2010 International Year of Biodiversity

Ontario's Biodiversity Strategy Progress Report 2005–2010

A Report of the Ontario Biodiversity Council





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Contents

Ontario Biodiversity Council

The Ontario Biodiversity Council (OBC) is a group of 22 volunteers who represent environmental and conservation groups, government agencies, academia, Aboriginal communities, and industry associations.

The purpose of the OBC is to guide the implementation of Ontario's Biodiversity Strategy (OBS). The Council also works with the public and other stakeholders to set priorities on implementing the Strategy and encourages partnerships and collaborations in order to protect and conserve biodiversity.

The OBC is responsible for communicating with Ontarians about how the Strategy is being implemented and what progress has been made. Ontario's Biodiversity Strategy Progress Report 2005-2010 is part of that communication effort.

The Council is also releasing the State of Ontario's Biodiversity 2010, which measures the health of our province's biodiversity.

In addition to the OBC, the following groups are working to implement Ontario's Biodiversity Strategy: the Ontario Biodiversity Science Forum (OBSF), Biodiversity Education and Awareness Network (BEAN) and the Stewardship Network of Ontario (SNO).

To learn more about the Ontario Biodiversity Council, download reports, or find out about the groups implementing Ontario's Biodiversity Strategy, please visit **ontariobiodiversitycouncil.ca**.

2010: INTERNATIONAL YEAR OF BIODIVERSITY

In 2010, the world is celebrating the **International Year of Biodiversity** (IYB).

The Ontario Biodiversity Council is contributing to this global initiative by releasing *Ontario's Biodiversity Strategy Progress Report 2005-2010* and the *State of Ontario's Biodiversity 2010*. These reports will help to promote biodiversity conservation and raise awareness about Ontario's efforts to protect biodiversity.

2010 International Year of Biodiversity

Message from the Ontario Biodiversity Council

It has been 5 years since people from across the province worked together on Protecting What Sustains Us: Ontario's Biodiversity Strategy, 2005 (OBS).

The OBS contains 37 actions to help us protect the biodiversity of our province. This strategy belongs to the people of Ontario, and each of us has a responsibility for its success. Preserving and restoring biodiversity requires effort from all levels of governments, industry, organizations and individuals throughout our province and the world.

This Progress Report celebrates the effort that the people of Ontario have made to protect and conserve biodiversity over the last 5 years. It also serves as a call to action. We need to continue and increase the work we are doing to care for biodiversity across the province. We need to do more to live in a sustainable way and reduce the footprint we are leaving on the Earth.

As you will see from the following pages, there is a role for each of us to play in protecting biodiversity. There are many people already involved and the Council recognizes that this report captures only a selection of the many worthwhile actions that have taken place across Ontario. While there is still much work to be done, we can take pride in the efforts already underway and what has been accomplished to date.

On behalf of the Ontario Biodiversity Council, we invite you to read Ontario's Biodiversity Progress Report 2005-2010 and share it with others. We hope these pages inspire you to learn more about biodiversity and why it must be protected. We encourage you to take part in activities to celebrate the International Year of Biodiversity throughout the province in 2010. This is just the beginning. Together, **we can protect what sustains us**.

OBS: A STRATEGY FOR ALL

More than 200 people including individuals from 20 non-governmental organizations, 12 provincial government ministries and agencies, the federal government, academic institutions, industry, and environmental, conservation and Aboriginal organizations contributed to the development of Ontario's Biodiversity Strategy.

A Vision for the Future

The OBS presents a vision of the future where:

- We have halted the loss of biodiversity and advanced recovery
- Ontarians recognize that we must live within nature's means
- Sustainable living is regarded as a responsibility of all sectors of society
- Ontario has a sustainable economy and human consumption and production don't deplete biodiversity
- The health of species, including humans, and ecosystems has improved
- Urban sprawl has been contained, southern Ontario farmland is no longer being lost and northern communities are healthy
- Ontario's biodiversity strategy is part of a worldwide effort to protect biodiversity

ONTARIO'S BIODIVERSITY CONSERVATION GOALS:

Protect the genetic, species and ecosystem diversity of Ontario.

Use and develop the biological assets of Ontario sustainably, and capture the benefits from such use for Ontario.

From "Protecting What Sustains Us: Ontario's Biodiversity Strategy"

Blue-ringed Dancer

Photo: Colin D. Jones, NHIC Archives

Reporting on Ontario's Achievements

The people of Ontario want a healthy environment. Many of us are already involved in conserving and protecting biodiversity, whether it's in our own backyards or across the province. People are planting trees and creating wildlife habitat in their communities. Others are working on province-wide programs and helping to develop policy and legislation to protect our biodiversity.

Ontario's Biodiversity Strategy offers seven strategic directions to help focus and coordinate all of our efforts. These directions are:

- Engage Ontarians
- Promote Stewardship
- Work Together
- Integrate Biodiversity Conservation into Land Use Planning
- Prevent Loss
- Improve Understanding
- Review Related Legislation and Policy

The following pages document the progress that Ontario has made toward these seven strategic directions by listing the programs, projects and activities that have taken place over the past 5 years. Information was collected from existing sources and is illustrated with case studies.

These are just a few examples of the great work Ontarians are engaged in, whether individuals, non-profit organizations, academic researchers, government policy makers, teachers, biologists or backyard bird watchers.

This report is in two sections:

Highlights: A brief description of some of the projects and programs that have taken place for each of the seven strategic directions.

Table: A listing of activities and programs for each of the Strategy's 37 actions.

Engaging Ontarians

Increasing Awareness and Strengthening Education

Why we're doing it

Biodiversity is everyone's responsibility. Conserving it depends on Ontarians being informed and engaged. It's important that people are aware of the threats to biodiversity and know what they can do to protect it.

First Nations Natural Resources Youth Employment Program

Photo: Matt Lawrence

Engaging Ontarians

Increasing Awareness and Strengthening Education

Why we're doing it

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The Aboriginal Youth Work Exchange Program

Photo: Matt Lawrence

Highlights

- Funding from the **Healthy Wetlands, Healthy Communities program** helped people better understand the value of wetlands.
- The 2008 **Back to Nature Workshop** brought together many organizations interested in addressing nature-deficit disorder in Ontario children and exploring ways to collaborate on this issue. Growing from this workshop is a new Ontario Back to Nature Network.
- **Ontario's Working Group on Environmental Education** produced "Shaping Our Schools, Shaping Our Future: Environmental Education in Ontario Schools" in 2007.
- In 2009 **Acting Today, Shaping Tomorrow** established Ontario's new policy framework for environmental education and made it a priority.
- Ontario's revised **Science and Technology curriculum (2007) policy document** for grades 1-8 includes new content on biodiversity including the fundamental concepts of systems and interactions, and sustainability and stewardship.
- **The Making Waves! Protecting Ontario's Aquatic Habitats** curriculum kit helps Ontario students learn about healthy habitats and how to protect them from invasive species.
- More than 350 Ontario teachers attended the **Going Green Teachers' Workshops** in 2008 and 2009 and learned about biodiversity and bringing environmental education into the classroom.
- **Resources for Rethinking** (R4R) provides materials to teachers to help students learn about a variety of topics including sustainability and biodiversity.
- More than 80 student groups from across Ontario learned about restoration and stewardship as part of the **Atlantic Salmon Restoration Program**.
- **Envirothon**, a high-school environmental competition, involves more than 5,000 Ontario students each year. The focus of the 2009 competition was biodiversity.
- **Our Incredible World** website was created to provide Ontario children and teachers with a fun place to learn about the natural world.
- The Ontario Ministry of National Resources (OMNR) and 12 Aboriginal communities offer an **Aboriginal Youth Work Exchange Program** that provides experience and job skills in fields including biodiversity.

BIODIVERSITY IN YOUR NEIGHBOURHOOD

Artist and naturalist Robert Bateman works to inspire connections between children and nature through his **Get to Know Your Wild Neighbours** program. Operating across North America, the Get to Know network includes Ontario cities, businesses, zoos, museums, botanical gardens, conservation agencies and groups.

To help celebrate International Year of Biodiversity in 2010, Get to Know is sponsoring BioBlitzes – days that nurture a deeper interest in youth about biodiversity through hands-on learning and exploration. To learn more visit **gettoknow.ca**.

- The **Species at Risk (SAR) Stewardship Fund** has provided funding for outreach and education activities to increase awareness on species at risk. More than 140,000 children and adults participated in SAR educational activities in the first 2 years.
- A number of organizations including Ontario Nature and the Ontario Forestry Association are hosting events to promote awareness about biodiversity and its importance to human health and well being.

Case Study

The Biodiversity Education and Awareness Network

Education and awareness play an important role in fostering environmental citizenship. The **Biodiversity Education and Awareness Network** (BEAN), formed in 2006, works to ensure that Ontario's educators and the public have current information and resources about biodiversity. It is a network of groups and individuals representing private industry, formal and non-formal education, government, and environment and conservation groups.

BEAN has:

- provided resources like the Primer on Biodiversity – a document that gives a plain language introduction to biodiversity related topics
- linked educators to biodiversity-related programs and providers
- helped to bring environmental educators together at conferences, workshops and other events

Recently, members helped develop the Big Picture—Biodiversity and Climate Change program for the revised Grade 10 science curriculum, which is available from the BEAN website.

Finally, BEAN is out there getting its hands dirty helping to organize and promote conservation activities. For example, to promote the 2009 International Day for Biological Diversity, volunteers removed invasive Garlic Mustard plants and monitored for Rusty Crayfish, an invasive species that is impacting the biodiversity of Ontario's lakes, rivers and streams. In 2010, BEAN will support continued Garlic Mustard removal, and promote events related to biodiversity and sustainable development.

For more information please visit BEAN's website **biodiversityeducation.ca**.

BEAN
Biodiversity Education and Awareness Network

Case Study

The Invasive Species Hit Squad

Not all species are welcome in our ecosystems. Invasive or "alien" species are plants, fish, invertebrates, birds, reptiles, amphibians or even mammals that are introduced to our province and flourish due to a lack of natural predators and competition which would keep their numbers in check.

The Ontario Federation of Anglers and Hunters (OFAH) has created the **Invasive Species Hit Squad**, a program that employs university and college students to help inform Ontarians about invasive species and how to prevent their spread. This is part of the Invasive Species Awareness Program, a partnership between OFAH and OMNR.

The squad hosts workshops and presentations at fishing tournaments, provincial parks, garden centres, summer camps, club meetings, marinas, and at cottage association meetings.

The "Hit Squad" promotes the "Invading Species Hotline" (a reporting tool), and offers hands on help with removing invasive species. They also monitor Ontario lakes for Zebra Mussels, Spiny Water Flea, Round Goby, Rusty Crayfish and other aquatic invasive species. To learn more about the hit squad visit **invadingspecies.com/HitSquad**.

The Hit Squad monitoring the Trent River for Rusty Crayfish

Photo: OFAH

Promoting Stewardship

Engaging Private Landowners and Improving Incentive Programs

Why we're doing it

All Ontarians have a role to play in protecting biodiversity. Many species at risk are found on privately-owned land. Working with landowners and improving incentive programs will help encourage conservation and recovery of Ontario's biodiversity.

Tree planting in Napanee

Photo: MF McGuire

Highlights

- The **Canada-Ontario Environmental Farm Plan** helps Ontario farmers identify actions to reduce environmental risk and improve environmental conditions on their farms. The Canada-Ontario Farm Stewardship Program financially supports actions identified in Environmental Farm Plans.
- Between 2005 and 2010, **Ontario Eastern Habitat Joint Venture (OEHJV)** partners implemented numerous private landowner stewardship projects to benefit Ontario's biodiversity. For example, in fiscal year 2008/09, Ducks Unlimited Canada secured 983 hectares (ha) through voluntary landowner conservation agreements and enhanced 3,090 ha to increase biodiversity values on private land.
- The Ontario Ministry of Agriculture, Food and Rural Affairs published a series of **Best Management Practices** to help Ontario farmers protect soil, water and woodlots.
- Cottagers can learn how to protect features of biodiversity on their properties with "**A Shoreline Owners Guide to Healthy Waterfronts**" published by the Federation of Ontario Cottagers' Association and the Lakeland Alliance.
- The **Species at Risk Stewardship Program**, which supports Ontario's Endangered Species Act, will provide $18 million in funding to eligible programs between 2007 and 2010.
- With $29,000 in funding from the **Species at Risk Stewardship Program**, the Ontario Aggregate Resources Corporation will create a model for grassland restoration.
- Forest properties being sustainably managed under the **Managed Forest Tax Incentive Program** have increased by over 1,500 since 2005.
- Between 2005 and 2010, 80% of the approximately 31 million hectares under **Sustainable Forest Licenses** was certified under the Sustainable Forestry Initiative Program (SFI), Forest Stewardship Council (FSC) or Canadian Standard Association Sustainable Forest Management (CSA-SFM).
- Ontario partners working closely on the **Landbird Habitat Program** have protected or improved over 971 ha of landbird habitat since 2007.
- Under the Ontario Stewardship program, the number of **Stewardship Councils** in Ontario has risen from 40 to 46 since 2005. These Councils help to link Ontario landowners and conservation organizations to foster responsible management of Ontario's land.

SUPPORTING BIODIVERSITY CONSERVATION

The Species at Risk Farm Incentive Program began in 2008 and has helped farmers protect and restore habitat for species at risk on their land.

The program offers up to 100% cost share up to $45,000 per farm for 6 categories of best management practices that enhance biodiversity.

Case Study

Environmental Farm Plans and carrot tops help protect biodiversity

Through the Canada-Ontario Environmental Farm Plan (EFP) program, farmers can find ways to reduce environmental risk and improve environmental conditions on their farms. The Canada-Ontario Farm Stewardship Program financially supports actions identified in the Environmental Farm Plans.

Doug van Luyk and his family grow carrots and onions on 121 ha in the Holland Marsh. They have always farmed with an eye towards protecting the environment and have completed several projects with support from Canada-Ontario EFP cost-share programs. To better manage crop residue and save on energy costs, van Luyk added a forage chopper to his carrot combine. Carrot tops are chopped and left on the field as residue, adding organic matter to the soil, reducing waste handling and holding the soil against wind erosion. Doug's other EFP projects included dealing with invasive species and increasing efficiency of his irrigation system for nutrient delivery.

"Farmers have always been stewards of their land," explains van Luyk, a third-generation vegetable grower. "We have to be. Our land is where we live, earn our livelihood and play. It is in our best interest to look after our land for future generations. And the care we take of our land extends beyond our properties to benefit the broader community."

To learn more about EFPs, visit **omafra.gov.on.ca/english/environment/efp/efp.htm**

Case Study

Teaming up for Stewardship: the Stewardship Network of Ontario (SNO)

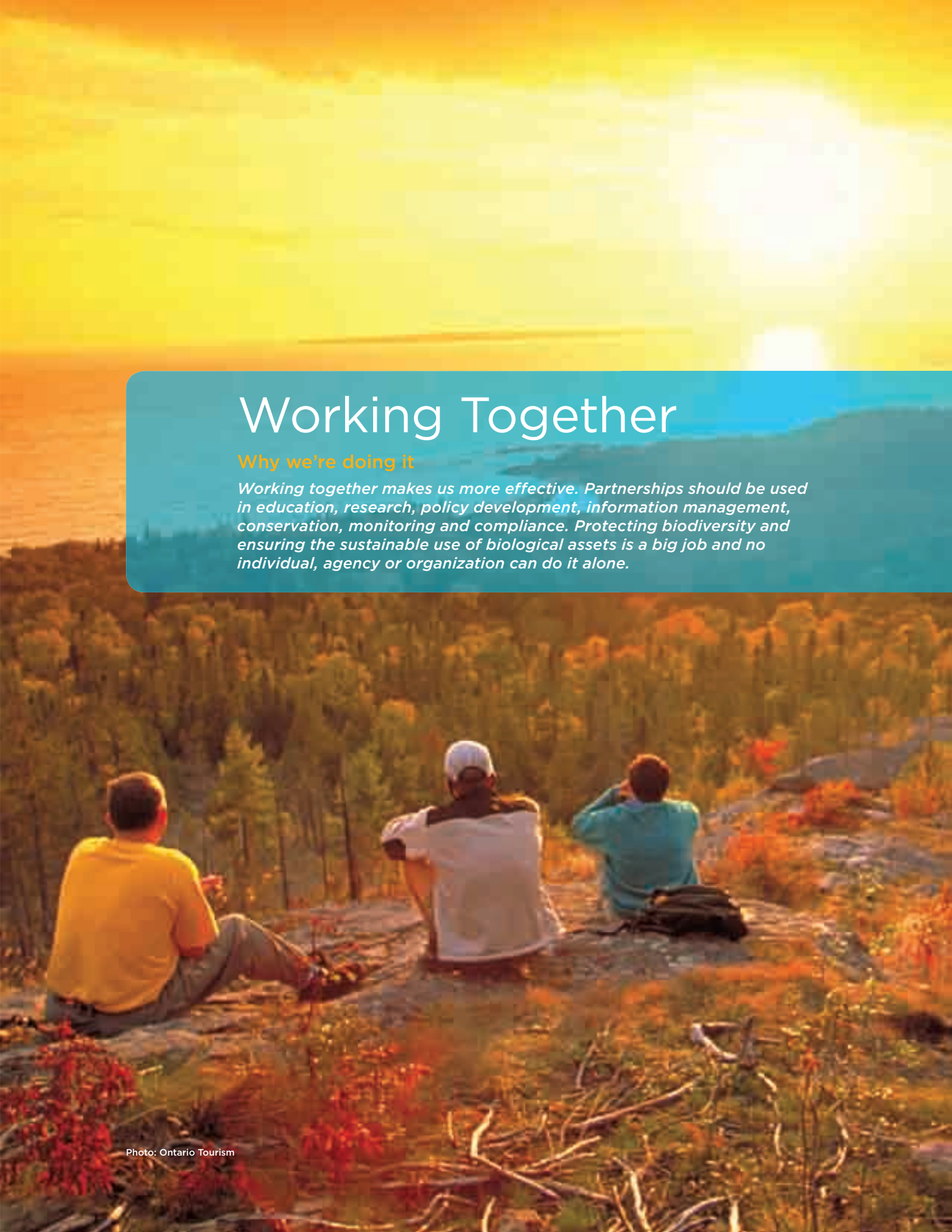
The **Stewardship Network of Ontario** (SNO) is a partnership of organizations that work on stewardship issues in Ontario. The Network ensures Ontario's landowners have the best access to stewardship programs, funding, advice and opportunities.

In 2006, SNO began working with the Ontario Biodiversity Council to help Ontario meet its goals of promoting and enhancing stewardship.

The Network has played a role in several Ontario projects and policies including The Canada – Ontario Agreement Respecting the Great Lakes Basin Ecosystem, the Ontario Drinking Water Stewardship Program, and the Species at Risk Stewardship Fund.

