Examining Current Woodlands Conservation By-laws in Municipalities Located within the Carolinian Region of Southwestern Ontario.

Prepared by: Heather Glasgow

Prepared for Dr. John FitzSimons

Author Note

This paper was prepared as a final Major Research Paper for the Rural Planning and Development Master of Science Program.
Abstract

This paper examines current Woodlands Conservation By-laws in municipalities located within the Carolinian Region of southwestern Ontario. The Carolinian region encompasses only 1% of the total land area of Canada, however it is one of the most threatened ecological regions in the country (Carolinian Canada, 2004). Forest resources in this region are under considerable pressure as a result of land development and the intensification of agricultural activities. A majority of the municipalities within southern Ontario use Woodlands Conservation By-laws as a tool to regulate and conserve forest resources. These by-laws vary considerably in aspects such as allowable harvest, fees required, and fines imposed for violations. This paper aims to provide a better understanding of the current by-laws in this region, as well as examine their effectiveness in protecting forest resources.
**Introduction**

Southern Ontario is considered as the most ecologically diverse region in Canada, having a wider array of animal and plant species than any other part of the country (ECO Issues, 2014). The Carolinian Region, which encompasses a large portion of southern Ontario, can be viewed in Figure 1 below.

2004).

![Figure 1: Map of the Carolinian Region in southwestern Ontario (Carolinian Canada, n.d)](image)

This region is home to Canada’s largest collection of deciduous native tree species such as the red mulberry, tulip, sassafras, and cucumber (SMFC, 2015). These species have long been threatened by not only invasive alien species, but also by intensive land settlement and land clearing for agricultural practices. Before early European settlement, southern Ontario was once covered in
vast wetlands and forested areas; however, over the last two centuries this region has experienced
the fragmentation of forested lands into smaller isolated woodlots (Thomson, 2002) Notes from
early European settlers in southern Ontario have been analyzed and used to create land cover maps
for this region. When compared to current GIS maps of land cover in southern Ontario, a
substantial difference can be seen. Figures 2 and 3 display maps from 1798-1850 and 2000,
respectively. These maps illustrate a decrease in forest coverage from 80% to less than 20% (Butt
et al., 2012).

Figure 2: Pre-European settlement land-cover in southern Ontario. The grey areas are
regions for which data has been lost or is missing in the archives (Butt et al., 2012).
Figure 3: A more recent representation of forest cover adapted from the Ontario Ministry of Natural Resources and Forestry Provincial Land Cover Map. Forest cover is labelled in red, non-forested areas in yellow, and urban areas in pink (Butt et al., 2012).

**Provincial Legislation**

Municipalities in southern Ontario were granted with the authority to regulate the cutting of trees through several pieces of legislation: the *Trees Conservation Act* in 1946, the *Trees Act* in 1950, and the *Forestry Act* 1988 (OWA, 2015). As of 2001, twenty-four municipalities in southern Ontario enforced forest conservation by-laws passed under the Forestry Act (OWA, 2015). Section 223.2 of the *Municipal Act* allows municipalities to regulate the destruction or injuring of individual trees by permitting municipalities with a population greater than 10,000 to enact tree cutting by-laws (OWA, 2015). According to the Ontario Woodlot Association, approximately twelve municipalities have enacted tree-cutting by-laws (OWA, 2015).

Although the Municipal Act provides power to all municipalities in Ontario, it is up to the municipality to act on this power and pass a by-law (OWA, 2015). The process of enacting a woodlands conservation by-law first requires approval by the Ontario Ministry of Natural
Resources and Forestry before it can be passed under the Forestry Act (FitzGibbon, 2002). By-laws passed under the Forestry Act allow municipalities to specify the minimum woodlot size that the bylaw applies to, the harvesting techniques permitted, the species of trees under a specified size that are protected, as well as the density of trees or basal area of a woodland that must be maintained (FitzGibbon, 2002). There are a number of exemptions that are permitted under the Forestry Act, some of which include: the harvesting of trees on a Christmas tree farm, the removal of trees for surveying, and the clearing of trees for an aggregate operation (FitzGibbon, 2002).

As previously stated, lower tier municipalities, such as the City of London and the City of Guelph, are able to pass a tree conservation by-law under Section 223.2 of the Municipal Act (FitzGibbon, 2002). A by-law that is passed under the Municipal Act can be applied to several designated areas in a region, the entire region, or even to specific species of trees (FitzGibbon, 2002). These by-laws generally require a permit for the removal of a tree located in any areas specified by the by-law (FitzGibbon, 2002). According to University of Guelph Professor, John FitzGibbon (2002), there are several exemptions permitted under the Municipal Act, which include: “activities undertaken by the provincial or federal government, activities prescribed by regulation, activities authorized by the Crown Forest Sustainability Act, and the removal of trees within disposal areas specified by the Environmental Protection Act” (pg.6). When creating a tree conservation by-law, a city or municipality also has the opportunity to expand on this list of exemptions (FitzGibbon, 2002).

**Municipal By-law Case Studies**

In southern Ontario, the responsibility of protecting trees has been delegated to municipalities at all levels to ensure that natural features on private lands are protected. The landscape, land use, and population vary between municipalities; therefore, one woodlands
conservation by-law may not be suitable for every municipality at every level. This section thoroughly examines four woodlands conservation by-laws: Lambton County, Huron County, Norfolk County, and Elgin County. These counties were selected from the map displayed in Figure 1. Recent amendments, official plan policies, enforcement, education and communication, and criticisms of the by-law will all be discussed to provide a comprehensive overview of the state of forest cover and the effectiveness of each individual by-law of the jurisdictions examined. Past applications in these areas will also be examined to understand whether or not the by-law was able to effectively protect forest resources. This paper will also briefly review several other woodlands conservation by-laws of municipalities located within the Carolinian Region of southern Ontario, which can be seen in Figure 1. A chart summarizing the different aspects of each by-law can be found on pg. 63 of this report.

**Lambton County**

Lambton County is located in southwestern Ontario, south of Lake Huron and North of the Municipality of Chatham-Kent. Lambton County has an area of 3,002 km², and as of 2016, a population of 126,638 (Stat Can, 2016). Agriculture is a prime land use in Lambton County, with over 207,621 hectares of farmland (SLEP, 2011). The County possesses diverse landscapes; including wetlands, lakeshore dunes, and approximately 13% forest coverage (Carolinian Canada, 2007). The Aamjiwnaang First Nations land is located within the County of Lambton, consisting of a total land area of 1,352 ha. This area retains 70% of its natural forest cover and is a significant natural area in the County (Carolinian Canada, 2007). Lambton County also contains the Pinery Provincial Park, which is the largest protected forest in southwestern Ontario, at 2561 ha (Carolinian Canada, 2007).
Figure 4 Forest Conditions Report Card for the St Clair Region Conservation Authority (SCRCA, 2013).

Figure 4 above displays the forest conditions in St Clair Region Conservation Authority Jurisdiction, which makes up a greater portion of the County of Lambton. As can be seen on the map, the County consists of both poor and marginal conditions, with the marginal areas being located in the central area of the county, as well as a portion of the northern county.

*Woodlands Conservation By-Law*

Lambton County implemented its first Woodlands Conservation By-law in 1979 in an attempt to protect the remaining forested lands in the county. As of 2010, the County of Lambton possessed approximately 13% forest coverage (Morden, 2010). The most recent update of the County Woodlands Conservation By-law occurred in 2012. This by-law defines “Woodlands” as a forested area that is at least 1.0 hectare or more in area containing at least:

i. 1000 trees, of any size, per hectare; or
ii. 750 trees measuring over five centimeters in diameter at DBH per hectare; or
iii. 500 trees, measuring over twelve centimeters in diameter at DBH, per hectare; or
iv. 250 trees, measuring over centimeters in diameter at DBH, per hectare; (GLC, 2013).

The by-law prohibits the destruction or injuring of trees unless it is conducted in accordance to
good forestry practices as prescribed by a Registered Professional Forester, or a member in good
standing of the Ontario Professional Foresters Association (Lambton County, 2012). The by-law
also permits the injuring or destruction of trees, using circumference limit cutting practices. Both
harvesting practices require the submission of a Notice of Intent, as outlined in Section 5 of the
by-law (Lambton County, 2012). Circumference limit cutting or harvesting restricts the individual
to only being allowed to destroy or injure trees that have a circumference measurement that is
greater than or equal to the minimum circumference for species defined in Schedule “A” of the
by-law (Lambton County, 2012). The individual must not reduce the density of trees below the
basal areas defined under the definition of “Woodlands”. The destruction or injuring of trees is
also forbidden in “Sensitive Natural Areas” designated by Lambton County, the St Clair Region
Conservation Authority, the Ministry of Natural Resources and Forestry, or the Ausable Bayfield
Conservation Authority (Lambton County, 2012).

To obtain a permit to destroy or injure a tree, a person must submit a Notice of Intent at
least 10 days before the planned destruction or injuring of the tree(s) is to occur (Lambton County,
2012). The fee for a Notice of intents using good forestry practices or circumference limit cutting
is $50.00 (Lambton County, 2012). Council may provide an exemption to a person through the
County of Lambton Woodlands Hearings Board, which deals with matters pertaining to woodlands.
A person may apply for an exemption to the by-law by completing the Exemption Form, and
paying a $250 fee (Lambton County, 2012). The application for Exemption to Clear Woodlands requires the payment of a $1,000 fee (Lambton County, 2012). The applicant must apply at least three months prior to when the destruction or injuring of trees is to occur (Lambton County, 2012). Exemptions from using the two permitted harvesting practices are evaluated on a case-by-case basis and a permit is required to proceed (GLC, 2013). All owners of parcels abutting the property will be notified, and a notice will also be posted on the subject lands fifteen days before the consideration of the application. If no appeals have been filed with the County of Lambton Clerk, and if the Woodlands Conservation Officer agrees that the general intent of the by-law is being maintained, then the permit for the exemption may be granted with terms or conditions of approval (Lambton County, 2012). However, if an appeal is filed or if the applicant does not agree with a condition imposed by the officer, the County of Lambton Woodlands Hearings Board will then consider the application and make a recommendation to County Council. The County of Lambton Woodlands Hearings Board examines all applications for exemptions to the by-law. In making the decision, the board takes into account correspondence received from neighbouring property owners, as well as the intent of the by-law.

