



Ontario
Biodiversity
Council



ONTARIO'S BIODIVERSITY STRATEGY

2023-2030



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Introduction

Ontario's Biodiversity Strategy (OBS) guides conservation across the province. It's like a 'to-do' list to help us take actions that will benefit biodiversity, address climate change, improve human health, make our communities stronger and safer, and support the economy.

The **vision**, **mission** and **goals** set the context of what the strategy can accomplish and what we hope the future looks like in Ontario.

Five strategic directions reflect the key components required to conserve biodiversity:

- Empower people
- Enhance resilience
- Reduce threats
- Improve knowledge
- Transform investments

Each strategic direction includes targets and actions to focus our efforts and guide actions and activities from all sectors.

TARGETS

Identify what we want to achieve and include ways to measure our progress and timing for when we want to complete them.

ACTIONS

Outline activities, programs and other work we can do to help meet the targets. Some actions are aimed at specific groups or sectors and others are for all of us.

“Protecting the diversity of life on Earth—of which we humans are an integral part—requires broad societal consensus and participation. It is a challenge not for some of us, but for all of us.” — **Ontario's Biodiversity Strategy, 2005**

What is biodiversity?

Biodiversity is the variety of life on Earth. All living things, ourselves included, rely on biodiversity to survive.

Biodiversity provides us with a healthy environment, clean air, productive soils, nutritious foods, and safe, clean water.

The benefits we get from biodiversity are called ecosystem services and they keep us healthy, help make our homes and families safe from natural disasters like floods, strengthen and feed our communities, and power our economy.

The targets have end dates of 2025 and 2030, because that's when we will report on our progress via the State of Ontario's Biodiversity. Work towards achieving them can and should take place as quickly and effectively as possible.

The targets and actions are not a complete list of everything that needs to be done in Ontario. The Ontario Biodiversity Council acknowledges that more specific actions may be required to address local or regional conservation priorities.

Building on past success

Ontario's Biodiversity Strategy 2023 builds on the positive efforts of the 2005 and 2011 versions. The Ontario Biodiversity Council led the renewal process, with support provided by the Ontario Ministry of Natural Resources and Forestry.

Broad public engagement helped make sure that many different perspectives were considered, including seeking feedback from a wide geographic and demographic range. More than 1,100 comments helped to refine and improve the strategy — thanks to everyone who participated.

OBS: Part of a bigger picture

Working together across diverse groups to achieve this strategy will contribute to national and international efforts such as Canada's Biodiversity Strategy and the goals and targets set out in the Kunming-Montreal Global Biodiversity Framework (2021–2030).

Measuring our progress

Ontario's Biodiversity Strategy includes commitments to report on the state of Ontario's Biodiversity and on progress in achieving biodiversity targets every 5 years. Council has reported on the state of Ontario's biodiversity in 2010, 2015 and 2021.

