Ministry of Natural Resources

Ontario

Natural. Valued. Protected.

Elk Management Plan

Ontario Ministry of Natural Resources
2010

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FOREWORD

The mission of the Ontario Ministry of Natural Resources (MNR) is to manage Ontario's natural resources in an ecologically sustainable way to ensure they are available for the enjoyment and use of future generations.

MNR's mandate includes providing leadership and oversight in the management of Ontario's fish and wildlife resources. Ontario's *Elk Management Plan* has been developed in the context of MNR's strategic direction in *Our Sustainable Future* and *Ontario's Biodiversity Strategy*.

Following the guidance from Ontario's *Cervid Ecological Framework*, this plan leads Ontario's elk management program in an evolution from a population restoration program to a sustainable management program for elk in Ontario.

ACKNOWLEDGEMENTS

With this plan the Ontario Ministry of Natural Resources (MNR) together with its partners celebrates the success achieved by the Ontario Elk Restoration Program in restoring a species that was once extirpated from the province. MNR congratulates all the individuals, organizations, committees and volunteers that have helped re-establish and ensure the future of elk in Ontario, including:

The Provincial Elk Technical Team and Elk Restoration Unit, Provincial Elk Restoration Advisory Committee and preceding committees, Local Implementation Committees (Bancroft/North Hastings Elk Restoration Committee, Lake Huron North Shore Elk Restoration Committee, Northwestern Ontario Elk Restoration Coalition, Quinte Elk Restoration Committee, Sudbury Elk Restoration Committee), Cambrian College, Lakehead University, Laurentian University, Sault College, Trent University, Parks Canada Agency, Northern Ontario Tourist Outfitters, Ontario Federation of Anglers and Hunters, Ontario Fur Managers Federation, Rocky Mountain Elk Foundation Canada, Thunder Bay Rocky Mountain Elk Restoration Inc., French River Resorts Association and Safari Club International (Ontario Chapter).

MNR would also like to thank all individuals that contributed to and provided comments during the development of this plan and associated materials.

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1.0 INTRODUCTION

The American elk (*Cervus elaphus*) is one of four members of the deer family (Cervidae) existing in Ontario. As part of Ontario's cervid population, elk are intrinsically valuable and have the potential to provide many benefits to the public including: contributions to biodiversity, recreation in the form of hunting and viewing, subsistence hunting, and economic benefits through tourism.

Native elk populations were extirpated from the province in the late 1800s due to pressures from human settlement, including unregulated and excessive harvest. Restoration efforts were undertaken by the Ontario Ministry of Natural Resources (MNR) along with many partners and volunteers beginning in the late 1990s. Because of these efforts, elk now inhabit several areas across Ontario. The restoration of elk to Ontario is a significant achievement and represents an important contribution to Ontario's biodiversity.

1.1 Scope

Ontario's *Elk Management Plan* is based on a wide range of ecological knowledge, socio-economic considerations, the best available science and an awareness of the inherent uncertainties and risks of various management actions. The challenges associated with managing wildlife across Ontario's diverse and complex ecosystems are recognized, as is the need to consider and integrate management strategies for different species and their habitats, other resources, human activities, and stressors such as disease and climate change. There is a need for provincial level guidance with enough flexibility to accommodate regional and local level ecological and socio-economic circumstances and objectives. This plan focuses on information and tools needed to manage elk within the larger landscape and ecosystem context and to help guide local management planning. Included in this document are guiding principles, objectives and key management strategies required to further the sustainable management of elk.