The most recent statistics for the Woodlands Conservation By-law were released in 2015. As can be seen in Table 1, a total of ninety-four Notices of Intent using either good forestry harvesting or circumference limit harvesting were filed in 2015. The applications equal to 1,830 acres or approximately 741 hectares. The table also indicates that two exemptions were approved in 2015, totaling 13 acres or approximately 5 hectares. There were also a total of eight violations investigated in 2015 and a total of forty-one general inquiry letters received by the county.
Amendments

Lambton County’s Woodlands Conservation By-law was reviewed in 2012 and several changes were proposed, including: the addition of protecting shelterbelts, windbreaks, and corridors; a limit of twenty stacked full bush cords per year that could be harvested for the owner’s own use; the removal of circumference limited harvesting; forbidding harvesting between March 20 to July 15; the allowance of the harvesting of trees in an identified sensitive natural area if the are addressed in the prescription; and the amount of notice required for the notification of the by-law officer before harvest (Dawn Euphemia, 2012). According to Tim Payne, Lambton County’s Woodlands Conservation Officer, the proposed revised by-law was not well received by the public, and therefor was not approved by County Council. Instead several minor amendments were made to the by-law, including: shortening the timeframe required for the notification of the officer from ten days to twenty-four hours; the requirement for applications to be heard by a Woodlands Hearing Board; as well as the addition of several minor exemptions for the removal of trees for agriculture, and drainage work (Dawn Euphemia, 2012).
Enforcement

The Lambton County Planning and Development Services Department is responsible for administering the Woodlands Conservation By-Law. The enforcement of the by-law is conducted by an individual appointed by Council of the Corporation of the County of Lambton. According to the County of Lambton website, the Woodlands Conservation Officer is available at the County Office every Wednesday (Lambton County, 2017). A study conducted by the Great Lakes CEI in 2013, found that enforcement in Lambton County has been fairly successful (2013, pg. 53). In 2012 there were four investigations, three of which were settled out of court (GLC, 2013). According to the study, a majority of the landowners were unaware that they were violating the by-law and were willing to work with the St Clair Region Conservation Authority in resolving the issue (GLC, 2013). If a landowner is convicted of violating the by-law in Lambton County, fines can reach as high as $100,000 or $10,000 per tree (GLC, 2013). The individual may also be ordered to rehabilitate the area.

County Woodlands Conservation Officer Tim Payne believes that the by-law is currently enforced as best as it can be. He stated that the county is large in area and he is the only enforcement officer, therefore enforcement is mainly complaint based. To ensure that the by-law is both effectively and efficiently enforced, Officer Payne inputs Notice of Intent Applications, review letters, exemptions, and violations into a tracking spreadsheet. Officer Payne also stated that he conducts harvesting inspections for applications, and site visits for review letters, exemptions, and violations to ensure that all activities are being conducted in compliance to the by-law. When asked what would improve the effectiveness of the current by-law and help the by-law gain more public support, Officer Payne stated that there needs to be better council support, as well as updates to the zoning by-law to better protect woodlands under zoning. He also added that he believes that there may
not even be a need for a County Woodlands Conservation By-law if the County’s Zoning By-laws were: properly updated; identified all of the Natural Heritage Features; and incorporated the County Official Plans, Municipal Official Plans, and the Provincial Policy Statement.

**Criticisms of By-law**

In 2012, when the Forest Conservation By-law in Lambton County was reviewed, stakeholders were provided with the opportunity to voice their opinions on the proposed updates (Dobson, 2013). The main concern expressed by woodlot owners in Lambton County was regarding their property rights; mainly they did not want “local politicians to restrict their rights to handle their trees as they see fit” (Dobson, 2013). Many farmers and landowners also displayed opposition to the implementation of a by-law that restricted the cutting of tree lines, as well as the enforcement of limited personal harvesting to twenty cords of wood per year (Dobson, 2013). In 2013, two different farmers approached the county committee proposing to clear a total of thirty acres of woodlands to allow for the expansion of workable farmland (Wright, 2013). The committee decided to approve one farmer to remove four and a half acres and the other to remove six acres (Wright, 2013). Many voiced concerns with the trend of farmers clearing woodlands to expand their land base. St Clair Township Mayor, Steve Arnold, believes that the county needs to examine long term strategies to benefit both the agricultural sector without impacting tree cover (Wright, 2013).

Through his experiences as the County Woodlands Conservation Officer, Tim Payne, has found that a majority of the farmers in Lambton County believe that the Woodlands Conservation By-law should be abolished. However, he has also found that some farmers support the by-law as long as it allows them to remove some woodland. He believes that most of the non-farming community supports the Woodlands Conservation By-law. Mr. Payne stated that those raising
issues or concerns with the by-law are mainly farmers, politicians, or non-farmers who believe that clearing should not be allowed. He also stated that farmers often tell him that they would like to be compensated for having a woodlot that benefits society. He added that timber prices have decreased significantly over the years and many farmers raise the issue of paying taxes on lands containing a woodlot that cannot be used to increase their income.

Communication and Education

Lambton County provides an overview of their Woodlands Conservation By-law on the county website. On the Woodlands Conservation By-law webpage, the county highlights why the by-law is needed, as well as exemptions from the by-law (Lambton County, 2017). The webpage also includes access to the by-law, as well as the application forms for Applications for Exemption, Notice of Intent to Cut for Good Forestry Practices, and Notice of Intent to Cut for Circumference Limit Harvesting (Lambton County, 2017).

The County of Lambton is currently working on completing a Natural Heritage Study of the County in collaboration with the St. Clair Region Conservation Authority, Sarnia Urban Wildlife, the Carolinian Canada Coalition, and local property owners (Lambton County, 2017). The aim of this project is to develop a solid information basis of the area’s woodland features to assist in policy implementation and to fulfil planning obligations under the Provincial Policy Statement (Lambton County, 2017). The study will also help increase the understanding of the County’s natural heritage features, as well as help facilitate and encourage public education and stewardship (Lambton County, 2017).

Official Plan Designation
Lambton County’s current Official Plan defines significant woodlots as any contiguous forested area that is 4 hectares in size or greater, or a woodlot located in a primary corridor or Significant Natural Area (Lambton County, 1998). The current County Official Plan encourages local municipalities to protect woodlots and also states that County will also assist lower-tier municipalities in identifying Significant Natural Areas (Lambton County, 1998). Lambton County is currently revising their Official Plan and a draft Official Plan was presented to County Council on August 2nd, 2017. The Draft Official Plan takes a more active approach in protecting woodlots and strengthening primary corridors and linkages. Policy 8.4.1 of the Draft Official Plan requires local municipalities to identify significant woodlands in both their zoning by-laws and official plans using the mapping and criteria in Lambton County’s Draft Natural Heritage Study (Lambton County, 2017). The Draft Official Plan defines significant woodlands as “any forested area that is 2 hectares in size or greater; has woodland interior habitat (100 meters from all edges); is the largest woodland patch by landform or soil type; is the largest woodland patch occurring on a particular valleyland; or is 0.5 hectares in size or greater and is located within 30 metres of another natural heritage feature identified in Map 2 of the Official Plan. The plan requires that all development be directed outside of the dripline of significant woodlands and adjacent lands, unless it can be demonstrated through a Environmental Impact Study that there will be negative impacts on the woodlands or their ecological function (Lambton County, 2017).

Case Study: OMB Case PL150827

The proponent in OMB Case PL150827 is the owner of a property located on the south shore of Lake Huron, municipally known as 1070 Bruce Street, in the City of Sarnia. The purpose of the consent application was to sever this lot to create two new building lots. The proposed
severed parcel would have an area of 2,005 sq. m, and the retained parcel would have an area of approximately 2,548 sq. m. (OMB, 2016).

According to the OMB case, the proponent had removed most of the tree cover on the subject lot in early 2015 (OMB, 2015). These trees provided environmental benefits and contributed to the natural heritage corridor along the Lake Huron Shoreline. According to the OMB case, these trees were not protected, as the City of Sarnia does not have a by-law in place that prohibits property owners from removing trees from private property (OMB, 2015). The City of Sarnia’s Tree By-law instead applies to trees located on public lands; therefore, city permission was not required before the proponent removed the trees from the property. The Woodlands Conservation By-law, enforced throughout the County of Lambton, also did not apply to the proponent’s property. After further discussion with the planner who wrote the report for the original application that was presented to the Committee of Adjustment, it was discovered that the trees that were removed from the property did not meet the woodlands definition stated in the County of Lambton Woodlands Conservation By-Law:

“Woodlands” means land at least one hectare or more in area with at least:

i) 1000 trees, of any size, per hectare; or

ii) 750 trees, measuring over (5) centimeters in diameter at DBH per hectare; or

iii) 500 trees, measuring over twelve (12) centimeters in diameter at DBH, per hectare; or

iv) 250 trees, measuring over (20) centimeters in diameter at DBH, per hectare”

(Lambton County, 2012).

Therefore, even though these trees were of environmental importance to the area, this by-law was not effective in preventing the clearing of this site. However the OMB was mindful of the
trees in the board decision, as it was ordered through a condition of approval that “a landscape architect and certified arborist recommend the type of trees and density that they are to be planted to allow for partial replacement of the woodlot” (2016, pg. 10). To protect trees in this region in the future, the City of Sarnia could implement a Tree Conservation By-law under Section 223.2 of the Municipal Act, allowing the city to protect each individual tree or trees in a designated region.

**Huron County**

Huron County is located on the southeast shore of Lake Huron, northeast of the Lambton County. As of 2016, the Huron County reported a population of 59,297 and a land area of 3,399km² (Stat Canada, 2016). Huron County is predominately an agricultural based region and is even considered as the most agriculturally productive county in Ontario (Huron County, 2017). According to a study conducted by Huron County in 2014, the County currently sits at 15% forest coverage, which is equivalent to approximately 126,900 acres or 51,354 hectares (Huron County, 2014). There are thirteen forest tracts owned by the County totaling approximately 1,500 acres or 607 hectares (Huron County, 2014).

