

“Living with Wildlife”

TOWARD AN ONTARIO STRATEGY TO MANAGE HUMAN-WILDLIFE CONFLICTS

Preface

Ontario is blessed with a great abundance and diversity of wildlife. In some areas, increasing wildlife populations, changes in habitat, changing land use patterns or changing societal values have created an environment where human-wildlife conflicts are increasing in number and complexity. Like many other jurisdictions in North America, Ontario is faced with the challenge of moving forward to address these conflicts. The Ministry of Natural Resources, in association with the Ministry of Agriculture, Food and Rural Affairs, The Ministry of Health, the Ministry of Transportation, and the Ministry of Municipal Affairs and Housing, is leading the development of a provincial strategy to address issues associated with human-wildlife conflicts. Through collaborative approaches that include stakeholder and public involvement, human-wildlife conflicts can begin to be explored and work can be initiated to identify long term management options and solutions.

To put this strategy into perspective, several definitions are needed to help define the focus of this endeavour.

Wildlife: *free ranging vertebrates other than fish.*

Resource: *something that provides a benefit to people.*

Value: *something that has the ability to cause an effect on people – either positive or negative. (e.g. if there were no people, wildlife couldn't affect them, thus they could not be assigned a value).*

Wildlife Management: *the act of influencing or modifying the wildlife resource to meet human needs, desires or goals.*

Conflict: *a disagreement or being incompatible.*

Managing human-wildlife conflict: *the science and practice of increasing the value of the wildlife resource by reducing the negative values of wildlife*

Why a nuisance wildlife strategy?

Like people, wildlife are an integral part of the ecosystem. The science of wildlife management reflects this dependency. Decisions about the management of wildlife need to be made with the involvement of the Ontario's public. The issues surrounding human-wildlife conflicts, like many other resource management issues, are complex and the solutions are not within the purview of one ministry alone. It is critical to take action to protect Ontario's societal and agricultural interests while providing for sustainable wildlife resources. To do this, ministries must work together, in collaboration with stakeholders, agricultural and environmental organizations to develop a common understanding of the issues and move forward with the identification of solutions.

Biodiversity

The intent of Ontario's Biodiversity Strategy is to conserve Ontario's biodiversity and provide for the sustainable use of the province's biological resources. Conserving the rich variety of natural life and promoting sustainability in our province is vitally important for ensuring a healthy environment, strong communities and a solid economy.

A strategy to manage human-wildlife conflicts for the province will contribute to the objectives of Ontario's biodiversity strategy and, through implementation, will assist in addressing Ontario's biodiversity challenge.

Valuing Wildlife – A century of tradition in North America

In the late 1800's and early 1900s, in face of a number of wildlife populations experiencing serious declines and even extinction (e.g. passenger pigeon), a continent-wide conservation movement began with the establishment of laws to prevent over-exploitation of species through licensing, bag limits and seasons and through the creation of several national parks to provide refuge for a number of wildlife species that were at risk from exploitation by early settlers. This stewardship ethic continued to evolve and interest in using wildlife resources wisely and conserving their habitat increased. Highly publicized campaigns by government agencies, environmental organizations and the angling and hunting community have raised the profile of species at risk, loss of biodiversity and impacts on wildlife as a result of deteriorating and lost habitat.

The significance and value of wildlife to society has generally been increasing and is indicated by a growing number of outdoor enthusiasts, the increasing number of "conservation and stewardship organizations" and people getting involved in restoration and conservation projects. Involvement in wildlife organizations is one of the fastest growing wildlife-related activities.

What is a human-wildlife conflict?

Wildlife come in conflict with people when they negatively impact on things valued by people and at a level that exceed the positive values received from wildlife. Negative wildlife values would include an animal that poses a health or safety concern, as in the case of a bear or rabid fox; if an animal causes economic or productivity loss; or if an animal causes negative impacts on societal or cultural values such as physical damage to property or interferes with a person's quality of life or well-being. The ability of people to tolerate negative impacts of wildlife varies widely. Often an animal viewed as a nuisance by one person, may be viewed as a welcomed component of nature by a neighbour. Just having wildlife on your property does not make it a nuisance animal.

Human-wildlife conflicts and the changing environment

Human-wildlife conflicts are not a new phenomenon. Wildlife damage to agricultural crops has been documented to the earliest days of agriculture some 10,000 years ago. In Ontario, as is the case in many other jurisdictions, human-wildlife conflicts are a growing concern.

Cumulative environmental and landscape changes over the past few decades in Ontario has, in some cases, increased the amount of wildlife habitat and made it more productive. Consequently in these areas, there may be greater numbers of some species of wildlife than experienced in recent memory. Climate variability and mild winters have

also had a positive effect on many wildlife species. Species that prefer diverse landscapes with an abundance of “edge” between agricultural and forested lands and which are adaptable have benefited the most. This includes species such as white-tailed deer, Canada geese, and raccoons. Deer populations in Ontario have increased 3-4 times since 1980. Resident Canada goose populations in Ontario have increased approximately five times between 1985 and 1996.

