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**Protecting and Conserving The Trees in Ontario  
Municipalities: *Assessment and Implementation of By-Laws  
and Policies.***



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## Key Words

**By-Law:** A regulated law made by a local government that is used only in that specific region for a certain purpose and is enforceable.

**Diameter Limit Cutting:** All trees above a specified diameter (usually ~30 cm in size) at chest height are cut. Also referred to as circumference limit cutting. (Ontario Woodlot Association, 2023)

**Good Forestry Practices:** Good forestry practices means the proper implementation of harvest, renewal, and maintenance activities known to be appropriate for the forest and environmental conditions under which they are being applied and that minimize detriments to forest values including significant ecosystems, important fish and wildlife habitat, soil and water quality and quantity, forest productivity and health and the aesthetics and recreational opportunities of the landscape. (Forestry Act, 1990).

**Highgrading:** The forestry practice that selects and removes only the highest value timber.

**Policy:** A set of guidelines that are adopted by a government in order to aid in decision-making.

**Protected Areas:** Lands and waters where the primary management objective is conservation (Phytosphere Research, 2023).

**Significant trees:** Identified on a survey, and/or tree inventory, and within tree preservation and protection plans as prepared by a qualified tree professional; they may not be damaged, removed, injured, or pruned without written approval of Township Council or delegated staff. (Phytosphere

Research, 2023).

**Special Status Trees:** Trees planted to commemorate a special occasion or person. Species that may be relatively rare to an area, or important locally native tree species that are associated with the character of a community (Phytosphere Research, 2023).

**Tree of historical significance:** Tree that maintains a historical significance to the township; associated with a notable local or regional historical event, person, structure, or landscape. Historic tree status is granted by a governing or advisory body. (Phytosphere Research, 2023).

**Woodland:** A treed area, woodlot, or forested area, other than a cultivated fruit or nut orchard or a plantation established for the purpose of producing Christmas Trees (Phytosphere Research, 2023).

# Introduction

## *Project Overview*

Tree protection and forest conservation policies and by-laws are useful tools implemented in municipalities in order to help keep trees and forests healthy as well as sustainable (Forests Ontario, 2023). This includes the proper protection requirements, management, regulations, and promotion of new growth. In *The Municipal Act, 2001*, it clearly states that municipalities are to implement tree protection and enhancement policies to ensure high quality of life for Ontarians as trees and forests provide many services and benefits. This paper focuses on how these tree protection requirements for municipalities, as expressed in *The Municipal Act, 2001*, specifically sections 135 and 270, have been addressed in the upper-tier municipality, Peterborough County, and the lower-tier municipality, Cavan-Monaghan. As well, this paper serves to provide a case for the implementation of recommended policies and by-laws for these municipalities. By reviewing current policies and by-laws for Peterborough County and Cavan-Monaghan and looking at other municipalities in Ontario that have good tree protection by-laws, this paper will state the importance of a provincially unified approach to tree and forest conservation.

## *The Value of Trees*

Trees serve a number of purposes within the environment and hold great ecosystem and economic values. Under the term total economic value (TEV), it is seen that trees contribute heavily to human well being in a variety of ways. Economically, trees and forests provide a number of products including timber, fuelwood, other products such as syrups. Through the harvesting of forests for timber, we utilize trees directly in building of houses and furniture needed for survival, the use of fuel as a form of renewable heat energy, and tree oils in various pharmaceutical products (Heidenreich, 2011). Trees also contribute to energy savings through shading and cooling factors in warm weather, acting as windbreaks, and allowing sun to reach and warm buildings in winter (Heidenreich, 2011). Total heating and cooling savings can amount to \$250 annually per household by planting just three trees on the property (U.S. Department of Energy, 2003). In addition, trees are used for landscaping purposes on properties and can increase property value.

As well as the economic values of trees and forests, there are many ecosystem services that trees provide. These include: habitat for other biota; increasing air quality; and supporting healthy soils. Through these services, trees help the environment build resistance to climate change impacts by mitigating impacts of climate change (Heidenreich, 2011). This resistance is due to both their cooling properties mentioned above and their ability to sequester carbon and act as carbon sinks (Heidenreich, 2011). It has recently been found that actual forest carbon storage is lower than the natural potential of forests globally (Mo et al., 2023). This is due to the

fragmentation and reduction of forested areas across the globe, with a total of just over half of the world's forests remaining (Mo et al., 2023). This means that ensuring and promoting conservation as well as proper management of our remaining forests is critical in helping to reach climate targets and help maintain a stable environment (Mo et al., 2023). As well, trees help to prevent impacts of extreme weather events. They aid in drought recovery through water retention and absorption into the soils, flood control by decreasing erosion of soils, and also help form healthy soils through nutrient, vegetation breakdown, and cycling processes (Heidenreich, 2011). For example, a forest of 10,000 trees can retain up to 10 million gallons of rainwater per year, helping to keep the water table full and available for use by both plants, animals, and humans (USDA Forest Service, 2003).

In addition to providing direct economic benefits and ecosystem services, trees also heavily contribute to quality of human life and well being. Forests and trees play a huge role in recreation like hiking and climbing, their aesthetic and decorative purposes in landscaping, their significance to the cultural heritage of a community, educational purposes, and overall health and restorative benefits for individuals (Heidenreich, 2011). These boosters of human quality of life and well-being are especially seen in urban environments as they act as destressors and help individuals to focus better on their work (Parsons et al., 1998; Taaylot et al., 2001).

In 2022 during the 15th United Nations Biodiversity Conference of the Parties (COP 15), it was agreed that by 2030, 30 percent of land and water would be classified as protected. This means that by the year 2030, at least 30 percent of lands in Canada are to be established as protected areas (OntarioNature, 2023). Protected areas are critical to ensuring resilience to climate change as these areas will help to protect from biodiversity loss. Currently, in Ontario 10.9 percent of lands and waters have been protected, for a total of 116,896 km<sup>2</sup> (Environment and Climate Change Canada, 2023). This number needs to increase drastically in order for Canada to meet this goal and protect our environment. This will be done through government action on all levels, including the municipal governments. By strengthening current land protection policies and creating new and more comprehensive lands and waters protection policies, this goal is attainable. Ontario Nature is partnering with conservation authorities and municipal governments in order to aid in the conservation process for lands and waters (Ontario Nature, 2023). In particular some of these partnership conservation authorities and regions include: Central Lake Ontario Conservation Authority, Credit Valley Conservation Authority, Hamilton Conservation Authority, Lake Simcoe Region Conservation Authority, Niagara Peninsula Conservation Authority, Toronto Region Conservation Authority, and the City of Toronto (Ontario Nature, 2023). Collaboration between all levels of government as well as community support is critical to the process of land and waters protection.

Protection of forests is an important step in minimizing the impacts of climate change as they act as terrestrial carbon sinks and promote healthy ecosystem functions and services (Mo et al., 2023). Through the implementation of policies and by-laws at the municipal level across the province of Ontario, we will reap the economic and environmental benefits of having strong, healthy trees in our municipalities.