As can be seen in *Figure 5*, North Huron and Morris-Turnberry have the highest percentage of forest coverage in the county, while Goderich has the least. Approximately 87% of forested lands in Huron County are privately owned; the remaining 13% consists of provincial parks, the Ausable-Bayfield and Maitland Valley Conservation Authority, and municipal woodlands (Huron County, 2014).
The council members of the Huron County are strong supporters of the implementation of a forest conservation by-law (Pullen, 2013). Similar to surrounding municipalities, agriculture is one of the top industries in this region. Studies have shown that increased forest coverage can help increase the yields of various crops, as well as prevent soil erosion. Tourism is also another key industry in this region, and according to the County, “maintaining the water quality of Lake Huron is a top priority” (Pullen, 2013). Forest coverage can help reduce the amount of sediment runoff, as well as help prevent the contamination of lake water.

**Forest Conservation By-Law**

To help prevent the loss of woodlands to intensive agricultural practices, Huron County implemented its first Forest Conservation By-law in 1947, which was most recently updated in 2013 (Huron County, 2013). This by-law defines “woodlands” as land at least 2.47 acres or 1 hectare in area with at least:

“(i) 1000 trees, of any size, per hectare (405 trees per acre);
(ii) 750 trees, measuring over five (5) centimetres (2 inches) in diameter at DBH, per hectare (304 trees per acre);

(iii) 500 trees, measuring over twelve (12) centimetres (5 inches) in diameter at DBH, per hectare (202 trees per acre); or (iv) 250 trees, measuring over twenty (20) centimetres (8 inches) in diameter at DBH, per hectare (101 trees per acre)” (Huron County, 2013)

The by-law also includes a definition for “woodlots”, defining them as land at least 0.5 acres or 0.2 hectares in area, with at least:

“(i) 200 trees, of any size, per 0.2 hectare (0.5 acre);

(ii) 150 trees, measuring over five (5) centimeters (2 inches) DBH, per 0.2 hectare (0.5 acre);

(iii) 100 trees, measuring over twelve (12) centimetres (5 inches) DBH, per 0.2 hectare (0.5 acre); or

(iv) 50 trees, measuring over twenty (20) centimetres (8 inches) DBH, per 0.2 hectare (0.5 acre)” (Huron County, 2013).

The by-law prohibits the destruction or injuring of any tree located within a woodlot or woodland within Huron County, but does provide exemptions (Huron County, 2013).

According to section 9, sub-section 9, the by-law “applies to all woodlands in the County and to all woodlots in those lower tier municipalities which have delegated to the County their power under section 135(10) of the Act in respect of such woodlots (Huron County, 2013). An individual may destroy or injure a tree that is located within a woodland or woodlot if they use either good forestry practices, or circumference limited harvesting (Huron County, 2013). The use of good forestry practices requires the individual to destroy or injure a tree in accordance with a silvicultural prescription prepared by either a registered professional forester or by a member in
good standing with the Ontario Professional Foresters Association (Huron County, 2013). The by-law also requires the individual to clearly mark the trees that are being removed. Circumference limit harvesting allows individuals to destroy or injure trees that are equal to or greater than the measurement specified in Schedule A of the by-law. The circumference measurement is dependent on the species of tree and should be taken at the highest possible point of measurement. For this method, individuals must still maintain the number of trees per hectare to meet the definition of a woodlot or woodland. This method also requires individuals to clearly mark the trees that are being removed. There are several other exemptions listed in the by-law including: the injuring or destruction of trees to establish a pit or quarry, for municipal drainage work, or if the destruction is imposed as a condition to the approval of a consent, site plan, or plan of subdivision (Huron County, 2013).

Huron County requires a Notice of Intent before harvesting, which consists of the submission of the form prescribed in Schedule B of the by-law. When cutting trees using good forestry practices, a notice of intent is required 20 days before the destruction or injuring of trees; while cutting trees using circumference limited harvesting requires a notice of intent 10 days prior to cutting (Huron County, 2013). A permit fee is not required when submitting a letter of intent (Huron County, 2013).

Amendments

As stated above, the most recent update to Huron County’s Woodlands Conservation By-law occurred in 2013. This by-law replaced the 2006 by-law and contained several minor amendments, including the addition of a new fee structure. The fee for Notices of Intent, however, were removed where: a silvicultural prescription based on good forestry practices is provided by a professional forester, the marking of trees for harvest has been completed by an Ontario Certified
Tree Marker or by a member in good standing of the OPFA, and the County Forest Conservation Officer is satisfied that all requirements have been met (Huron County, 2013).

**Enforcement**

Huron County employs a Forest Conservation By-law Officer to help maintain and protect the remaining 15% of forest coverage in this region (Huron County, 2013). The Conservation By-law Officer has the ability to file an order against a person if they believe, on reasonable grounds, that there has been a contravention of the by-law. If a person fails to comply with the order issued by the Conservation By-law Officer, they are then liable to the penalties prescribed in the by-law (Huron County, 2013). On a first conviction a person can be fined up to $10,000 or $1,000 per tree and on a subsequent conviction up to $25,000 or $2,500 per tree (Huron County, 2013). Corporations that violate the by-law can receive fines up to $50,000 or $5,000 per tree on a first conviction, and up to $100,000 or $10,000 per tree on a subsequent conviction (Huron County, 2013). Settlements often also involve the replanting of trees at the violators expense (Huron County, 2013). Huron County estimates that in 2013 the County had roughly three to four cases at any given time being investigated for non-compliant activity, likely due to increasing cropland values and high commodity prices (GLC, 2013, pg.51). Most of these cases were resolved out of court in favour of upholding the Woodlands Conservation By-law (GLC, 2013).

Dave Pullen, the current County Forest Conservation Officer believes that Huron County landowners are becoming more committed to using good forestry methods in managing their woodlots. Pullen stated, “that between 2001 and 2015, the number of property owners using professional foresters for commercial harvesting had increased by 30% (Broadley, 2016). According to Pullen, there has also ben a significant increase in the amount of calls that the County
is receiving from woodlot owners requesting information and advice on woodlot management (Broadley, 2016).

Criticisms of By-law

One criticism of Huron County’s current Forest Conservation By-law involves the use of circumference limited harvesting. Currently the by-law allows for the cutting of any tree over a certain diameter, which leads to the issue of clear-cutting (Pullen, 2013). The current Forest Conservation Officer, Dave Pullen, believes that a basal area requirement should be included in the by-law. According to Officer Pullen, adopting a basal area limit could help balance out the density of trees in forested areas for future growth (Pullen, 2013).

Another contentious issue of the by-law is the belief that the system used promotes sanctions and penalties, as opposed to encouraging woodlot owners to use good forestry practices through rewards and benefits (Broadley, 2016). At a committee meeting in April 2016, Huron County Council discussed the future of tree management in the county. At this meeting a presentation was made by the Ontario Association of Responsible Tree Management (OARTM), in which they stated that the current by-law encourages neighbourhood feuds (Broadley, 2016). The OARTM was formed in 2015 with the purpose of exploring alternative options to tree-cutting by-laws in Huron County (OARTM, 2017). At the April 20th, 2016 committee meeting the OARTM provided council with a sample by-law that aims to create a system of incentives, as well as cooperation amongst landowners, consultants, contractors, and the county (Broadley, 2016).

The sample forest management by-law prepared by the OARTM, is less stringent when compared to Huron County’s current Woodlands Conservation By-law. OATRM believes that the use of good forestry practices cannot be fairly enforced, as the definition is based on personal interpretation and that a municipalities main role under a woodlands conservation by-law should
be to educate and advise landowners to allow for a balanced interpretation (OARTM, 2015). In the OARTM sample by-law, it is stated, “the sample by-law respects existing landowners rights of use and serves as a formal guide to help them make their own informed management decisions” (pg.1, 2015). The introduction to the sample by-law discusses British Common Law, and how it protects neighbouring properties from harm. Thus, the OARTM sample by-law only allows a woodlands conservation officer to enforce the by-law in two areas: the first being any area within three meters of a property line in order to respect property lines between neighbouring properties; and the second is in areas that are to be cleared in a responsible manner for agricultural purposes (OARTM, 2015). This by-law allows landowners to manage trees that are greater than three meters from the property line without enforcement, as long as the area of the woodland is not reduced.

The OARTM (2015) sample by-law lists several notable exemptions, including: “thorn bearing trees that could cause damage or injury, trees with extensive deer browsing damage, trees that appear to have become established from neighbouring trees, and clearing for the purpose of returning land zoned for agricultural use that pre-existed the by-law” (pg. 6-7).

This leads to another contentious issue with Huron County’s current Woodlands Conservation By-law, which is the removal of trees on land zoned for agricultural uses. In 2010 Laurie Macpherson and Terry Brake of Canada Banana, a company that grows exotic fruits in greenhouses in western Ontario, purchased a forty-one hectare property containing a twenty-eight hectare woodlot (Collins, 2016). As of 2016, the company had cleared approximately seven hectares with plans of clearing approximately seven more for agricultural use. At the time of purchase, the owners had confirmed with the Maitland Valley Conservation Authority that they would be able to remove the trees, however, the representatives from the MVCA had since left their jobs and the replacements did not agree (Collins, 2016). In 2013, the County also passed the
new Woodlands Conservation By-law that also restricted the removal of the trees. Macpherson and Brake brought their case to the Normal Farm Practices Protection Board, as they believed that the by-law had impeded on their ability to operate a normal farm practice of clear-cutting the land to allow for cultivation and planting (Collins, 2016). The Board decided that the practice of clear-cutting as it pertains to this specific site does not constitute as a normal farm practice for several reasons:

1. The applicants failed to provide sufficient evidence in proving to the Board that on the balance of probabilities that clear cutting is a normal farm practice;
2. The zoning by-law did not permit the lands that were proposed to be cleared to be used for agriculture;
3. The presence of agricultural wetlands, as well as areas of natural scientific interest raises many environmental concerns;
4. The applicants failed to demonstrate that they would improve drainage and erosion issues in the areas proposed to be cleared; and
5. The conclusion was consistent with a similar case: Sproul v. County of Huron, 2016 (North Huron, 2016).

Huron County’s Forest Conservation Officer, David Pullen, testified at the hearing, stating “that clear cutting the areas that the applicants want to clear would be catastrophic to this property and to neighbouring properties, as especially in the wetland areas there would be significant topsoil eroded into the watercourses finding its way down the Maitland River because of the nature of the soil and the high water table” (North Huron, 2016). The criticism of the by-law impeding on agricultural operations is a common complaint, both in Huron County and in other municipalities across Ontario.
Communication and Education

Huron County’s website provides information on the County Forest Conservation By-law on the Forest Services webpage. This page highlights the benefits of healthy forests, activities that are regulated under the by-law, steps to apply for commercial harvesting, services offered to woodlot owners, management of County owned forests, local tree planting and stewardship programs, as well as other general forestry advice (Huron County, 2017). The most recently updated version of the Forest Conservation By-law is also available on this page.