As well, agricultural practices have changed and today, farmers grow a broader range of crops such as soybeans. Some marginal farmlands have been allowed to revert back to early successional forest. Through land use planning, natural areas and corridors have been protected from development in urban areas and provide ample habitat and movement for various species. In the past 20 years, an over-all reduction in the use of pesticides, including the banning of DDT, has contributed significantly to the reproductive success and population increases of some species.

What are the Issues?

Economic/Productivity loss

Wildlife damage to agriculture is a concern in Ontario especially at a time when the industry is facing other significant challenges. Wildlife damages cost Ontario farmers over \$41 million in 1998 and farmers invest over \$7.5 million annually in preventing wildlife damage. (Ontario Soil and Crop Improvement Association “Wildlife Impact Assessment” 2000). In the fall of 2004, the Agricultural Advisory Task Team submitted its findings to the Government of Ontario concerning control of predation and crop damage by wildlife. (<http://www.gov.on.ca/OMAFRA/english/aat/advice.htm>). Through the consultation process farmers indicated that they experience significant losses due to livestock predation and crop damage by wildlife. “Farmers are growing increasingly frustrated and are calling for strong and proactive action from government to address this costly and growing problem”.

Insurance claims related to vehicular collisions with wildlife are rising relative to the increase in collisions. Costs are also increasing and are borne by policy holders. There are additional costs borne by the public sector, such as hospitals for related injuries and health care, lost days of employment and untold emotional impacts.

In addition, there are costs associated with prevention of wildlife related damage and management of individual nuisance wildlife or populations. Ontario farmers spend more than \$7.5 million annually in preventing wildlife damage, while other landowners invest in measures to protect gardens, repair damage or to remove animals (e.g. racoons) from their property. Crop insurance in Ontario does not cover wildlife damage as it is only intended to insure against weather related losses such as hail, floods or drought. An issue with wildlife damage to crops is that this reduces the overall yield and, if reported to crop insurance, then future payouts for weather related losses may be diminished. Examples of costs to municipalities and other government agencies include bear proof waste management practices, design and building costs to increase public safety on highways, and at airports as well as costs associated with relocating or removing bears, geese or other wildlife. On the other hand, some of these preventative costs can save considerable future expenses of dealing with problem wildlife.

There are opportunities for farmers to obtain assistance in dealing with wildlife conflicts.

New programs, such as the Environmental Cost-Share Opportunities for Ontario Farmers, open new avenues for farmers to obtain funding for specific projects. At least eight of the 36 funding categories may pertain to alleviating farmer-wildlife conflicts.

Societal and Cultural Values

Social and cultural values and conflicts create many challenges for management agencies.

In Ontario, as in many other North American jurisdictions, the number of hunters is generally declining. Hunting is the primary method of managing most wildlife game populations throughout North America. This decline can have significant wildlife management implications. On the other hand, citing public safety concerns, many near-urban municipalities and private landowners may restrict hunting activities from occurring. In these areas, where wildlife populations have reached or exceeded their cultural carrying capacity, other management tools to manage abundant wildlife must be considered.

Differing values can create conflicts between neighbours, communities, stakeholders and areas and impact on the ability to tolerate impacts from wildlife. One neighbour sees wildlife as a nuisance that must be removed and another one considers wildlife as a benefit, to observe and even in some cases feed. Some people may have a perceived or real fear for certain species of wildlife and if this animal were to be on their property, a loss of enjoying one's own property would occur. A real threat may be a bear on the property; a perceived threat may be a phobia for snakes even though they cannot incur an injury.

Public Safety

The problem of animals on the road is of growing concern and in some areas contributes to public safety issues. Vehicular collisions with wildlife are increasing, particularly in core deer range in Ontario. Three to nine fatalities and countless injuries occur annually in Ontario as a result of wildlife/vehicle collisions (Elzohairy, Y.M., Janusz, C., Tasca, L., "Characteristics of Motor Vehicle-Wild Animal Collisions, An Ontario Case Study, Ontario Ministry of Transportation, 2004). A recent report by Transport Canada indicates that between 4-8 large animal-vehicle collisions take place every hour in Canada, and it is likely that the actual number of such collisions are underreported (L-P Tardif&Associates, "Final Report, Collisions Involving Motor Vehicles and Large Animals in Canada" to Transport Canada Road Safety Directorate, 2003).

Public safety can sometimes be compromised due to interactions between certain species such as bears and humans. In recent years these interactions have become highly publicized.