SNO holds an annual forum to bring people together, to share information, and learn more about stewardship initiatives and opportunities to collaborate. SNO membership is open to provincial or regional organizations that adhere to the actions of the Stewardship Strategy for Ontario.

To learn more, visit SNO's website at **stewardshipcentre.on.ca**.



Working Together

Why we're doing it

Working together makes us more effective. Partnerships should be used in education, research, policy development, information management, conservation, monitoring and compliance. Protecting biodiversity and ensuring the sustainable use of biological assets is a big job and no individual, agency or organization can do it alone.

Photo: Ontario Tourism

Highlights

- With members from 22 different organizations and agencies, the Ontario Biodiversity Council (OBC) was formed to guide the implementation of Ontario's Biodiversity Strategy.
- The OBC released the Interim Report on Ontario's Biodiversity in 2008 and has also developed the first report on the state of Ontario's biodiversity, for release in 2010.
- In 2008, Canadian and U.S. partners developed **The Beautiful Lake: A Binational Biodiversity Conservation Strategy for Lake Ontario**, a plan for conserving and restoring the biodiversity of Lake Ontario on both sides of the border.
- Federal, Provincial and Territorial governments work together on projects and initiatives to advance the Canadian Biodiversity Strategy and the UN Convention on Biological Diversity through the **Canadian Council of Resource Ministers (CCRM)**.
- In 2007, **Ontario Eastern Habitat Joint Venture** partners completed work on a new five-year **Implementation Plan**, identifying 50 actions to help achieve North American conservation goals for wetlands and migratory birds, especially waterfowl.
- The first **Great Lakes Summit** was held in 2009 and encouraged partners to work together on ecological and economic planning in the Great Lakes regions. The province of Ontario and the Great Lakes and St. Lawrence Cities Initiative organized the event, where mayors from the municipalities in the Great Lakes Basins presented their report **At the Shoreline: A Mayors' Collaborative Action Plan to protect the Great Lakes**.
- The Greater Sudbury Biodiversity Partnership is working to restore, protect, research, monitor and manage its natural systems and wildlife through the **Biodiversity Action Plan for Greater Sudbury**, and will promote and educate on the importance of local biodiversity.

WORKING TOGETHER!

Fisheries Advisory Councils bring together Aboriginal communities, conservation organizations, biologists and anglers to provide advice on sustainable fisheries management in Ontario.

Case Study

Restoring Atlantic Salmon to Lake Ontario

Restoring declining biodiversity takes time and teamwork. Bringing even one native species back to an ecosystem is a huge undertaking. Science, research, public support, and cooperation among partners are all required, along with a good deal of money. The **Lake Ontario Atlantic Salmon Restoration Program** works to bring all of these pieces together.

Atlantic Salmon were once plentiful and served an important ecological role as a top predator in Lake Ontario and its tributaries. Over the 18th and 19th century, habitat loss, destruction and over fishing eliminated the salmon from Lake Ontario.

Government agencies, conservation organizations, schools, and private industry partners joined forces in 2006, on a restoration program to restore Atlantic Salmon to Lake Ontario and its tributaries. The program focuses on fish production, habitat restoration, research and assessment, and education and outreach. OMNR maintains a broodstock population and ensures genetic diversity and fish health.

The Atlantic Salmon project encourages public involvement. Along with school field trips to stocking sites, there is a large network of volunteers who help with stocking, monitoring and communicating the importance of the project.

Partners include the Government of Ontario, Conservation Ontario, Fleming College, Trees Ontario, Greenbelt Foundation, Fishing Forever, Pioneer, Credit Valley Conservation, Ganaraska Conservation, the Canadian Sportfishing Industry Association, World Fishing Network, the LCBO, OFAH, Banrock Station Wines and Conservation Halton. The success of the Lake Ontario Atlantic Salmon Restoration Project is a great model for other restoration and conservation projects. To learn more visit **bringbackthesalmon.ca**.

Case Study

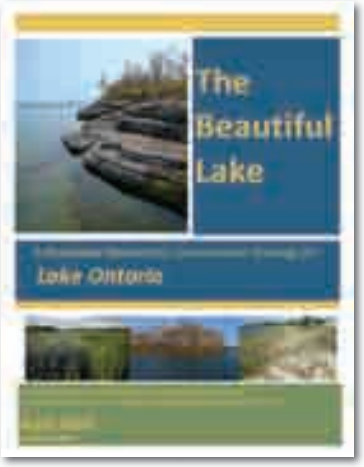
International Cooperation for Lake Ontario's Biodiversity

Lake Ontario has the smallest surface area of the five Great Lakes but still boasts almost 4,000 km of shoreline. Its basin is home to a rich diversity of fish, wildlife, and habitats such as rare sand dunes, alvars, cobble beaches, marshes, wet meadows and forests.

The biodiversity of Lake Ontario and its water quality and wildlife habitat is under threat. The region is home to more than 10 million people. Development, habitat loss and fragmentation, invasive species, dams, climate change, and pollution are affecting the basin. These challenges require a coordinated approach to find and carry out solutions.

This approach is reflected in **The Beautiful Lake: A Binational Biodiversity Conservation Strategy for Lake Ontario**, released in 2009 in cooperation with the Lake Ontario Lake-Wide Management Plan. Over 150 experts from more than 50 organizations, government agencies and universities from Canada and the United States worked together on this comprehensive plan to protect and restore the biodiversity and natural processes of Lake Ontario.

Creation of this report required cooperation, not only among conservation organizations and government agencies, but also between countries. Experts on a wide variety of subjects gathered at workshops on both sides of the border, to identify biodiversity targets, threats to the Lake's biodiversity, strategies and actions, and recommendations on how to implement these throughout the basin. The final report includes recommendations on specific actions, targets and deadlines, partnerships and areas requiring urgent action. You can download a copy of the Plan at **epa.gov/greatlakes/ontario.html**.



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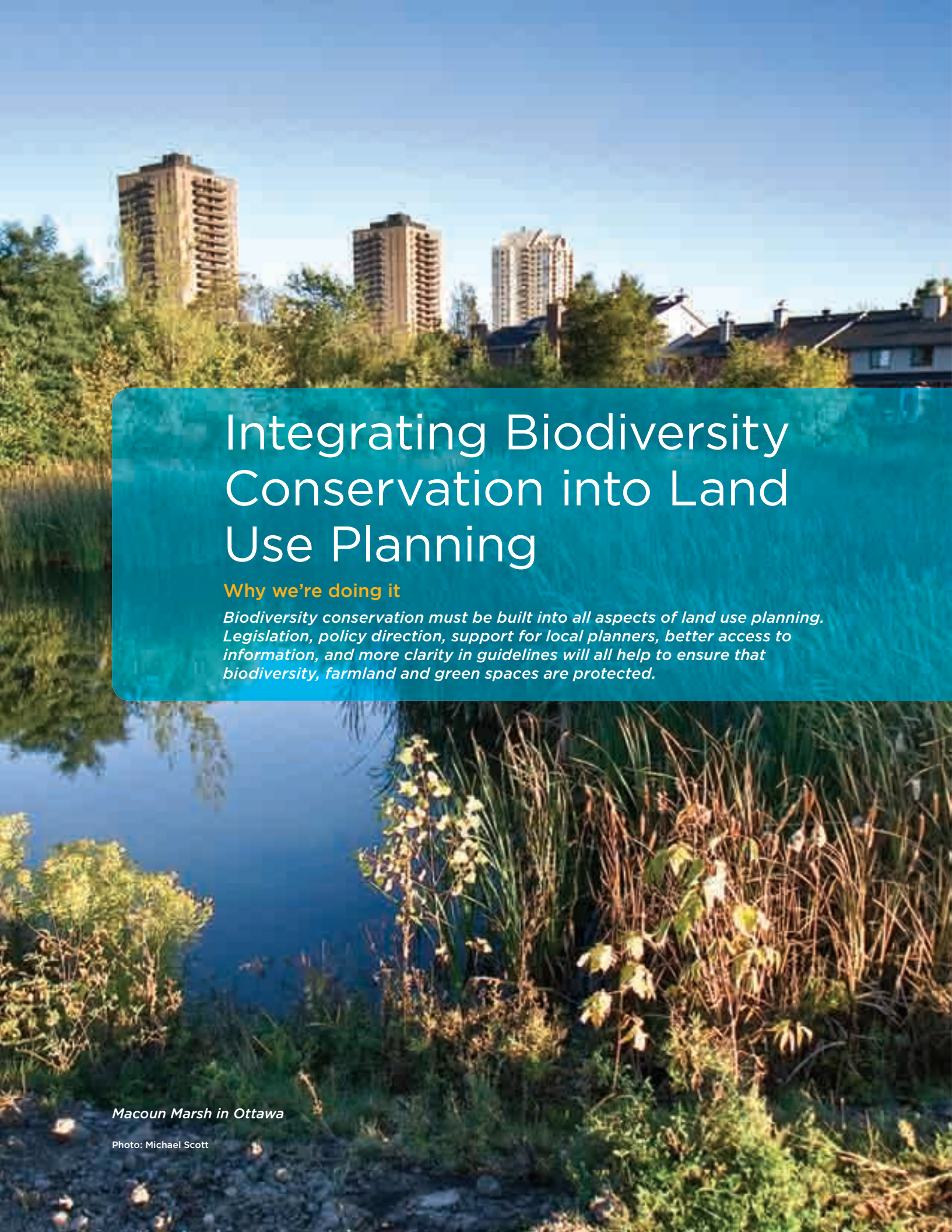


Integrating Biodiversity Conservation into Land Use Planning

Why we're doing it

Biodiversity conservation must be built into all aspects of land use planning. Legislation, policy direction, support for local planners, better access to information, and more clarity in guidelines will all help to ensure that biodiversity, farmland and green spaces are protected.

Macoun Marsh in Ottawa

Photo: Michael Scott

Highlights

- **The Greenbelt Act (2005)** and **Greenbelt Plan** protect 728,434 ha of environmentally sensitive and agriculture land. This includes the Niagara Escarpment, Oak Ridges Moraine and newly protected Countryside areas.
- **Growing the Greenbelt** provides an opportunity for the provincial government to consider requests from regions, counties and single tier governments to expand the Greenbelt.
- The **Greenbelt Council** is a provincial advisory agency established under the Greenbelt Act (2005) to provide the Minister of Municipal Affairs and Housing with advice on the Greenbelt.
- **The Growth Plan for the Greater Golden Horseshoe** (2006) is a 25-year plan that will curb sprawl and protect farmland and green spaces.
- Issued under the authority of the Planning Act, the **Provincial Policy Statement** (PPS, 2005) provides policy direction on land-use planning and development to promote strong communities, a clean and healthy environment, and a strong economy. This includes policies to protect natural heritage features and water resources.
- **The Sustaining What We Value Project** works with eastern Ontario communities to identify and map natural heritage systems, help strengthen natural heritage planning, and promote the consideration of ecological values in land use planning projects.

SHARING INFORMATION

The **Ontario Geospatial Data Exchange (OGDE)** is a community of organizations that access and share geographic information at no cost through a standard licence agreement.

By becoming a member of the OGDE groups such as municipalities and Aboriginal communities can use geographic data to support sustainable land use planning and conservation activities.

For more information about the OGDE please visit **ontario.ca/lio**.

Case Study

Making Information about Ontario's Biodiversity Easier to find!

Information about biodiversity needs to be accessible to Ontarians. The province's Natural Heritage Information Centre (NHIC) acquires, compiles, maintains and distributes information on Ontario's rare species, vegetation communities and natural areas.

NHIC recently launched the **Biodiversity Explorer**, an online tool that provides information for over 15,000 plants and animals and over 450 ecological communities throughout Ontario. The site now includes information on invasive species and conservation lands. You can search for certain species, find out the conservation status of plants and animals, and locate rare species and find locations of invasive species.

By making it easier for organizations and individuals to access information on species and natural areas in Ontario, the Biodiversity Explorer helps ensure the best possible planning and conservation work. The site was launched in 2009 and replaces the earlier NHIC website.

For more information visit **biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp**.

Case Study

Planning for a Sustainable Ontario – The Greenbelt Plan

Ontario's Biodiversity Strategy lists "habitat loss" as one of the main threats to biodiversity. When we do not plan for sustainable growth and development, we end up with urban sprawl. We also lose farmland, wetlands, forests, and economic and social opportunities.

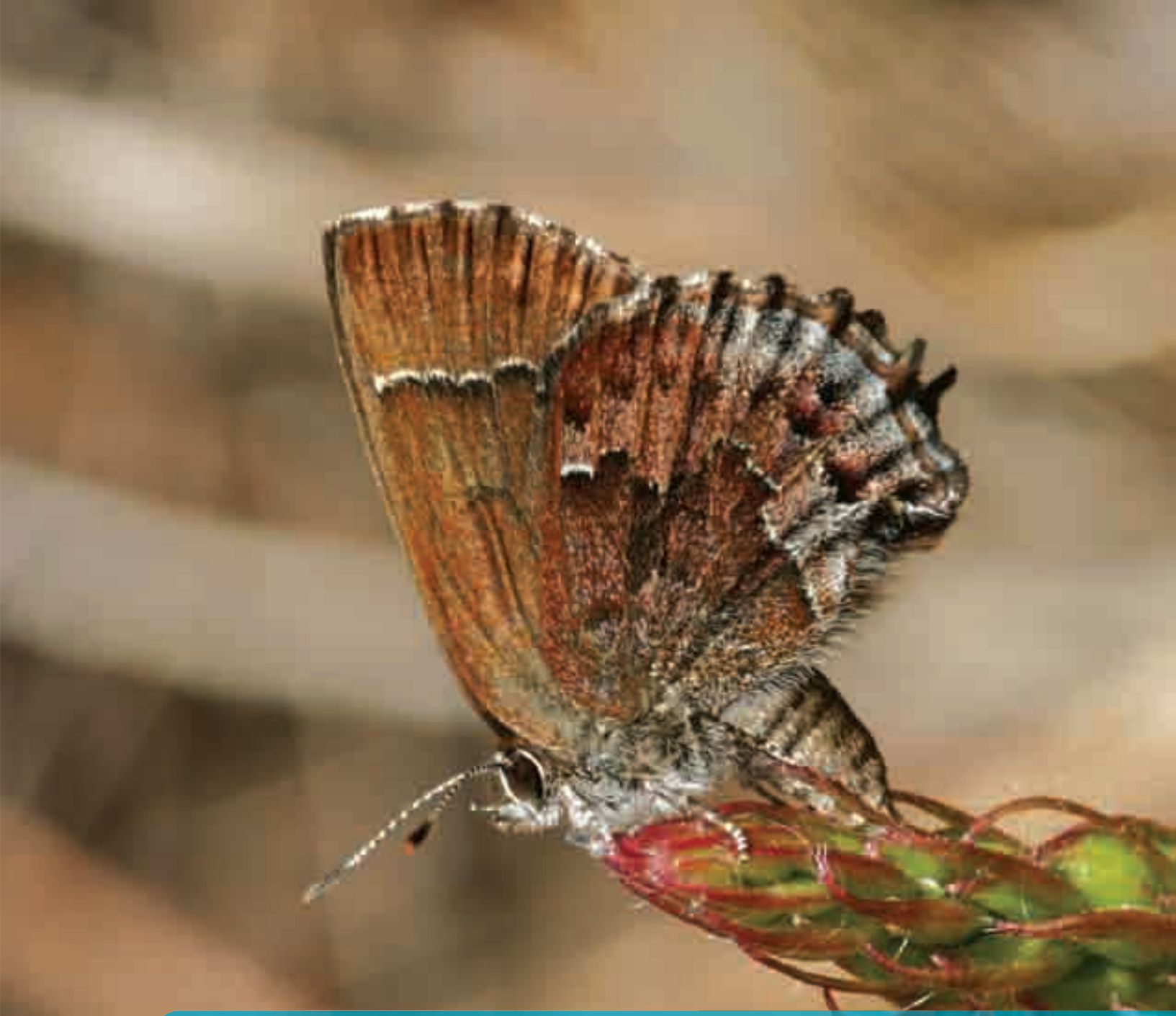
Ontario's Greenbelt is made up of 728,434 ha in southern Ontario and stretches from the Niagara Escarpment to Rice Lake, south of Peterborough. It surrounds the province's Golden Horseshoe – the most populated area of Canada. This area's population is expected to grow from 8 million to 11 million people by 2031.

The **Greenbelt Plan** was created by legislation to protect key environmentally sensitive land and farmlands from urban development and sprawl. The plan promotes sustainable land use planning in Ontario. Planning for growth and ensuring it happens in a socially, economically and environmentally sustainable manner protects natural areas and preserves ecosystems and wildlife habitats.

To learn more visit **ontario.ca/greenbelt**

Halton farm


Photo: Friends of the Greenbelt



Preventing Loss of Biodiversity

Why we're doing it

We must take action to prevent the loss of biodiversity. Pollution, invasive species, species at risk, genetic diversity, ecosystem representation, and enforcement are all areas where actions are required.

Hoary Elfin butterfly

Photo: MaryAnn Friedman

Highlights

- **The Clean Water Act** (2007) protects drinking water at its source, our lakes, rivers, streams and underground aquifers. Under the Act, communities create Source Water Protection Plans to identify risks to water quality, and offer strategies to reduce the risks, and ensure clean water.
- Since 2007, the **Clean Air Resolution** has required that all gasoline sold in the province contain an average of 5% ethanol, reducing greenhouse gas emissions and improving air quality.
- **Go Green – Ontario's Action Plan on Climate Change** (2007) calls for the reduction of greenhouse gases, investment in public transit, renewable energy, "green" technology and jobs, as well as the planting of 50 million trees throughout Ontario.
- The **Invading Species Awareness Program** works with over 300 community groups and agencies a year on invasive species outreach, monitoring and stewardship activities.
- **The Ontario Invasive Plant Council** (OIPC) was formed in 2007 to address the growing threat of invasive plants and provides leadership, expertise and a forum to empower Ontarians to take action to deal with invasive plants.
- In 2008, a new **Endangered Species Act, 2007** (ESA) came into effect, and protects a greater number of species at risk, includes habitat protection, and calls for Recovery Strategies and Management Plans to help safeguard Ontario's species at risk.
- The Natural Spaces Leadership Alliance produced **Getting the Future Right**, promoting a vision of healthy ecosystems sustaining healthy people and a healthy economy.
- In 2008, the **Species at Risk Research Fund** provided over $400,000 for science based research projects to improve our understanding and ability to help recover "at risk" species.
- The Ontario Government provided $5 million towards the University of Guelph's **Barcode of Life**, the world's largest reference library of DNA samples, representing over 500,000 species.
- 45 new **Conservation Reserves** (450,156 ha) and 14 new **Provincial Parks** (52,384 ha) have been created in Ontario since 2005. There have also been additions made to 16 existing Provincial Parks, increasing their area by a total of 167,677 ha.
- In 2009, the Nature Conservancy of Canada purchased the "**Little Bluestem Alvar**", creating a 539 ha nature reserve within the Carden Alvar protecting important habitat for many "at risk" species and grassland birds.
- In 2007, Ontario and Canada reached an agreement to establish the **Lake Superior National Marine Conservation Area** as the largest freshwater marine protected area in the world.