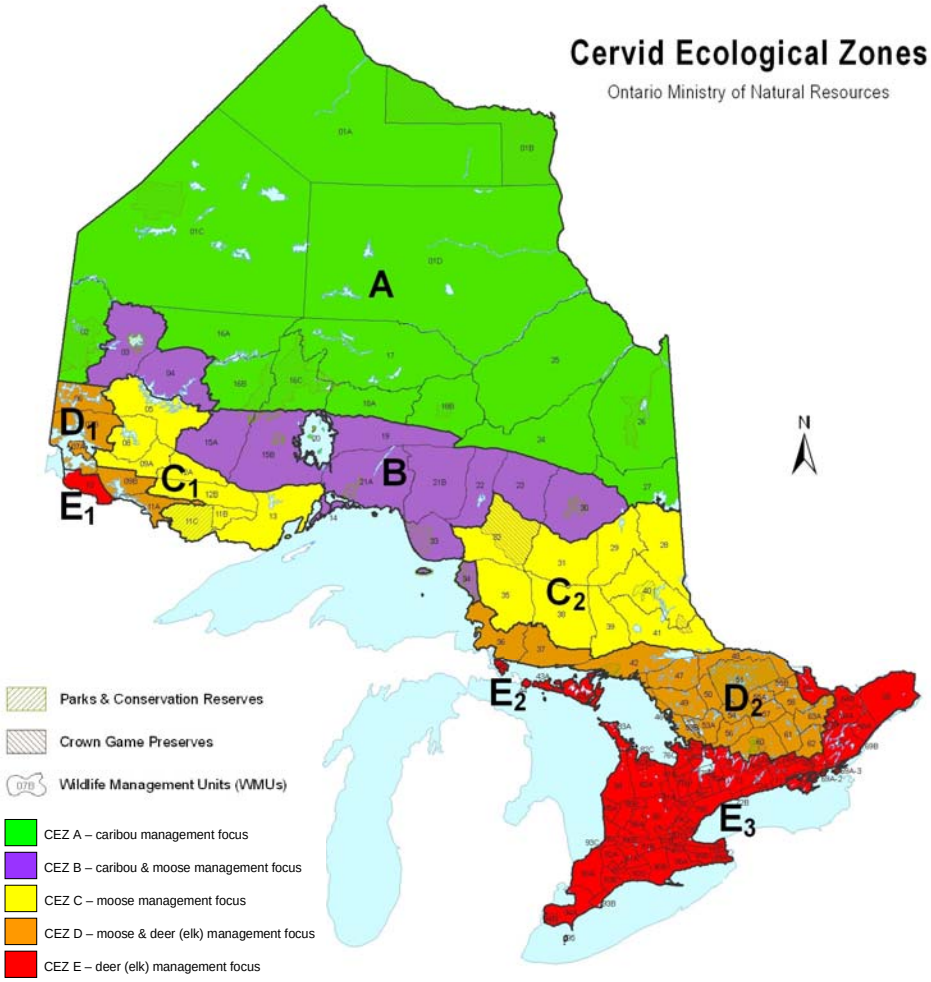
1.2 Strategic Direction

MNR's strategic and policy direction for wildlife management is provided in *Our Sustainable Future* (2005) and *Ontario's Biodiversity Strategy* (2005). These documents direct the Ministry to continue to move towards a more ecological approach for managing resources, emphasizing adaptive management, resource stewardship and the need for Ontarians to work together to achieve sustainability.

In contributing to the conservation of elk and their habitat, Ontario's elk management program assists in the realization of Ontario's biodiversity conservation goals. Partnerships continue to play a key role in the management of elk in Ontario, as does the promotion of private land stewardship. Ontario's *Elk Management Plan*, as such, is consistent with the recommended actions identified in Ontario's broader strategic documents.

1.3 Policy Context

Ontario's *Cervid Ecological Framework* (2009) (*CEF*) addresses cervid management at the broad landscape and ecological level. It consolidates and integrates Ontario's approach to managing cervid species in relation to each other with consideration of the broader ecosystem(s) they inhabit. Ontario's *Elk Management Plan* fits within the overarching cervid management goal and guiding principles set out in the *CEF*, and is guided by direction from the broad cervid management objectives provided for each Cervid Ecological Zone (CEZ).