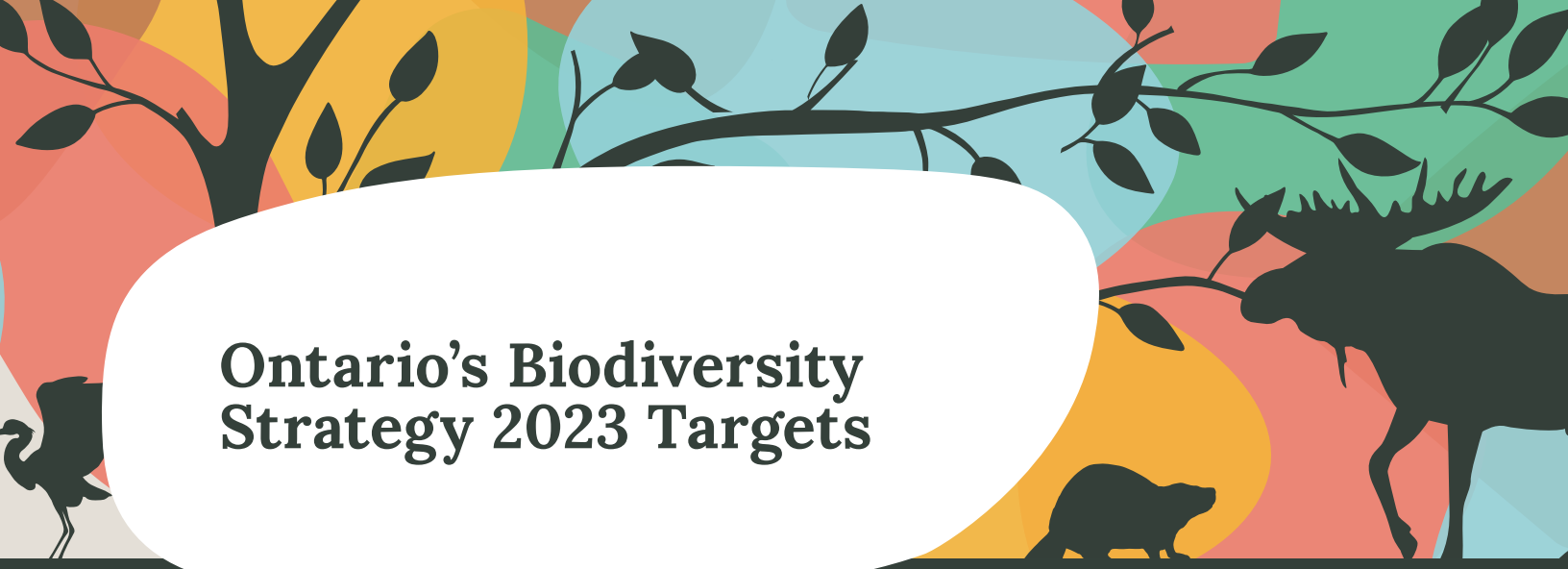
The reports are available online on the State of Ontario's Biodiversity website.

The Ontario Biodiversity Council leads the implementation of Ontario's Biodiversity Strategy. It's a group of 40+ conservation, academic, Indigenous and industry organizations and government that work together on common biodiversity goals.

This strategy builds on the 2005 and 2011 versions and will guide our efforts until 2030.

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Ontario's Biodiversity Strategy 2023 Targets

1. By 2025, sectors have developed action plans in support of Ontario's Biodiversity Strategy and by 2030 those plans are being implemented.
2. By 2025, the capacity for people to conserve biodiversity is increased and by 2030 people are taking action to protect and care for biodiversity in their daily lives.
3. By 2030, biodiversity conservation programs and actions are inclusive, equitable and reflect Indigenous knowledge and diverse perspectives.
4. By 2030, land use planning approaches to maintain and enhance biodiversity, such as natural heritage systems, are implemented at local, regional, and provincial levels.
5. By 2030, the harmful impacts of invasive species on biodiversity are further reduced.
6. By 2030, the release of ecologically damaging pollutants is reduced to a level that is not harmful to biodiversity and ecosystem services.
7. By 2030, the impacts of climate change on biodiversity are minimized and biodiversity is enhanced to support climate mitigation and adaptation.
8. By 2030, Ontario's per-capita resource consumption and waste generation is reduced and is within Ontario's biocapacity limits.
9. By 2025, priority restoration areas are identified and by 2030 efforts are underway to restore biodiversity to at least 30 per cent of priority areas.
10. By 2030, at least 30 per cent of terrestrial and aquatic ecosystems are conserved through well-connected networks of protected areas and conservation lands.
11. By 2030, the conservation of species and ecosystems in Ontario is improved.
12. By 2030, Ontario's biodiversity research, monitoring and reporting framework is improved, accessible and reflects diverse knowledge systems and perspectives
13. By 2030, biodiversity considerations are integrated into the public and private sectors including through budgeting, funding, investments and financial disclosure.