## *History of Tree By-laws*

Legislation surrounding the protection and conservation of trees across the province and country have existed in a variety of capacities and at different scales for over 70 years (Forests Ontario, 2023). The purpose of Acts such as the *Trees Conservation Act* (1946) is to protect woodlands from un-sustainable practices such as overharvesting and clear-cutting, as well as the promotion of sustainable forestry practices (Forests Ontario, 2023). Avoiding these unsustainable practices and instead implementing sustainable forestry practices and tree protection requirements is good practice. The first county in Ontario to pass a tree protection by-law to control tree cutting practices in the region was Wellington County in 1946 (Forests Ontario, 2023). This was soon followed by many other municipalities across southern Ontario also implementing tree protection by-laws (Forests Ontario, 2023). These tree by-laws were passed under the *Trees Conservation Act* (1946), the *Trees Act* (1950), and the *Forestry Act* (1998).

In 2001, under the new *Municipal Act*, 2001, came the responsibility for all local municipalities to pass and enforce tree cutting by-laws. This allowed upper-tier municipalities to regulate and prohibit the removal of trees in woodlands, and lower-tier municipalities to regulate and prohibit the removal of individual trees (*Municipal Act*, 2001). These updates are critical for tree management as the *Municipal Act* (2001) enables municipalities to actually prohibit the destruction of trees, whereas the *Forestry Act* (1998) only allowed for the destruction and inuring of trees (Municipal Act, 2001). With the allowance of municipalities to regulate and prohibit tree removal, this means permit applications and approvals are required instead of only notices of intent by landowners, and conditions for tree removal as the municipality sees fit (Municipal Act, 2001). This includes the ability for by-law officers to stop the destruction and cutting of trees (*Municipal Act*, 2001). *The Municipal Act*, 2001, also allows for the upper-tier municipalities and lower-tier municipalities to work together to promote tree protection and gives the option to trade off responsibilities for woodland tree protection by-laws from being a responsibility of the upper-tier municipality, to the lower-tier municipality if agreed upon.

Additionally, the *Oak Ridges Moraine Conservation Act* (2001) granted power for the province of Ontario to pass regulations, if the province should choose, stating that all lower tier municipalities must have a forest conservation by-law. This means that if the province of Ontario were to pass such regulations, they could require every municipality within the province to enact a forest conservation by-law. This requirement for municipalities would drastically increase protection for trees and forests across Ontario.

## ***Creation of Tree By-Laws***

The creation and implementation of tree cutting by-laws are important as they exist to prevent overharvesting and unsustainable forestry practices, while at the same time promoting sustainable practices and recognizing the rights of landowners to make management decisions regarding their forests and trees (Forests Ontario, 2023). The presence of municipal by-laws also helps to provide landowners with helpful information from professionals regarding their tree and forest health and additional information regarding diversity and suggestions to enhance the overall health of their trees (Forests Ontario, 2023). These protection by-laws are therefore beneficial for both landowners as well as the general public.

Ontario Woodlot Association provides ample information on the legislation in Ontario about conservation related by-laws as well as how to develop municipal by-laws in order to enhance tree protection across the province. They provide general information about tree by-laws in order to assist municipalities who are in the process of developing or upgrading pre-existing by-laws under the *Municipal Act*, 2001.

A critical step during the planning and creation of a municipal by-law for tree protection and conservation is consultation with the public through encouraging discussion and feedback related to the plan. This is so important because without public engagement and knowledge that the creation of a by-law is taking place, citizens are much more likely to not support due to lack of consultation. As well, this provides the opportunity to gain information regarding what the public values and wants to see protected. It is important to engage with municipal citizens, but for tree protection and conservation by-laws it is especially important to discuss this planning with farmers, environmental groups, those involved with the logging industry, and those in the forestry industry. Collaboration with the public is useful as it decreases the risk of public backlash to the implementation of a by-law. In addition to consultation with the public, consulting with the respective upper-tier municipality is also critical in the implementation process.

Also, the preservation practices and policies regarding woodlots and trees within municipalities are usually laid out in the respective municipalities Official Plan. As seen in the Township of Cavan-Monaghan's Official Plan, specifically section 3.26, the policies regarding Woodlot, Tree Preservation, Replacement, and Enhancement are already laid out and established as policies. Taking the next step would be to implement these policies for tree protection and enhancement as official by-laws for the municipality.

During the process of creating a tree protection and conservation by-law, drawing from the experience of other municipalities is good practice. This is because you can determine what they included, what the implementation process looked like, and how the public responded. This includes looking at the tree by-laws from other municipalities that have the same population size. As well as looking to other similarly sized municipalities, balancing this and taking practices and information from municipalities in Ontario that have the most comprehensive plans that include good forestry practices is also useful. Reviewing current comprehensive plans and by-laws that



have been implemented in other municipalities allows for an additional layer of ideas and the experiences held by other municipalities can help to ensure a smooth creation and implementation process.

## **Tree Protection Requirements for Municipalities.**

There are a number of legislative tools in Ontario that support the creation and implementation of municipal tree protection and forest conservation by-laws. The following is the summary of this legislature which promotes municipalities' active role in protecting trees and forests. This legislature should be consulted during all steps of the process in order to ensure that it is being followed and utilized to the fullest extent.

### ***Municipal Act, 2001, SO 2001, c. 25***

In *The Municipal Act, 2001*, sections 135 to 147 describe information related to the natural environment and how municipalities are able to interact with matters concerning the environment. This includes the extent of the powers and duties that municipal governments are allowed to regulate and are required to follow. Within this section, it is clearly seen that power has been given to the municipal governments across Ontario to enact by-laws surrounding tree protection as well as forest conservation.

Section 135 states:

“(1) Subject to subsection (4), a local municipality may prohibit or regulate the destruction or injuring of trees.

(2) An upper-tier municipality may prohibit or regulate the destruction or injuring of trees in woodlands designated in the by-law.

(5) In passing a by-law regulating or prohibiting the injuring or destruction of trees in woodlands, a municipality shall have regard to good forestry practices as defined in the *Forestry Act*.”

*(Municipal Act, 2001).*

To go along with this, by-laws that are passed under this section may:

“(a) require that a permit be obtained to injure or destroy trees; and  
(b) impose conditions to a permit, including conditions relating to the manner in which destruction occurs and the qualifications of persons authorized to injure or destroy trees.”

*(Municipal Act, 2001).*

*The Municipal Act, 2001*, allows all levels of municipalities to protect their trees and woodlands through the creation, implementation, and enforcement of tree by-laws which include following good forestry practices. The decision to create and implement a by-law is up to the discretion of individual municipalities, but through the *Oak Ridges Moraine Act*, the province of Ontario is able to require lower tier municipalities to create tree-cutting and forest conservation by-laws as well.

As well as the above section 135 regarding the allowance for municipal governments to pass by-laws for tree protection and conservation, section 270 further says that municipalities are required to adapt and maintain policies regarding the enhancement of trees within their respective municipality (*Municipal Act, 2001*).

Section 270 states:

“(1) A municipality shall adopt and maintain policies with respect to the following matters: ...