Huron County has several plans, as well as stakeholder groups that aid in supporting the by-law and in protecting natural landscapes. The Huron Stewardship Council is a community-based organization whose mission is to promote responsible resource stewardship (Huron Stewardship, 2017). Both the Ausable-Bayfield Conservation Authority, as well as the Maitland Valley Conservation Authority also assists in tree planting and stewardship programs in Huron County. The County also currently possesses a “Strategic Plan for County Forests and the Forest Cover of Huron County”, which provides recommendations for utilizing and managing the County owned forest tracts over the net twenty years (Huron County, 2014).

In 2006, Huron County made a few minor changes to the County Forest Conservation By-law, and also created the Clean Water Project (GLC, 2013). “The Clean Water Project is a County-funded initiative that assists farmers and rural landowners in making stewardship improvements on their property through grants that cover up to 50% of the project costs” (Pullen, 2013). In 2013, council approved of a new category of the program for woodlot enhancement and management, which helps provide some compensation for landowners who are working with a professional forester (Pullen, 2013).

Official Plan Designation
Huron County’s Official Plan requires lower-tier municipalities to include policies within their local official plans that protect natural heritage features, as well as areas of local, regional, and provincial significance (Huron County, 2015). The Official Plan policies of the lower-tier municipalities in Huron County protect woodlands beyond the recommended policies in the Provincial Natural Heritage Reference Manual (HNHP, 2015). The Townships of North Huron, and Ashfield-Colborne, Wawanosh, as well as the Municipalities of Bluewater, Morris Turnberry, and Central Huron, protect woodlands greater than or equal to 4 hectares in size (HNHP, 2015). The Municipalities of South Huron and Huron East go even further to preserve wooded areas in their jurisdictions by protecting woodlands greater than or equal to 2 hectares in size. As can be seen in Figure 5, South Huron and Huron East have two of the lowest percentages of forest coverage in the county, at 11.37% and 12.96%, respectively. The Township of Howick does not define what constitutes a woodlot in the Township Official Plan, but instead states that woodland significance shall be determined by the local Conservation Authority and the County of Huron (HNHP, 2015).

Huron County’s Official Plan speaks to the development of a Natural Heritage Plan with the purpose of “building on existing information relating to the identification and evaluation of natural heritage features, areas of local, regional, and provincial significance, as well as identifying opportunities for linkages, restoration and enhancement as part of a natural heritage system” (Huron County, 2016). In the Implementation Strategy for the Natural Heritage Plan, it is recommended that local zoning by-laws are updated to recognize natural environment features using Natural Environment Zones or through holding zones for natural heritage features located within urban settlement areas (HNHP, 2016). The Implementation Strategy also recommends adding a policy reference to protect natural heritage linkages in Agricultural ‘Goals’ in the County Official Plan.
Case Study

OMB Case PL101197

This OMB hearing was brought forth by Jennison Construction Ltd. against the Township of Ashfield-Colborne-Wawanosh’s Council in regards to their refusal of the proponent’s Official Plan Amendment and Zoning By-law Amendment applications. The purpose of these applications was to allow for the extraction of aggregate on part of the proponent’s twenty-seven hectare property (OMB, 2011). The proposed site is located within a rural area and contains nineteen hectares of environmentally significant woodland. If approved, the proposed application would allow for the removal of fifteen hectares of woodland (OMB, 2011). According to the OMB case (2011), many of those opposed to the gravel pit believed that “the removal of the woodland on the site would impact the habitat of endangered species and the woodlot rehabilitation and restoration plans may be avoided or delayed by the proponent. They also believe that the science associated with the woodlot rehabilitation and restoration plans were not well understood and would result in negative impacts to the significant woodland and its ecological features and functions” (pg. 6).

During the OMB hearing, Dr. Bowles, an ecologist retained by the Maitland Valley Conservation Authority, stated “that the performance measures found in the rehabilitation and restoration plan are nothing short of laughable, as the Jennison forest is much more than the trees found within it. It would be impossible to replicate the current forest conditions once they have been removed and this, in her opinion would be an unacceptable impact” (pg.15, 2011). The planner representing the Ministry of Natural Resources and Forestry opined that the Ministry was satisfied with the plans and that Ministry approval would be required by the proponent for each phase of the gravel pit extraction based upon the success of the progressive woodlot rehabilitation and restoration plan (OMB, 2011). The Board permitted Jennison Construction Ltd. to obtain an aggregate licence from
the Ministry to extract aggregate from a twenty-two hectares site, stating in the Board Order that “the Board could not find significant flaws in the Planning Assessment of the Jennison proposal with respect to the policy directions of the 2005 PPS, the County of Huron, or the Township of Ashfield-Colbrone-Wawanosh Official Plans other than those articulated by the Board in the decision” (pg.39, 2011). The Board decision allowed for the destruction of six hectares of woodlands including three Butternut trees, which are protected under the endangered species act. This OMB case is a good example of how provincial interests are given priority even over environmentally significant areas and endangered species. The Forest Conservation By-law was unable to protect these trees as exemptions 7 and 8 in section 5 of the by-law allow for the injury or destruction of trees on land in order to establish, operate, or enlarge a pit or quarry (Huron County, 2013).

**Norfolk County**

Norfolk County is located on the north shores of Lake Erie, approximately fifty-six kilometers south of the City of Hamilton (Historica, 2017). The municipality has an area of 1,607 km², and, as of 2011, a population of 63,175 (Historica, 2017). The largest urban centre in the county is the Town of Simcoe, having a population of 13,922 (Historica, 2017). The main industries in Norfolk County are agriculture, tourism, and the natural resource sector, such as timber operations. As opposed to Huron County and Lambton County’s mainly wheat, soybean, and corn based agricultural industry; Norfolk County produces mainly fruits and vegetables. In fact, Norfolk County claims to supply more fruits and vegetables to Canadian dinner tables and restaurants than anywhere else in Canada (Norfolk County, 2016).

Norfolk County posses approximately twenty-five percent forest coverage, a large portion of which is privately owned (Norfolk, County 2016). The county has the highest percentage of
forest cover in all of southern Ontario. The county also has the largest woodlot owners association (NWOA) in the province and has received the award for being the forest capital of Canada by the Canadian Forest Associated in both 2008 and 2009 (Norfolk, County 2016). Norfolk County is dedicated to conserving forest resources in the county, and has even created a Forest Conservation Service Department to assist in the management and enforcement of the by-law.

**Forest Conservation By-law**

Similar to the other municipalities in southern Ontario, Norfolk County’s By-law restricts the inuring or destruction of trees in designated woodlands defined in the by-law. This by-law defines woodlands as land at least 1.0 hectares in area containing:

(i) 1000 trees, of any size, per hectare;

(ii) 750 trees, measuring over five (5) centimetres in diameter at DBH, per hectare;

(iii) 500 trees, measuring over twelve (12) centimetres, in diameter at DBH-I, per hectare; or,

(iv) 250 trees, measuring over twenty (20) centimetres, in diameter at DBH, per hectare;

The by-law also contains a definition for a woodlot, designating it as land at least 0.2 hectares in area and no greater than 1.0 hectare, and containing:

(i) 200 trees, of any size, per 0.2 hectare;

(ii) 150 trees, measuring over five (5) centimetres in diameter at DBH, per 0.2 hectare;

(iii) 100 trees, measuring over twelve (12) centimetres, in diameter at DBH-I, per 0.2 hectare; or,
(iv) 50 trees, measuring over twenty (20) centimetres, in diameter at DBH, per 0.2 hectare;

The definition of a woodlot also includes any corridors measuring up to and including thirty meters in width (Norfolk County, 2006). According to section 9, sub-section 9, “this by-law applies to all woodlands in the County and to all woodlots in those lower tier municipalities which have delegated to the County their power under section 135(10) of the Act in respect of such woodlots” (Norfolk County, 2006).

The by-law prohibits the harvesting, destruction, and injuring of trees, unless it is done in accordance with provincial regulations and legislation, federal regulations and legislation, or good forestry practice prescription (Norfolk County, 2006). When using good forestry practices the by-law requires that a registered professional forester, an associate member in good standing of the Ontario Foresters Association, or a certified tree marker apply for the prescription (Norfolk County, 2006). The by-law also requires that the trees that are being harvested or destroyed are clearly marked and that an application for a permit is submitted and approved by the County (Norfolk County, 2006). Section 2 (e) of the by-law also permits the harvesting, destroying or injuring of trees that have reached the specified circumference measurement outlined in Schedule A of the by-law (Norfolk County, 2006). Both good forestry practices and circumferences limited harvesting methods require a permit, as well as the payment of a fee that is dependent on the method and number of days notice provided before the activity is to occur (Norfolk County, 2006). If notice is given more than seven days before the harvest or destruction, the permit is free; however, if the application is submitted one day before harvest or destruction there is a fee of $200.00 (Norfolk County, 2006).
Similar to Lambton County and Huron County’s By-laws, there are several exemptions listed in Norfolk County’s By-law, such as activities undertaken by a municipality, or for the establishment, operation, or enlargement of a pit or quarry (Norfolk County, 2006). Norfolk County’s By-law, however, also includes the exemption of harvesting trees for personal use, but requires that the applicant maintain the number of trees per hectare specified in the by-law definition of a woodlot or woodland (Norfolk County, 2006). The by-law also states that if the woodlot or woodlands owner is harvesting less than twenty cords or twenty logs of wood, they must still maintain the basal area specified in the woodland and woodlot definition (Norfolk County, 2006).