Note: reference Cervid Ecological Framework for more detailed information on cervid management approaches within each Cervid Ecological Zone.

The legal basis for the plan is provided by the *Fish and Wildlife Conservation Act, 1997* , the *Crown Forest Sustainability Act, 1994*, the *Public Lands Act,* the *Constitution Act, 1982,* the *Provincial Parks and Conservation Reserves Act, 2006,* and the *Planning Act* (through the *Provincial Policy Statement, 2005*).

Statement of Environmental Values

MNR, on behalf of Ontarians, is the steward of Ontario's provincial parks, forests, fisheries, wildlife, mineral aggregates, and Crown lands and waters that make up 87% of the province. MNR manages this responsibility through a diverse legislative mandate and an array of programs aimed at meeting the needs of the public. MNR envisions a healthy environment that is naturally diverse and supports a high quality of life for the people of Ontario through sustainable development. MNR's mission is to manage Ontario's natural resources in an ecologically sustainable way to ensure that they are available for the enjoyment and use of future generations. MNR is committed to the conservation of biodiversity and the use of natural resources in a sustainable manner.

In 2008 MNR revised the Statement of Environmental Values (SEV) under the Environmental Bill of Rights (EBR). The SEV describes how the purposes of the EBR are to be considered whenever decisions that might significantly affect the environment are made by MNR. MNR has considered the SEV during the development of the *Elk Management Plan* which is intended to reflect its direction and to further the objectives of managing our natural resources on a sustainable basis.

1.4 Management Goal

The goal of Ontario's elk management program is to support sustainable elk populations and the ecosystems on which they rely, for the continuous provision of ecological, cultural, economic and social benefits to the people of Ontario.

1.5 Guiding Principles

The following are the guiding principles for elk management, which are derived from the guiding principles for the management of cervids outlined in Ontario's *Cervid Ecological Framework*. They have been developed in the context of the strategic direction set out in *Our Sustainable Future*:

1. Elk are a part of Ontario's natural biodiversity and have an intrinsic value within their natural ecosystems, and for the people of Ontario.

2. An adaptive management approach is required to ensure that elk management is evaluated, and continues to provide a balanced range of benefits desired by Ontarians.

3. Elk management will be supported by the best available knowledge (including scientific, local and Aboriginal traditional knowledge), with consideration for social, cultural and economic values.

4. Elk management will respect Aboriginal peoples' unique perspectives, traditional knowledge and practices related to elk and the exercise of their constitutionally protected Aboriginal or treaty rights.

5. Elk populations and habitat will be managed at the appropriate spatial scale to achieve broader management goals and objectives for each Cervid Ecological Zone (CEZ), and to allow for management actions which address local needs.

6. Elk management includes the management of both population and habitat with consideration for potential stressors (e.g. climate change, predator-prey interactions, other cervid species, disease and parasites).

7. All Ontarians and partners will be encouraged to participate in elk management planning.

2.0 OBJECTIVES AND STRATEGIES

2.1 Policy and Legislation

Wildlife policy reflects the range of ecological, social and economic factors existing in Ontario, within the context of wildlife sustainability. *Our Sustainable Future* and *Ontario's Biodiversity Strategy* direct that MNR manage all natural resources, including wildlife, in an ecologically sustainable manner.

The *Fish and Wildlife Conservation Act, 1997* (FWCA) contains regulatory tools to protect and manage elk. Under the FWCA, elk are designated as Game Mammals. Policies and regulations may be adjusted or created to reflect changes in the direction of elk management planning over time.

OBJECTIVE 1: Provide an effective policy and legislative framework which supports the ecologically-based, adaptive management of elk in Ontario.

Strategy 1.A: Develop and maintain policy direction and legislation/regulation support for elk management.