7. The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality.”

*(Municipal Act, 2001).*

In Ontario, all municipalities have the responsibility for ensuring that proper policies and plans are in place to protect natural features including tree canopy cover and natural vegetation. This imperative command is seen through the wording choice above, using the word “shall” directly indicates that the following action, the protection and enhancement of tree canopies within the municipality, is not merely just a suggestion, but is mandatory for municipalities to follow. This includes not only protecting current vegetation, but also promoting new growth through various initiatives and planting events.

## ***Other Related Legislation***

As well as *The Municipal Act*, 2001, there are many other pieces of legislation that are related to the regulation, including protection and conservation, of trees in Ontario. Such acts include: *The Forestry Act*, 1990; *The Environmental Assessment Act*, 1990; *Ontario Planning Act*, 1990; *Conservation Authorities Act*, 1990; and *The Endangered Species Act*, 2007. Each of these pieces of legislation may apply to different circumstances in tree protection.

*The Forestry Act*, 1990, is a comprehensive look at all forestry practices within Ontario and this includes agreements with a main focus on forest management and forestry practices such as cutting, planting, and overall proper forestry practices (*Forestry Act*, 1990). The purpose of the *Environmental Assessment Act*, 1990, is to aid in maintaining Ontario's environment through providing protection, conservation, and wise management practices for projects such as those involving tree removal. With *The Ontario Planning Act*, 1990, the purpose is to promote sustainable economic development for the province while maintaining a healthy natural environment. In relation to tree protection, this act includes regulations for tree protection and use of sustainable design features such as trees when planning developments (*Planning Act*, 1990). Next, the *Conservation Authorities Act*, 1990, is related to tree and forest protection and conservation as the purpose of this act includes providing programs and services which promote conservation, restoration, development, and management of natural resources in Ontario watersheds, which includes planting trees and forests on both Crown lands and other lands as consent allows. Finally, the purpose of the *Endangered Species Act*, 2007, includes protecting the habitats of endangered species, which may include woodlands and forests for certain species. As well, the further purpose of this act is to promote the recovery of species at risk, which could include building forest habitat for plant and animal species, as well as planting trees to encourage population growth of tree species labeled endangered (*Endangered Species Act*, 2007). All of the above legislation to be referred to while dealing with trees and forest conservation and promotion efforts within all Ontario municipalities.

# Assessment of Cavan-Monaghan and Peterborough County

## *Cavan-Monaghan*

The Township of Cavan-Monaghan has an official plan which sets out the vision and goals for Cavan Monaghan, and how those are to be implemented (Township of Cavan Monaghan, 2021). This plan includes public awareness for the Township’s land use planning policies and helps the public to best understand how the land will be used (Township of Cavan Monaghan, 2021). This plan was last consolidated and approved October 15, 2021, and it states that the plan provides the policy framework for guiding growth within this municipality and will take into consideration environmental matters (Township of Cavan Monaghan, 2021). Under section 3.22 Urban Design Guidelines it reads:

“Natural features will be integrated with open space and parks systems to create a continuous system. Watercourses, valleylands, significant trees, woodlots, wetlands and other ecological features and functions will be protected. Healthy established trees will be protected in new development in accordance with Section 3.26 of this Plan;”  
(Township of Cavan Monaghan, 2021)

This clearly states that trees will be integrated into the city development plan, and also that trees that are healthy and established will be protected if new development occurs.

Following to section 3.26, it reads:

“The Township will protect significant woodlands including areas within the Natural Heritage System and in Settlement areas.”  
(Township of Cavan Monaghan, 2021)

In order to be protected, woodlands and trees need to be classified as significant through either identification via a survey or a tree inventory (Township of Cavan Monaghan, 2021). Other than under the designation of significant, tree of historical significance, celebration trees, or special status trees, no protection policies or by-laws are in place. While the Township has identified preservation options for some selected trees, as mentioned above, the vast majority of trees in the Township are not protected. Other than the brief section 3.26, the township has no official tree protection or forest conservation by-laws in place. Without a by-law in place, policies are merely guidelines and are not enforceable to the public, meaning that trees and forests will not be protected and conserved to the full extent, leading to fewer and smaller forests and increased cutting of trees. This is an issue that needs to be addressed through the implementation of official by-laws for this municipality.

## ***Peterborough County***

Peterborough County, the upper-tier municipal government covering this region, including Cavan-Monaghan, currently does not have any tree protection and forest conservation by-laws in place. This means that the municipal government has not taken charge and followed what is laid out in *The Municipal Act*, 2001, as mentioned above regarding requirement for the implementation of tree by-laws in municipalities. As a result, the county has no enforceable laws surrounding tree and forest management and preservation practices.

Peterborough County created a new Official Plan and under section 6 is where natural heritage features of the County are mentioned (City of Peterborough, 2022). The purpose of this section is to preserve, protect, and enhance the natural systems and features, which include: areas of natural and scientific interest, habitats of endangered and threatened species, significant wildlife habitats, and significant woodlands (City of Peterborough, 2022). Policies regarding these features are important and it shows that the County has regard for tree protection, but this protection could be improved if there were tree-cutting by-laws in place. This would allow for the enforcement of the protection of areas which may be home to diverse numbers of tree species (City of Peterborough, 2022).

The lack of policies and by-laws for Peterborough County is cause for concern as it shows that the municipality is not following what is laid out in the legislature and also is not promoting healthy environments. The importance of municipal governments and local communities being involved in tree protection practices has been found in various studies as this involvement is key for conserving biodiversity and mitigating climate change impacts at all scales (Mo et al., 2023).

## **Practices from other Municipalities.**

As mentioned, consultation and looking at other municipalities within Ontario is critical to ensuring that the tree protection and forest consultation by-laws that the municipality is implementing are comprehensive and follow the best practices and information available. Below, both good forestry practices and bad forestry practices are discussed in further detail. The majority of upper and lower-tier municipalities across Ontario follow a combination of practices that are considered good and bad, depending on what was officially decided upon in their by-law. When making a by-law from scratch, alongside working from any tree protection policies that are laid out in Official Plans, following the best practices will allow for the highest level of protection and enhancement for the municipality.

### ***Good Practices***

“Good forestry practices” is referenced in the *Forestry Act*, 1990, as: “The proper implementation of harvest, renewal and maintenance activities known to be appropriate for the forest and environmental conditions under which they are being applied and that minimize detriments to forest values including significant ecosystems, important fish and wildlife habitat, soil and water quality and quantity, forest productivity and health and the aesthetics and recreational opportunities of the landscape”.

These practices allow for the forest activities that are required to enable a strong forest to grow healthy plants, maintain ecological processes, provide wildlife habitats, and create products (Forests Ontario, 2005). Good forestry practices represent what the forestry profession, forest workers including loggers, and society have come to expect from forest management operations as the importance of healthy forests are deeper understood (Forests Ontario, 2005).

These good forestry practices include: minimizing environmental damages to the site; continuing to protect and encourage forest species diversity; protecting and enhancing animal habitat; encouraging sustainable practices; ensuring the safety of forests for health and safety (Forests Ontario, 2005). Good forestry practices allow landowners to continually reap increased economic benefits as good practices create healthy and strong trees (Forests Ontario, 2005). Maintaining good practices in the forestry industry is critical and therefore should be included when looking at both short and long term management plans and practices as well as the implementation of policies and by-laws (Forests Ontario, 2005).