FUNDING RECOVERY

The Species at Risk Stewardship Fund provides funds to help Ontarians protect at-risk species and their habitat.

Since 2007, over 300 projects have received funding to help advance the recovery and protection of Ontario's species at risk.

- Ontario's new **Provincial Parks and Conservation Reserves Act** was put in place in 2007 and makes ecological integrity a priority.
- OMNR's new **Risk Based Compliance Framework** puts greater enforcement emphasis on issues that threaten Ontario's biodiversity, including invasive species and threats to species at risk.
- Between 2006-2010, OMNR contributions to the **Ontario Land Trust Assistance Program (OLTAP)** helped to conserve 2,380 ha of ecological land valued at almost $20 million.
- Between 2006 and 2010, the **Greenlands Challenge** program provided over $3 million in grants to help land trusts, conservation authorities and municipalities secure 3,120 ha of ecologically sensitive land in Ontario.

Case Study

Planting Trees for Biodiversity and Climate Change: The 50 Million Trees Program

Trees provide habitat for wildlife, help conserve water and soil, moderate local climates by providing shade, lessen the effects of storms, sequester carbon, and provide local economic opportunities. Planting trees is good for biodiversity.

Ontario has committed to planting 50 million trees across the province by the year 2020. Through the "50 Million Tree Program", landowners, governments, and conservation organizations are working together to meet this goal. This program contributes to the United Nations' The Plant for the Planet: Billion Tree Campaign.

Trees Ontario works with Conservation Authorities and local Stewardship Councils to implement tree planting and offers a tree planting subsidy program. Planting agencies help landowners choose the best planting sites and species and allocate funding.

To date, over 3 million trees have been planted throughout Ontario by approximately 450 landowners and 40 planting partners. To get involved visit **ontario.ca/plantatree** or **treesontario.ca**.

Tree planting in Lakefield


Photo: Heather Bickle

Case Study

Protecting Species at Risk in Ontario – The Endangered Species Act

To conserve biodiversity we need to make sure our most vulnerable wildlife, plants, and habitats are protected. An updated **Endangered Species Act, 2007** (ESA) came into effect in 2008 to achieve this goal. The original Act from 1971 was outdated and needed to be changed. The new ESA protects more species and offers greater legal protection for endangered species and their habitat.

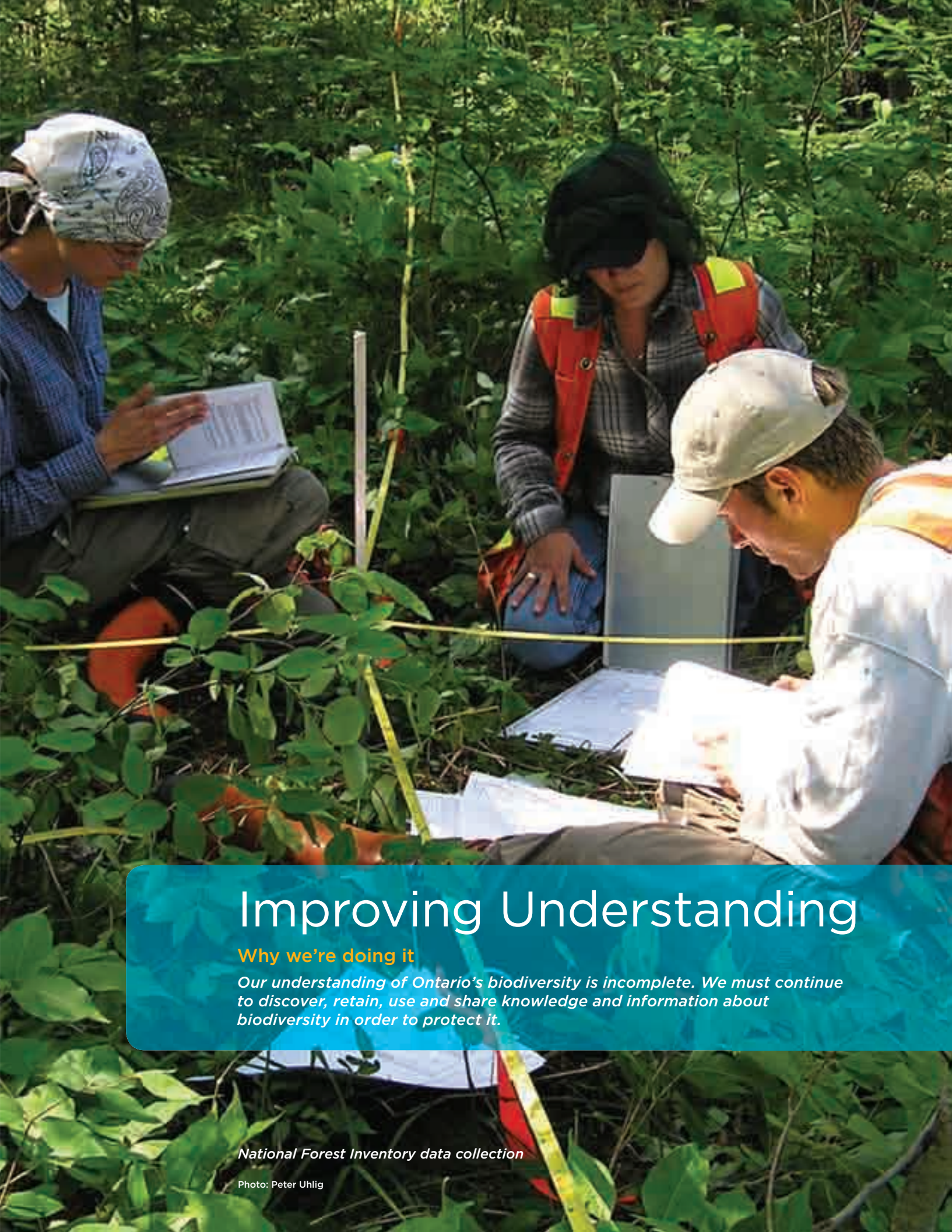
The updated legislation calls for Recovery Strategies and Management Plans. These are created by teams of experts and outline how we will recover and protect our 'at risk" flora and fauna. The new ESA also includes strong enforcement provisions.

The ESA recognizes that individuals and landowners in Ontario have an important role to play in conserving biodiversity. With this updated law, there is greater support for volunteer stewardship efforts. The Species at Risk Stewardship Fund and the Species at Risk Farm Incentive Program encourage landowners, organizations and other individuals to get involved with the conservation of species and habitat in their own backyards and farms.

More information, including the Act, is available at **ontario.ca/speciesatrisk**.

Blanding's Turtle, a species at risk

Photo: OMNR



Improving Understanding

Why we're doing it

Our understanding of Ontario's biodiversity is incomplete. We must continue to discover, retain, use and share knowledge and information about biodiversity in order to protect it.

National Forest Inventory data collection

Photo: Peter Uhlig

Highlights

- Ontario's **Biodiversity Science Forum** promotes science partnerships, highlights the role of science in biodiversity, determines how to best reach our biodiversity goals, and links science and policy.
- **Keeping the Land – A Land Use Strategy for the Whitefeather Forest and Adjacent Areas** (2006) is a community based forest management plan, based on both western science and Traditional Aboriginal Knowledge.
- In 2008/2009 a total of 368 Ontario lakes were monitored under the **Broadscale Monitoring Program** to identify stresses such as invasive species and contaminants, and collect information about species abundance and distribution.
- Ontario Nature is leading an effort to create a new **Ontario Reptile and Amphibian Altas** to improve our knowledge of the distribution and abundance of Ontario's reptiles and amphibians.
- Provincial, federal and U.S. partners work together to monitor, prevent and respond to **White Nose Syndrome**, a fungus that threatens the survival of Ontario's bats.
- In 2008, the Ontario Biodiversity Council published the **Interim Report on Ontario's Biodiversity Strategy**, to provide an overview of the province's ecosystems, the threats to biodiversity and conservation efforts underway.
- NatureServe Canada, in association with Ontario's NHIC produced the reports: **Our Home and Native Land: Canadian Species of Global Conservation Concern** and **Sentinels on the Wing: The Status and Conservation of Butterflies in Canada**.
- OMNR launched a series of **State of Resource Reports** to keep people informed on the health of the province's natural resources and ecosystems. Reports released to date focus on Wolves, Rabies, American Eel, Canada Yew, Lake Sturgeon, Polar Bears and White Pine.
- Ontario is part of a national effort to develop the **Ecosystem Status and Trends Report for Canada** which assesses the health of ecosystems across Canada from a biodiversity perspective. The report will provide information in addition to that published in the State of Ontario's Biodiversity 2010 and is scheduled for release in 2010.

Case Study

Sharing Aboriginal Traditional Knowledge

Sharing Aboriginal traditional knowledge (ATK) can help us to understand and conserve biodiversity. Ed Desson, general manager of the Anishinabek/Ontario Fisheries Resource Centre (A/OFRC), tells this story about the role of Aboriginal traditional knowledge and his experience in Lake Nipigon:

"I have listened to a great deal of talk in the First Nations around Lake Nipigon about fishermen past and present encountering Lake Sturgeon of all ages in various parts of the lake. This talk was the impetus behind the Lake Nipigon study that we did in 2008, where we hired two elders to actually lead us to the fish. We were shocked to find that sturgeon could be captured consistently at all depths. The elders were able to follow the fish through their weekly fall migration and they even knew what would occur during a change in the moon. We captured, tagged and released close to 80 sturgeon of all ages over a four week period. I don't believe this would have been possible without this intimate knowledge of these fish."

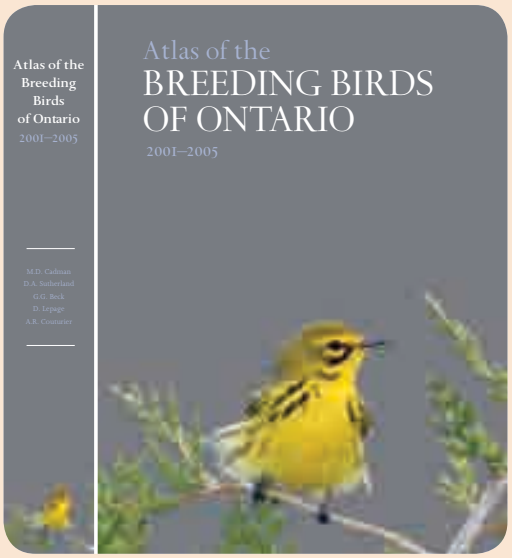
Ed considers the support of community elders to be critical in project design and implementation. He explains that, "with the help of the elders, we were able to get right to the science".

Under Ontario's Endangered Species Act 2007, 2 populations of Lake Sturgeon are listed as threatened species. A recovery strategy is needed to ensure the long term sustainability of the fish. In 2008, the A/OFRC undertook projects to monitor Lake Sturgeon populations to identify critical habitat. To learn more visit **aofrc.org**.

CITIZEN SCIENCE

Citizen scientists are regular people who get involved with monitoring biodiversity. For example, birdwatchers might contribute to volunteer-based bird surveys such as the Ontario Nocturnal Owl Survey, Ontario Breeding Bird Atlas, Christmas Bird Count, Project FeederWatch and more. These volunteers help to paint a clearer picture of biodiversity in our province.

To learn more about becoming a Citizen Scientist contact your local Field Naturalist club, or visit **naturewatch.ca**.



Case Study

Economic Value of Ontario's Biodiversity

It's hard to put a value on biodiversity because it's all around us and is essential to our survival. Forests and wetlands protect us from floods and filter our water. Diverse farmlands provide society with economic benefits beyond food production and greenspace offers us opportunities for recreation, leisure and tourism. This "green infrastructure" supports our economies, communities and health.

It has often been assumed that nature has no economic value unless it is consumed. Understanding the social and economic value of biodiversity as well as its ecological value helps to ensure it is appreciated and protected.

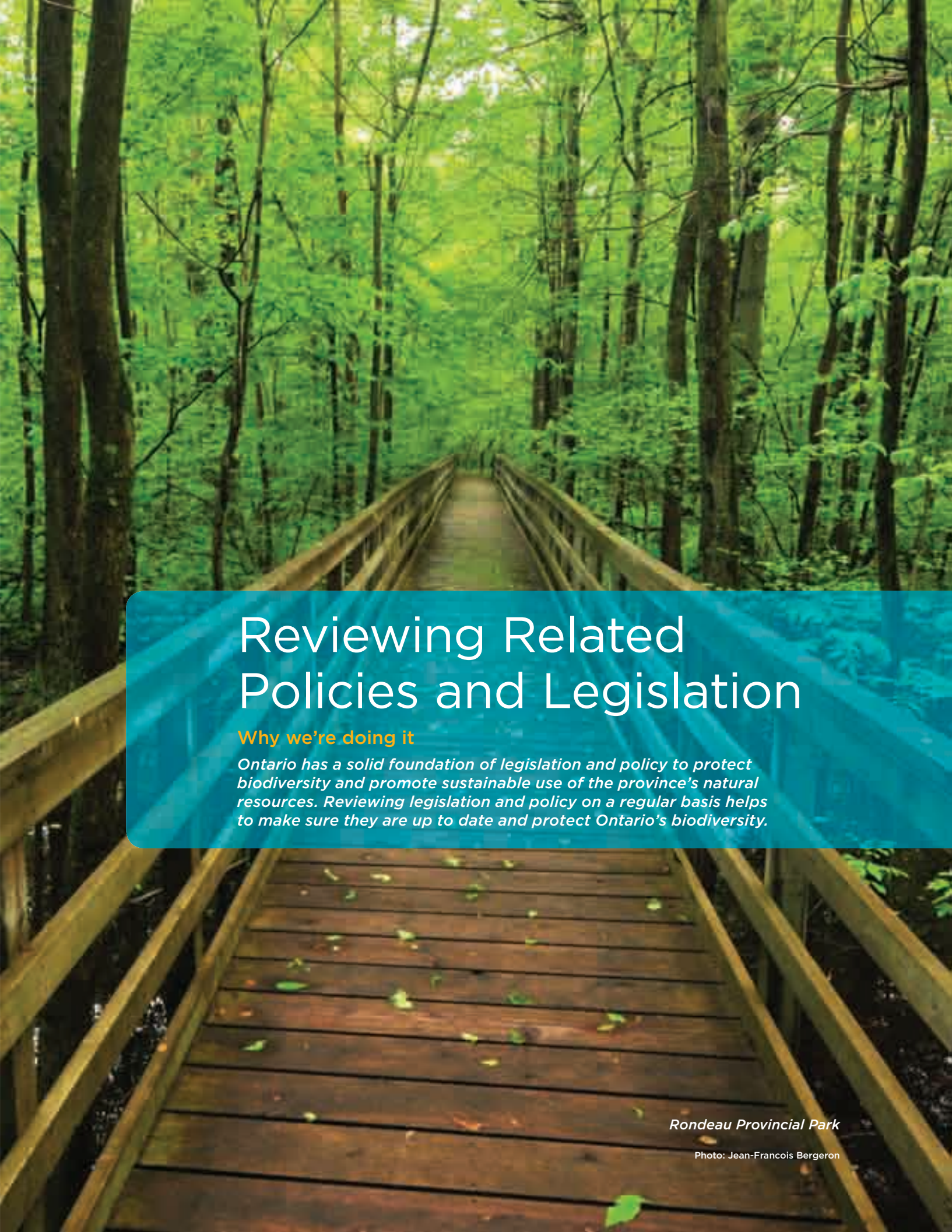
The Nature Count$: Valuing Southern Ontario's Natural Heritage report, which began as part of the Natural Spaces program, explores how southern Ontario's natural areas contribute to our health, communities, and quality of life. It identifies the changing attitudes of Ontarians and how we are making links between our own well-being and the state of our natural resources. The study looks at recent demographic and social changes, and identifies where more research should be done.

The report **Estimating Ecosystem Services in Southern Ontario** builds on Nature Count$ to reveal the economic value of the otherwise priceless benefits provided by Southern Ontario's natural areas. This study identifies 10 different economic benefits provided by 19 types of natural habitats that are mapped across Southern Ontario. The economic value of each benefit was estimated through a variety of means, including the amount of money that people were willing to spend for its protection.

To learn more about these reports visit **mnr.gov.on.ca/en/Business/LUEPS/2ColumnSubPage/279467.html**.

Native trees for sale

Photo: Kate Ballantyne



Reviewing Related Policies and Legislation

Why we're doing it

Ontario has a solid foundation of legislation and policy to protect biodiversity and promote sustainable use of the province's natural resources. Reviewing legislation and policy on a regular basis helps to make sure they are up to date and protect Ontario's biodiversity.

Rondeau Provincial Park

Photo: Jean-Francois Bergeron

Highlights

- Ontario's **Ecological Framework for Recreational Fisheries Management** focuses on managing and monitoring our fisheries, encouraging more public involvement, and regular reporting of the state of Ontario's fisheries.
- The **Ontario Wild Turkey Management Plan (2007)** ensures sustainable management of Ontario's wild turkeys, an important part of Southern Ontario's biodiversity.
- The OMNR established a **VHS Management Zone in 2007** to address the threat of Viral Hemorrhagic Septicemia (VHS), an infectious disease in fish, which includes restrictions on the transport of bait.
- In December 2006, an Act respecting the **Duffins Rouge Agricultural Preserve** (DRAP) was passed, which ensures that all agricultural easements in the preserve are protected in perpetuity. At the same time, complimentary amendments were made to the Conservation Land Act to improve use of conservation easements as a long-term land securement tool.
- The province released its **Lake Simcoe Protection Plan** in 2009, under the authority of the new Lake Simcoe Protection Act. The Plan addresses sustainable development, habitat restoration, and pollution abatement. Most notably, the Plan sets water quality targets, and limits phosphorus discharge into the lake. It also includes provisions for habitat protection and guidelines for preventing the spread of invasive species.

RULES TO FISH BY

Under the **Ontario Fishery Regulation's** new bait rules, it is illegal to dump the contents of a bait bucket into any water or within 30m of water. Live fish, live leeches, salamanders and crayfish are banned from import into the province for use as bait.

Atlantic Salmon

Photo: OMNR

Case Study

Preventing the Spread of Invasive Fish & Plants – Rules & Regulations

Invasive species have a big impact on Ontario's lakes, rivers and streams. They push out Ontario's native species, alter water quality, affect recreational and commercial boating, and pose serious threats to the biodiversity of our aquatic ecosystems. This brings big ecological and economic costs.