The county by-law also provides the ability for landowners to apply for a council exemption permit. This permit requires the submission of an application at least thirty days before the anticipated commencement of harvest, destruction or injury of the trees (Norfolk County, 2006). The application consists of a form, as well as a $200 fee. At least fifteen days before the consideration of the application, the County Clerk will provide notice to all landowners whose property abuts the subject woodlands or woodlot (Norfolk County, 2006). A notice must also be posted on the subject lands fifteen days prior to the consideration of the application. Norfolk County has delegated the approval power of exemption permits to the County By-law Officer (Norfolk County, 2006). The officer may issue the permit as long as they believe that the general intent of the by-law is being maintained (Norfolk County, 2006). The officer is also able to impose conditions of approval to insure that the harvesting, injuring or destruction of trees does not exceed 0.2 hectares. If an objection has been filed to the County Clerk or if the applicant objects to a condition of approval, the By-law Appeals Committee will then consider the application or the condition that is a concern (Norfolk County, 2006). Once a permit has been granted, the owner of
the woodlands or woodlot must display a sign in the format outlined in Schedule F of the by-law at the entrance at the adjoining road to the subject lands (Norfolk County, 2006). The sign must be posted from the commencement until ten days after the conclusion of the activity. The by-law also requires the person to notify the by-law officer at least twenty-four hours before the activity occurs, as well as twenty-four hours before completion (Norfolk County, 2006).

**Haldimand County By-law**

Haldimand County is a single-tier municipality located on the north shore of Lake Huron, bordering the west side of Norfolk County. Haldimand County is being examined in this section, as the county currently has a contract with Norfolk County for forestry conservation and management services, including enforcement (Haldimand County, 2015). In 2014, the cost of these services was approximately $26,110 (Gable, 2015). Woodlands in Haldimand County are protected by the Regional Municipality of Haldimand-Norfolk Forest Conservation By-law, as this by-law pre-dates the municipal restructuring that occurred in 2001 (Haldimand County, 2015). This by-law protects woodlands that are 0.2 hectares in area or greater (Williams & Associates, 2016). According to a County Management Plan completed by Williams and Associates Forestry and Consulting Ltd., Haldimand County’s Forest Conservation By-law is dated and requires a number of housekeeping updates to bring the by-law up to current standards (William & Associates, 2016). In their report, Williams and Associates (2016) recommends that the county “updates the Forest Conservation Bylaw to current standards and consider measures that affect woodlands of all sizes and natural areas that do not meet the definition of a woodland, and to prevent pre-development clearing of trees and woodlands” (pg. 46).

**Amendment**
The first forest conservation by-law in Norfolk County was implemented in 1947, under the County of Haldimand-Norfolk (FitzGibbon, 2002). Since the restructuring of Haldimand County and Norfolk County in 2001, the most recent update to the Norfolk County Forest Conservation By-law occurred in 2006 (Norfolk County, 2016). In January 2013 several citizens of Port Dover voiced concerns that there was a need for the Forest Conservation By-law to be strengthened, which will be further discussed in the *Criticisms of the By-law* section. County Council carried a motion to direct the matter to the Community Services Department for a report to be provided back to Council within two months. After allowing further research, County Council did not proceed with an amendment to the current by-law.

*Enforcement*

Norfolk County’s Forest Conservation By-law is enforced by a by-law officer appointed by the county. Similar to other county forest conservation by-laws, if a by-law officer believes on reasonable grounds, that the by-law has been contravened, then they are able to file an order requiring the individual to stop the activity (Norfolk County, 2016). If a person fails to comply with an order or contravenes sections 2 or 6 of the by-law, they may be liable to fines up to $10,000 or $1,000 per tree for a first conviction, and up to $25,000 or $2,500 per tree on any subsequent conviction (Norfolk County, 2006). If a corporation fails to comply with an order or contravenes section 2 or 6 of the by-law, it may be liable to up to $50,000 or $5,000 per tree for a first conviction, and up to $100,000 or 10,000 per tree on any subsequent conviction (Norfolk County, 2006). The by-law also states that a person who is convicted of contravening the by-law or an order issued by a by-law officer, may also be ordered by court to rehabilitate the area (Norfolk County, 2006).

*Criticisms of By-law*
A majority of the controversy regarding Norfolk County’s Forest Conservation By-Law in the past has revolved around what should be defined as a “woodlot”. In 2013, a citizen of Norfolk County removed a 200-foot row of trees that stood along a creek on their property (Sonnenberg, 2013). Since this area did not meet the by-law definition of a woodlot, the removal of these trees did not require a permit or the approval of the county. The removal of the trees upset many local residents, and the issue was brought to council with the hope that the by-law would be strengthened to include tree lines and smaller areas of trees (Sonnenberg, 2013). Many councilors voiced concerns over the fine line between the desires of the community and individual property rights (GLC, 2013). They also did not see the need for a stricter by-law, since the county has seen an increase in tree cover over recent years. The Forestry Staff in Norfolk County also voiced concerns over the ability for the current staff to enforce a strengthened by-law (GLC, 2013).

**Communication and Education**

Norfolk County’s Forestry webpage provides information on forest cover, as well as the Carolinian tree species found in this region. The Forest Conservation Services page offers information on the type of responsibilities and services that the Forest Conservation Department provides to the public, including forest conservation by-law enforcement, private land education and extension, and management of the community county forest network (Norfolk County, 2017). A copy of the Forest Conservation By-law is available to the public on the county by-law webpage.

**Official Plan Designation**

Norfolk County is currently in the five-year review process of the County Official Plan. The Official Plan contains policies for the protection of woodlands under the Forestry section of the by-law, instead of Woodlands like other Official Plans examined. This is likely due to the high percentage of forest cover and the significance of the lumber industry in the county. Many of the
policies in the Official Plan speak to the encouragement of the forestry industry and the use of
good forestry management. The plan also encourages landowners to view forestry and agriculture
as mutually compatible uses and recommends the use of trees for windbreaks (Haldimand County,
2016). The current County Official Plan states that “in accordance with the Forest Conservation
By-law, clearing trees within a woodland is permitted without a permit to: maintain existing
irrigation and drainage systems; and to provide forest access trails, maintain existing airport areas,
and access fields for farm operations” (pg.143, 2008). In the proposed draft this policy is removed
and instead replaced with a policy stating that the County Forest Conservation By-law will prohibit
and regulate the destruction or injuring of trees (Norfolk County, 2017).

Haldimand County’s Official Plan also recognizes the importance of woodlands and aims
to protect forested areas from incompatible uses. According to the plan, development that is within
or adjacent to significant woodlands shall be subject to an Environmental Impact Study. Development that is within or adjacent to a woodlands as defined by the County Forest Conservation By-law will be reviewed by the County Forester (Haldimand County, 2009). In determining significant woodlands, the County Official Plan provides a table containing the criteria for determining significance. This includes such criteria as size of the woodland depending on the area, proximity to water, connectivity, and woodland diversity (Haldimand County, 2009). If the woodland meets two or more of the criteria it is considered to be significant.

In May of 2014, Haldimand County Council put forward the motion for staff to investigate
financial implications and parameters of tree programs in other municipalities to encourage tree-
planting initiatives within the county (Gable, 2015). Tree Planting initiatives examined in a report
prepared by Zach Gable, a Research Technician at Haldimand County, focused on opportunities
for tree planting on municipal right-of-ways and boulevards. Municipalities, such as St. Catherines,
Brantford, Hamilton, and Toronto allow residents to request trees to be planted on a municipal boulevard located in front of their property. The trees are generally planted by forestry staff, to insure that the trees are planted properly and do not interfere with surrounding utilities. According to Gable’s report, these tree-planting programs were more commonly undertaken by municipalities that possess forestry management plans, forestry staff, and a significant municipal budget dedicated to tree planting. When a proposed development is under review by the County, the planting of trees is encouraged on various types of development through the site plan approval process (Gable, 2015). In the development of a new subdivision, the county requires a tree to be planted on each property, and two on corner lots (Gable, 2015). These trees are then protected through subdivision or site plan control agreements.

Case Studies

**Ministry Reference Number: MNR INST 48/11**

An OMB Case in Norfolk County involving woodlands was not found. Instead this section will examine an application to the Ministry of Natural Resources and Forestry for the removal of endangered species on 5.8 ha site will examine. In November of 2011, the Ministry issued a permit to the applicant under clause 17(2)(c) of the Endangered Species Act 2007. The application was in respect to 5.8 ha site in the Township of Charlotte, Norfolk County, in which the applicant was proposing to build a residence and would require the removal of Eastern Flowering Dogwood trees (ER, 2011). The significant wetland located on the property restricted where the residence could be located on the property. The Ministry requested that the applicant reduce the development to a 0.40 to 0.20 hectare parcel, which would include the footprint of the house, the septic system construction area, as well as the driveway (ER, 2011). There were several conditions of approval included in the Ministry’s decision, such as:
(i) Relocating two Eastern Flowering Dogwood trees to another suitable habitat on the property;

(ii) Planting and tending to four additional Eastern Flowering Dogwood trees;

(iii) The implementation of a five year Habitat Improvement Plan;

(iv) Forbidding unauthorized recreation vehicles from being on the property; and

(v) The submission of reports to the MNRF over the five year period

Public consultation was provided for thirty-one days prior to the decision, during which two comments were received supporting the application. The MNRF believes that the decision in granting the permit “supports the goal for the recovery through development of best management practices for Eastern Flowering Dogwood stands and habitat enhancement at degraded sites, identification and description of vegetation communities in which Eastern Flowering Dogwood occurs, encouragement of landowners to become aware of Eastern Flowering Dogwood threats and undertake appropriate management actions” (ER, 2017). This is a good example of how the Ministry was able to create a solution that allowed the landowner to build a residence on the lot, while still keeping the tree species on the property. The conditions of approval insure that the applicant follows through with the decision, and that the trees and Habitat Improvement Plan are successful. When granting exemption to the by-law municipalities should use similar conditions, to allow for the general intent of the by-law to be fulfilled.