A good by-law would follow the good forestry practices laid out above in order to ensure high quality and quantity of forests and trees in the municipality. Creating a good thorough by-law takes both time and money and cannot be rushed. As previously mentioned, this includes collaborating with the public in order to gain a variety of perspectives and learn what members of the public want out of the by-law. Sections in a good by-law would require applications in order to cut and remove trees on property. This would include requiring a registered forest marker to go to the property and create a prescription for the forest. As well, a by-law officer

would check to ensure that the trees on the property are being cut according to the prescription in order to avoid penalties.

### ***Bad Forestry Practices***

One bad forestry practice that is commonly found across Ontario, and is included in many of the municipal by-laws is the practice of diameter limit cutting, also known as high-grading. This practice includes cutting the largest, healthiest, and therefore most valuable trees from a site and leaving the lower quality trees on the site. This means that the lower quality trees that are left become the seed source for the forest. This means that over time, the genetic quality of the forest decreases significantly. When forests are traditionally high-graded and the quality of trees decrease, it no longer is beneficial for foresters to come and log the forest as the majority of trees are young, small, and poor quality. The practice of high-grading forests fails to look to the future and what the forest will look like 20 years down the road.

As seen in Appendix C. Table 1., many municipalities across Ontario have implemented tree protection and forest conservation by-laws. Some of the highlighted municipalities which maintain high standards and follow good forestry practices include York Region and Durham Region. This is because they do not impose diameter limits, allowing for smaller trees to be cut to allow for others to grow larger. The majority of tree by-laws that are found in **Table 1.** and **2.**, although they encourage good forestry practices, still allow for the use of diameter limit cutting. This is for a few reasons, one of which is because they have traditionally been written into the by-laws in order to simplify the enforcement of by-laws (Ontario Woodlot, 2023).

### ***Experiences of Implementing Policies and By-Laws***

Every municipality that has implemented policies and by-laws which regulate and protect trees has had different experiences. This is because each municipality's by-law is going to look slightly different, and the creation and implementation process of the policy and by-laws may have been made with more or less input from the community and previous policies. Overall, tree by-laws are beneficial for the protection and enhancement of trees within municipalities because they are enforceable and include penalties if they are not followed. Policies act as guides for management practices and unless they are under a by-law, they are not enforceable as there are no repercussions if they are not followed.

Ensuring that by-laws are not passed without due process and public consultation is critical so that there can be collaboration and feedback each step of the way. As well, it is important to know what your specific municipality wants the by-law to look like and the purpose in wanting to implement one. Some municipalities may want to implement a by-law in order to create a level playing-field for everyone involved in the logging industry by enforcing minimum standards, whereas in other municipalities, the purpose may be to focus on tighter regulations for tree cutting as well as implementing fees and the requirement of replacing trees. Implementing

tree by-laws without public awareness and contribution is risky as they might reject the ideas that the by-law lays out. As well, it is useful for municipalities to draw from the experiences of other municipalities and see what worked during their implementation process in order to make it smooth.

## **Recommended Approach to meet the *Municipal Act*, 2001, Requirements.**

### ***Greater Importance***

Having every municipality across Ontario implement a tree conservation by-law would be a big step towards creating a healthier environment, building resistance against climate change, and would help Canada to reach the goal of 30% land and water conservation by 2030. Implementing a municipal by-law has lasting impacts that are much bigger than just in that municipality, because as the number of municipalities that have tree protection by-laws increases, the greater environmental impact exceedingly grows. It shows that we care for those living on the Earth now, and future generations. As well, the creation of policies and by-laws help to protect the vast diversity of plant and animal species that require these ecosystems to live but are unable to defend themselves. The frequency of municipalities implementing tree by-laws is increasing due to greater awareness of the value of trees (Ontario Woodlot, 2013). Both Cavan-Monaghan and Peterborough County should follow the steps of other municipalities across Ontario in order to best protect their trees for the benefit of the public and environment.

### ***Cavan-Monaghan***

Cavan-Monaghan has an Official Plan for the Township, but as seen above, they are lacking official tree by-laws that would protect and conserve the trees within the municipality. In the Official Plan, there are policies for the protection of trees with certain designations (e.g., Historical Significance), but these policies are not comprehensive and do not protect all trees and forests within the municipality through enforceable protection. These policies included in the Official Plan are listed under section 3.26 a-l. In order to meet the *Municipal Act*, 2001, requirements for municipalities to protect and enhance trees, Cavan-Monaghan needs to develop a tree by-law based off of these policies that are present within the Township's Official Plan.



To create this by-law, they should look to other municipalities composed of similar population sizes and also those that follow best forestry practices. The more comprehensive the by-law, the better, and when writing a by-law, it needs to be a good balance of good practices and what is going to be manageable for a municipality of a certain size. Looking to other lower-tier municipalities for by-laws is a good start. Lower tier municipalities with similar population sizes that have implemented tree by-laws include: The Blue Mountains, Muskoka Lakes, and Powassan, ON. In Appendix D., basic tree protection by-law templates and examples have been inserted as a beginning guideline for Cavan-Monaghan to follow. As well, Ontario Woodlot Association has provided detailed *Tree Conservation By-law* templates for municipalities to utilize in order to make the creation and implementation process easier. Following a basic tree protection by-law template will make the implementation process much faster, especially for a municipality where there has never been a tree by-law implemented.

Another step for Cavan-Monaghan to take in order to protect this municipality's trees is through discussion with Peterborough County, as it is the upper-tier municipality. These two municipalities could potentially work together in order to implement tree protection by-laws that are extensive and cover both individual trees as well as woodlots. Or, if the County is not interested in working on this at present, Cavan-Monaghan can take charge.

Under the *Municipal Act*, 2001, s. 135(4) does not apply in this situation because there is no upper-tier by-law regulating woodlots within this County. Therefore, as there are no upper-tier by-laws for woodlots across this area, Peterborough County is able to delegate its power to create a woodlot conservation by-law to the municipality of Cavan-Monaghan so that Cavan-Monaghan is able to regulate all trees and woodlots in the municipality, as allowed in s. 135(8). It is recommended that Cavan-Monaghan should request this power and responsibility from Peterborough County so that it has the recourse to implement a fully comprehensive by-law which would protect trees on and off woodlots. The fully comprehensive by-law for Cavan-Monaghan would be able to include trees on properties both over and under one hectare in size, as well as areas designated under the natural heritage system in the Official Plan.

Developing a by-law is a good first step to protecting and conserving trees and forests within municipalities, and there are also other steps that can help promote tree protection. This includes: designating trees as heritage features through utilization of the *Ontario Heritage Act*, 1990, which would add additional layers of protections to specified trees; including trees in the Official Plan to a greater extent in order to ensure that tree protection is thoroughly included in policies and are a part of municipal goals; preserving trees that are on-site of new construction plans; adopting planting goals for the township, could include number of trees or goals focusing on canopy coverage percentage; and increasing tree education programs with support of organizations with similar goals (Webber et al., 2020). As it is a difficult process to designate trees as Heritage Trees under this act, another option is to utilize the Forest Ontario Heritage Tree Protection Program to identify significant trees, and protect them. This process of using the Forest Ontario Heritage Tree Protection Program has been utilized in the other municipalities, e.g., City of Toronto, and may be a useful tool in order to help further protect trees in

Cavan-Monaghan. Having a tree recognized under the Heritage Tree program does not automatically protect a tree, but rather at the municipal level, trees with this status can be specially protected (Forests Ontario, 2022).