The importance of Indigenous perspectives and leadership

The Ontario Biodiversity Council recognizes that Indigenous Peoples are essential partners in biodiversity conservation and commits to “recognize and respect the contribution of Indigenous and local knowledge to the conservation and sustainable use of biodiversity and ecosystems”.¹

There is a need to create more space for Indigenous leadership and participation in conservation.

Indigenous lands make up around 20 per cent of the Earth's territory, containing 80 per cent of the world's remaining biodiversity — a sign Indigenous Peoples are the most effective guardians of the environment (International Institute for Sustainable Development).

Council values and is motivated by the work done by Indigenous communities and organizations to protect and restore biodiversity, share knowledge, and inspire actions.

Council will strive to promote, support, and generate opportunities to increase Indigenous leadership and participation in conservation in Ontario and will:

- work to create an ethical space where knowledge systems interact with mutual respect, value, and cooperation,
- promote knowledge that supports the development of Indigenous Protected Areas (IPCAs) and other Indigenous-led projects,
- respect the rights and assertions of Indigenous Peoples.

We understand that this is only one step in our journey towards reconciliation and a stronger relationship with Indigenous Peoples that benefits biodiversity and builds a better future.

A strategy for all of us

To successfully protect biodiversity, we need a whole of society approach. This means all of us — the private sector, non-governmental organizations, Indigenous Peoples and local communities, individuals, and all levels of government, work together to implement this strategy.

By finding unique ways to collaborate, and by creating new partnerships to focus on common goals, we can address the causes of biodiversity loss and begin to reverse the damage already done.

¹ UNEP/IPBES.MI/2/9, Appendix 1, para. 2 (d)

Urgency to act

“We can’t live without nature’s help; and nature can’t live without our help. We must protect our planet’s biodiversity to safeguard the future of our ecosystems, our climate, our health — and our humanity.”

— **United Nations Foundation**

Biodiversity sustains us and enriches our lives — and we need to protect it.

Globally, we are losing biodiversity at an alarming rate. It is estimated that wildlife populations around the world have declined by 69 per cent since 1970, and up to one million species are threatened by extinction (WWF Living Planet Report 2022).

In Ontario, we are losing biodiversity faster than we are conserving it (SOBR 2021). Some of our efforts to protect and restore biodiversity are having a positive impact, but more effort is needed to reverse this trend.





Vision, mission and goals

2050 VISION

Biodiversity is valued, conserved and restored, and people live in harmony within nature.

2030 MISSION

To take urgent action to halt and reverse biodiversity loss for the benefit of all living things, including people.

GOALS

- Empower all people to value, respect and take steps to conserve, recover and sustainably manage biodiversity.
- Listen to and learn from Indigenous People and pursue reconciliation through biodiversity conservation.
- Manage biodiversity sustainably in an inclusive and equitable way.
- Mobilize human and financial resources to scale-up actions to conserve biodiversity.
- Protect, restore and recover ecosystem, species and genetic diversity and the benefits that biodiversity provides for all living things.

Empower people

Society is more aware of the importance of biodiversity and its main threats. While awareness is growing, we are still not doing enough to stop biodiversity loss in Ontario.

This strategic direction includes ways to encourage more active and inclusive participation in biodiversity conservation, and integrate biodiversity values into all sectors of the economy.

TARGETS



1

By 2025, sectors have developed action plans in support of Ontario's Biodiversity Strategy and by 2030 those plans are being implemented.



2

By 2025, the capacity for people to conserve biodiversity is increased and by 2030 people are taking action to protect and care for biodiversity in their daily lives.

PRIORITY ACTIONS

1. Develop and implement plans to incorporate biodiversity values into all levels of government, and across business, health, education, industry, not for profit, and natural resource sectors.
2. Adapt governance systems, including enhancing law and policy, to support biodiversity action.
3. Explore creative ways to achieve positive biodiversity outcomes, such as recognizing the Rights of Nature.
4. Support and expand biodiversity stewardship and guardianship by Indigenous communities, landowners and local communities.
5. Support Indigenous communities to identify, preserve and protect cultural keystone species and their habitats.
6. Continue to develop and share information about how biodiversity links to human health, climate change, and the economy.
7. Continue to integrate biodiversity education into all levels and all types of curricula, including in non-formal education and non-traditional subject areas such as business, engineering, health and public policy.
8. Increase availability of tools and training to support actions for biodiversity.