- Review policy direction and associated legislation and regulations periodically. Revise as necessary as new knowledge and information become available or as societal interests evolve over time.
- Maintain transparent decision-making processes by engaging the public, stakeholders, and Aboriginals on policy or regulatory changes.
- Ensure policy direction enables both broad consistency within a common management approach and flexibility to accommodate varying local circumstances.

2.2 Population Management

Elk Populations in Ontario

A total of 443 elk were released at four sites across Ontario between 1998 and 2001. This added to an existing population of two herds residing near the Nipissing and French River area – remnants of a past restoration project. In 2002, further transport of elk from Alberta was stopped due to risks associated with the potential spread of Chronic Wasting Disease as identified in an independent risk assessment commissioned by MNR (Sifton & Steven 2002).

Released animals have responded differently, both within and between release areas, to natural environmental conditions and stressors. Population trends for elk in Ontario are influenced by their ability to adapt to these factors.

OBJECTIVE 2: Under guidance from Ontario's *Cervid Ecological Framework*, support a self-sustaining elk population on the landscape.

Strategy 2.A: Building on the guidance in Ontario's *Cervid Ecological Framework*, develop an elk management planning process and supporting tools to facilitate the setting and achievement of population objectives.

- This planning process will reflect an adaptive management approach that encompasses an ecosystem focus, coordination among management units, integration with other land use and resource planning exercises, and requires transparency in development and implementation.
- An adaptive management approach allows for appropriate adjustments to be made to management intensity as Ontario's elk management program and populations evolve. As self-sustaining populations evolve, there may be the opportunity to exercise less intensive management where appropriate (e.g. monitoring, geographic scale).
- Population objectives will be set for applicable Cervid Ecological Zones by:
    - Determining an ecological population range which takes into account: habitat suitability, other cervid species and associated factors identified in the *Cervid Ecological Framework*, and elk-ecosystem interactions (e.g. predator/prey interactions, diseases).

- Determining a socio-economic population range which considers: stakeholder interests, activities and benefits, as well as area characteristics.
- Setting a specific population objective to provide the optimal mix of socio-economic benefits while remaining ecologically sustainable.
- Consistently evaluating objectives, monitoring achievements and making changes as appropriate.

Strategy 2.B: Undertake elk population monitoring and assessment to assist in developing and updating population objectives and management approaches.

- Identify and set priorities for the monitoring of population characteristics (e.g. size, age-sex composition, recruitment and mortality rates), as necessary for effective management.
- As resources permit, carry out monitoring using consistent and appropriate survey methods for all areas.
- Ensure data collected is relevant to objectives and future goals, and makes the best use of available technology.
- Where feasible, collaborate with other agencies and partners (e.g. local elk committees, wildlife organizations, academia) to undertake research, including the collection and analysis of data.

Strategy 2.C: Under guidance from Ontario's *Cervid Ecological Framework,* implement locally appropriate management approaches.

- Use Cervid Ecological Zone (CEZ) population objectives to inform elk management at sub-CEZ levels, appropriately adjusting management approaches or intensity as Ontario's elk management program evolves.
- Explore key local productivity and mortality factors (e.g. population composition, habitat and forage availability, predation, harvest).
- Review the feasibility of elk translocations (i.e. the trapping and transferring of animals within Ontario) as a recovery tool for specific situations, including an assessment of risks and the development of criteria and guidelines, if appropriate. This review will examine lessons learned from past experience in Ontario and elsewhere as well as disease transmission risk and regulatory considerations.
- Consider implementation of an elk harvest to achieve ecological and socio-economic elk management objectives. The following table sets out general guidelines for those areas considering a harvest, and may be adapted to reflect the state of recovery of local elk populations.

Population Level Relative to Objective	Population Trend		
	Increasing	**Stable**	**Decreasing**
Above Objective	Consider a harvest	Consider a harvest	Consider a harvest
Meeting Objective	Consider a harvest	Use caution when considering a harvest *examine population mortality and productivity*	Use caution when considering a harvest *examine population mortality and productivity*
Below Objective	Use extreme caution when considering a harvest *examine population mortality and productivity*	Use extreme caution when considering a harvest *examine population mortality and productivity*	Do not consider a harvest

- Harvest management approaches (e.g. sex/age harvest characteristics, seasons) will be chosen appropriately to ensure the continued sustainability of a population.

