. It will also show how each individual contribution and parcel of land is a vital piece of the region's overall habitat puzzle.

Another important tool in the works is a wetland care guidebook. The guidebook will give landowners an overview of different types of wetlands, what kinds of animals and plants they might see in and around their wetland, the research and science that goes into wetland restoration, answers to frequently asked questions and helpful contact information. This guidebook will be ready for distribution by the end of 2011.

Doug Bacon, from Amherst, N.S., is one landowner who already feels a stronger connection with DUC and is eager for all other landowners to realize the true importance of their wetlands.

"It gives me joy to provide wildlife habitat for so many species by having these wetlands on my property," says Bacon. "As well, having a wetland has brought me closer to my community. When you have a wetland, the level of interest from other people is just amazing. I let people on my property to hunt or just enjoy the sights and sounds. My connection to DUC has become their connection as well."

Without committed landowners, DUC's conservation reach would be severely limited. Variations of the Atlantic Wetland Care Program exist across Canada to ensure these important relationships remain solid for years to come. ✨

Left: Landowner Francis Verstraten and Deanne Meadus, DUC manager of Eastern Region Partnerships, at Verstraten's farm in Nova Scotia. Verstraten worked with DUC to place several wetlands on his property.

"It gives me joy to provide wildlife habitat for so many species by having these wetlands on my property."

— Doug Bacon
Amherst, Nova Scotia