Several aquatic invasive species are bought and sold in Ontario's aquarium, bait and live food markets. Instead of ending up in our aquariums or on the dinner plate, they can end up in our water bodies, wrecking havoc on our native species and habitats.

The OMNR, OFAH, and Ontario Streams are working together to monitor invasive species in the aquarium, water garden and live food fish industry.

Since 2006, over 250 presentations have been offered at places such as pet stores and garden centres to raise awareness of the dangers invasive species pose to our native ecosystems.

Ontario's new laws about invasive live food fish species were passed between May 2004 and May 2005. These include the Ontario Fish Licensing Regulation under the Provincial Fish and Wildlife Conservation Act, and the Ontario Fishery Regulations, under the Federal Fisheries Act. These new laws prohibit the buying and selling of certain species of live fish such as Asian Carp, Round Goby, Snakeheads and Ruffe.

Provincial enforcement officers work closely with Fisheries and Oceans Canada, the Canadian Border Services Agency and the Canadian Food Inspection Agency to enforce these rules and prevent the importation of live invasive fish into Ontario. To learn more about invasive fish species in Ontario visit **invadingspecies.com**.

Charting our Progress 2005–2010: Ontario's Biodiversity Strategy

About this table

The following table lists a selection of activities that have taken place to conserve and protect biodiversity in the province over the last 5 years. To build the table, Council polled organizations across the province. Council recognizes that not all activities are captured here but feels that the table is a good representation of the biodiversity conservation actions that have taken place in Ontario in the past 5 years.

This table lists each of the 37 actions outlined in Ontario's Biodiversity Strategy and the activities that have taken place to fulfill them. In some cases, particular projects meet the criteria for more than one action. In these instances they have been listed under the most relevant action.

ENGAGING ONTARIANS	
ACTION #1	PROGRESS
Create an Education and Awareness Task Team that fosters multi-partner collaboration to promote community-based biodiversity education and awareness and environmental citizenship by developing an implementation plan for education and awareness to: • Engage NGOs, industry, government, Aboriginal peoples, communities, rural landowners and the public in the implementation of the Ontario Biodiversity Strategy (e.g., Volunteers for Nature, Pond Watch, Christmas Bird Counts)	Established in 2005, the **Biodiversity Education and Awareness Network** (BEAN), is a volunteer based organization that promotes community-based biodiversity education and awareness. Further information is available on BEAN's website at **biodiversityeducation.ca**. Ontario and BEAN supported the second **World Youth Symposium on Biodiversity** held July 2009 in Ottawa. This event brought together 100 youth from 11 countries to foster youth engagement activities to enhance their understanding of global stewardship, and develop a shared sense of understanding and commitment to the global community through acting locally and thinking globally.

ENGAGING ONTARIANS	
ACTION #1	PROGRESS
• Strengthen education and awareness programs about the importance of biodiversity, causes of biodiversity loss, its protection and sustainable use • Provide guidance and resources to existing non-formal educational programs (e.g., interpretive programs, Ontario Agri-Food Education, Conservation Authorities, Science North, museums, Toronto Zoo, botanical gardens).	The **Healthy Wetlands, Healthy Communities** program funded projects to help people better understand the value of wetlands. Activities included improving public viewing and educational facilities at wetlands in southern Ontario, and restoring wetlands. Ducks Unlimited Canada (DUC) and OMNR work together on this program. The 2008 **Back to Nature Workshop** brought together environmental, government, health and youth organizations to explore the concept of nature-deficit disorder and look at how groups might work together to build capacity to get more children outdoors in Ontario. The Royal Botanical Gardens worked with partners and sponsors to host the event. Many organizations are working to raise our understanding about biodiversity and its importance to human health and well-being. • The Ontario Forestry Association hosted a series of six **Biodiversity Walks** throughout Southern Ontario in 2008. The walks provided participants with information to take back to their own woodlots. • Ontario Power Generation and Ontario Nature have teamed up to host a series of events in the GTA focused on biodiversity – visit **opgbiodivesity.ca**. • In 2009, Toronto's Harbourfront hosted an outdoor photo exhibition called **RESPECT**: A Photo Odyssey Celebrating Canada's Boreal Forest. Science North, in association with many partners, produced the IMAX film **Mysteries of the Great Lakes** to foster a greater appreciation of the world's largest inland sea, its inhabitants and its social and economic importance. **Our World, Ontario**, a video to raise awareness and understanding about biodiversity was released by OMNR in 2010. Artist and naturalist Robert Bateman continues his work to inspire connections between children and nature in the outdoors through his **Get to Know Your Wild Neighbours** program. Operating in Canada and the USA, the Get to Know network includes Ontario cities, businesses, zoos, museums, botanical gardens, BEAN, conservation agencies and groups. To help celebrate International Year of Biodiversity, Get to Know is sponsoring a national series of BioBlitzes on May 22nd, 2010 in national parks (Point Pelee, Pukaskwa and Georgian Bay Islands) and at the Kortright Centre, north of Toronto, **gettoknow.ca**.

ENGAGING ONTARIANS	
ACTION #2	PROGRESS
Encourage further development of curriculum support materials by the Ontario education community to enhance biodiversity education by: • Supplying the Ministry of Education with science information in a useable form • Supporting further professional development activities that assist teacher/educators to incorporate biodiversity messages • Providing youth with opportunities to apply their knowledge in field situations (e.g., 4H Programs, Ontario Stewardship Rangers).	The Ministry of Education created the Working Group on Environmental Education that produced **Shaping our Schools, Shaping our Future: Environmental Education in Ontario Schools**. In 2009, the Ministry of Education released **Acting Today, Shaping Tomorrow** a new policy framework for environmental education in Ontario schools. The policy makes the commitment that environmental education will be part of every child's learning and responsible environmental practices will be fostered across the education system. To support implementation, new environmental education resource guides have been published. Ontario's revised **Science and Technology (2007)** curriculum for grades 1–8 contains new content on biodiversity including the fundamental concepts of systems and interactions and sustainability and stewardship. A Grade 4 resource kit called **Making Waves: Protecting Ontario's Aquatic Habitats** was created by provincial, federal and conservation partners. It aims to familiarize elementary students with concepts of healthy habitats and our role in protecting them from aquatic invasive species. This material was distributed to Ontario teachers in 2007. **Resources for Rethinking** (R4R) website, developed by Learning for a Sustainable Future (LSF) gives educators access to support materials to help teach students about a variety of topics, including sustainability. These materials include information on how to incorporate biodiversity topics across curriculum. R4R also includes **Step Outside – Your Guide to Nature's Events** helping Ontario's teachers bring nature into the classroom throughout the year. Visit **r4r.ca** to learn more. In 2009, the Royal Ontario Museum (ROM) opened the **Schad Gallery of Biodiversity**, a permanent exhibit featuring the world's biodiversity. Special programming in 2010, coinciding with the International Year of Biodiversity, will help raise awareness about the biodiversity in each of Ontario's ecozones. Programming also includes community outreach, workshops, public lectures and teacher professional development focussed on Ontario's biodiversity. Conservation and government partners supported the development of **Our Incredible World** (**incredibleworld.ca**), to provide children with a fun place to learn about the natural world. The website also gives educators resources to teach students about habitat, biodiversity, ecosystems, species at risk, invasive species and other biodiversity related topics. This material supports Ontario's Grade Six Biodiversity topic of the Understanding Life System strand of the curriculum.

ENGAGING ONTARIANS	
ACTION #2	PROGRESS
	In 2008, the Ontario Teachers Federation (OTF) partnered with BEAN, the Ministry of Education and OMNR to launch the OTF **Going Green Teachers' Workshops**. These professional development workshops provide teachers with an opportunity to incorporate the latest environmental education policy framework and initiatives into classroom programs. Participants also discuss various approaches to environmental education and develop partnerships with individuals, organizations, and agencies delivering environmental education programs. The 2008 and 2009 workshops were held in a number of Ontario locations and involved more than 360 teachers. **Envirothon** is a North American environmental education program that gets students outdoors to experience nature. A program of the Ontario Forestry Association, Ontario's Envirothon attracts over 5,000 high school students each year and links directly to Ontario's science and geography courses for grades 9 to 12. Biodiversity was the theme of the 2009 Envirothon and a biodiversity trail with interpretive signs was created at the Tim Hortons Onondaga Farms camp. Visit **ontarioenvirothon.ca**. Over 80 groups of Ontario students took part in field trips for the **Atlantic Salmon Restoration Program**. This program is providing youth with opportunities to learn about the role of restoration and stewardship in conserving Ontario's biodiversity. The **Invasive Species Hit Squad** employs college and university students across Ontario each summer to raise public awareness and understanding about the impact of invasive species and the actions people can take to prevent their spread. Students are employed with OFAH, OMNR, conservation authorities, First Nations and non-government organizations. Funding partners include the Government of Canada's Canada Summer Jobs Program. **Aboriginal Youth Work Exchange Program**. 12 First Nations communities and OMNR work with Aboriginal youth on resource management projects. The program offers hands on experience and job skills training in biodiversity-related field and technical training, Aboriginal Treaty Rights, government policy and Aboriginal entrepreneurship. The Ecosystem Management Technology program at Fleming College in Lindsay requires students to form teams that undertake hands-on projects proposed by conservation organizations. This **Credit For Product** is a course requirement. In 2008 student teams completed two projects for the Victoria Stewardship Council: **A Recreational Map of the Kawarthas** and **Natural Seedling Recruitment to Provincial Tree Planting Targets**.

PROMOTING STEWARDSHIP	
ACTION #3	**PROGRESS**
Enhance and promote private land resource stewardship and biodiversity conservation by: • Establishing a Biodiversity Stewardship Working Group to identify annual stewardship priorities • Communicating what biodiversity conservation means in the context of private land ownership and existing practices • Developing and promoting best management practices for the conservation of biodiversity on agricultural and other private lands • Developing a strategy for the management of problem wildlife in cooperation with the agricultural community • Improving technical assistance and the stewardship support tools available to landowners/farmers where needed (e.g., work sheets, extension notes) • Seeking ways to strengthen existing stewardship organizations (e.g., Ontario Stewardship Councils, Conservation Authorities, the Ontario Heritage Foundation, Land Trusts, NGOs) • Creating recognition programs to profile exemplary stewardship actions by farmers and other landowners.	The **Stewardship Network of Ontario** (SNO) is an informal network of organizations working together to foster communication, partnership, and a strategic approach to stewardship activity in Ontario. Their work is guided by the **Stewardship Strategy for Ontario**. Under Ontario's Biodiversity Strategy, SNO functions as the Biodiversity Stewardship Working Group. For more information, see **ontariostewardshipnetwork.ca**. In 2006, OMNR worked with several conservation organizations to create the **Guide to Stewardship Planning for Natural Areas**, a user-friendly manual to help landowners create sustainable management plans for their properties. The **Federation of Ontario Cottager's Association (FOCA)** continues to bring together Ontario cottage owners, while promoting sustainable waterfront living, environmental stewardship and sound public policy. In 2008, FOCA published **A Shoreline Owners Guide to Healthy Waterfronts** to help cottagers protect features of biodiversity on their properties. Between 2005 and 2010, **Ontario Eastern Habitat Joint Venture (OEHJV)** partners DUC and Wildlife Habitat Canada, with financial support from other OEHJV partners such as the OMNR, OMAFRA and Environment Canada, took part in private landowner stewardship projects to benefit Ontario's biodiversity. For example, in 2008/09, DUC secured 983 ha through voluntary landowner conservation agreements. Enhancements such as buffer establishments, nest box installation, vegetation plantings, and wetland creation were completed on 3,090 ha to increase biodiversity. The **Stewardship Guide for the Lake Huron Coastline, Rural Landowner Stewardship Guide for the Ontario Landscape** and the **Rural Landowner Stewardship Guide for the Lake Huron Watershed** are assessment tools for landowners modeled on the Environmental Farm Plan and developed by a wide variety of stewardship and conservation experts. The overriding goal of the guides is to protect and enhance the quality of the natural environment – both groundwater and surface water such as streams, rivers, ravines, creeks, wetlands and lakes, and the natural landscape features that support these ecosystems. Partners involved include the Huron Stewardship Council, the Stewardship Network of Ontario, Conservation Ontario and the School of Rural Planning and Development at the University of Guelph.

PROMOTING STEWARDSHIP	
ACTION #3	PROGRESS
	DUC's **Wetland Farm Stewardship Incentive Program** offers financial support to Ontario farmers engaged in wetland restoration on their properties (the program was created in consultation with the Ontario Soil and Crop Improvement Association (OSCIA). **The Ontario Wetland Care Program** has provided $1 million in funding, to help Southern Ontario landowners protect and restore wildlife habitat on their properties. This is a partnership between DUC and OMNR. **Ontario's Ministry of Agriculture Food and Rural Affairs (OMAFRA)** publishes a series of Best Management Practices to help Ontario farmers protect soil, water and other natural resources. Recent titles that address biodiversity concerns include, Nutrient Management Planning, Woodlot Management, Establishing Tree Cover and Greenhouse Gas Reduction in Livestock Production Systems. To learn more visit, **www.omafra.gov.on.ca/english/environment/bmp/series.htm#15**. Initiated as a pilot program in 2006 by the provincial and federal governments, the Nature Conservancy of Canada and Wildlife Habitat Canada, the **Landbird Habitat Program** supported the protection, restoration and enhancement of upland bird habitat in Ontario. The program provided financial and technical assistance to private landowners to undertake bird habitat stewardship projects on their properties. Program partners contributed over $600,000 to undertake a total of 78 projects resulting in over 971 ha of habitat being secured or enhanced. With $29,000 from the **Species at Risk Stewardship Fund**, the Ontario Aggregate Resources Corporation is creating a model for grassland restoration for the aggregate industry. This will enable the rehabilitation of sand pits and quarries, for the benefit of grassland species at risk, and habitat. Ten demonstration projects showcased best management practices (BMPs) on selected farms across Ontario under the **Greencover Canada** program 2005-2008. The Ontario Soil and Crop Improvement Association (OSCIA) promoted these BMPs in a brochure that encouraged producers to connect with project leads or participate in tours. The federal and provincial agriculture ministries also hosted a Demonstration Project Workshop in 2007 to promote these best practices. The $628,400 investment supported a variety of on-farm projects that aim to improve water quality and quantity, enhance fish and wildlife habitat, control erosion and reduce greenhouse gases. Buffer strip effectiveness, treatment of tile drain runoff, and direct seeding of trees were among the projects.

PROMOTING STEWARDSHIP	
ACTION #3	PROGRESS
	In 2008 the Ontario government released the **Strategy for Preventing and Managing Human-Wildlife Conflicts in Ontario** and the **Strategy for Preventing and Managing Human-Deer Conflicts in Southern Ontario**. To assist with implementation a stakeholder-based Human-Wildlife Conflict Advisory Group will provide guidance and assistance in addressing conflicts that affect public safety, the economy (including agriculture), biodiversity, and urban areas. The **Canada-Ontario Farm Stewardship Program** (COFSP) supports efforts to prevent agricultural damage from wildlife. **Ontario Stewardship** has guided the development of new products to support private land stewardship including: Landowner Guides for Woodlot Management, Shoreline Living, Constructing and Maintaining a Rural Pond and Controlling Invasive Woodland Plants. Under the **Growing Forward** initiative (formerly under Greencover Canada), the Ontario Soil and Crop Improvement Association and Conservation Ontario provide improved technical assistance to farmers for the adoption of best management practices such as buffer strips, livestock fencing projects alongside watercourses, structural erosion control work next to creeks, and tree shelterbelt plantings. This work was supported by federal funding through Agriculture and Agri-food Canada and by other partners including the Ontario Farm Environment Coalition and Ministry of Agriculture, Food and Rural Affairs. Under the Ontario Stewardship program, the number of **Stewardship Councils** in Ontario has risen from 40 to 46 since 2005. These Councils help to link Ontario landowners and conservation organizations to foster responsible management of Ontario's land. The **Greenlands Challenge** is a program developed by the OMNR and the Nature Conservancy of Canada to provide grants to help secure privately held lands with important natural heritage features. The program is funded by OMNR, who provided over $3 million in grants to the program between 2006 and 2010. These funds helped land trusts, conservation authorities and municipalities secure 3,120 ha of ecologically sensitive land in Ontario.

PROMOTING STEWARDSHIP	
ACTION #3	PROGRESS
	The **Premier's Award** for Agri-Food Innovation Excellence initiated in 2007 includes environmental stewardship and innovation as criteria and has honoured farmers for projects such as turning manure into electricity, composting manure and eliminating runoff; and setting aside land for buffers and shelterbelts. To learn more visit **http://www.omafra.gov.on.ca/english/premier_award/index.html**.
ACTION #4	PROGRESS
Promote the preparation of Environmental Farm Plans and the adoption of best management practices that contribute to biodiversity conservation on Ontario farms through cooperative work among farm organizations, conservation organizations and the federal and Ontario governments by: • Implementing the Canada-Ontario Implementation Agreement under the Agricultural Policy Framework to achieve improvements in biodiversity conservation on Ontario farms • Providing incentives under the Canada-Ontario Farm Stewardship Program and Canada-Ontario Greencover Program to support the adoption of beneficial management practices that contribute to biodiversity conservation.	The agricultural community continues to work together to promote the preparation of **Environmental Farm Plans** (EFP). Since 2005, over 11,000 new plans were accepted under the **Canada-Ontario Environmental Farm Plan** (EFP) making these farms eligible for assistance under the **Canada-Ontario Farm Stewardship Program** (COFSP) (which is a part of the Agricultural Policy Framework (2005-2008) and **Growing Forward (2009-2013)**). To learn more visit **ontariosoilcrop.org**. In 2007, DUC launched the **Wetland Farm Stewardship Incentive Program** in consultation with the Ontario Soil and Crop Improvement Association (OSCIA), the Ontario Farm Environmental Coalition, and the Federal and Provincial governments. DUC provides a 50% cost share top up to qualifying farmers implementing wetland restoration and/or planning beneficial management practices (BMP) through the existing Canada Ontario Farm Stewardship Program. DUC contributes $10,000 for wetland restoration projects and $2,000 for supporting planning activities. Since 2005, over 17,000 on-farm **environmental projects** have been completed with a total investment value of over $243 million, with over 60% of the cost coming from farmers. Over 25% of these projects directly improve biodiversity while others indirectly improve biodiversity. Funding was provided under Canada-Ontario Farm Stewardship Program (COFSP) and, until 2008, Greencover Canada. The **Lake Simcoe Farm Stewardship Program** (LSFSP) was funded as part of the Government of Ontario's commitment to protect and restore the health of Lake Simcoe. The LSFSP provides enhanced funding opportunities to farmers in the watershed to address the pressures facing Lake Simcoe and to contribute to the overall protection of the lake.