### ***Peterborough County***

Peterborough County needs to follow the lead that other municipalities have taken and implement a comprehensive by-law for the protection and conservation of all woodlots in the municipality. This is an important step towards the County doing its part in taking care of our lands. The implementation of a municipal by-law has been needed since it was allowed more than 50 years ago. Peterborough County needs to start looking at percent forest cover for the County and then setting goals to increase this and protect the coverage that already exists. As previously mentioned, there are resources for municipalities to use in order to make a comprehensive by-law that ensures good forestry practices, and therefore there is no excuse to not implement one. Resources given by Ontario Woodlot Association, and also tools available to municipalities under the *Planning Act*, 1990, and *Municipal Act*, 2001.

Several regions with good by-laws can be found in Appendix C., such as York Region and Durham Region, and therefore Peterborough needs to see what comprises these good by-laws and collaborate with these regions and the community to see what should be included. Peterborough County needs to do this in order to protect and enhance the ecological integrity of our lands in order to protect against the many issues that climate change is bringing. This includes protecting against droughts, extreme weather events, and diseases. The quicker that a draft by-law can be created and shared for feedback, the sooner the enforcement and implementation of good forestry management practices can begin. This would aid in the agreement for Canada to have 30% of our lands and forests officially protected by 2030.

In addition, Peterborough County, as an upper-tier municipality, is able to pass forest conservation by-laws for forests that are one hectare or more in size, while a lower tier municipality, such as Cavan-Monaghan, is able to pass forest conservation by-laws for trees found in forests of less than one hectare down to individual trees. It is also seen that either tier of municipal government can delegate its powers to the other tier and by agreement, enforce the by-law of the other tier. Meaning, Peterborough County could delegate its powers to Cavan Monaghan, and therefore Cavan-Monaghan could then pass forest conservation by-laws for their Core Natural Areas delineated and designated in the Official Plan for protection, and all woodlots within Cavan-Monaghan. As well, the County could request that Peterborough City enact forest conservation by-laws for its designated Core Natural Areas as mentioned in the Official Plan. The different tiers of municipal governments are able to work together in order to implement comprehensive plans that would ensure that all trees and forests are conserved and enhanced through protection by-laws.

## Appendix A

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## **Appendix B**

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## Appendix C.

### *Current Tree-cutting and Conservation By-laws across Ontario.*

**Table 1.** List of Current Tree-cutting and forest conservation by-laws in Ontario, Canada by jurisdictions.

Note: Those highlighted in green ensure good forestry practices and do not follow diameter limit cutting, and therefore should be consulted.

	<b>Municipality</b>	<b>Date of Newest Version Enacted</b>	<b>Notes</b>	<b>ByLaw No.</b>	<b>Link to By-Law for Municipality</b>
1	<b>Haliburton County</b>	2008	Combination; Good forestry practices and diameter limits.	Forestry By-law No. 3196.	Format Currently being Updated, link not available at present time.
2	<b>Muskoka Lakes</b>	1999	Combination; Good forestry practices and diameter limits.	By- Law No. 2022-107.	<a href="https://www.muskokalakes.ca/en/resourcesGeneral/Documents/Planning/Tree-Conservation-By-law-2022-107.pdf">https://www.muskokalakes.ca/en/resourcesGeneral/Documents/Planning/Tree-Conservation-By-law-2022-107.pdf</a>
3	<b>Northumberland County</b>	2015	Combination; Good forestry practices and diameter limits.	By-Law No. 2015-27.	<a href="https://www.northumberland.ca/en/discovering-and-exploring/resources/Documents/By-Law-2015-27.pdf">https://www.northumberland.ca/en/discovering-and-exploring/resources/Documents/By-Law-2015-27.pdf</a>
4	<b>Lanark County</b>	2016	Combination; Good forestry practices and diameter limits.	By-Law No. 2016-22.	<a href="https://www.lanarkcounty.ca/en/doing-business/resources/documents/Forestry/2016-22-Forest-Conservation-By-Law.pdf">https://www.lanarkcounty.ca/en/doing-business/resources/documents/Forestry/2016-22-Forest-Conservation-By-Law.pdf</a>
5	<b>Halton Region</b>	2006	Good forestry practices.	By-Law No. 121-05.	<a href="https://www.halton.ca/getmedia/c43258a3-5f6a-4a4a-84a3-ebc3ea974af8/CAO-by-law-121-05.aspx">https://www.halton.ca/getmedia/c43258a3-5f6a-4a4a-84a3-ebc3ea974af8/CAO-by-law-121-05.aspx</a>
6	<b>York Region</b>	2013	Good forestry practices.	By-Law No. 2013-68.	<a href="https://www.york.ca/yorkregion/bylaws/forest-conservation-by-law">https://www.york.ca/yorkregion/bylaws/forest-conservation-by-law</a>
7	<b>Durham Region</b>	2008	Good forestry practices.	By-Law No.	<a href="https://www.durham.ca/en/doing-business/resources/Docu">https://www.durham.ca/en/doing-business/resources/Docu</a>



				30-2020.	ments/PlanningandDevelopment/By-law-Number-30-2020.pdf
<b>8</b>	<b>Lambton County</b>	2020	Combination; Good forestry practices and diameter limits.	By-Law No. 04-2012.	<a href="https://www.lambtononline.ca/en/business-and-development/resources/Documents/PlanningandDevelopment/WoodlandsConservation/County-of-Lambton-Woodlands-Conservation-By-Law-4-of-2012-as-amended---Sept-2014.pdf">https://www.lambtononline.ca/en/business-and-development/resources/Documents/PlanningandDevelopment/WoodlandsConservation/County-of-Lambton-Woodlands-Conservation-By-Law-4-of-2012-as-amended---Sept-2014.pdf</a>
<b>9</b>	<b>Elgin County</b>	2005	Combination; Good forestry practices and diameter limits.	By-Law No. 05-03.	<a href="https://www.elgincounty.ca/wp-content/uploads/2020/02/Consolidated-Version-of-Tree-By-Law.pdf">https://www.elgincounty.ca/wp-content/uploads/2020/02/Consolidated-Version-of-Tree-By-Law.pdf</a>
<b>10</b>	<b>Middlesex County</b>	2004	Combination; Good forestry practices and diameter limits.	By-Law No. 5738.	<a href="https://www.middlesex.ca/sites/default/files/Woodlands_Bylaw.pdf">https://www.middlesex.ca/sites/default/files/Woodlands_Bylaw.pdf</a>
<b>11</b>	<b>Huron County</b>	2013	Combination; Good forestry practices and diameter limits.	By-Law No. 38-2012.	<a href="https://www.huroncounty.ca/wp-content/uploads/2014/07/By-law38-2013.pdf">https://www.huroncounty.ca/wp-content/uploads/2014/07/By-law38-2013.pdf</a>
<b>12</b>	<b>Perth</b>	2021	Combination; Good forestry practices and diameter limits.	By-Law No. 3836-2021.	<a href="https://www.perthsouth.ca/en/living-here/resources/3836-2021-Regulate-the-Destruction-or-Injuring-of-Trees---Consolidated.pdf">https://www.perthsouth.ca/en/living-here/resources/3836-2021-Regulate-the-Destruction-or-Injuring-of-Trees---Consolidated.pdf</a>
<b>13</b>	<b>Bruce</b>	2004	Combination; Good forestry practices and diameter limits.	By-Law No. 4071.	<a href="https://www.brucecounty.on.ca/sites/default/files/Blaw4071_updated%20July%202015.pdf">https://www.brucecounty.on.ca/sites/default/files/Blaw4071_updated%20July%202015.pdf</a>
<b>14</b>	<b>Grey</b>	2006	Combination; Good forestry practices and diameter limits.	By-Law No. 4341-06.	<a href="https://docs.grey.ca/share/public?nodeRef=workspace%3A/SpacesStore/17818388-3d7c-4b6c-8119-632de6758b5a">https://docs.grey.ca/share/public?nodeRef=workspace%3A/SpacesStore/17818388-3d7c-4b6c-8119-632de6758b5a</a>
<b>15</b>	<b>Wellington</b>	2009	Combination; Good forestry practices and	By-Law No. 5115-09.	<a href="https://www.wellington.ca/en/resident-services/resources/Planning/Forest-Conservation/">https://www.wellington.ca/en/resident-services/resources/Planning/Forest-Conservation/</a>