Committee of Appeals- January 02-2016

On December 14th, 2015 County Forest Conservation Officer, Adam Biddle, conducted a site inspection after receiving a complaint for tree cutting on a rural property in Norfolk County. The complaint had described the site as having extensive tree removal with log piles located by the road (Norfolk County, 2016). Upon arrival to the property, Officer Biddle found the landowner
in the process of moving logs that had recently been cut down. Officer Biddle had a brief discussion with the landowner, who indicated that he was removing trees to straighten his field, and that this was permitted as it is considered as a Normal Farm Practice under the Farming and Food Protection Act (Norfolk County, 2016). Officer Biddle informed the landowner that the clearing of woodlands without a permit is a violation of By-law 2006-170, and issued a Stop Work Order to prevent any further destruction of trees (Norfolk County, 2016). After a thorough site visit was conducted, it was discovered that at least 367 trees had been destroyed, which encompassed approximately one hectare (Norfolk County, 2016). The officers also found that the woodlot was relatively square and that the area of the woodlot where the trees were being removed was already straight. The landowner decided to file a By-law Appeal Application in response to the Work Order that was issued by Officer Biddle. In the Committee of Appeals meeting, Officer Biddle stated that he believed that the landowner was fully aware of the requirement under the County Forest Conservation By-law to apply for a permit to remove trees from woodlands. The landowner had been issued a Stop Work Order for a similar circumstance in 2013 (Norfolk County, 2016). No charges were laid for the violation in 2013; instead, the landowner was permitted to clean up the trees that had been cut and was explained the permit requirements under By-law 2006-170. County Staff had been contacted by OMAFRA regarding the cutting that took place in 2016, as OMAFRA acts as a mediator in cases where an agricultural related matter has come into conflict with a municipal by-law. Since there was a prior occurrence and the landowner did not agree that a permit was necessary, an agreeable solution could not be made between the two parties (Norfolk County, 2016). The outcome was then dependent on the decision of the committee, who ordered for the Stop Work Order to be withheld to cease the cutting activities. The committee believed that not upholding the Stop Work Order would be precedent setting (Norfolk County, 2016). The
committee allowed the landowner to remove logs, stumps brush, and debris that have already been felled prior to the Stop Work Order. The landowners were not ordered to replant an equal area that had been cut or were not charged with a fine.

**Elgin County**

Elgin County is located on the north shore of Lake Erie, south of London and east of Norfolk County. The county has a land area of 1,845.41km$^2$, and as of 2016, a population of approximately 88,978 (Stat Canada, 2016). Elgin County is composed of seven unincorporated municipalities, including the Town of Aylmer, which is the largest urban centre in the county. The county’s economy is based on the agricultural, environmental, manufacturing and tourism industries. Elgin County is home to one of the largest wind farms in the County, as well as several large solar wind farms (Elgin County, 2017). The county is composed of four conservation authorities including Catfish Creek, Kettle Creek, Long Point Region, and Lower Thames Valley. The percentage of forest cover in Elgin County was approximately 18% in 2008 (SWP, 2008).

**Woodlands Conservation By-law**

The first Woodlands Conservation By-law in Elgin County was established in 1987 with the intent “to restrict and regulate the destruction of trees by cutting, burning, bulldozing, application of chemicals or other means” (Elgin County, 2005). The county by-law only contains a definition for woodlands, and does not speak to woodlots. The by-law defines woodlands as being a parcel of land with an area of 1.0 hectare or more containing at least:

(i) 1000 trees, of any size, per hectare; or

(ii) 750 trees, measuring over five centimeters in diameter at DBH, per hectare;

(iii) 500 trees, measuring over twelve centimeters in diameter at DBH, per hectare; or
(iv) 250 trees, measuring over twenty centimeters in diameter at DBH, per hectare (Elgin, 2005).

The definition of woodlands also includes parcels of land that have an area of 0.2 hectares to one hectare with an extrapolated average of:

(i) 1000 trees, of any size, per hectare; or

(ii) 750 trees, measuring over five centimeters in diameter at DBH, per hectare;

(iii) 500 trees, measuring over twelve centimeters in diameter at DBH, per hectare; or

(iv) 250 trees, measuring over twenty centimeters in diameter at DBH, per hectare (Elgin, 2005).

The by-law’s definition of woodlands also includes a minimum number of trees per hectare, which in some cases could include overgrown tree corridors or fencerows (Elgin County, 2015). The by-law definition states that corridors measuring up to and include thirty meters in width are included in the definition (Elgin County, 2015). Similar to other by-laws in southwestern Ontario, the harvesting of trees in Elgin County is permitted through either good forestry practices or circumference limited harvesting. The use of good forestry practices requires the landowner to harvest, destroy or injure trees using practices prescribed by either a Registered Professional Forester or an associate member in good standing with the Ontario Professional Foresters Association (Elgin County, 2005). Circumference limit harvesting only allows landowners to harvest, destroy or injure trees that have attained the circumference measurement, at the specified point of measurement (Elgin County, 2005). Landowners however, must still maintain the basal area for the specific species as prescribed in Schedule A of the by-law. Both tree-cutting methods require the landowner to file an Application to Harvest with the County Tree Commissioner before the
destroying or injuring trees. From November 1, 2013 to October 21, 2014, a total of 156 applications to harvest were received by the Elgin County Tree Commissioner, totaling approximately 3,100 acres of forested area (Elgin County, 2014). Figure 6 below displays the harvest applications received by the County from 2006-2014 in the different lower-tier municipalities within the county.

![Harvest Applications by Municipality 2006-2014](image)

Figure 6: Harvest Applications received in Elgin County from 2006-2014 (Elgin County, 2014).

Council recognizes the benefits that good forest management practices provide to all residents of the county, therefore the county does not require the payment of administrative fees when filing for an application to destroy, injure, or harvest trees (Elgin County, 2014). It is a requirement, however, that applications to destroy, injure, or harvest trees be submitted five days before the intended activity. A landowner may file for an exemption from the by-law, although this requires council’s approval. The landowner must file an application for exemption to council forty days before the anticipated harvest, destruction, or injuring of trees is to occur (Elgin County, 2014). Notice of the application must also be posted on the subject lands and sent to the owners of
abutting parcels. For all exemptions in which the woodlands are less than one hectare and no appeals have been received, the County Clerk may grant a permit for an exemption (Elgin County, 2005). If the application for exemption relates to woodlands greater than 1.0 hectare in area or if an appeal has been received, than the application will be considered by council (Elgin County, 2005). The application fee for an exemption to clear woodlands is $200.00, and an extension, if needed, is $35.00 (Elgin County, 2005). If granted an exemption, the clerk or council may include conditions of approval, such as the county’s “no net loss” policy, which requires the owner to replant trees in another suitable location on the property or in the county (Elgin County, 2005).

Landowners in Elgin County are permitted to harvest trees for personal use, provided that they do not reduce the basal area below the number of trees per hectare required to meet the definition for woodlands in the by-law.

**Amendments**

The most recent update to Elgin County’s Woodlands Conservation By-law occurred in 2005, which amended the 1993 by-law (Elgin County, 2005). In 2016, Elgin County proposed to amend the by-law to include specific requirements for the removal of trees on sloped properties within the Municipality of Central Elgin. This amendment would help avoid slope stability concerns associated with activities that create an unwanted expense for the county. The removal of trees on sloped land in Port Stanley has been a common occurrence, as many people clear trees to help better their view (Harvey, 2016). The proposed amendment requires property owners wishing to remove a tree in the specified regulated areas to submit an “Application to Harvest, Destroy, or Injure Trees on Slopes”. The proposed amendment also requires supporting documents to be submitted with the application, such as an arborist report, as well as a geotechnical report (Lawrence, 2016). According to a staff report prepared by the County Tree Commissioner, Jeff
Lawrence, staff recommended that the “own use” exemption that applies to the County Woodlands Conservation By-law not apply to the slope regulated areas in order to maintain effectiveness of the by-law (Lawrence, 2016). At a public information session in June 2016, County Staff provided the public with detailed maps, such as the map seen in Figure 7, outlining the areas of Central Elgin that would be impacted by the proposed amendment (Harvey, 2016). According to Doug Harvey of the Port Stanley News, many of the people who attended the public information session were not supportive of the proposed amendment, and believed that it is too costly, complicated and restrictive for property owners, especially if they only wish to remove one tree (Harvey, 2016).

Figure 7 Proposed regulated sloped areas in Port Stanley, Elgin County (Elgin County, 2015).

Enforcement

Schedule H of the by-law outlines the appointment of officers whom are responsible for enforcing the by-law. The by-law identifies the Chief Administrative Officer of the County, as well
as the Forest and Soils Conservation Supervisor or designate of the Kettle Creek Conservation Authority as the appointed enforcement officers (Elgin County, 2005). Any person who violates any of the provisions of the by-law may be fined up to $10,000 or $1,000 per tree on the first conviction and up to $25,000 or $2,500 per tree on the second conviction (Elgin County, 2005). The by-law does not identify separate fines for corporations. If convicted for contravening the by-law, the court may also order the individual to rehabilitate or replant trees as the court sees appropriate.

According to a County Report, in 2014 Elgin County received four applications to clear woodlands, totaling an area of 2.4 hectares (Elgin County, 2015). The applications for exemption were approved conditional to the completion of the county’s “No Net loss” policy. The report also stated that there were a number of cases in 2014 where trees were removed without the issuance of a permit. All of these cases were considered minor by the county and were resolved; however, there were two different cases in 2013 that proceeded to court and were resolved in 2014. Both of these cases resulted in the violators being found guilty, and receiving fines, as well as reforestation orders (Elgin County, 2015).

**Communication and Education**

According to a county report, Elgin County has been making an effort to educate and promote the County Woodlands Conservation By-law (Elgin County, 2014). In recent years the County Tree By-law Enforcement Officers have held workshops, with topics such as “Forest Stewardship Council Certification”, and “Harvesting During Breeding Season” (Elgin County, 2014). The by-law has also been promoted at local events, such as the Western Fair Farm Show and the Carolinian Forest Festival. The County believes the recent advertising efforts have raised public awareness of the by-law (Elgin County, 2014). The County continues to advertise the by-
law on posters and through the use of brochures, which are posted and distributed in municipal offices, libraries, farm supply stores, and Conservation Authorities throughout the County (Elgin County, 2014). Tree Commissioner, Jeff Lawrence, believes that advertising efforts that were first initiated in 2013 and continued until present date have appeared to have improved public awareness of the County’s by-law. There is likely a strong correlation between advertising efforts and the data displayed in Figure 6.

Elgin County’s website lacks information for the County Woodlands Conservation By-law. The webpage for the tree by-law only contains two PDF links: one for the by-law and the other for “Administrative Service By-laws”, which takes the user to a different page only containing a link to the by-law. The County webpage could improve the promotion of the by-law by providing a page summarizing key points of the by-law or by even providing commonly requested application forms for download. After completing further research, a webpage outlining the County’s Forest Conservation By-law was found on the Kettle Creek Conservation Authority webpage. This page contains access to the by-law, a summarization of the intend of the by-law, a definition of what is considered to be woodlands, application forms for harvest, and a brochure for the County Woodlands Conservation By-law. The contact information for the County of Elgin Tree Commissioner is also located on this page.