PROMOTING STEWARDSHIP	
ACTION #4	PROGRESS
	Created in 2008 to support implementation of Ontario's new Endangered Species Act, the **Species at Risk Farm Incentive Program** is delivered as a top-up program in conjunction with the Canada-Ontario Farm Stewardship Program and Canada-Ontario Greencover Program (now Growing Forward). Partners in this program include the Ontario Environmental Farm Coalition, Ontario Federation of Agriculture, Ontario Soil & Crop Improvement Association, OMARFRA and Agriculture & Agri-Food Canada. In 2008/09, $950,000 funded over 885 projects that support the protection and recovery of species at risk and their habitat on Ontario farms. An additional $800,000 is available for year 2 of the program.
ACTION #5	PROGRESS
Promote the adoption of best practices and environmental management systems by major business sectors to enhance the conservation of biodiversity and the sustainable use of biological resources (e.g. ISO 14000-EMS, Forest Certification).	Between 2005 and 2010, 24,286,140 ha, of the 30,877,700 ha under **Sustainable Forest Licenses** (about 80%) was certified under the Sustainable Forestry Initiative Program (SFI), Forest Stewardship Council (FSC) or Canadian Standards Association Sustainable Forest Management (CSA-SFM). There is increasing awareness within the Canadian business community that biodiversity considerations need to be incorporated in their policies, planning, and decision-making processes. For example, the Real Property Association of Canada commissioned the **Biodiversity and the Canadian Commercial Real Estate Industry (2009)** report that outlines a number of opportunities for the Canadian commercial real estate industry to contribute to biodiversity conservation and restoration, and to be at the forefront of emerging natural capital policies both nationally and internationally. The Mining Association of Canada's (MAC) **Towards Sustainable Mining** initiative includes a commitment to biodiversity conservation. Supporting this commitment, the association has established guiding principles for biodiversity conservation management and has a protocol in place with three biodiversity performance indicators. MAC will begin publicly reporting 2012 results under this initiative in 2013. The **Canadian Business and Biodiversity Secretariat** has been formed to develop case studies, guidance manuals and a business and biodiversity leadership declaration for integrating issues of biodiversity into business operations. Wildlife Habitat Canada is coordinating this effort.

PROMOTING STEWARDSHIP	
ACTION #5	PROGRESS
	Ontario Power Generation (OPG) has a **Biodiversity Policy** that requires issues of biodiversity to be integrated into planning and operational activities through the company's ISO 14001 registered Environmental Management Systems. **Biodiversity Management Plans** have been developed for all of its thermal and nuclear generating stations and its hydroelectric plant groups. Twelve of those sites have also been independently certified and audited by the Wildlife Habitat Council for their biodiversity management plans. OPG was recently given an award by the Wildlife Habitat Council for its history of striving for excellence in biodiversity conservation education and outreach. The schools that make up the Council of Ontario Universities have signed the sustainability pledge, **Ontario Universities: Committed to a Greener World**. This pledge supports the United Nations Decade of Education for Sustainable Development (2005-2014), and declares universities are incorporating environmental sustainability in their operations and policies.
ACTION #6	PROGRESS
Enhance incentives for landowners to practice resource stewardship and the conservation of biodiversity by amending the Assessment Act and updating regulations pertaining to the Conservation Land Tax Incentive program and the Managed Forest Tax Incentive Program, consistent with the government's December 2004 announcement.	The **Managed Forest Tax Incentive Program** (MFTIP) was updated in 2006, and includes changes that better recognize the diversity in Ontario's forests, and increase the efficiency of the program (for example, the terms of a forest plan increased from 5 to 10 years). The number of properties under a MFTIP plan has increased by over 1500 since 2005. By 2008 there were over 11,000 properties participating, covering 728,434 ha. The **Community Conservation Lands** (CCL) category of the Conservation Land Tax Incentive Program (CLTIP) was reinstated for the 2005 tax year following the government's December 2004 announcement. The CCL category allows for additional lands owned by conservation organizations or conservation authorities that contribute to natural heritage protection to receive tax relief. Since reinstatement over 1000 properties have been submitted and approved for CCL, providing for protection of an additional 27,700 ha.
ACTION #7	PROGRESS
Explore opportunities over time to improve incentive programs and to use other mechanisms to support private land stewardship by: • Monitoring and evaluating the effectiveness of existing grants and incentive programs	The **Species at Risk Stewardship Program** was put in place to support Ontario's new Endangered Species Act. The program includes education and outreach, incentive programs to support private landowners and funding for stewardship activities. The fund will provide $18 million to eligible programs from 2007 to 2011.

PROMOTING STEWARDSHIP	
ACTION #7	PROGRESS
• Learning from creative financial and non-financial incentive programs in other jurisdictions for possible application in Ontario (e.g., Safe Harbour Program) • Identifying the potential for partnerships and/or harmonization within and between government and non-government grants and incentive programs.	The **Landbird Habitat Program** is a partnership aimed at conserving Ontario's biodiversity, promoting stewardship, developing partnerships and community involvement in Ontario. The Program provides financial and technical assistance for private landowners undertaking habitat stewardship projects on their properties. It was developed under the auspices of the **North American Bird Conservation Initiative** (NABCI). Since 2007, the program has undertaken 78 landowner projects resulting in over 970 ha of habitat being secured or enhanced. **Alternative Land Use Services** (ALUS) is a new conservation concept based on the idea that responsibility for the environment and resources like air, water and soil is shared by the public and farmers. The Norfolk Federation of Agriculture launched a 3-year pilot project in 2007 to test the concept in Norfolk County. ALUS provides incentives for farmers who practice good farm stewardship and protect the environment. The **Greenbelt Farm Stewardship Program** was an innovative program funded with $2.4 million in grants from the Friends of the Greenbelt Foundation to the Ontario Soil and Crop Improvement Association. This funding was coupled with the Environmental Farm Plan program and the Canada-Ontario Farm Stewardship Program (COFSP) to allow for enhanced funding for farmers with the Greenbelt for on-farm environmental projects. The Environmental Farm Plan program and the associated cost sharing programs are administered through a one-window approach delivered by the **Ontario Farm Environment Coalition** and the **Ontario Soil and Crop Improvement Association**, on behalf of the federal and provincial government. This simple, easy to understand approach, that every farmer in Ontario can access, allows for coordination of most environment programs for farmers.

WORKING TOGETHER	
ACTION #8	PROGRESS
Establish a broad-based Ontario Biodiversity Council to guide implementation of Ontario's Biodiversity Strategy, and to: • Involve the public, Aboriginal peoples and a wide range of stakeholders in identifying a set of annual implementation priorities	The **Ontario Biodiversity Council** is a 22-member organization created under Ontario's Biodiversity Strategy. The Council is made up of volunteers from a broad range of organizations & agencies who guide the implementation of the strategy. In 2008, Council developed the **Interim Report on Ontario's Biodiversity**. This report was an important milestone towards reporting on Ontario's biodiversity in 2010. In 2008, Council initiated a process to develop Ontario's first state of Ontario's biodiversity report and a report on progress in implementing Ontario's Biodiversity Strategy.

WORKING TOGETHER	
ACTION #8	**PROGRESS**
• Coordinate implementation planning in association with other groups (e.g., Education and Awareness Task Team (#1), Biodiversity Stewardship Working Group (#3) and Ontario Biodiversity Science Forum (#28) • Build shared accountability by encouraging improved partnerships and collaboration to advance implementation • Evaluate progress and report on implementation annually, with emphasis on the year's priorities • Lead a five-year review of the strategy and its implementation, and preparation of an updated strategy for 2010-15.	Ontario's Biodiversity Council receives regular updates from the **Biodiversity Education and Awareness Network** (BEAN), **Stewardship Network of Ontario** (SNO) and the **Ontario Biodiversity Science Forum**. In 2009, websites were created for each of these groups to facilitate broader public awareness of activities underway. Council determined that it would not report annually on implementation. The five-year review of Ontario's Biodiversity Strategy is scheduled to begin in the Fall 2010. To learn more about the council visit **ontariobiodiversitycouncil.ca**.
ACTION #9	**PROGRESS**
Strengthen communication and coordination within and between governments (municipal, provincial, federal and international), Aboriginal peoples, NGOs, the agricultural community, the private sector, and other groups on initiatives / issues affecting Ontario's biodiversity, using existing mechanisms where possible.	Ontario's Biodiversity Strategy contributes to national biodiversity conservation efforts under the **Canadian Biodiversity Strategy** (CBS). Federal, provincial and territorial governments implement the CBS through the **Canadian Council of Resource Ministers** (CCRM). The CCRM consists of ministers responsible for forests, wildlife, endangered species, parks, fisheries and aquaculture. In recent years, the CCRM approved the **Biodiversity Outcomes Framework for Canada**, which identifies conservation priorities and ensures all partners are working towards a sustainable Canada. Ontario is involved in a number of CCRM initiatives including the **Ecosystem Status and Trends Report for Canada**, which assesses the health of ecosystems across Canada, scheduled for release in 2010, the **Value of Nature to Canadians Study** to identify the social, cultural, and economic values of biodiversity and ecosystem services to Canada, and the **2010 Engagement Strategy** to help Canadians become aware of and celebrate biodiversity during the International Year of Biodiversity. The City of Greater Sudbury released the **Biodiversity Action Plan for Greater Sudbury**. The action plan was developed with the support and participation of Xstrata Nickel and Vale Inco, and outlines planned re-greening and ecological remediation actions for the community. The plan was developed with significant input from community members and will be implemented through the Greater Sudbury Biodiversity Partnership involving citizens, the education and academic community, businesses and others. To learn more visit **greatersudbury.ca/biodiversity**.

WORKING TOGETHER	
ACTION #9	PROGRESS
	In 2007, **Ontario Eastern Habitat Joint Venture** partners completed work on a new five–year **Implementation Plan**. The Plan identified 50 actions to help achieve North American conservation goals for wetlands and migratory birds, especially waterfowl. The new plan renewed the Joint Ventures commitment to waterfowl and wetland conservation in Ontario and made an important step towards integrating priorities and conservation actions for other bird planning initiatives, advancing efforts to establish a truly coordinated approach to bird conservation in the province. In 2005, collaborating government and non-governmental partners launched a third **Great Lakes Wetlands Conservation Action Plan** which outlined a series of milestones and conservation strategies focusing on important issues such as wetland monitoring, functions of wetland ecological goods and services, biodiversity and species at risk. **Great Lakes Conservation Blueprint for Terrestrial and Aquatic Biodiversity (2005)** outlines the methods and results of an ecoregional assessment of the terrestrial and aquatic biodiversity of the Canadian portion of the Great Lakes ecoregion. Partners include Nature Conservancy of Canada and the OMNR. OMNR, in partnership with Nature Conservancy of Canada and The Nature Conservancy produced a comprehensive international spatial database of Great Lakes islands and their associated biodiversity values, threats and conservation status. An ecologically-based analysis of this information identified islands within the Great Lakes that are the highest priority for conservation action. **Islands of Life: A Biodiversity and Conservation Atlas of the Great Lakes Islands** summarizes this information and will be available in 2010. Eighteen conservation partners (U.S. state, federal and provincial agencies, First Nations, conservation groups) in the Lake Huron Basin led the development of **Lake Huron Biodiversity Conservation Strategy, 2010**. **The Beautiful Lake: A Binational Biodiversity Conservation Strategy for Lake Ontario (2009)** is a plan for conserving and restoring the biodiversity of Lake Ontario, its coastal wetlands, islands and tributaries. The Strategy reflects the input of more than 150 experts and 53 agencies from Canada and the United States, which included The Nature Conservancy, Nature Conservancy Canada, universities, provincial and state government agencies, and conservation organizations.

WORKING TOGETHER	
ACTION #9	PROGRESS
	As part Ontario's new Ecological Approach to Fisheries Management, several **Fisheries Advisory Councils** were created. Councils are made up of Aboriginal communities and conservation organizations and provide advice to the OMNR on fisheries management within their zone. In 2007, the **FMZ 17 Fisheries Advisory Council** was initiated as one of three pilot projects. The Council consists of various local stakeholders including First Nations, the OFAH, the Ontario Chinese Anglers Association, Muskies Canada, the Ontario B.A.S.S. Federation Nation, Peterborough Field Naturalists, FOCA and others. With input from the Council, the OMNR has created a **Fisheries Management Plan** for FMZ 17. The plan addresses the threats from invasive species and fish pathogens, and identifies approaches for managing "at risk" fish species within the zone. OMNR's Peterborough District is leading the development of a management plan for the **Brighton Wildlife Management Area** in consultation with a public advisory committee. Biodiversity values will be recognized in the plan. OMNR has worked with Conservation Authorities on the development of **Watershed Plans** and **Watershed-Based Fisheries Management Plans**, specifically for the Cobourg and Ganaraska watersheds. The **Species at Risk Advisory Committee (SARAC)** was established under the Endangered Species Act, 2007, which came into effect on June 30, 2008. The committee is an independent body that advises the Minister of Natural Resources on policy development and implementation, as well as public engagement, related to the protection and recovery of species at risk. The first **Great Lakes Summit** was held in 2009 and encouraged partners to work together on ecological and economic planning in the Great Lakes regions. The province of Ontario and the Great Lakes and St. Lawrence Cities Initiative organized the event, where mayors from the municipalities in the Great Lakes Basins presented their report **At the Shoreline: A Mayors' Collaborative Action Plan to protect the Great Lakes**.

WORKING TOGETHER	
ACTION #9	PROGRESS
	A 38-kilometre strip of land along Highway 40 in southwestern Ontario has been naturalized thanks to the Ministry of Transportation (MTO), OMNR, and the Rural Lambton Stewardship Network (RSLN) as part of the **Highway 40 Prairie Grass Project**. The goal is to plant 52 ha of native species of tallgrass, trees, wildflowers and approximately 26,000 berry and seed producing wildlife shrubs. Along with providing habitat and a wildlife corridor, the plantings also help to reduce erosion, lower maintenance costs for weed control, and provide a living snow fence. Other partners in this project include OPG, St. Clair Regional Conservation Authority and the Great Lakes Sustainability Fund. In June 2008 the MTO made a corporate commitment to develop a **sustainability strategy**. The goal of the strategy is to integrate sustainability into MTO programs, policies, internal operations and decision making processes.

INTEGRATING BIODIVERSITY CONSERVATION INTO LAND USE PLANNING	
ACTION #10	PROGRESS
Enact and implement a legislative framework that will guide the preparation of growth plans in Ontario to enable decisions about growth to be made in ways that sustain a robust economy, build strong communities and promote a healthy environment and a culture of conservation.	The **Places to Grow Act** was passed in 2005 and helps Ontario plan for growth and development in a coordinated and strategic way. The Act makes sure that growth plans reflect the needs, strengths and opportunities of the communities involved, and promotes growth that balances the needs of the economy with the environment. Under this Act, the **Growth Plan for the Greater Golden Horseshoe** was released in 2006 and a **Proposed Growth Plan for Northern Ontario** was released in 2009.
ACTION #11	PROGRESS
Implement the Greenbelt Protection Act and its related greenbelt plan to enhance the conservation of biodiversity by: • Generally protecting greenspaces and farmland within the Greenbelt's Protected Countryside area • Identifying and protecting a Natural Heritage System, including Key Natural Heritage Features and Key Hydrologic Features	**The Greenbelt Act** received royal assent in 2005. The greenbelt protects 728,434 ha including the land protected by the Niagara Escarpment Plan (NEP) and the Oak Ridges Moraine Conservation Plan (ORMCP). In addition to protecting the headwaters of major watersheds not included in the Niagara Escarpment or the Oak Ridges Morraine, the Greenbelt's natural heritage and water resource system is about 217,000 ha. The Greenbelt also protects about 40,468 ha of Niagara Peninsula tender fruit and grape specialty areas and the entire Holland Marsh specialty crop area of over 6,000 ha. Ministry of Municipal Affairs and Housing (MMAH) is leading an inter-ministry team to develop performance measures for monitoring the effectiveness of the **Greenbelt Plan** in preparation for the Plan's ten-year review in 2015. The team is developing a single monitoring approach using performance measures for the entire Greenbelt Area, including the ORMCP and the NEP areas.

INTEGRATING BIODIVERSITY CONSERVATION INTO LAND USE PLANNING	
ACTION #11	PROGRESS
• Preventing the expansion of settlement areas within the Natural Heritage System and Specialty Crop areas • Supporting connectivity within the Natural Heritage System and between key features.	**Growing the Greenbelt** - Criteria were put in place by MMAH to evaluate voluntary requests from regions, counties and single-tier municipalities to grow the Greenbelt. MMAH will consider such requests provided the proposal addresses specific criteria, including identifying the relationship between the existing Greenbelt system and the system within the proposed expansion area. Should a municipality address all of the criteria, the Minister may initiate a process to amend the Greenbelt Plan pursuant to the **Greenbelt Act, 2005**. The Lieutenant Governor is the final approval authority for an amendment. **Friends of the Greenbelt Foundation** is a non-profit charitable corporation, independent from government with an initial one-time start up provincial grant of $25 million. The Foundation's objectives are to fund Greenbelt supportive activities/programs such as: research, public education, land stewardship, promotion of agriculture and viniculture for the public good. **Greenbelt Council** is a provincial advisory agency established under the *Greenbelt Act, 2005* to provide the Minister of Municipal Affairs and Housing with advice on the Greenbelt. In 2006, Ontario amended the **Greenbelt Transition Regulation (O.Reg. 61/05)** to protect the crucial headwaters of the Rouge River watershed. This amendment added 8,060 ha of the Rouge River to the Greenbelt Act. The Greenbelt Plan does not permit settlement area expansion to extend into any Natural Heritage System or into Specialty Crop Areas. The Greenbelt Plan sets out policies to provide for the connectivity between key natural heritage features and key hydrologic features.
ACTION #12	PROGRESS
Implement the 2005 Provincial Policy Statement under the Planning Act to ensure effective direction to promote managed growth, sustainable development, a strong economy and a healthy environment.	The **Provincial Policy Statement**, 2005 (PPS) came into effect March 1, 2005 and contains policy direction to maintain, improve or restore the biodiversity of natural heritage systems; protect significant natural features and areas for the long term; and other policies. The Planning Act requires that all decisions affecting planning matters shall be consistent with the PPS. Performance indicators for the PPS have been finalized. A review of the PPS was launched on March 1, 2010 to determine if any revisions to the policies are needed.