Strategy 2.D: Consider linkages with management objectives for predator species (e.g. wolves, bears) as well as other cervid species to help maintain sustainable elk populations that are compatible with the ecosystems they inhabit.

2.3 Habitat Management

The health and sustainability of a population is largely dependant on the quantity and quality of available natural habitat. Important elk habitat characteristics relate to topography and space, climate and weather, as well as the availability of forage and cover. The natural carrying capacity of an area is determined by these factors, and is influenced further by factors such as interactions with predators and competition with other cervids.

Elk Habitat in Ontario

The *Plan for the Restoration of Elk in Ontario* (1998) identified areas suitable for the restoration of elk. Releases occurred in four of these areas:

- Lake of the Woods (CEZ D1)
- Lake Huron North Shore (Northwestern CEZ D2)
- Nipissing/French River (Northern CEZ D2)
- Bancroft/North Hastings (Central/Southern CEZ D2)

These areas were selected partly as a result of extensive habitat suitability analyses. All areas fall within Ontario's Great Lakes-St. Lawrence forest region and the Ontario Shield ecozone. Release areas were also selected on the basis of local interest as expressed through the formation of a local implementation committee and the submission of a proposal. Local consultation, in the form of public meetings and postings on the Environmental Registry occurred prior to the release of elk in each area.

OBJECTIVE 3: Under guidance from the *Cervid Ecological Framework*, maintain the quality and quantity of habitat suitable for sustaining elk populations in Ontario.

Strategy 3.A: Integrate elk habitat needs into land use planning and other resource management processes to ensure adequate consideration and suitable management of elk habitat.

- Relevant land use plans include existing Crown land use plans, and municipal land use plans.
- Relevant resource plans include Forest Management Plans, plans for parks and protected areas as well as land stewardship initiatives.

Strategy 3.B: Consider the natural carrying capacity of local habitats, including competition with other cervids, and reflect those considerations in the management of elk

Strategy 3.C: Consider the need to evaluate and undertake habitat improvement, enhancement, or protection initiatives.

- Consider ways of defining and protecting key habitat areas (e.g. through land use planning, education, or agreements with land owners).
- Where feasible, collaborate with other agencies and partners (e.g. local elk committees, wildlife organizations, academia) to undertake research directed at enhancing natural elk habitat.

Strategy 3.D: Support research into the effects of climate change on elk and other cervid habitat.

2.4 Elk Health

Health concerns

Disease & Parasites

As with many cervid species, elk are susceptible to a variety of parasites and diseases. The prevention of disease is critical to promote healthy and sustainable elk populations. A disease outbreak within Ontario's elk population could have social, economic and environmental implications including elk population decline, loss of biodiversity, the potential for disease transmission to other cervids, as well

as alterations to cultural practices and wildlife recreational activities (e.g. hunting and viewing).

Canada's National Wildlife Disease Strategy (2004) articulates federal and provincial government commitments to address wildlife disease that may cause significant social, ecological or economic harm. MNR played a key role in the development of this strategy and continues to be committed to its goals and objectives.

The *Ontario Chronic Wasting Disease Surveillance and Response Plan* (2005) outlines key actions to minimize the risks of CWD associated with cervid populations. This plan was developed in collaboration with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Ministry of Health and Long Term Care (OMHLTC), and the Canadian Food Inspection Agency (CFIA). Since 1998, CWD surveillance has occurred in captive and wild deer and elk populations. To date, this surveillance has not detected CWD in Ontario's cervids. MNR continues to work with the OMAFRA, OMHLTC and CFIA to achieve the objectives of this plan by carrying out the recommended actions.