Managing Population Growth

The population in the Golden Horseshoe is expected to grow from about 7 million today to about 11 million by 2031. If current development trends continue, an area the size of Toronto, over 1,000 square kilometres, could be consumed within 30 years. The provincial government has undertaken a number of initiatives key to planning for the expected population growth in the Golden Horseshoe and beyond. The Greenbelt Act of 2005 provides for the protection of 1.8 million acres of environmentally sensitive and agricultural land that are under the most significant development pressure in southern Ontario.

Bill 136, the proposed Places to Grow Act, 2004, would plan for growth and development outside of the Greenbelt Area, focussing key resources to curb sprawl and encourage more efficient urban development. The newly revised Provincial Policy Statement also includes enhanced policies for managing growth and promoting efficient land-use and development patterns.

These initiatives will enhance habitat protection in areas where human population densities are greatest. Specific land use management strategies may need to be considered in local planning to address potential human-wildlife conflicts.

Urban Wildlife

Urban wildlife issues are currently of increasing concern. Urban wildlife problems range from racoons ransacking compost containers and garbage to encounters with black bears. Deer, coyotes and other species are finding their way into urban areas through corridors and valley systems. Ready access to food and shelter and the absence of natural predators and hunting activities have allowed many wild animals to successfully adapt to urban environments. For many, wildlife in urban areas enriches communities and provides diversity in the environment. Human-wildlife conflicts can arise however, and the degree of conflict in some cases can be mitigated. Some communities have launched “Living with Urban Wildlife” programs aimed to inform residents about wild animals and preventative action that could be taken to reduce human-wildlife conflicts.

Public Health and Animal Health

Healthy wild animal populations are important to society for many reasons. They provide ecological, social, cultural, recreational and economic benefits. Healthy wild animals must deal with the stresses of every day living in their ever-changing environments. They need to secure the appropriate kind and amount of food; to reproduce and raise offspring; to avoid predation; to adapt to extremes in weather and other changes in their environment, including naturally occurring diseases and parasitic infections. In the past several years, emerging infectious diseases are increasingly of concern to wild animals, domestic animals and humans.

Agencies, organizations and researchers are increasingly collaborating on issues related to wild animal care, wildlife conservation, wildlife diseases, livestock and agriculture and the impacts these have on public health. Some examples include West Nile virus, chronic wasting disease, rabies, and bovine tuberculosis.

Invasive Species

In recent years, the introduction (either intentional or non-intentional) of non-native species into Ontario has become a growing concern. Examples abound where these species have caused major disruptions to ecosystems (e.g. zebra mussels, purple loosestrife and spiny water flea). Invasive species may not only displace native wildlife, but they may also alter habitat causing a cascading effect on many other species as well.

Invasive species may not always be an introduction of non-native species, but would also include the range expansion of native wildlife due to changes in land-use practices, climate change, or any other event that may give a species an advantage where it wasn't before. Sometimes well-meaning people are the cause of the problem by changing the balance of nature or competitiveness on the landscape (e.g. poorly planned intro-

ductions such as muskellunge or northern pike in lake trout watersheds or the natural discrimination or favouritism of certain species by the public at large). When a species expands its range into areas of human settlement or vice versa, conflicts occur (e.g. fisher eating house cats or wolves eating dogs).

Nuisance Deer in Southern Ontario

In recent years, the deer population has increased in many areas in southern Ontario due to mild winters, favourable habitat conditions and plentiful food, including crops. In addition, rural land purchases have brought humans closer to deer habitat. Many landowners attempt to keep deer on their property for viewing by feeding deer. This has resulted in increased contact between humans and deer, which has caused problems such as deer/vehicle collisions and crop and horticultural damage.

MNR's deer management goal is to manage white-tailed deer and their habitat throughout their range, and provide opportunities for recreation from deer, consistent with other land uses, for the continuous ecological, social, cultural and economic benefit of the people of Ontario.

MNR is reviewing deer management activities in southern Ontario to ensure that management goals are ecologically sustainable and balanced with the interests of the broader public. As part of this review, MNR will work with other ministries and the public to look at the specific issue of human-deer conflicts to determine overall effectiveness of the existing suite of policy and program tools that are available. This work will lead to the development of a nuisance deer strategy for Southern Ontario.

What will we achieve?

- Wildlife will continue to be highly valued by all segments of society. Wildlife plays an important role in the lives of many Ontarians as we seek out opportunities to experience nature in growing numbers.
- Farmers and the general public will be better informed and will have greater access to information on how to prevent and effectively deal with wildlife conflicts.
- Actions taken by individuals and agricultural organizations will reduce the negative impacts that abundant wildlife may have.
- We will benefit from the experiences and actions of numerous other jurisdictions that are facing similar challenges and have been working within their communities to alleviate concerns.
- Improved wildlife management will result from governments and other organizations collectively identifying regulatory and non-regulatory options, communicating public education approaches, and methods for implementation of best bets.
- We will have reasonable mitigation measures to deal with human-wildlife conflicts.