INTEGRATING BIODIVERSITY CONSERVATION INTO LAND USE PLANNING	
ACTION #13	PROGRESS
Update provincial guidelines that encourage the enhanced integration of the conservation of biodiversity (including related water quality measures) into municipal land use planning decisions, including the guidelines for "Significant Habitat" and "Natural Heritage" for municipal planning to address gaps and/or inconsistencies.	The **Natural Heritage Reference Manual** (previously issued in 1999) has been updated through a process that included consultation with planning practitioners from various organizations. The **Significant Wildlife Habitat Decision Support System** is also being reviewed and updated by the OMNR.
ACTION #14	PROGRESS
Improve public, private and NGO **access to available biodiversity information** (e.g., species at risk, natural heritage values) and technical guidelines to inform land use decisions (e.g., Source Water Protection Plans, Watershed Plans, and Municipal Official Plans).	The **Ontario Geospatial Data Exchange** allows non-profit groups, Aboriginal communities, schools and government agencies to share geographic information. It is now available free of charge, to allow better access to maps and other information that supports sustainable land use planning. This is a program of Land Information Ontario (LIO), a section of the OMNR. **The Great Lakes Conservation Blueprints for Terrestrial and Aquatic Biodiversity** (2005) help guide conservation efforts to further sustain and enhance terrestrial and freshwater biodiversity in Ontario. The Nature Conservancy Canada and OMNR worked closely on this project. Blueprint data is available online to OGDE members. Conservation agencies, municipalities and other organizations have downloaded information more than 660 times. In 2009, the online **Biodiversity Explorer** was released by Ontario's Natural Heritage Information Centre (NHIC), making it easier to access information about Ontario's species of conservation concern, wildlife concentration areas, plant communities and invasive species. **NatureServe Canada** is a network of 8 conservation data centres, including NHIC, that provides scientific information about plants, wildlife and ecosystems of Canada to a wide range of people and organizations: conservation groups, governments, companies, schools, and members of the public. This information helps resource managers find the most accurate, current information on Canada's biodiversity, and is vital to sound conservation and planning. It is part of the international NatureServe network.

INTEGRATING BIODIVERSITY CONSERVATION INTO LAND USE PLANNING	
ACTION #14	PROGRESS
	Ontario information about tracked species maintained by the Natural Heritage Information Centre was used to produce **Wild Species 2005: The General Status of Species in Canada**. Work is underway for Ontario to report again in 2010. Reports are available online at **wildspecies.ca**. Conservation Ontario has created a website to provide information on **Source Protection Planning**. To learn more visit **sourcewaterinfo.on.ca**.

PREVENTING LOSS	
ACTION #15	PROGRESS
Reduce the impact of pollution on biodiversity by implementing Ontario's plans for clean air, land and water through initiatives such as Ontario's Clean Air Action Plan, Nutrient Management, watershed-based Source Water Protection and actions under the Canada-Ontario Agreement for Great Lakes Water Quality.	The **Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem** (COA) was renewed in 2007. Under COA, 155 projects across the Great Lakes Basin focus on protecting and restoring Great Lakes aquatic habitats by rehabilitating native fish and wildlife species, helping to restore fish and wildlife populations and monitoring their recovery in environmental hotspots "Areas of Concern", implementing An Invasive Alien Species Strategy for Canada: A Canadian Action Plan to Address the Threat of Aquatic Invasive Species, and supporting actions that encourage and enhance sustainable living within the basin. Over 220 partners work together on these projects (federal/provincial/municipal governments in Canada and the U.S., Aboriginal communities, conservation authorities, academia, landowners). Since 2007, the **Clean Air Resolution** has required that all gasoline sold in the province contain an average of 5% ethanol, reducing greenhouse gas emissions and improving air quality. **Green Energy Act** became law in 2009, and encourages and supports renewable energy development in Ontario. Establishment of the **Nutrient Management Science-Based Standards Committee** will develop measures that will build on nutrient management principles, protect drinking water, and not place undue burden on the agriculture industry. Ontario's agriculture sector continues many activities on nutrient management. Ongoing training on following the Nutrient Management Act (2002) along with approvals and technical assistance is provided by OMAFRA. Between 2005 and 2008 almost 4,500 nutrient management Best Management Practises projects were implemented in Ontario.

PREVENTING LOSS	
ACTION #15	PROGRESS
	Funding for Green Research Initiatives was announced in 2007 with $2.5 million in funding. The **Toxics Reduction Act, 2009** is the cornerstone of Ontario's Toxics Reduction Strategy. The goal of the Strategy is to help protect the health and environment of Ontarians by reducing toxic substances in air, land, water and consumer products while fostering the green economy. **Ontario's Climate Change Action Plan** (2007) includes a number of measures to fight climate change. The plan calls for the reduction of greenhouse gases, investment in public transit, renewable energy, "green" technology and jobs, as well as the planting of 50 million trees throughout Ontario. The MTO released the **High Occupancy Vehicle (HOV) Network Plan** to encourage car-pooling, transit use and a reduction in traffic congestion. In 2005, the province's first High Occupancy Vehicle lanes were opened. Ontario implemented a new cosmetic pesticide ban under the **Pesticides Act** in 2009. The ban helps reduce pollution and protect the environment from toxic chemicals. Exceptions apply for natural resource management activities associated with invasive species and species at risk. More than 125,000 kilograms of old and unwanted pesticides and animal health products were collected from Ontario farms during CropLife Canada's **CleanFARMS** agricultural waste collection campaign. More than 1,000 farmers dropped off potentially hazardous materials for safe disposal, acting as environmental stewards and helping to prevent land and water pollution from these unwanted materials. The program was coordinated by AGCare with financial support from CropLife Canada, OMAFRA through the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem and the Canadian Animal Health Institute. Other project partners included Ontario Farm Animal Council, Ontario Veterinary Medical Association and Ontario Agri Business Association and participating agricultural retail outlets which served as collection points.

PREVENTING LOSS	
ACTION #16	PROGRESS
Enact and implement source water protection legislation to both protect water quality and quantity, and enhance the conservation of biodiversity.	The **Clean Water Act** came into law in 2007 to protect drinking water at its source - our lakes, rivers, streams and underground aquifers. The Act requires communities to undertake scientific assessment of their drinking water sources and then create watershed based **Source Water Protection Plans** to address the risks and threats to water quality, quantity and offer local strategies to ensure clean drinking water. Since 2005, the Ministry of Environment, and OMNR have contributed over $130 million to Conservation Authorities and municipalities to develop comprehensive watershed mapping, water budgets, surface and groundwater models and public engagement. Since 2009, the program also requires climate change to be addressed in local plans. Since 2006, **The Ontario Drinking Water Stewardship Program**, established under the Clean Water Act, has provided financial assistance for measures that help protect Ontario's drinking water sources, including, education and outreach, well decommissioning and upgrades, septic systems, runoff and erosion control and pollution prevention reviews. The **Water Quality in Ontario Report** released in 2009 will help protect the Great Lakes and Lake Simcoe, reducing toxics and combating climate change. In December 2005, Ontario, Quebec and the eight Great Lakes states signed the **Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement**. This agreement implements the commitments of the 1985 Great Lakes Charter and the 2001 Great Lakes Charter Annex to further the protection and conservation of the waters of the Great Lakes Basin and respond to increased concern about bulk water exports and diversions of water from the Basin. The **Safeguarding and Sustaining Ontario's Water Act**, 2007, elevated Ontario's regulated ban on water transfers out of Ontario's three major water basins (Great Lakes – St. Lawrence, Nelson River, and Hudson Bay) to legislation. It also mandates charges for commercial and industrial users for the water they take and use.

PREVENTING LOSS	
ACTION #17	**PROGRESS**
Complete the Canadian Alien Invasive Species Action Plan (under the Canadian Alien Invasive Species Strategy) and implement the action plan in Ontario by (but not limited to): • Preventing introductions of invasive species through the identification and management of high risk pathways (e.g., ballast water, shipping containers, nurseries), and bans on high risk species (e.g., Asian Carp) • Improving capability to assess risks of invasions • Building capability to quarantine where necessary • Enhancing early detection capacity, especially in high risk areas • Taking rapid action to eradicate invasive species • Limiting the spread/impacts of invasive species that cannot be eradicated • Communication and education.	The Ontario and Canadian governments have provided funding to create an **Invasive Species Centre** at the Great Lakes Forestry Centre in Sault Ste. Marie. The Centre is dedicated to combating invasive species through research, early detection and creation of response plans to protect our native ecosystems from species such as the Emerald Ash Borer, and Sea Lamprey. Supporting this new centre, Algoma University and OMNR have jointly funded an **Invasive Species Research Chair** at Algoma's Invasive Species Research Institute. To address the problem with invasive species spreading through commercial baitfish operations the OMNR, OFAH, and the Bait Association of Ontario worked closely to develop a **Hazard Analysis and Critical Control Point (HACCP)** program for commercial bait licence holders in Ontario. This program is intended to reduce risks associated with the bait industry through training in AIS identification and the development of a HACCP Plan for each commercial bait licence. Ontario's Conservation Officers inspect facilities to ensure licence conditions are being met. This program began in 2006, and by 2009, HACCP training had been delivered throughout the province. **The Aquatic Invasive Species Complete Prevention Plan** is a bi-national effort that proposes a range of management strategies (regulation, collaboration, monitoring and education) to keep new invasive species from entering Lake Superior and its basin. The draft plan was released in December 2009. Ontario is an active member and supporter of the **Canadian Aquatic Invasive Species Network** (CAISN), a national group of specialists created to examine and identify existing invasions with the goal to predict and prevent new aquatic invasive species from harming Canada's aquatic ecosystems. Visit **caisn.ca**. **Viral Hemorrhagic Septicemia (VHS) Management Actions**: A zone concept has been implemented to prevent the spread of VHS in the Great Lakes basin. Regulatory controls were created to prevent the movement or spread of the virus to virus-free zones.

PREVENTING LOSS	
ACTION #17	PROGRESS
	The **Invading Species Awareness Program** is a partnership between the Ontario Federation of Anglers and Hunters and OMNR. The program aims to raise awareness about aquatic and terrestrial invasive species through the production and distribution of information products including pamphlets, identification cards, videos, paid service announcements, educational programs for schools, etc. In 2008, the program added **Rusty Crayfish Monitoring Protocol** to the list of efforts at monitoring and preventing the spread of invasive species. The program also includes the **Invading Species Hotline** and website **invadingspecies.com** to encourage members of the public to report, by phone or online, sightings of invasive species in Ontario. **The Field Guide to Aquatic Invasive Species** was created in 2008 to help natural resource professionals identify, collect and report aquatic invasive fish, plants, algae and invertebrates. Funding for this guide came from Environment Canada's Invasive Alien Species Partnership Program, the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, and the OMNR. The Guide is now in its third edition, and is updated as new invasive species are detected and old ones expand their distributions. OMNR led a team to eradicate **Water Soldier** (*Stratiotes aloides*) from the Trent River. Water Soldier is a new to Ontario aquatic invasive plant recently discovered in the Trent River. OMNR is involved in planning the response to the invasive **Kudzu Vine** (*Pueraria montana*). OMNR has contributed to the development of the Fisheries and Oceans Canada's (DFO) A Canadian **Rapid Response Framework for AIS**. **A Rapid Response Framework for Aquatic Invasive Species in Ontario** and **A Practical Guide to Rapid Response Against Invasive Fish and Aquatic Plants in Ontario** are being developed by the OMNR. The OMNR works with Ontario partners and the Government of Quebec to respond to **Water Chestnut** *(Trapa natans)* infestation in the Ottawa River at Voyageur Provincial Park. OMNR initiated a project in the Niagara area to remove **European Common Reed** (*Phragmites australis subsp australis*) from a seepage area in the vicinity of Allegheny Mountain Dusky Salamander (*Desmognathus ochrophaeus*) habitat, an endangered species in Ontario.

PREVENTING LOSS	
ACTION #17	PROGRESS
	OMNR's Lake Erie Management Unit is leading a **Phragmites Management Program** to develop best management practices (BMPs) for European phragmites control and management in Ontario, communicating those BMPs, and has managed control sites in Rondeau Bay, St Clair Wildlife Area and Long Point Bay to demonstrate benefits of controlling phragmites to restore natural habitat. Ontario's **Conservation Officers** deliver community outreach that includes invasive species awareness. The **Ontario Invasive Plant Council** (OIPC) was formed in 2007 and is a network of over 600 individuals. The Council addresses the growing threat of invasive plants and provides leadership and expertise related to their management. Further information is available on OIPC's website **ontarioinvasiveplants.ca**. The **Landowner's Guide to Controlling Invasive Woodland Plants** was produced with funding from various sources and led by the Kawartha Conservation / Victoria Stewardship Council. The guide is available online via the Ontario Invasive Plant Council website.
ACTION #18	PROGRESS
Review and update Ontario species at risk legislation to provide broader protection for species at risk and their habitats, and to include requirements for recovery planning, assessment, reporting and enforcement.	In 2008, a new **Endangered Species Act** (ESA) came into effect in Ontario. The legislation protects a greater number of species at risk, includes habitat protection, and calls for "Recovery Strategies" and "Management Plans" to help safeguard Ontario's species at risk. Under the new ESA, two committees have been established. The **Species at Risk Advisory Committee** (SARAC) provides expertise and advice on the protection and recovery of species at risk. The **Committee on the Status of Species at Risk in Ontario** (COSSARO) is responsible for assessing and classifying the status of species that may be at risk.

PREVENTING LOSS	
ACTION #18	PROGRESS
	Species at Risk Stewardship Fund provides $18 million to help Ontarians engage in protection and recovery. Under this fund, projects associated with education and outreach, recovery actions, and surveys, inventory and monitoring are eligible to receive funding. Since 2007, this funding has supported over 300 projects. **Species at Risk Research Fund** is a partnership between the World Wildlife Fund Canada and the OMNR who provided over $400,000 in 2008 for science based research projects to improve our understanding and ability to help recover "at risk" species.
ACTION #19	PROGRESS
Implement the National Accord for the Protection of Species at Risk and the associated framework in Ontario by working in partnership with private landowners, municipalities, conservation groups and business sectors to: • Protect species at risk and their habitats • Prepare and implement recovery plans in a timely fashion (multi-species/ecosystem-based where possible) • Participate in Canadian Endangered Species Conservation Council.	In 2008, Ontario closed recreational fishing for **Lake Sturgeon**, in areas where populations are threatened to help support the recovery of the species. The Forest Gene Conservation Association released the **Butternut Tree – A Landowner's Resource Guide** to provide more detailed information for landowners who want to plant or manage butternut trees, which is a species at risk in Ontario. **Bring Back the Salmon Lake Ontario Recovery Action Plan for Atlantic Salmon** was launched in 2006 and will continue until 2010 to restore self-sustaining populations of Atlantic Salmon to Lake Ontario and its tributaries (10–15 years) through stewardship projects. Partners include the Government of Ontario, Conservation Ontario, Fleming College, Trees Ontario, Greenbelt Foundation, Fishing Forever, Pioneer, Credit Valley Conservation, Ganaraska Conservation, CSIA, WFN, the LCBO, OFAH, Banrock Station Wines and Conservation Halton. To learn more visit **bringbackthesalmon.ca**. **Salmon River Bridge Rehabilitation on Highway 401**. The Ministry of Transportation (MTO) designed and implemented a fish habitat compensation plan within Salmon River to create new habitat for the Channel Darter, a threatened species of fish. MTO worked closely with Conservation Authorities, Fisheries and Oceans Canada and private landowners to optimize fisheries enhancement design to mitigate fisheries impacts from bridge construction.

PREVENTING LOSS	
ACTION #19	PROGRESS
	Moon River Walleye and Lake Sturgeon Spawning Habitat Rehabilitation: OPG helped create 1500 square metres of spawning shoal to enhance walleye and Lake Sturgeon habitat. OPG's Action Plan for the **Recovery of American Eel**, 2006-2011 in Lake Ontario and Upper St. Lawrence River includes trapping and transporting mature eels, stocking of young eels, and monitoring the effectiveness of these measures. **Species at Risk Recovery Teams**, are made up of experts from government, scientists, policy makers, and the public who are working together to benefit the province's most vulnerable species. There are 56 Recovery Teams working on plans for Ontario's species at risk; developing strategies, involving landowners and other members of the public to protect and recover Ontario's at risk plants, birds, reptiles, mammals and insects. Since 2007, 13 draft **Recovery Strategies** have been created for Ontario's species at risk, including: Wood Turtle, Peregrine Falcon, Jefferson Salamander, Eastern Prairie Fringed-orchid, Barn Owl, American Badger, Eastern Flowering Dogwood, and Deerberry. The **Woodland Caribou Recovery Strategy** was finalized in 2008. These strategies are all created by teams of experts, using scientific, community and Aboriginal Ecological Knowledge. Ontario is an active member of the **Canadian Endangered Species Conservation Council** (CESCC). Ontario's Natural Heritage Information Centre supports the work of the CESCC by contributing rare species data for compilation in the General Status of Species in Canada reports. To learn more visit **wildspecies.ca**. OMAFRA works with OMNR, Environment Canada and farm and conservation organization on species at risk issues. Recently, OMAFRA worked with Environment Canada on a workshop to assist in development of an action plan for **grassland bird species at risk** under the federal Species at Risk Act.

PREVENTING LOSS	
ACTION #20	PROGRESS
Strengthen institutions and partnership arrangements related to the conservation (including ex-situ) of genetic diversity (e.g., Forest Gene Conservation Association, Seeds of Diversity, Rare Breeds Canada, Toronto Zoo and Trent University DNA Cluster Partnership).	**The Ontario Tree Seed Facility** in Angus is a state of the art facility that collects seeds from native trees, supplies nurseries, forestry companies and the public with native seed sources. It also maintains a bank of native tree species from across the province, and supplies seeds for reforestation, contributing to the genetic health of Ontario's forests. In 2004, Trees Ontario and the City of Toronto developed the **Tree Seed Diversity** pilot project. The project uses locally adapted seeds from native species, for urban tree plantings. This increases the genetic diversity and the health of Toronto's urban forests. **Forest Gene Conservation Association** (FGCA) administers Ontario's Natural Selections Program, a seed source certification program dedicated to increasing the supply of locally adapted seed and stock of native woody species for planting in Ontario. FGCA hosts Seed Collector workshops and is contributing to Butternut recovery efforts in the province. The Ontario Government provided $5 million in 2008, to the University of Guelph's Canadian Centre for DNA Barcoding, a member of the **Consortium for the Barcode of Life** (CBOL). The CBOL initiative is creating the world's largest reference library of DNA samples, representing over 500,000 species. The CBOL will assist in biodiversity conservation and monitoring, pest and disease management and invasive species control.
ACTION #21	PROGRESS
Support the development of a national approach on access to and the sharing of benefits from genetic resources, working with the federal government, other provinces and territories, Aboriginal peoples and interested stakeholders.	Ontario is involved with the development of a national policy framework for **Access and Benefit Sharing of Genetic Resources** (ABS). A federal/provincial/territorial Working Group is examining the issue of ABS policy in Canada. The working group is led by Environment Canada, with guidance from the Canadian Council of Resource Ministers. The Task Group identified a series of options on an ABS policy framework for Canada. The Northern Ontario School of Medicine (NOSM), through its **Boreal Bioprospecting Initiative** (BBI), launched a collaborative research program which aims to derive new medicinal compounds from natural sources found throughout northern Ontario. BBI is a joint initiative involving a number of federal, provincial, academic, industrial and community groups. The NOSM includes the faculties of medicine at Lakehead University and Laurentian University.