**Official Plan Designation**

According to Elgin County’s Official Plan, treed areas ten hectares or greater are considered as significant woodlands (Elgin County, 2015). Woodlands that are between two hectares and ten hectares in size are also considered significant if they are located within thirty meters of a significant environmental feature, such as a wetland or watercourse (Elgin County, 2015). Development and site alterations are not permitted in areas containing significant
woodlands. Adjacent lands within 120m of significant woodland are also not permitted unless an Environmental Impact Study is completed to evaluate the ecological function of the adjacent lands and to demonstrate that there will be no negative impact on the natural heritage feature (Elgin County, 2015). The County Official Plan states that “the diversity and connectivity of natural features in an area, and the long term ecological function and biodiversity of natural heritage systems, should be maintained, restored or where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and groundwater features” (pg. 66, 2015). It is a policy of this plan that the establishment of a natural heritage system be considered at the time of the next Official Plan Review. The Environmental Impact Study must satisfy both the county, as well as the appropriate conservation authority before development approval is granted. For local planning applications such as zoning amendments, site plan, minor variance, and building permit applications, the lower-tier municipality must require the completion of an Environmental Impact Study depending on the policies of the local Official Plan and on the natural feature (Elgin County, 2015). The County Official Plan also outlines the policies for agricultural uses adjacent to or within natural features. The Official Plan clearly states that there is no intent for the policies to limit the ability of existing agricultural operations to continue on land adjacent to or within natural heritage features or areas (Elgin County OP, 2015). However, new agricultural uses requiring approval under the Planning Act are only permitted if it has been demonstrated to the satisfaction of the County or lower-tier Municipality that there will not be a negative impact on natural heritage features (Elgin County, 2015).

Case Study

Clear Cutting Exemption Case
In October of 2014, Elgin County received an application for a Council Exemption for Woodlands Clearing from a resident in the Municipality of Dutton/Dunwich (Lawrence, 2014). The applicant requested to clear 2.49 hectares of woodland to allow for more efficient agricultural practices (Lawrence, 2014). The County Tree Commissioner, Jeff Lawrence, assessed the woodlands and created a species inventory, which identified that approximately 87% of the trees in the woodland were ash trees, most of which were dead or declining (Lawrence, 2014). The applicant identified an area, that they would be willing to reforest to meet the County’s “No Net Loss” Policy, which can be seen below. Notice was posted twenty-one business days before council heard the application. There were no comments or objections received from abutting property owners.

![Figure 8: Site Plan for Exemption Application (Lawrence, 2014)](image_url)

According to the report, council approved the application with the condition that 4,355 trees be replanted in the proposed location to meet the County’s Requirement of “No Net Loss”. Figure 8 displays the applicants site plane, which indicates the both the proposed are to be cleared, as well as the proposed replanting area. According to the report written by Jeff Lawrence (2014),
the County believed that “the application was consistent with Elgin County’s “No Net Loss Policy” and that reforesting the area proposed by the landowner will ultimately:

1) Provide a net increase in forested area;
2) Increase riparian vegetation along a watercourse;
3) Potentially increase species diversity within the wooded area;
4) Retire marginal farmland” (pg. 70).

This example displays the effectiveness of Elgin County’s “No Net Loss” policy, and how it is a useful tool in maintaining forest cover. Agricultural activities and woodlands are considered to be compatible uses, however many woodlands and woodlots get slowly shaved down or completely cleared, often without the replanting of trees as seen in the case discussed above.

**Other Woodlands Conservation By-laws**

**Middlesex County**

The County of Middlesex estimates that the amount of woodland cover within the county has changed significantly since early European settlement. It is estimated that woodlot cover was above eighty percent in 1851, and after over a century of land alterations, this amount had significantly decreased to less than 10% by 1951 (Middlesex, 2013). Currently, woodlot cover within Middlesex County is estimated to be at approximately fifteen percent, with around 42,000 hectares or 103,784 acres of woodlands (Middlesex, 2013). The first forest conservation by-law in Middlesex was passed in 1986 with the purpose of restricting and regulating the destruction of trees (Middlesex, 2013). In 2004 By-Law 5738 was developed with surrounding counties “as a means of standardizing by-laws in this region, however the by-laws are not identical” (Middlesex, 2013). By-law 5738 was officially passed in 2004 by County Council and is the most recent Woodlands Conservation By-law to date. This by-law restricts the harm or destruction of trees
within regulated woodlands, which are defined as being at least 1.0 hectare or more in area (Middlesex, 2004). Wood harvesting is permitted through either good forestry practices or circumference limited harvesting. Commercial timber harvesting is permitted within the County, but requires a Notice of Intent be filed fourteen days before harvest, as well as the use of one of the two harvesting methods stated above. In 2013, 130 Notices of Intent were received, allowing for 2,800 acres or 1,133 hectares of woodlands to be selectively harvested. This is more than the average for past years, which is 2,000 acres or 809 hectares (Middlesex County, 2013).

Similar to other by-laws examined, there are certain activities that are exempt from the by-law, such as the removal or destruction of trees for a licensed aggregate pit or quarry, municipal drainage maintenance, or other exemptions approved by council (Middlesex County, 2013). Middlesex County Council holds the authority to grant exemptions to the by-law permitting a property owner to clear cut woodlands, however this power is rarely exercised. From 2006 to 2015 there were only thirteen exemptions applications filed, nine of which were granted (Middlesex County, 2015). The approved exemptions permitted the approval of approximately six hectares (Middlesex, 2015). When considering exceptions, the County Council has established a “No Net Loss” policy, similar to Elgin County, which requires the property owner to replant an area that is equivalent in size to that that is being cleared. According to Middlesex County (2013), “if the replanting of an equivalent area cannot practically be undertaken, Council can instead permit clearing subject to money being paid into the Tree Bank Reserve Account” (pg. 19). The fee is currently set at $2000 per acre and is used by the County for tree planting and related activities.

The County Council appoints a “Woodlands Conservation Officer” who is responsible for administering and enforcing the by-law. According to a presentation prepared by County Council, the County generally averages less than one prosecution each year (2013, pg. 20). Penalties for
violating the by-law can include replanting, prohibition orders, as well as fines that can reach up to $10,000 for a first conviction and $25,000 for a second (Middlesex County, 2013). Middlesex County takes an active approach in ensuring that the By-law is being abided by, as they conduct over 350 woodlot inspections each year. Middlesex County believes that it takes an active approach in enforcing the by-law. According to a presentation made to County Council in 2015, over 350 inspections are conducted each year (Middlesex County, 2015). The county estimates that they Woodlands Conservation by-law costs $90,000 to enforce and administer, annually, including 80% of the Woodlands By-law Officer’s time (Middlesex County, 2015).

**Oxford County**

The first Woodlands Conservation By-law in Oxford County was enacted in 1946 and was most recently revised in 2004. Woodland cover within the county is currently estimated at approximately thirteen percent (Oxford County, 2016). The current by-law defines woodlands as being at least 1.0 hectare in area. The Woodlands Conservation By-law is administered and enforced through the Oxford County Public Works Department, which includes a By-law Officer appointed by the Oxford County Council (Oxford County, 2004). The county has established a Woodlands Conservation By-law Appeal Committee to deal with matters pertaining to woodlands. The Woodlands Conservation By-law Appeal Committee approves all exemptions from the by-law. The by-law permits harvesting using either good forestry practices or by circumference limited harvesting. If a landowner intends to harvest, destroy, or injure trees they must submit Notice of Intent to the Oxford Public Works Department ten days before the planned activity, which includes a fee of $25 (Oxford County, 2004). They must also notify the Municipal Law Enforcement Officer 24 hours prior to the commencement of the planned activity. Any person who violates any provision of the by-law may be fined up to $10,000 or $1,000 per tree for the first conviction and
up to $25,000 or $2,500 per tree for the second conviction (Oxford County, 2004). The by-law also defines fines for corporations at up to $50,000 or $5,000 per tree on the first conviction and up to $100,000 or $10,000 per tree on the second (Oxford County, 2004). The by-law is currently under review and several changes have been proposed. The proposed changes include:

1. Removing the option of circumference limited harvesting and only allowing good forestry practices permits to be issued. The County believes that circumference limited harvesting is not a sustainable practice, as it does not account for species, quality, health, or age (Oxford County, 2016).

2. Providing the Forest Conservation By-law Officer with the ability to issue permits for minor exemptions. According to the County, this would help decrease the need for Committee approval, but would only apply in limited circumstances (Ex. removal or trimming of trees that are interfering with agricultural operations) (Oxford County, 2016).

3. Updating the definition of Woodlands to include additional provisions related to measurement and boundaries.

Oxford County sent out a request for proposals for the Woodlands enforcement and administration of the Woodlands Conservation By-law in February 2017. Three public meetings were also held in 2013 to allow for the county to gain feedback on the draft Woodlands Conservation By-law. Oxford County believes that public input is a key element in updating the review process and will aid in implementing a more effective by-law (Oxford County, 2017). According to a report prepared by staff, there were repetitive concerns raised during the consultation process and suggested improvements, including:

1. A more simple and user-friendly by-law that clearly states what is regulated and what is not;
2. The inclusion of “as of right tree cutting activities” (ex. trimming fields);

3. Reducing the amount of time to process permits;

4. Amending the by-law to allow for the cutting of specific species of trees, such as buckthorn, sumac, and ash; and

5. Providing more educational activities and information, as well as the use of more engaging and cooperative approaches in dealing with woodlot related concerns and disputes (Oxford, 2017).

County staff is currently working on developing an “issues and options” approach to aid in addressing the concerns listed above and for council direction (Oxford County, 2017). This process will continue into Fall 2017.