Captive Cervids

Due to the natural movements of wild elk, there is the potential for interaction with captive cervids and other livestock which exist on farms throughout Ontario. This could result in a mutual risk of parasite and disease transmission. There is also concern about the potential for captive cervids of different sub-species or hybrids (e.g. elk/red deer hybrids) to escape, self-propagate and negatively impact the genetic integrity of wild elk populations via inter-breeding or provide potential competition for habitat.

In an attempt to minimize such risks, there are specific requirements under the *Fish and Wildlife Conservation Act*, *1997* (FWCA) for the owners of farmed animals to report and attempt to recapture escaped or released animals. It is an offence under the FWCA to release or cause the escape of farmed deer or elk.

OBJECTIVE 4: Promote a healthy elk population

Strategy 4.A: Identify current or potential elk health concerns.

- Work with the Canadian Cooperative Wildlife Health Center to determine cause of death in elk mortalities where possible.
- Monitor health of elk and other cervid populations by using appropriate surveillance methods.

- Remain informed about current status of diseases to which elk are susceptible.
- Identify potential effects of climate change on diseases of concern and on general disease propagation.

Strategy 4.B: Where appropriate, take preventative action when addressing elk health.

- Discourage and, where appropriate, take measures to prevent the supplemental feeding of elk and other practices that result in high elk concentrations.
- Collaborate with other agencies and partners regarding research that facilitates early detections of disease in wild elk populations.
- Consider making use of risk-based prevention measures to reduce the likelihood of elk disease incidences in Ontario.

Strategy 4.C: Position Ontario to respond to chronic or emergency disease outbreaks in wild elk populations.

- Prepare for a disease outbreak in elk populations by collaborating with partner agencies to establish roles and responsibilities, and take appropriate actions.
- Ensure elk management enables the appropriate implementation of relevant disease management plans (e.g. *Ontario Chronic Wasting Disease Surveillance and Response Plan* (2005), *Canada-Ontario Foreign Animal Disease Emergency Response Plan* (2008).

Strategy 4.D: Explore and, where appropriate, address the health implications of interactions between wild elk and captive cervids or other livestock.

- In partnership with other relevant agencies, investigate potential programs to detect and prevent contact between wild elk, captive cervids (elk, elk-red deer hybrids, deer), and other livestock.
- Investigate possible issues surrounding genetic integrity of wild elk populations.

2.5 Benefits

It is recognized that elk have an intrinsic value within their natural ecosystems, and for the people of Ontario. Many other benefits are available to Ontarians through elk appreciation, education and awareness, as well as viewing and harvest opportunities.

Opportunities and Elk

Using an adaptive approach when managing recreational opportunities allows for appropriate adjustments to be made to management intensity and supports the sustainability of Ontario's elk population and the benefits it provides.

Harvest Opportunities

For self-sustaining populations, the selective harvest of elk can help to achieve management objectives associated with the provision of recreational and economic opportunities. A selective harvest could also potentially contribute to the reduction of human-elk conflict, improved understanding and awareness, and monitoring and data collection.

Hunter education and enforcement of regulations are important aspects of the overall success of elk management. The vast majority of hunters act responsibly; however, the need to be vigilant remains to ensure that an animal of the right species, age and sex is harvested.

Viewing Opportunities

Elk are often found in open areas and forest edges, and as a result may provide excellent viewing and photographic opportunities. Elk mating behaviour in fall months often results in increased elk movement and a greater likelihood of locating elk for viewing purposes. Elk bugling is also often heard at this time.

OBJECTIVE 5: Provide a balance of benefits from a self-sustaining elk population.

Strategy 5.A: Enhance opportunities for public awareness and understanding of elk management and biology in Ontario.