TARGETS



By 2030, biodiversity conservation programs and actions are inclusive, equitable and reflect Indigenous knowledge and diverse perspectives.

PRIORITY ACTIONS

9. Encourage equitable and meaningful participation in biodiversity decision-making and conservation, at all levels, including engaging with youth, new Canadians, Indigenous communities and other under-represented groups.
10. Collaborate with and support Indigenous communities and organizations to develop and lead biodiversity conservation initiatives.

Working across sectors

When we say ‘sectors’ we mean everyone. Examples of sectors include those that:

- operate in the public, private, or non-profit realms,
- extract and harvest raw materials, such as aggregates, mining, forestry and agriculture,
- build or make products using raw materials to make finished goods, like construction of homes and businesses, manufacturing and processing,
- offer services such as recreation, tourism, retailer, entertainment, transport and financial companies,
- include knowledge and intellectual pursuits such as research, consulting and education.

What is mainstreaming biodiversity?

Mainstreaming biodiversity means integrating biodiversity into decision making so that it becomes everyone’s business and is part of our day-to-day lives. As individuals and citizens, we are responsible for taking good care of the resources we use and upon which we depend. From the purchases we make at the grocery store to the flowers we plant in our gardens and the decisions made in managing our businesses or providing services in our communities, we all impact biodiversity. Our choices and actions will ultimately determine the state of biodiversity now and in the future.




Reduce threats

To conserve biodiversity we have to address ways that humans destroy and degrade it, in Ontario and around the globe.

This strategic direction includes ways to improve the condition of species and ecosystems and help prevent further biodiversity loss by reducing and removing the threats to biodiversity and their impacts.

TARGETS

4  By 2030 land use planning approaches to maintain and enhance biodiversity, such as natural heritage systems, are implemented at local, regional, and provincial levels.

5  By 2030, the harmful impacts of invasive species on biodiversity are further reduced.

PRIORITY ACTIONS

11. Implement integrated land use planning approaches that conserve biodiversity in terrestrial and aquatic ecosystems.
12. Identify Key Biodiversity Areas and improve their management and conservation.
13. Maintain and expand natural infrastructure on municipal and private lands to support biodiversity and enhance climate resilience within cities and communities.
14. Develop and implement prevention strategies for main pathways of introduction of invasive species.
15. Develop and implement innovative surveillance and control tools for high-risk invasive species.
16. Collaborate and grow partnerships among Indigenous and local communities, conservation organisations, and governments across jurisdictions to manage invasive species.
17. Continue and enhance efforts to control, manage, and remove harmful invasive species.

TARGETS



By 2030, the release of ecologically damaging pollutants is reduced to a level that is not harmful to biodiversity and ecosystem services.



By 2030, the impacts of climate change on biodiversity are minimized and biodiversity is enhanced to support climate mitigation and adaptation.



By 2030, Ontario's per-capita resource consumption and waste generation is reduced and is within Ontario's biocapacity limits.

PRIORITY ACTIONS

18. Review, strengthen and implement strategies to reduce harmful pollution in the environment.
19. Develop and implement approaches that leverage biodiversity's ability to reduce pollutants and improve air and water quality and soil health.
20. Support strategies, such as integrated pest management and nutrient management, that reduce pollutants, support biodiversity and maintain and enhance food security.

21. Develop, use and integrate tools and approaches that build the resilience of biodiversity to climate change.
22. Promote and implement nature-based solutions and/or ecosystem-based approaches to enhance climate mitigation and adaptation.