			diameter limits.		Approved-Forest-Conservation-By-law-5115-09.pdf
16	<b>Waterloo Region</b>	2008	Good forestry practices.	By-Law No. 08-026.	<a href="https://www.regionofwaterloo.ca/en/resources/Bylaws/By-law-08-026.PDF">https://www.regionofwaterloo.ca/en/resources/Bylaws/By-law-08-026.PDF</a>
17	<b>Norfolk County</b>	2022	Combination; Good forestry practices and diameter limits.	By-Law No. 2022-98.	<a href="https://www.norfolkcounty.ca/wp-content/uploads/2023/01/2022-98.pdf">https://www.norfolkcounty.ca/wp-content/uploads/2023/01/2022-98.pdf</a>
18	<b>Oxford County</b>	2018	Combination; Good forestry practices and diameter limits.	By-Law No. 6035-2018.	<a href="https://www.oxfordcounty.ca/en/services-for-you/resources/Community-Planning/FINAL_By-law-6035-2018.pdf">https://www.oxfordcounty.ca/en/services-for-you/resources/Community-Planning/FINAL_By-law-6035-2018.pdf</a>
19	<b>Brant County</b>	2021	Combination; Good forestry practices and diameter limits.	By-Law No. 70-21.	<a href="https://www.brant.ca/en/bylaws-and-animal-services/resources/Documents/Office-Consolidation-Good-Forestry-Practices-By-Law-70-21.pdf">https://www.brant.ca/en/bylaws-and-animal-services/resources/Documents/Office-Consolidation-Good-Forestry-Practices-By-Law-70-21.pdf</a>
20	<b>Haldimand County</b>	2020	Combination; Good forestry practices and diameter limits.	By-Law No. 2204-20.	<a href="https://www.haldimandcounty.ca/wp-content/uploads/2020/10/2204-20ForestConservationBylaw.pdf">https://www.haldimandcounty.ca/wp-content/uploads/2020/10/2204-20ForestConservationBylaw.pdf</a>
21	<b>Niagara Region</b>	2021	Good forestry practices.	By-Law No. 2020-79.	<a href="https://www.niagararegion.ca/government/bylaws/pdf/by-law-2020-79%20-woodlands.pdf">https://www.niagararegion.ca/government/bylaws/pdf/by-law-2020-79%20-woodlands.pdf</a>
22	<b>Hamilton Region</b>	2017	Combination; Good forestry practices and diameter limits.	By-Law No. 17-094.	<a href="https://live-city-of-hamilton.patheonsite.io/sites/default/files/2022-05/17-094.pdf">https://live-city-of-hamilton.patheonsite.io/sites/default/files/2022-05/17-094.pdf</a>
23	<b>Simcoe County</b>	2021	Combination; Good forestry practices and diameter limits.	By-Law No. 6894.	<a href="https://www.simcoe.ca/Forestry/Documents/Forest%20Conservation%20By-law%20No.%206894.pdf">https://www.simcoe.ca/Forestry/Documents/Forest%20Conservation%20By-law%20No.%206894.pdf</a>
24	<b>Dufferin County</b>	2017	Combination; Good forestry practices and diameter limits.	By-Law No. 2019-20.	<a href="https://www.dufferincounty.ca/sites/default/files/clerks/2019%20By-Laws/2019-20%20Amend%20By-law%202017-">https://www.dufferincounty.ca/sites/default/files/clerks/2019%20By-Laws/2019-20%20Amend%20By-law%202017-</a>

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**Table 2.** List of Lower/single tier Municipalities with tree-preservation by-laws under the *Municipal Act, 2001*.

Note: Highlighted municipalities are those with populations similar to Cavan-Monaghan, to be used as references.

	<b>Municipality</b>	<b>Date of By-Law Creation</b>	<b>Notes</b>	<b>By-Law No.</b>	<b>Link to By-Law for Municipality</b>
<b>1</b>	<b>Powassan</b>	2005	Similar Population size to Cavan-Monaghan.	By-Law No. 2005-25.	<a href="https://www.powassan.net/Uploads/Documents/MunicipalServices/ByLaws/2005/Bylaw%202005-35.pdf">https://www.powassan.net/Uploads/Documents/MunicipalServices/ByLaws/2005/Bylaw%202005-35.pdf</a>
<b>2</b>	<b>Armour</b>	2019		By-Law No. 17-2019.	<a href="https://irp-cdn.multiscreensite.com/20e551fd/files/uploaded/Bylaw-Tree_Canopy_Policy.pdf">https://irp-cdn.multiscreensite.com/20e551fd/files/uploaded/Bylaw-Tree_Canopy_Policy.pdf</a>
<b>3</b>	<b>Clarington</b>	2021		By-Law No. 97-35.	<a href="https://weblink.clarington.net/WebLink/0/edoc/369714/97-35%20-%20Consolidated%20as%20of%202021-11-22.pdf">https://weblink.clarington.net/WebLink/0/edoc/369714/97-35%20-%20Consolidated%20as%20of%202021-11-22.pdf</a>
<b>4</b>	<b>Whitby</b>	2000		By-Law No. 4640-00.	<a href="https://www.whitby.ca/Modules/Bylaws/Bylaw/Download/b8473144-d5ee-4a71-88da-8dbf7d23fe2b">https://www.whitby.ca/Modules/Bylaws/Bylaw/Download/b8473144-d5ee-4a71-88da-8dbf7d23fe2b</a>
<b>5</b>	<b>Ajax</b>	2006		By-Law No. 137-2006.	<a href="https://www.ajax.ca/en/get-involved/resources/Sustainability/Trees/TreeProtectionTownWide.pdf">https://www.ajax.ca/en/get-involved/resources/Sustainability/Trees/TreeProtectionTownWide.pdf</a>
<b>6</b>	<b>Pickering</b>	2003		By-Law No. 6108-03.	<a href="https://corporate.pickering.ca/weblink/1/edoc/236943/By-law%20610803.pdf">https://corporate.pickering.ca/weblink/1/edoc/236943/By-law%20610803.pdf</a>
<b>7</b>	<b>Brampton</b>	2012		By-Law No. 317-2012.	<a href="https://www1.brampton.ca/EN/City-Hall/Bylaws/All%20Bylaws/trees.pdf">https://www1.brampton.ca/EN/City-Hall/Bylaws/All%20Bylaws/trees.pdf</a>