PREVENTING LOSS	
ACTION #22	**PROGRESS**
Seek opportunities to establish protected areas that contribute to the completion of a well-designed system of protected areas representative of Ontario's ecosystems. • In southern Ontario, through stewardship partnerships, securing important private and public properties, and review public lands to determine the potential to establish, and connect where possible, representative protected areas • In the Ontario Shield Ecozone, through the Room To Grow process under the Ontario Forest Accord • In the Hudson Bay Lowlands and northern boreal region, through cooperative planning approaches such as the Northern Boreal Initiative • In the Great Lakes, through international, national and provincial agreements and legislation.	45 new **Conservation Reserves** (450,156 ha) and 14 new **Provincial Parks** (52,384 ha) have been created in Ontario since 2005. There have also been additions made to 16 existing Provincial Parks, increasing their area by a total of 167,677 ha. In 2007, the Government of Canada invested $225 million in the new **Natural Areas Conservation**. The national program helps secure ecologically sensitive lands to ensure their protection and works with Nature Conservancy Canada, Ducks Unlimited Canada, and other non-government conservation organizations. Between 2005 and 2010, **Ontario Eastern Habitat Joint Venture (OEHJV)** partners DUC and Wildlife Habitat Canada, with financial support from other OEHJV partners such as the OMNR, OMAFRA and Environment Canada, implemented numerous private landowner stewardship projects to benefit Ontario's biodiversity. For example, in fiscal year 2008/09, Ducks Unlimited Canada secured 983 ha through voluntary landowner conservation agreements and enhanced 3,090 ha to increase biodiversity values on private land. Examples of land acquisition activities include the **St. Williams Conservation Reserve** and **Bickford Oak Woods Conservation Reserve**. OMNR has published **Ontario's Natural Heritage Areas: Their Description and Relationship to the IUCN Protected Areas Classification System (A Provincial Assessment) (2009)** as a complete tally of areas in Ontario that contribute to biodiversity protection, whether as fully protected areas (national or provincial parks, conservation reserves and wilderness areas) or other natural heritage areas (e.g., municipal parks, conservation areas, private land areas).

PREVENTING LOSS	
ACTION #22	PROGRESS
	In 2009, partners Nature Conservancy of Canada, federal and provincial governments, with York Region and Oak Ridges Moraine Foundation and private owners worked together to protect ecologically significant old growth forest in the **Happy Valley Forest**. **Nature Conservancy of Canada (NCC)** has protected many areas such as the Carden Alvar, Eastern Georgian Bay Coast, and sections of Northern Bruce Peninsula since 2005 in partnership with numerous local and provincial partners. **Manitoba-Ontario Interprovincial Wilderness Area** was protected in 2008. The area, which lies along the Manitoba-Ontario border, encompasses over 9,400 square kilometres and includes Woodland Caribou Provincial Park and the Eagle-Snowshoe Conservation Reserve in Ontario and Atikaki and parts of Nopiming Provincial Parks in Manitoba. **Whitefeather Forest Land Use Strategy (2006)** was approved by Pikangikum First Nation and the Ministry of Natural Resources. A new interim protection land use category, called *Dedicated Protected Areas* was applied to 35.7% of the Whitefeather Forest planning area. **The Far North Act** was introduced in 2009 to protect and sustain economic development for an area more than 450,000 square kilometres (42% of Ontario). The government has committed to permanently protecting over half of the Far North Boreal Region through an interconnected network of conservation lands. The identification of protected areas will be done through community based land use plans led by First Nations. Candidate protected areas will be assessed for their contribution to ecological representation. Additions to **Grassy River Halliday Lake Forest and Lowlands Conservation Reserve**, Ivanhoe River Clay Plain Conservation Reserve and Chapleau Nemegosenda River Provincial Park are proposed as alternatives to a planned Woman River Complex conservation reserve. The proposed Woman River Complex conservation reserve included areas previously staked by prospectors, as well as areas of private land.

PREVENTING LOSS	
ACTION #22	PROGRESS
	Agreement was reached in 2007 to establish the **Lake Superior National Marine Conservation Area** between the Government of Canada and Government of Ontario. The area protects a vast expanse of Lake Superior and is the largest freshwater marine protected area in the world. The zone will cover roughly 10,000 km^2 (3,861 sq mi) of lakebed, its overlaying freshwater and associated shoreline on 60 km^2 (23 sq mi) of islands and mainland. In September 2009, the Nature Conservancy of Canada, and partners including The Nature Conservancy (USA), the Government of Canada and the Province of Ontario announced the acquisition of Wilson Island and seven other islands totally 1900 hectares within the **Lake Superior National Marine Conservation Area**. This $7 million acquisition is the largest single conservation project (in terms of dollar value) completed in Ontario.
ACTION #23	PROGRESS
Enact updated provincial protected areas legislation that enhances ecological integrity and implement the updated legislation by: • Reviewing and updating provincial protected areas policy accordingly • Working with partners to develop a framework for the preparation and/or updating of management direction for national, provincial and municipal protected areas.	Ontario's new **Provincial Parks and Conservation Reserves Act** received Royal Assent in 2007. The new legislation makes ecological integrity a first priority when planning and managing within parks and conservation reserves. Regulations under the Act are in place. Supporting the implementation of the **Provincial Parks and Conservation Reserves Act**, a new **Protected Areas Planning Manual** was released in 2009. Under the process outlined in the manual, management direction for parks and conservation reserves can be via a management statement (less complex) or a management plan (more complex). Each provides policy direction for protection, development and management of the values of protected areas.

PREVENTING LOSS	
ACTION #24	PROGRESS
Work to re-establish and/or retain natural linkages and connectivity on the landscape between natural areas, including protected areas, with a high priority on reducing landscape-level habitat fragmentation in southern Ontario, through the securement of lands by such mechanisms as conservation easements, donation, purchase, protected areas and/or long-term leases (e.g., Great Lakes Conservation Blueprint, Big Picture 2002, Algonquin to Adirondacks, Greenways Strategy, Conservation Authorities and the Ontario Heritage Foundation).	Established in 2006, **OMNR's Land Securement Program** is a granting program to acquire land for the purpose of natural heritage protection and biodiversity conservation. By working with partners, the program allows OMNR to help conserve areas with sensitive biodiversity attributes and ecological functions that contribute to the long-term environmental health and sustainability of Ontario. In 2006, OMNR signed land securement partnership agreements with the **Nature Conservancy of Canada, Ducks Unlimited Canada** and the **Ontario Land Trust Alliance** for five-year terms. From April 2006 to March 2010, the OMNR contributed over $21 million to land securement and securement-associated stewardship efforts in Ontario. Partners (such as land trusts, conservation authorities and municipalities) receiving these grants used this funding to permanently secure over 11,000 ha of ecological sensitive land. (*Also corresponds with Action 3*) The **Ontario Land Trust Assistance Program (OLTAP)** provides grants to land trusts to help defray the transaction costs associated with land securement (e.g., legal fees, land transfer fees, surveys, etc). OLTAP is administered by the Ontario Land Trust Alliance and supported financially by the Ontario Ministry of Natural Resources and Environment Canada. From 2006-2010 OMNR contributed over $500,000 to the OLTAP. These grants helped to conserve 2,380 ha of ecological land valued at almost $20 million. (*Also corresponds with Action 3*) OMNR, in partnership with the County of Simcoe and 13 other stakeholders, created an enhanced **Natural Heritage System** (NHS) to protect core areas and to retain natural linkages to improve connectivity of the system. The system has been designated as Greenlands in the updated County of Simcoe Official Plan and will be used to make decisions on areas of future growth, resource use and recreational opportunities. The system will also assist in decision making with respect to best bets for stewardship and possible securement. (*Also corresponds with Actions 12 and 25*) OPG has a **Carbon Sequestration and Biodiversity Management Program** to enlarge and connect woodlands in southwestern Ontario. Since the project started OPG and its partners have planted more than 3.9 million native trees and shrubs as well as native plants and grasses on about 1,850 ha of land. This project helps sequester carbon and strengthen ecosystems and connects fragmented woodlands.

PREVENTING LOSS	
ACTION #25	PROGRESS
Develop a natural spaces initiative for southern Ontario to help Ontarians conserve and restore over time a network of natural systems (land and water) that: • Will support provincial and municipal land use planning initiatives • Respects private landowners' interests by working with willing landowners on a voluntary basis • Recognizes the need for strategic public investment and incentives.	The **Natural Spaces Program** was launched in 2005 to support private land stewardship, and help protect and restore natural heritage systems in southern Ontario. The effort was guided by the **Natural Spaces Leadership Alliance** which released its **Getting the Future Right** report in 2007. The Alliance brought Ontario's conservation and stewardship communities together to plan and implement the seven projects described below. The **Natural Spaces Land Acquisition and Stewardship Program** conserves and protects provincially sensitive land in Southern Ontario. More than 50 properties and 1,538 ha of land have been protected by the OMNR, Ontario Heritage Trust along with conservation authorities, municipalities and other stakeholders. Through **Natural Spaces**, OMNR provided a $2 million grant to the **Trees Ontario Foundation** (TOF) to implement tree planting projects, to purchase tree seed, hold workshop for landowners and volunteers, and develop a website that allows users to track tree seed development and availability. This effort will help ensure enough tree seedlings are grown for planting. This partnership has evolved to lead the 50 million tree challenge. **Nature Count$**, is a study commissioned by the OMNR at the request of the **Natural Spaces Leadership Alliance** on the socio-economic benefits and implications for natural heritage in Southern Ontario. This study was the subject of a seminar held by the Canadian Urban Institute to promote its availability. The **Rural by Choice: Southern Ontario's Rural Non-Farm Landowners** study was commissioned by the **Natural Spaces Leadership Alliance** and includes recommendations on improving stewardship education and services for non-farming rural landowners and provides advice and information about engaging and communicating with these landowners. The **Natural Spaces Rural Landowner Stewardship Program** was based on the **Rural by Choice** study and offers tools to non-farming rural landowners to assess the natural heritage values of their lands and provides advice on how to improve and protect those features. The program was developed by a variety of stewardship and conservation exports and was managed by the University of Guelph.

PREVENTING LOSS	
ACTION #25	PROGRESS
	The **Natural Heritage Systems Modelling Methodology** was developed by technical experts and is being tested with a number of pilot projects. Examples are the **Sustaining What We Value Project** in Lanark, Leeds and Grenville counties and South Frontenac Township which identifies and maps natural heritage systems, helps strengthen natural heritage planning, and ensures ecologic, social, and economic values are protected in land use planning projects. For more information, go to **sustainingwhatwevalue.ca**. Also, the OMNR's Peterborough District with input from stakeholders is designing, developing and implementing a **Natural Heritage System** for ecodistrict 6E-15 to contribute to conservation and planning activities. A variety of **Natural Spaces communications materials** including fact sheets, brochures, publications, reports and news releases were provided to inform partners and the public about the work of the Alliance and the importance of conservation and stewardship in southern Ontario. To further the work of Nature Counts, the **Estimating Ecosystem Services in Southern Ontario** is a publicly available report commissioned by the OMNR in partnership with a number of agencies to provide an estimation of ecosystem services values for southern Ontario. This report provides spatially explicit monetary estimates on the social and economic benefits associated with the natural landscapes of southern Ontario. This work will be used by the conservation community to help communicate how natural areas contribute economically to the province through the services they provide.
ACTION #26	PROGRESS
Continue to update Crown forest management guides to provide more effective and efficient direction on biodiversity conservation at the landscape, forest stand and site scales.	Five **Forest Management Guides** have been revised (2010). The guides provide direction to forest practitioners for the protection and management of forest values, including biodiversity. The guides include Management Guidelines for Forestry and Resource-Based Tourism and the Forest Management Guide for Cultural Heritage Values. The guides can be found online at **ontario.ca/forests**.
ACTION #27	PROGRESS
Review compliance and enforcement plans and assign a higher priority to ensuring compliance with legislation that protects biodiversity and its sustainable use (e.g., Endangered Species Act, protected areas legislation, Crown Forest Sustainability Act, Planning Act, Oak Ridges Moraine Conservation Act and Greenbelt Act).	OMNR's Enforcement Branch has a revised **Risk Based Compliance Framework**. Introduced in 2006, this approach puts greater enforcement emphasis on issues that threaten Ontario's biodiversity, including invasive species and threats to species at risk. Under this new approach for instance, the number of hours dedicated to Species at Risk related enforcement increased from 2650 during the 2006/07 fiscal year, to over 5600 hours in 2009/10. The number of hours dedicated to Species at Risk outreach and education increased from 400 in 2006/07 to over 1000 hours in 2009/10.

IMPROVING UNDERSTANDING	
ACTION #28	**PROGRESS**
Establish an "Ontario Biodiversity Science Forum" (that includes but is not limited to academia, museums, government, Aboriginal peoples, industry and non-governmental organizations) to focus the biodiversity science agenda and foster science partnerships by identifying knowledge gaps and recommending science priorities in areas such as: • Improving our understanding of ecosystem functions and relationships (e.g., interspecific and intraspecific competition, predator-prey relationships, population-habitat linkages, impacts of problem wildlife and reintroduced wildlife on agriculture, taxonomy, genetic diversity, light pollution) • Evaluating existing and aiding the development of new habitat/ecosystem and species/population management guides, best management practices and other conservation tools • Improving our understanding of the economic and non-economic valuation of biodiversity • Identifying gaps in available expertise (e.g., Ontario taxonomy/systematics) and recommending solutions to address such gaps • Supporting enhanced training (i.e., science and technology transfer).	Ontario's **Biodiversity Science Forum** fosters science partnerships, highlights the role of science in biodiversity, determines how to best reach our biodiversity goals, and identifies linkages between science and policy. In 2009, the Forum held the **State of Science and Knowledge and Critical Gaps** workshop. 85 participants from industry, academia, government, and conservation organizations discussed the knowledge gaps in biodiversity, the importance of an ecosystem approach, as well as how best to communicate with and engage the public. Information about the Biodiversity Science Forum is available at **obsf.ca**. Ontario scientists are members of an **Expert Panel on Biodiversity Science** under the **Council of Canadian Academies**. The panel is engaged in a project looking at the State and Trends of Biodiversity Science in Canada. Through this project, two surveys are underway including a **Survey of Taxonomic Expertise in Canada** and a **Survey of Collections in Canada**. The charge to the Panel focuses specifically on the state of taxonomic and biosystematics research in Canada — research that discovers, distinguishes, identifies and classifies species of organisms. These areas of research support effective approaches to biodiversity conservation, the maintenance of ecosystem services and our ability to mitigate and adapt to climate change. This project is supported by the Canadian Museum of Nature.
ACTION #29	**PROGRESS**
Work in partnership with Aboriginal peoples and organizations to integrate traditional ecological knowledge into decisions about biodiversity conservation.	The consideration of **Aboriginal traditional knowledge** (ATK) is reflected in OMNR legislation and policies, including Endangered Species Act, Cervid Ecological Framework, Moose Management Policy, Far North initiative, Protected Areas Planning Manual, Woodland Caribou Conservation Plan, and Water Management Planning Guidelines for Waterpower.

IMPROVING UNDERSTANDING	
ACTION #29	PROGRESS
	OMNR supports a number of **Mushkegowuk Environmental Research Centre** (MERC) projects that include ATK. MERC is a First Nation owned independent agency that undertakes and coordinates research relating to the environmental and natural resources with a focus on the Western James Bay basin. MERC's mandate is to address environmental information needs, including traditional knowledge, fish, wildlife, and water quality and land management. OMNR contributes $800,000 a year to **Anishinabek/Ontario Fisheries Resource Centre** (A/OFRC). A/OFRC was established in 1995 to serve as an independent source of information on fisheries assessment, conservation and management, promoting the value of both western science and ATK. The A/OFRC is a not for profit corporation controlled by a Board with equal representation from Native and non-Native Directors. Negahneewin College, in Thunder Bay, has developed an initiative to provide resources and support to Aboriginal communities in collection, storage, and management of **Aboriginal traditional knowledge**. A number of Ontario ministries support this initiative. Ontario is committed to working with First Nations who are interested in **land use planning** in the Far North. Community based land use planning is key to Ontario's Far North Land Use Planning Initiative to establish a network of conservation lands across the Far North and support economic opportunity for First Nation communities. Mapping and documenting the historical use of the land is an important step towards the development of a Community Land Use Plan. OMNR, along with MOE, engage in conferences, workshops and ceremonies with the Union of Ontario Indians and the Anishinabek Nation to collaborate on the implementation of the **Great Lakes St. Lawrence Sustainable Water Resource Agreement**. Through these initiatives, First Nations shared knowledge and fundamental beliefs and attitudes regarding water. These concepts are being included in Agreement policies pertaining to developing Ontario's own Water Conservation And Efficiency Strategy. Ontario Parks, notably Woodland Caribou and Wabikimi Provincial Parks, have **knowledge sharing arrangements** with First Nations that are intended to inform the management planning process. Related initiatives include animal surveys, fire management, education of visitors, and communication protocols. **Species At Risk (SAR) Stewardship Fund** allocated $1.9 million over 2007-2010 for recovery activities, inventories and monitoring (including the collection of ATK), and education and outreach activities carried out by Aboriginal groups and communities. Examples where ATK have contributed to SAR management include eel, caribou, and Lake Sturgeon management.

IMPROVING UNDERSTANDING	
ACTION #29	PROGRESS
	To support the development of the **Keeping the Land – A Land Use Strategy for the Whitefeather Forest and Adjacent Areas**, Pikangikum First Nation proposed a working partnership between 'western' and 'indigenous' knowledge traditions in support of the planning. In so doing they identified two data sets; an indigenous data set and a western science data set. The **Forest Management Planning Manual** provides opportunities for Aboriginal communities to become involved in the development and implementation of a forest management plan and the protection of Aboriginal values in a manner that addresses their needs. These opportunities include membership on the planning team, membership on the local citizens committee, development of a community specific consultation approach, and preparation of an Aboriginal Background Information Report. When the Forest Management Planning Manual was revised in 2009, specific provisions were incorporated from the **Keeping the Land – A Land Use Strategy for the Whitefeather Forest and Adjacent Areas** that will be used in the development and implementation of the forest management plan for the Whitefeather Forest. These provisions include the role of Pikangikum elders and the integration of Pikangikum indigenous knowledge.
ACTION #30	PROGRESS
Continue to review new monitoring information and knowledge to ensure that the use of biological assets (e.g., forests, wildlife, fish, and water) is sustainable, biodiversity is conserved and ecological integrity is maintained.	In 2008, Ontario developed a new **Ecological Framework for Recreational Fisheries Management**. This new framework focuses on: New ecological Fisheries Management Zones, managing and monitoring at the broader landscape level, enhanced stewardship and regular reporting on the state of fisheries in Ontario. **Woodland Caribou research** projects have been undertaken to increase our understanding of Ontario's Woodland Caribou populations and habitat. This project was among the first proposals approved under the Ontario Species at Risk Stewardship Fund in 2007. In 2008 and 2009, the **Broadscale Monitoring Program (BsM)** was implemented to conduct standardized fisheries assessment programs. Ultimately, this data will be used to monitor the fisheries and provide State of the Resource reports for each Fisheries Management Zone. The BsM program includes sampling of small and large bodied fishes and is designed to provide information on biodiversity. The program also includes the collection of water quality data, invasive species monitoring and the collection of samples to assess contaminant levels in sport fish species. **Forest health monitoring** in Ontario is conducted jointly by the Canadian Forest Service (CFS) and OMNR under a Memorandum of Agreement. The Forest Health Conditions in Ontario reports includes major forest disturbances, invasive species and regional-level reporting on forest health issues. **Forest Health Conditions in Ontario** reports for 2006, 2007 and 2008 are available on the OMNR website.