23. Report on Ontario's Ecological Footprint and Biocapacity and promote the use of this information in decision-making.
24. Raise awareness and access to information related to consumption and waste (e.g., food, water, plastics).
25. Support and encourage priority actions to reduce levels of resource consumption and waste generation to be well within Ontario's biocapacity.



What are the main threats to biodiversity?

Habitat loss and land use change have the largest and most immediate negative impact on terrestrial and freshwater ecosystems.

Invasive species are defined as harmful, non-native plants, animals and micro-organisms whose introduction or spread threatens the environment, the economy, or society, including human health.

Population growth is one of the main pressures on Ontario's biodiversity. Ontario's population is estimated at 15.39 million in 2023 (Statistics Canada, 2023) and is predicted to grow to 20.4 million by 2046 (OMOF, 2022).

Pollution Our industries and consumption patterns create pollution that is released into the air, soil, and water. Tens of thousands of pollutants are currently circulating through the Earth's ecosystems, and many of them are having significant, large-scale impacts on biodiversity.

Overconsumption and unsustainable use include over-using or wasting food, which requires the use of more land, leaving less space for natural areas. Making products and food that are thrown away unnecessarily increases pollution and depletes healthy ecosystems.

Climate change is an increasing threat to biodiversity. Climate change affects biodiversity through changes in air and water temperatures, changes to precipitation patterns and extreme weather which can make habitats unsuitable for native species.

Nature-based solutions

Nature-based solutions are activities that use nature to help address big societal problems, such as climate change, loss of biodiversity, and protecting human health and wellbeing. Nature-based solutions are different from typical conservation actions because they tackle multiple problems at the same time by working with nature, usually at a lower cost, and creating multiple benefits for people and the planet.

Enhance resilience

Diverse ecosystems are more resilient to change. A healthy ecosystem can better withstand and recover from disturbance and stresses such as flooding, drought, extreme heat, invasive species and pollution.

This strategic direction includes ways to maintain, restore and recover ecosystem function and protect species diversity.

TARGETS



By 2025, priority restoration areas are identified and by 2030 efforts are underway to restore biodiversity to at least 30 per cent of priority areas.



By 2030 at least 30 per cent of terrestrial and aquatic ecosystems are conserved through well-connected networks of protected areas and conservation lands.

PRIORITY ACTIONS

26. Increase availability of appropriate native species for restoration projects that are adapted to their growing environment now and in the future.
27. Identify, prioritize, and undertake ecological restoration of terrestrial and aquatic ecosystems, in urban, rural and wilderness areas.
28. Support and use diverse and novel approaches (e.g., Key Biodiversity Areas, Other Effective Area-based Conservation Measures, and Indigenous Protected and Conserved Areas) to increase area-based protection and conservation of biodiversity on Crown and private land (e.g. Land trusts, institutional and corporate lands).
29. Identify and conserve ecological corridors and landscape connectivity in urban, rural and wilderness areas.
30. Identify, protect and develop management plans for climate refugia in Ontario.

TARGETS



By 2030, the conservation of species and ecosystems in Ontario is improved.

PRIORITY ACTIONS

31. Report on the status of species and ecosystems to prioritize conservation activities.
32. Assess species and ecosystems vulnerabilities to threats (e.g., climate change, invasive species) and create and implement policies and management plans to reduce vulnerabilities.
33. Develop and implement a genetic resource management strategy for wild species (e.g., a native seed strategy).
34. Promote multi-species approaches to the recovery of species at risk.





Improve knowledge

Improving and bridging the information from both science and traditional knowledge can help us to better understand biodiversity and what we need to do to protect it.

This strategic direction includes ways to improve and share biodiversity knowledge, implement monitoring and evaluation, and better understand what motivates individuals and sectors to begin working towards biodiversity conservation.

TARGET

12



By 2030, Ontario's biodiversity research, monitoring and reporting framework is improved, accessible and reflects diverse knowledge systems and perspectives.