8	<b>Mississauga</b>	2022		By-Law No. 0020-2022.	<a href="https://www.mississauga.ca/wp-content/uploads/2022/03/31134316/Public-Tree-Protection-By-law-0020-2022.pdf">https://www.mississauga.ca/wp-content/uploads/2022/03/31134316/Public-Tree-Protection-By-law-0020-2022.pdf</a>
9	<b>Caledon</b>	2000		By-Law No. 2000-100.	<a href="https://www.caledon.ca/uploads/14/Doc_635016160599217804.pdf?ts=638372349567830883">https://www.caledon.ca/uploads/14/Doc_635016160599217804.pdf?ts=638372349567830883</a>
10	<b>Muskoka Lakes</b>	2022	Similar Population size to Cavan-Monaghan.	By-Law No. 2022-107.	<a href="https://www.muskokalakes.ca/en/resourcesGeneral/Documents/Planning/Tree-Conservation-By-law-2022-107.pdf">https://www.muskokalakes.ca/en/resourcesGeneral/Documents/Planning/Tree-Conservation-By-law-2022-107.pdf</a>
11	<b>Bracebridge</b>	2008		By-Law No. 2008-130.	<a href="https://bracebridge.civicweb.net/document/2702/">https://bracebridge.civicweb.net/document/2702/</a>
12	<b>Clarence-Rockland</b>	2018		By-Law No. 2018-98.	<a href="https://www.clarence-rockland.com/fr/hotel-de-ville/resources/Documents/201898Destructionordamageoftrees.pdf">https://www.clarence-rockland.com/fr/hotel-de-ville/resources/Documents/201898Destructionordamageoftrees.pdf</a>
13	<b>Ottawa</b>	2021		By-Law No. 2020-340.	<a href="https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/trees-and-urban-forests/tree-protection-law#section-12cc4ebd-dc87-41bf-b8ac-edd381b43231">https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/trees-and-urban-forests/tree-protection-law#section-12cc4ebd-dc87-41bf-b8ac-edd381b43231</a>
14	<b>Kingston</b>	2018		By-Law No. 2018-15.	<a href="https://www.cityofkingston.ca/documents/10180/16904/Tree+Bylaw">https://www.cityofkingston.ca/documents/10180/16904/Tree+Bylaw</a>
15	<b>Peterborough</b>	2021 (Private tree removal); 2017 (Woodlands Conservation)		By-Law No. Tree removal: 21-074. Woodlands Conservation: 17-121.	<a href="https://bylaws.peterborough.ca/bylaws/getFNDoc.do?class_id=20&amp;document_id=11896">https://bylaws.peterborough.ca/bylaws/getFNDoc.do?class_id=20&amp;document_id=11896</a>  <a href="https://www.peterborough.ca/en/city-services/resources/Documents/17-121---Woodland-Conservation-By-law.pdf">https://www.peterborough.ca/en/city-services/resources/Documents/17-121---Woodland-Conservation-By-law.pdf</a>

<b>16</b>	<b>Richmond Hill</b>	2007		By-Law No. 41-07.	<a href="https://www.richmondhill.ca/en/shared-content/resources/documents/369-tree-preservation-by-law.pdf">https://www.richmondhill.ca/en/shared-content/resources/documents/369-tree-preservation-by-law.pdf</a>
<b>17</b>	<b>Aurora</b>	2007		By-Law No. 5850-16	<a href="https://www.aurora.ca/en/home-and-property/resources/Documents/Trees/5850-16-Private-Tree-Protection-By-law-1.pdf">https://www.aurora.ca/en/home-and-property/resources/Documents/Trees/5850-16-Private-Tree-Protection-By-law-1.pdf</a>
<b>18</b>	<b>Vaughan</b>	2018		By-Law No. 052-2018.	<a href="https://www.vaughan.ca/sites/default/files/052-2018%20%28Consolidated%29.pdf?file-version=1701659938200">https://www.vaughan.ca/sites/default/files/052-2018%20%28Consolidated%29.pdf?file-version=1701659938200</a>
<b>19</b>	<b>Markham</b>	2006		By-Law No. 2008-96.	<a href="https://www.markham.ca/wps/wcm/connect/markham/103328d0-9d91-4d8f-a54d-4755bcde20bf/2008-96-Consolidated.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_2QD4H901OGV160QC8BLCRJ1001-103328d0-9d91-4d8f-a54d-4755bcde20bf-o8RIOK9">https://www.markham.ca/wps/wcm/connect/markham/103328d0-9d91-4d8f-a54d-4755bcde20bf/2008-96-Consolidated.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_2QD4H901OGV160QC8BLCRJ1001-103328d0-9d91-4d8f-a54d-4755bcde20bf-o8RIOK9</a>
<b>20</b>	<b>Barrie</b>	2005		By-Law No. 2014-115.	<a href="https://www.barrie.ca/media/3984">https://www.barrie.ca/media/3984</a>
<b>21</b>	<b>Stoney Creek</b>	1996		By-Law No. 4401-96.	Not Found.
<b>22</b>	<b>Oakville</b>	2022		By-Law No. 2017-031.	<a href="https://www.oakville.ca/getmedia/79a98834-2a1c-4b68-bfa3-a24ff3191e38/bylaw-2017-038-private-tree-protection-consolidated.pdf?ext=.pdf">https://www.oakville.ca/getmedia/79a98834-2a1c-4b68-bfa3-a24ff3191e38/bylaw-2017-038-private-tree-protection-consolidated.pdf?ext=.pdf</a>
<b>23</b>	<b>Dundas</b>	1999		By-Law No. 4513.99.	<a href="https://www.hamilton.ca/sites/default/files/2022-02/private-property-dundas-4513-99-amendments.pdf">https://www.hamilton.ca/sites/default/files/2022-02/private-property-dundas-4513-99-amendments.pdf</a>
<b>24</b>	<b>Fort Erie</b>	2004		By-Law	<a href="https://www2.forterrie.ca/bylaw">https://www2.forterrie.ca/bylaw</a>