IMPROVING UNDERSTANDING	
ACTION #30	PROGRESS
	OMNR, independently and in cooperation with partners, undertakes a number of **monitoring programs** for wildlife species including provincially and federally protected species, and monitoring of wild turkey, cormorant, moose and elk populations. This data is used to inform policy and management decisions that help support sustainability of these biological assets while ensuring biodiversity and ecological integrity are maintained. OMNR continues to conduct wolf research, particularly on **Eastern Wolves**. Ongoing research and monitoring is aimed at obtaining vital information on wolf populations and their role in different landscapes, including the effectiveness of protected areas in sustaining wolves and their prey.
ACTION #31	PROGRESS
Enhance the current risk assessment capability in Ontario so that ecological, social and economic risks to biodiversity from threats such as climate change, invasive species, reintroductions and the release of genetically modified organisms can be better evaluated, and so that priorities for contingency plans and response teams can be identified.	In November 2009, the Ontario Expert Panel on Climate Change Adaptation reported to the Minister of the Environment. The report **Adapting to Climate Change in Ontario: Towards the Design and Implementation of a Strategy and Action Plan** makes recommendations in the areas of agriculture, energy, infrastructure, health, Great Lakes, biodiversity, forests, wetland peats of the Far North and water. In 2006, OMNR updated its **Climate Change Strategy and Action Plan**. The plan focuses on 3 themes: understand climate change, mitigate the impacts of climate change, and help Ontarians adapt to a changing climate. To meet the first goal, a series of climate change research reports have been commissioned. An example is *The Known and Potential Effects of Climate Change on Biodiversity in Ontario's Terrestrial Ecosystems: Case Studies and Recommendations for Adaptation*.
ACTION #32	PROGRESS
Develop and implement pathogen (i.e. wildlife and plant diseases) surveillance, prevention and emergency response protocols, based on the relative risk of various diseases (e.g., Chronic Wasting Disease in ungulates, Avian Vacuolar Myelinopathy in eagles, Sudden Oak Death, Soybean Rust) to wildlife populations, crops and humans, and support research programs that improve risk assessments and develop response options.	**Canada's National Wildlife Disease Strategy** (2005) is a disease response and management plan to minimize the negative impacts of wildlife diseases. In Ontario, several partners work closely on research, prevention and monitoring of diseases that can affect Ontario's wildlife, and biodiversity. For example, Ministry of Natural Resources, Ministry of Agriculture Food and Rural Affairs, and the Canadian Food Inspection Agency monitor wild and captive deer and elk for signs of Chronic Wasting Disease. Ontario also works with U.S. and Quebec agencies on prevention and response planning. In partnership with the Canadian Cooperative Wildlife Health Centre, Ontario monitors for **White Nose Syndrome** in Ontario's bats. Ontario partners work with the U.S. Fish and Wildlife Service (FWS), various state wildlife agencies and the province of Quebec to coordinate prevention and response actions.

IMPROVING UNDERSTANDING	
ACTION #32	PROGRESS
	Ontario is a partner in the **Canadian Cooperative Wildlife Health Centre**, a centre of excellence for wildlife disease surveillance and management. In 2005, OMNR (and partner agencies) released a plan outlining prevention, surveillance, and response activities if **Chronic Wasting Disease** was detected in Ontario. OMNR has conducted surveillance in over 7000 cervids (all negative for CWD). OMNR continues to examine methods to prevent CWD from spreading to Ontario and continues to plan response actions. **Public Engagement - Fish Virus**, the Ontario government engages the pubic in various invasive disease issues. In 2007, the Ontario government asked the public to assist in tracking the occurrence of viral hemorrhagic septicemia to slow and limit the spread of the fish disease. Following the large-scale die-off of Common Carp in many lakes within the Kawartha Lakes in 2007, the OMNR worked with agency partners to develop the **Fish Die-off Response Protocol**. This protocol outlines agency roles and responsibilities as they relate to large scale fish die-offs. Contributing factors in the carp die-off were found to be the combination of environmental stressors, opportunistic bacteria and the invasive fish pathogen Koi Herpes Virus (KHV). This was the first confirmed case of KHV in Ontario. Due to the interrelatedness of wildlife and domestic animal health, OMNR provided support to OMAFRA in the development of **Animal Health Act**. The ministry continues to provide support in the development of regulations under this Act. **Canada-Ontario Foreign Animal Disease Emergency Response Plan** is a renewed agreement between the governments of Canada and Ontario (signed through EMO/OMAFRA) which outlines roles and responsibilities if a significant foreign animal disease is found in Ontario. Ontario supports coordination and collaboration to address wildlife, livestock, and zoonotic diseases through the inter-ministerial **Animal Health Forum**. OMNR's Climate Change Fund is funding a report entitled **"Enhancing Ontario's Preparedness for Wildlife Diseases Influenced by Climate Change"** which will examine the prevention and preparedness activities of other jurisdictions (and provide recommendations) for select wildlife diseases that may be influenced by climate change.

IMPROVING UNDERSTANDING	
ACTION #33	**PROGRESS**
Report on the "State of Ontario's Biodiversity" every five years and issue a first report by 2010 that will: • Describe biodiversity reporting standards (criteria and indicators) Establish benchmarks for biodiversity in Ontario to allow future reports to track progress in meeting conservation (protection and sustainable use) goals Identify challenges, risks, threats and opportunities (e.g., the Ministry of Natural Resources' State of Resources Reporting program, Ontario Breeding Bird Atlas) • Be preceded by a brief interim report within two years.	The Ontario Biodiversity Council is developing the **State of Ontario's Biodiversity 2010**, scheduled for release in May 2010. The report will provide Ontario's first benchmark on the state of biodiversity. In 2008, the Ontario Biodiversity Council published the **Interim Report on Ontario's Biodiversity Strategy**, which provided Ontarians with an overview of the province's ecosystems, the threats to biodiversity and conservation efforts underway.
ACTION #34	**PROGRESS**
Review and implement improved inventory, monitoring and assessment programs to support public reporting on the "State of Ontario's Biodiversity" and to improve the establishment of baseline information and tracking trends through time related to species/ecosystem status and land cover change.	In 2007, Ontario implemented a new **ecological framework for recreational fisheries management**. This new framework focuses on: new ecological Fisheries Management Zones; managing and monitoring at the broader landscape level; enhancing stewardship, and; regular reporting on the state of fisheries in Ontario. Ontario has invested $315,000 in the first year of a three-year **Polar Bear research** project that will provide a better understanding of the impacts of climate change on the health of Ontario's polar bear population. OMNR launched a series of **State of Resource Reports** to keep people informed on the health of the province's natural resources and ecosystems. Reports released to date focus on Wolves, Rabies, American Eel, Canada Yew, Lake Sturgeon, Polar Bears and White Pine. OMNR reports on the state of Ontario's Crown forest resources every 5 years in the **State of the Forest Report**. The most recent State of the Forest Report was produced in 2006. The report uses a criteria and indicator framework to report on sustainable forest management, including a number of biodiversity indicators. Ontario's conservation community worked together to produce the second edition of the **Atlas of the Breeding Birds of Ontario**. The atlas provides a thorough assessment of how bird distributions have changed in Ontario since the first atlas (1981-2005), provides the first maps of relative abundance for many species in Ontario and establishes a foundation for future bird research and environmental management applications. Visit **birdsontario.org** to learn more.

IMPROVING UNDERSTANDING	
ACTION #34	PROGRESS
	Ontario Nature, in partnership with the Eastern Ontario Model Forest (EOMF), the Natural Heritage Information Centre (NHIC) and other governmental and nongovernmental groups, has begun work on a new **Ontario Reptile and Amphibian Atlas**. The objective of this program is to improve our collective knowledge of the distribution and abundance of Ontario's reptiles and amphibians, collectively referred to as herpetofauna, through public solicitation of species observation data, field surveys, and the amalgamation of existing databases. This project will significantly enhance information previously compiled by the NHIC in the **Ontario Herpetofaunal Atlas** (2000). Ontario's Conservation Authorities (CAs) have developed **Watershed Report Cards** to report on the health of their watersheds. CAs measure things like water quality, forest health, surface and ground water quality, and overall environmental conditions of the watershed. These report cards help planning and resource agencies better understand the issues facing their watersheds, and they provide the public with valuable information on the health of their watershed. In addition to the 2010 State of Ontario's Biodiversity report, Ontario is involved with the **Biodiversity Ecosystem Status and Trends Report (ESTR)** for Canada. Federal, provincial and territorial partners teamed up to assess and report on each of Canada's ecoregions, and threats to biodiversity. Environment Canada leads the project, and the research comes from provincial and territorial sources, Aboriginal Traditional Knowledge, and existing literature. The report will be released in 2010. Monitoring the health of our lakes is an important tool in fisheries management and protecting the biodiversity in our lakes. OMNR began a **Broad-scale Monitoring Program** to collect information such as age, species, gender and number of fish in Ontario lakes. A total of 368 lakes (189 in 2008 and 179 in 2009) across Ontario were monitored to identify stresses such as invasive species and contaminants and to enhance understanding of the fish and other aquatic species of the lakes. The **State of the Aggregate Resource in Ontario Study** (SAROS), released in 2010, is a province-wide assessment of aggregate resources. The study contains information and current science on the consumption, demand, availability, analysis of alternatives, current reserves, rehabilitation, transportation, recycling/reuse and the value of aggregates to the province and will help in planning and managing Ontario's aggregate resources. In 2010, the OMNR will finalize and publish the first-ever **State of Ontario's Protected Areas Report**.

IMPROVING UNDERSTANDING	
ACTION #35	**PROGRESS**
Strengthen the Natural Heritage Information Centre partnership to manage (receive, process and share) biodiversity information and establish mechanisms and protocols that streamline the sharing of data on species, biological communities and ecosystems, while protecting the security of sensitive data.	Since 2005, the amount of rare species and ecological community data being received and processed by the Ontario Natural Heritage Information Centre (NHIC) has increased by 300%. This province-wide information is used to support planning and resources management regulations associated with 38 federal and provincial acts of legislation. Most notably, the passing of Ontario's **Endangered Species Act** has had a profound and positive effect on the NHIC partnership. The information and regulation demands of the ESA 2007 require accurate and verified information on the location and condition of species listed under the act. The NHIC has been developing databases and using international taxonomic data standards for over 15 years and is now managing the provincial record for Species At Risk location data on behalf of MNR's Species at Risk Branch. The NHIC has supported **NatureServe Canada** and the international NatureServe network in producing two national reports: *Our Home and Native Land: Canadian Species of Global Conservation Concern* and *Sentinels on the Wing: The Status and Conservation of Butterflies in Canada*. The NHIC works with **Parks Canada** and other federal agencies with land management responsibilities in Ontario to help them manage information for species at risk on federal lands. The NHIC has maintained a strong partnership relationship with the **Nature Conservancy of Canada** producing the *The Beautiful Lake: A Bi-National Biodiversity Conservation Strategy for Lake Ontario* and *Islands of Life: A Biodiversity Conservation Atlas for the Great Lakes Islands*. The NHIC is also working with federal, state and NGO partners on a Biodiversity Conservation Strategy for Lake Huron. Recently the NHIC has been supporting NGO and government partners in directed field inventories of high priority sites and properties in Ontario. While field survey effort covers the whole province, recent concentrations of effort have been focused on the Niagara Parks Commission Lands and on areas in Ontario's Far North. The NHIC has launched a new **Biodiversity Explorer Website**. The website will help interested public and stakeholders streamline and access the data of species easier. The site has been expanded to include invasive species data and conservation lands information. To ensure sensitive data is used appropriately, the NHIC provides **data sensitivity training** and requires data sharing agreements for external users. 69% of the 2,098 conservation users of NHIC's natural heritage information data have been trained since 2005. 489 of the users have on-line detailed access to sensitive information for their jurisdiction. For more information on the work of the NHIC, please see the NHIC Newsletter, published annually at **www.nhic.mnr.gov.on.ca**.

REVIEWING POLICY AND LEGISLATION	
ACTION #36	PROGRESS
Review other relevant legislation and regulations to identify gaps and issues (e.g., disincentives), and the need for potential changes in the legal framework for the conservation of biodiversity (protection and/or sustainable use of biological resources). The review may include (but is not limited to): • Land trust, and conservation easement legislation • Species of increasing conservation concern (e.g. Canada yew, wolves) • Native wildlife, plants, invertebrates • Critical habitat and sensitive natural heritage features • Invasives, through high-risk pathways, and pathogens.	To respond to the growing threat of invasive species, Ontario introduced new **Baitfish Rules** under **Ontario's Fishery Regulations** to prohibit the release of live bait in or near Ontario waters, and certain "bait species", such as crayfish, may not be imported into the province. The province released its **Lake Simcoe Protection Plan** in 2009, under the authority of the new Lake Simcoe Protection Act. The Plan addresses sustainable development, habitat restoration, and pollution abatement. Most notably, the Plan sets water quality targets, and limits phosphorus discharge into the lake. It also includes provisions for habitat protection and recommendations for preventing the spread of invasive species. In December 2006, an Act respecting the **Duffins Rouge Agricultural Preserve** (DRAP) was passed, which ensures that all agricultural easements in the preserve are protected in perpetuity. At the same time, complimentary amendments were made to the **Conservation Land Act** to improve use of conservation easements as a long-term land securement tool. To address the threat of Viral Hemorrhagic Septicemia (VHS), an infectious disease in fish, identified in Lake Ontario fish in 2005, Ontario has developed an ecologically based response that came into effect in 2007. The Ministry of Natural Resources established a **VHS Management Zone**, which includes restrictions on the transport of bait fish. To address the threat to the biodiversity of the Great Lakes from invasive species, Ontario has been contributing to Transport Canada's activities associated with **Ballast Water Control and Management Regulations**. Ontario banned the commercial harvest and sale of all frog species as bait in 2008 due to scientific studies confirming that commercial harvesting and sale of Northern Leopard Frogs was contributing to the spread of Ranavirus. The disease causes mass mortality events in the Wood Frog and Leopard Frog. Ontario also banned the commercial harvest and sale of crayfish as bait to prevent the further expansion in range of the invasive Rusty Crayfish. **Regulation changes** permit anglers to capture limited numbers of Northern Leopard Frogs and crayfish for personal use and restrict the use of crayfish to the waterbody where it was captured.

REVIEWING POLICY AND LEGISLATION

ACTION #37	PROGRESS
Review other relevant resource management and planning policies to identify and address policy gaps and issues (e.g., disincentives) related to the conservation of biodiversity (protection and/or the sustainable use of biological resources). The review may include (but is not limited to): • A classification system for aquatic areas including the Great Lakes • Sustainable management of harvested wildlife including those harvested plant and animal species for which harvest regulations are currently not in place • Management of introduced species for recreation and/or farming • Strategies to reduce damage associated with problem wildlife populations, especially in agricultural areas • Working with interested landowners on trail planning and delivery • Conservation of genetic diversity • Appropriate accessibility to property assessment data (e.g., sites of conservation interest) • Improving the effectiveness of multi-ministry input into municipal planning.	In 2007, the province included public involvement in fisheries management by implementing a pilot project which establishes advisory councils in three areas of Ontario to help pursue an **Ecological Approach for Fisheries Management**. Ontario has taken a number of specific actions to help conserve Eastern Wolf populations in recent years. In 2004 the province identified the Eastern Wolf as a species of special concern and in doing so took steps to ensure they are adequately protected. In response to this concern, in 2005 Ontario released the **Strategy for Wolf Conservation in Ontario** which addresses such key objectives as ensuring sustainable wolf populations and raising public awareness about the role of wolves in healthy, natural ecosystems. Ontario has a new **Cervid Ecological Framework** in place. This is an ecosystem approach to managing wildlife that considers species' habitat, disease transmission, predators and other issues related to biodiversity. The new framework guides the management of Ontario's cervid species (Moose, White-tailed Deer, Woodland Caribou and American Elk). Under this framework, the OMNR released the 2010 draft **Management Plan for Elk**, and launched the 2007 **Moose Program Review**. In 2009 the OMNR completed a review of Ontario's **Moose Management Policy**. Based on the findings of this review, the ministry has finalized and began implementation of a new moose management policy and supporting guideline documents that will support sustainable moose populations today and into the future, contributing to Ontario's biodiversity. In 2009, Ontario released **A Framework for Enhanced Black Bear Management in Ontario** in an effort to ensure an improved and more consistent approach to long-term decision-making about black bear management. The **Ontario Wild Turkey Management Plan** was released in 2007. Developed with conservation partners, the goal of the plan is to ensure sustainable management of turkeys, as an important part of the biodiversity of southern Ontario. **Strategy for Preventing and Managing Human-Wildlife Conflicts in Ontario** was released in 2007 and outlines broad strategies to prevent and manage human and wildlife conflicts. **Strategy for Preventing and Managing Human-Deer Conflicts in Southern Ontario** was released in 2007. The Strategy addresses the social, economic and ecological issues and challenges of managing Ontario's White-tailed Deer, while recognizing deer as a valuable part of Ontario's biodiversity.

REVIEWING POLICY AND LEGISLATION	
ACTION #37	PROGRESS
	With $3.5 million in funding, the Ministry of Culture, along with NGOs, landowners and the agricultural community created the **Ontario Trails Strategy**, as a long term plan for managing, creating and promoting trails in Ontario. The Government of Ontario has developed guidelines to help guide decision making with respect to renewable energy development including **The Guideline to Assist in the Review of Wind Power Proposals: Potential Impacts to Birds and Bird Habitats** and **The Guideline to Assist in the Review of Wind Power Proposals: Potential Impacts to Bats and Bat Habitats**.

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