- Contribute to the development of elk education materials to enhance public learning.
- Encourage partners to explore and where appropriate enhance elk-related tourism (e.g. viewing). With the awareness that many such opportunities occur on private land, ensure that landowners' wishes are respected (e.g. by not trespassing or causing damage to private property while viewing elk).
- Provide periodic updates on the status of elk in Ontario through MNR's website and other appropriate forums.

Strategy 5.B: Involve interested groups (Aboriginals, partners, stakeholders, interest groups, landowners, the public) in a transparent and adaptive management process.

- Stakeholders could be engaged through local-level updates, meetings, websites, etc.

Strategy 5.C: Identify and provide opportunities for the selective harvest of elk in a manner which provides optimal ecological, social and economic benefits to the people of Ontario.

- Develop an allocation process and management guidelines for the selective harvest of elk as part of an overall management planning process.
- Apportion harvest opportunities in relation to the available supply, with consideration of all user groups and interests.
- Provide a reasonable and equitable distribution of harvest opportunities.
- Improve hunter awareness and understanding of any harvest management strategies through the distribution of educational materials (e.g. videos, posters, signs, information published in annual hunting regulations summary).

Strategy 5.D: Communicate and enforce legislation and regulations pertaining to elk.

- Where necessary, identify areas where illegal harvest may have a significant impact on the sustainability of elk populations.
- To the extent feasible, ensure legislation, regulations, and procedures are straightforward, enforceable and easy to follow.

2.6 Human-Elk Conflict

Conflicts between humans and elk have occurred in all areas where elk were released and include fence damage, motor vehicle collisions, depredation of agricultural crops and forest products, and conflicts with captive cervid farming operations.

Conversely, elk have been negatively affected by a variety of human activities including land development, outdoor recreation, as well as motor vehicle and railroad traffic.

Conflict Management

The *Strategy for Preventing and Managing Human-Wildlife Conflict in Ontario* (2007) released by the Government of Ontario outlines approaches to address human-wildlife conflicts, including a focus on community and partnership-based actions, leadership and responsibility, and public understanding. Ontario will continue to work with partners, stakeholders and the public to address these needs.

Developing effective tools to minimize conflicts is consistent with the approach taken by MNR with other big game species such as white-tailed deer, for which there exists the *Strategy for Preventing and Managing Human-Deer Conflicts in Southern Ontario* (2007). Information in this strategy may also help to prevent and manage human-elk conflict.

OBJECTIVE 6: Consistent with Ontario's *Strategy for Preventing and Managing Human-Wildlife Conflict in Ontario,* collaborate on preventing and managing human-elk conflict.

Strategy 6.A: Increase public understanding and awareness of human-elk conflict.

- Recognize that all residents of the province share responsibility for preventing and managing human-wildlife conflicts.
- Increase local public awareness of elk populations and their habits.

Strategy 6.B: Encourage preventative measures to reduce conflicts between elk and the agricultural community.

- Provide information on and support the use of prevention techniques (e.g. fencing, deterrents).
- Consider the benefits of improvements to elk habitat where appropriate to reduce elk reliance on agricultural lands.
- Discourage and, where appropriate, take measures to prevent the supplemental feeding of elk.
- Explore methods and tools for alleviating human-elk conflict situations.

Strategy 6.C: Improve elk and public safety by working collaboratively to reduce elk-motor vehicle and elk-train collisions.

- Where feasible, work with other agencies to encourage appropriate communications materials in key elk areas to communicate with the

public during times of increased elk presence on or near roads and railway lines, and to explore other mitigation approaches.
- Encourage discussion amongst relevant agencies to consider habitat management projects to reduce attractiveness of vegetation along roads and railway lines or to improve availability of suitable elk habitat elsewhere if necessary.

2.7 Implementation

The implementation of the strategies outlined within this policy will require ongoing analysis and discussion related to the identification of key priorities and requirements, as per available resources.

The Ontario Ministry of Natural Resources in collaboration with partners will lead discussions on implementation and conduct consultation with the public, Aboriginal organizations, partners and interested stakeholders as appropriate.

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