PRIORITY ACTIONS

35. Respect, preserve and invest in the knowledge, innovations and practices of Indigenous Peoples to support biodiversity conservation.
36. Support and expand community-based monitoring and reporting programs relevant to the conservation of biodiversity.
37. Regularly review and update the status of knowledge about Ontario's biodiversity.
38. Continue and improve reporting on the state of Ontario's biodiversity and biodiversity targets at five-year intervals and share and expand access to biodiversity data and information.
39. Investigate and support the development of Ontario's Living Planet Index.



Ethical space in biodiversity conservation

Achieving common ground can be hard when language, power levels, ownership, scale and timeframes differ. An approach that could be helpful in this context is the creation and maintenance of “ethical space” where asymmetrical power is balanced and diverse worldviews are respectfully engaged.

“Ethical space involves creating a place for knowledge systems to interact with mutual respect, kindness, generosity, and other basic values and principles. It is based on the belief that all knowledge systems are equal.” — **We Rise Together, The Indigenous Circle of Experts**

Creating a collaborative space within conservation work can provide new insights and approaches in environmental stewardship, and can challenge the prevailing conservation management systems. Unlike Western approaches, which focus mainly on human perspectives, ethical space in conservation can help ensure that the well-being of all creatures is considered.

Transform investments

Biodiversity has to be included in balance sheets of all sectors and the cost of inaction must be calculated so that we better understand and manage biodiversity and its role as the foundation for our economy and our communities.

This strategic direction includes innovative methods to improve the ways we value biodiversity, generate economic growth, and fund conservation.

TARGET

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- 13** By 2030, biodiversity considerations are integrated into the public and private sectors including through budgeting, funding, investments and financial disclosure.

PRIORITY ACTIONS

40. Investigate how biodiversity financing can be further developed.
41. Review and strengthen economic tools, such as incentives, that encourage conservation and increase private investments like green bonds.
42. Expand accounting and disclosure principles and make data available to integrate the economic value of biodiversity and ecosystem services into decision making.
43. Work with and within financial institutions to create positive biodiversity and climate resilient outcomes as a condition of financing (e.g., for land development and resource extraction).

Biodiversity and the economy

Biodiversity provides ecosystem goods and services that we rely on everyday, however the values they provide are often missed or hidden unless they are a marketable product, e.g., timber, fishing. Non-marketable outputs, e.g., clean air, are just as important and evidence suggests that leaving biodiversity out of the economic valuation and accounting has eroded economic opportunities and contributed to negative costs and impacts to society and the environment.

Investing in biodiversity has positive economic benefits and can stimulate demand for products and services of local businesses (e.g., plant nurseries, aggregates, equipment). Cooperation between the Ontario government, non-government organizations and the private sector, for example, has resulted in an increased consideration of biodiversity values in land management (e.g., sustainable forest management).



Conclusion

Everyone has a role to play if we are to succeed in conserving the wealth of biodiversity in Ontario, both now and in the future.

The actions and targets contained in Ontario's Biodiversity Strategy provide a framework for coordinating biodiversity conservation across the province, but much more is possible.

In addition to the actions we take as individuals, this document should inspire Ontario's sectors and groups to think creatively about biodiversity and to take responsibility for developing their own implementation or action plans for biodiversity conservation.

What you can do to help conserve biodiversity

- Get outside and discover biodiversity! Share your passion for nature with others.
- Lower your Ecological Footprint at school, home and work: refuse, reduce, reuse, repair, and recycle.
- Buy locally grown produce, farm products and other goods and services.
- Drive less! Try walking, riding your bike or using public transit to get around.
- Use less energy and water: you'll lower your energy bills and conserve natural resources.
- Share your talents and time — volunteer and participate in biodiversity stewardship activities.
- Watch out for invasive species. Learn about them, and help prevent their spread.
- Help monitor biodiversity in your backyard, neighbourhood or community by becoming a community scientist.
- Get your hands dirty — plant native trees and flowers in your garden or grow your own food.