				No. 60-04.	s/2004-060/\$FILE/2004-060.pdf
25	<b>Ancaster</b>	2000		By-Law No. 2000-118.	<a href="https://live-city-of-hamilton.pantheonsite.io/sites/default/files/2022-02/private-property-ancaster-2000-118-amendments.pdf">https://live-city-of-hamilton.pantheonsite.io/sites/default/files/2022-02/private-property-ancaster-2000-118-amendments.pdf</a>
26	<b>Brantford</b>	2017		By-Law No. 119-2017.	<a href="https://www.brantford.ca/Modules/Bylaws/Bylaw/Download/a8d76abe-c0c4-433d-aeb3-0f020a7bf343">https://www.brantford.ca/Modules/Bylaws/Bylaw/Download/a8d76abe-c0c4-433d-aeb3-0f020a7bf343</a>
27	<b>Guelph</b>	2010		By-Law No. 2010-19058	<a href="https://guelph.ca/wp-content/uploads/TreeBylaw.pdf">https://guelph.ca/wp-content/uploads/TreeBylaw.pdf</a>
28	<b>Kitchener</b>	2010		By-Law No. 2010-041	<a href="https://www.kitchener.ca/en/resourcesGeneral/Documents/DS_D_PLAN_Tree-Conservation-Bylaw.pdf">https://www.kitchener.ca/en/resourcesGeneral/Documents/DS_D_PLAN_Tree-Conservation-Bylaw.pdf</a>
29	<b>Wasaga Beach</b>	2020		By-Law No. 2019-82	<a href="https://www.wasagabeach.com/en/town-and-government/resources/By-laws-and-Policies/Tree%20Cutting%20By-Law.pdf">https://www.wasagabeach.com/en/town-and-government/resources/By-laws-and-Policies/Tree%20Cutting%20By-Law.pdf</a>
30	<b>Orillia</b>	2023		By-Law No. 2023-095	<a href="https://www.orillia.ca/Modules/Bylaws/Bylaw/Download/b4c46336-f91a-4f0a-828e-84211f606cee">https://www.orillia.ca/Modules/Bylaws/Bylaw/Download/b4c46336-f91a-4f0a-828e-84211f606cee</a>
31	<b>Collingwood</b>	2012		By-Law No. 2012-084	<a href="https://www.collingwood.ca/sites/default/files/docs/town-services/bylaws/2012-084_destruction_trees.pdf">https://www.collingwood.ca/sites/default/files/docs/town-services/bylaws/2012-084_destruction_trees.pdf</a>
32	<b>Stratford</b>	2020		By-Law No. 86-2020.	<a href="https://www.stratford.ca/en/inside-city-hall/resources/By-laws/Private-Tree-By-law---86-2020---Accessible.pdf">https://www.stratford.ca/en/inside-city-hall/resources/By-laws/Private-Tree-By-law---86-2020---Accessible.pdf</a>
33	<b>London</b>	2021		By-Law No. 1555(b)-29.	<a href="https://london.ca/by-laws/consolidated-tree-protection-law">https://london.ca/by-laws/consolidated-tree-protection-law</a>

34	<b>Sarnia</b>	1992		By-Law No. 34.	<a href="https://sarnia.civicweb.net/filepro/documents/40785/?preview=40827">https://sarnia.civicweb.net/filepro/documents/40785/?preview=40827</a>
35	<b>Cambridge</b>	2018		By-Law No. 124-18.	<a href="https://www.cambridge.ca/en/learn-about/resources/Private-Tree-Forestry-By-Law-124-18.pdf">https://www.cambridge.ca/en/learn-about/resources/Private-Tree-Forestry-By-Law-124-18.pdf</a>
36	<b>Burlington</b>	2022; 2013		By-Law No. 40-2022 (Private); 68-2013 (Public)	Private: <a href="https://www.burlington.ca/en/by-laws-and-animal-services/resources/By-laws/By-law-Search/2022-By-laws/040-2022-By-law.pdf">https://www.burlington.ca/en/by-laws-and-animal-services/resources/By-laws/By-law-Search/2022-By-laws/040-2022-By-law.pdf</a> Public: <a href="https://www.burlington.ca/en/by-laws-and-animal-services/resources/By-laws/By-law-Search/068-2013-By-law.pdf">https://www.burlington.ca/en/by-laws-and-animal-services/resources/By-laws/By-law-Search/068-2013-By-law.pdf</a>
37	<b>The Blue Mountains</b>	2010	Similar Population size to Cavan-Monaghan.	By-Law No. 2010-68.	<a href="https://www.thebluemountains.ca/sites/default/files/2021-09/2010-68%20Tree%20Preservation%20By-Law.pdf">https://www.thebluemountains.ca/sites/default/files/2021-09/2010-68%20Tree%20Preservation%20By-Law.pdf</a>
38	<b>City of Waterloo</b>	2014		By-Law No. 2014-078	<a href="https://www.waterloo.ca/en/living/city-tree-bylaw.aspx">https://www.waterloo.ca/en/living/city-tree-bylaw.aspx</a>
39	<b>City of Thunder Bay</b>	2005		By-Law No. 008-2005	<a href="https://www.thunderbay.ca/en/city-services/resources/Documents/Home-and-Property/Trees/CTB-By-laws-008-2205-and-Amendment-144-2006.pdf">https://www.thunderbay.ca/en/city-services/resources/Documents/Home-and-Property/Trees/CTB-By-laws-008-2205-and-Amendment-144-2006.pdf</a>
40	<b>Seguin</b>	2008		By-Law No. 2008-103	<a href="https://www.seguin.ca/en/township-services/resources/BL_By-law_Enforcement/BL-Bylaws-Tree-Cutting.PDF">https://www.seguin.ca/en/township-services/resources/BL_By-law_Enforcement/BL-Bylaws-Tree-Cutting.PDF</a>

## Appendix D

### *Tree Protection By-Law Templates and Examples.*

It is suggested that when creating a tree protection by-law that the municipality reviews those that have been implemented by other Ontario municipalities; taking note of their best practices and critical information in order to make a comprehensive municipal by-law.

Tree-Protection By-law, General Formatting:

[https://www.ontariowoodlot.com/resources/Tree\\_Conservation\\_By-law\\_Template\\_Jan-2013.pdf](https://www.ontariowoodlot.com/resources/Tree_Conservation_By-law_Template_Jan-2013.pdf)

Forest Conservation By-Law, Good Practices Only Template:

[https://www.ontariowoodlot.com/resources/Forest\\_Conservation\\_By-Law\\_Template-GFP\\_Jan-2013.pdf](https://www.ontariowoodlot.com/resources/Forest_Conservation_By-Law_Template-GFP_Jan-2013.pdf)

Upper-Tier Woodlands Conservation by-law example:

<https://www.regionofwaterloo.ca/en/resources/Bylaws/By-law-08-026.PDF>

Lower-Tier Tree Cutting by-law example:

<https://guelph.ca/wp-content/uploads/TreeBylaw.pdf>

Lower-Tier By-Law that Includes Woodlands Conservation and Tree Protection:

<https://www.vaughan.ca/sites/default/files/052-2018%20%28Consolidated%29.pdf?file-verison=1701659938200>

Application to Injure or Destroy Trees Example, Muskoka Lakes:

<https://www.muskokalakes.ca/en/resourcesGeneral/Documents/ApplicationsLicensesPermits/Planning/Injure-or-Destroy-Trees.pdf>