**Brant County**

The first “Tree Conservation By-law” in Brant County was enacted in 1948, with the most recent revision of the by-law occurring 2001 (Brant County, 2016). The Tree Conservation By-law aims to conserve trees within the county by prohibiting and regulating the injuring, destruction, or harvesting of trees in woodlands that are larger than 0.49 acres or 1.2 hectares (Brant County, 2016). Before injuring, destructing, or harvesting trees, the land owner or individual conducting the activity must complete a Notice of Intent application that must be submitted, along with a $100 application fee, to the County Clerk’s Office seven days prior to the planned activity (Brant County, 2001). The Tree Conservation By-law permits circumference limit harvesting and requires that the average basal area of the section of the woodland that the trees are being removed does not reduce below sixty-five squared feet per acre (Brant County, 2001). Landowners also have the option of applying for a minor exception, which requires an application, as well as a $250 fee (Brant County, 2001). A minor exception must be approved by County Council and is more likely to be successful
if the applicant is planning on replanting or replacing trees. For example, in 2011 a Brant County resident applied for a minor exception to remove forty-four black walnut trees that were affected by cankers and planned on replacing them with conifers (Marion, 2011). Council approved the individual’s application due to his plan to re-plant, as well as council’s belief that this action was necessary to prevent the spread of disease. If the individual had injured or destroyed more than the forty-four trees that were approved he would have violated the by-law. Any person who violates any provision of the by-law is subject to “any penalty as provided for in the Provincial Offences Act” (Brant County, 2001). A specific fine was not identified in the current Tree Conservation By-law. A Municipal By-law Enforcement Officer, who is appointed by the County Council, enforces the by-law (Brant County, 2001).

In April 2017, Brant County Council’s Corporate Development Committee endorsed a recommendation to council to strengthen the fines set out in the by-law for property owners who cut without a permit (Marion, 2017). The proposed amendments included:

1. A clause authorizing the County Municipal By-law Enforcement Officers to issue orders to violators of the by-law to remediate the site in accordance to a plan prepared by a qualified expert; and

2. The submission of an application to the Ontario Attorney General for a fine to be set for violation of the by-law (Marion, 2017).

According to an article prepared by Marion (2017), if approved, the changes would be included in property tax bills advising residents that they are required to obtain approval before cutting trees, as set out in the tree conservation bylaw. The committee believes that a mix of education and penalties are needed to increase awareness of the by-law (Marion, 2017).
**Niagara Region**

The first “Regional Tree and Forest Conservation By-law” in Niagara Region was implemented in 1971 and was most recently revised in 2008 (Niagara Region, 2008). The by-law aims to regulate the destruction of trees in woodlands by burning, cutting, or other means and to improve and conserve woodlands within Niagara Region (Niagara Region, 2016). The by-law applies to “all woodlands that are 1.0 hectares or more in size, as well as woodlands that have an area of less than 1.0 hectare upon delegation of such authority to the Region by a local municipality in Niagara” (Niagara Region, 2016). The county only permits tree cutting that is in accordance with good forestry practices, which requires: the submission of a permit application; a Forest Management Plan or Silviculture Prescription prepared by a Registered Professional Forester; a map indicating the location where the cutting is to occur; and an accurate count of trees being removed (Niagara Region, 2016). The by-law also outlines many exemptions including

1. The cutting of trees for a landowner’s personal use subject to confirming with several criteria (ex. the use of good forestry practices, the minimum basal area is sustained, and the wood is not being sold commercially);

2. The removal of dead or diseased trees that are identified in a Forest Management Plan or prescription by a Registered Professional Forester;

3. The clearing of trees by a registered farmer for agricultural purposes, provided that it is conducted in accordance with good forestry and agricultural practices; and

4. The removal of trees where a building-permit has been issued by the local municipality (Niagara Region, 2016).
Niagara Region has established a Tree and Forest Conservation By-Law Advisory Committee that is responsible for reviewing and providing advice on matters of forest conservation within the Region. The fines for violating any provision of the by-law are similar to other counties at up to $10,000 or $1,000 per tree for an individual’s first conviction and up to $50,000 or $5,000 per tree for a corporation’s first conviction (Niagara Region, 2016). The Niagara Peninsula Conservation Authority provides enforcement and management services for the by-law.

**Halton Region**

The first Woodlands Conservation By-law in Halton Region was established in 1983 and was most recently revised in 2006 (Halton Region, 2016). According to the region, the by-law applies to two types of property owners: those who own property that contains all or part of a woodlands greater than 0.5 hectares, and those who own a property that is entirely or partially within the Regional Greenlands System (Halton Region, 2016). Landowners are required to apply for one of two types of permits if planning on injuring, destroying, or harvesting trees within woodlands: a Harvest Permit or a Special Council Permit. A Harvest Permit is required for those planning on selectively harvesting trees, and requires the use of good forestry practices (Halton Region, n.d). When applying for a Harvest Permit, the individual must provide a site plan of the woodlands that displays the limits of the cutting. The individual must also provide information on how many trees will be removed or harvested (Halton Region, 2016). Acquiring the assistance of a Registered Professional Harvester when preparing the application can help speed-up the process of reviewing and issuing the permit. The Special Council Permit applies to all tree applications that do not follow good forestry practices. These applications must be approved by Halton Regional Council and require more detailed technical information, an application fee of $500, and generally involve a more timely approval process (Halton Region, n.d).
Similar to Niagara Region, Halton Region’s by-law also includes several exemptions including: the removal of dead or diseased trees, the removal of trees necessary to carry out normal farm operations, and the removal of trees for an approved development application (Halton Region, n.d). The by-law is enforced by a By-law Officer appointed by Regional Council. Penalties for violating any provision of the by-law can be up to $10,000 or $1,000 per tree for an individual’s first conviction and up to $25,000 or $2,500 per tree for a second conviction (Halton Region, 2006). Fines for corporations that violate the by-law are also stated in the by-law as being up to $50,000 or $5,000 per tree for a first conviction and up to $100,000 or $10,000 per tree for a second conviction (Halton Region, 2006).

**Proposal for an Effective By-Law**

**Definition of Woodlands**

After the review of the woodlands conservation by-laws discussed above, Niagara County’s by-law appears to have the most practical definition of a woodlot being: "Woodland" or “Woodlands” means land on one or more properties with a density of at least:

a. 1,000 trees, of any size, per hectare; 1.38.

b. 750 trees, measuring over five (5) centimetres in diameter at DBH, per hectare; 1.38.

c. 500 trees, measuring over twelve (12) centimetres, in diameter at DBH, per hectare; or 1.38.

d. 250 trees, measuring” (Niagara County, 2008)

The definition from the by-law stated above applies to all woodlands that are 1.0 hectare in size or greater. The protection of “woodlots” or forested areas 0.2 hectares to 1.0 hectare is then delegated to local or lower-tier municipalities. Effective and efficient enforcement is a key contributor to the
success of a woodlands conservation by-law. While working for various municipal governments I have heard many complaints about the lack of adequate enforcement of by-laws. This lack of enforcement is often due to a lack of staff, funds, and an over ambitious by-law. I believe that the distribution of enforcement to several levels of government would be more efficient use of staff and funds, as well as an effective form of enforcement.

**Permitted Harvesting Methods**

I agree with Officer Dave Pullen, of Huron County, that circumference limited harvesting is a non-sustainable practice, as it does not take into account the species, health, or age of the trees being harvested. For this proposal I believe that good forestry practices should be the only permitted form of harvesting or cutting. Landowners should be required to harvest, destroy or injury trees using practices prescribed by either a Registered Professional Forester an associate member in good standing with the Ontario Professional Foresters Association. Landowners should also be required to file an Application to Harvest with the County Tree Commissioner before the destroying or injuring trees. Similar to Elgin County, I believe that good forest management practices provide benefits to all residents of the County, therefore a County should not require the payment of administrative fees when filing for an application to destroy, injure, or harvest trees. Many landowners believe it is unfair that they have to pay a fee to harvest wood on their own property, on top of being required to harvest under the by-law’s standards. Municipalities should recognize good forestry practices and management, and not require fees for permits to harvest.

**Exemptions for Harvesting for Personal Use**

Harvesting for personal-use is another common difference amongst the by-laws. For example, both Lambton County and Huron County allow unlimited harvesting for personal use, as
long as the basal area of the section of the woodlands being harvested is maintained. This approach likely encounters less community disapproval and is more easily enforced than creating a specific limit for the amount of wood that can be harvested or restricting the cutting of wood for personal use all together.

**Violation Fines**

The fines for violating woodlands conservation by-laws also vary amongst the municipalities. The highest first conviction fine for an individual who is found guilty of violating a woodlands conservation by-law was $100,000 or $10,000 per tree. It is important for municipalities to take land prices into account when setting the fine. If the value of farmland is greater than the set fine, farmers or landowners may still chose to clear-cut a forested area. To help prevent this, the by-law should always require violators to replant any trees that have been injured or removed. Several municipalities have enforced a “No Net Loss” policy, which proves to be effective in maintaining forest coverage percentages. It may also discourage landowners from deciding to apply for clear cutting or exemption permits, as they may not have a suitable alternative area to replant an equivalent amount of trees.

**Public Education and Communication**

Along with enforcement, public education and communication are critical contributors to the success of a woodlands conservation by-law. As stated above, in 2012 there were four investigations in Lambton County, three of which were settled out of court (GLC, 2013). A majority of the landowners stated that they were unaware that they were violating the by-law and were willing to work with the St Clair Region Conservation Authority in resolving the issue (GLC, 2013). The public needs to be informed on what constitutes as a woodland and woodlot, and as well as the allowable methods of harvest. I believe that Huron County had one of the most “user
friendly” and informative websites of those examined. It provided all of the crucial information for the by-law on the main page; the form for a Notice of Intent; access to the by-law; information on other services offered to woodlot and woodland owners, such as the Huron Clean Water Project Forest Management; as well as the contact information for the County Forest Conservation Officer.

Of the municipalities examined, Elgin County appeared to have the most effective outreach approach. As previously discussed, the Tree By-law Enforcement Officers for Elgin County used various educational methods such as hosting workshops and promoting the by-law at local events, such as the Western Fair Farm Show and the Carolinian Forest Festival. Elgin County also advertises the by-law through the use of posters and brochures, which are posted and distributed in municipal offices, libraries, farm-supply stores, and Conservation Authorities throughout the County (Elgin County, 2014). Having an informative website and using proactive approaches such as those listed above will likely aid in the success of a woodlands conservation by-law.

**Overview of Interviews**

Through several interviews with woodlands by-law enforcement officers and planners, it was confirmed that the largest threat to the health of woodlands and percentage of forest cover in southern Ontario is agriculture. Many farmers believe that woodlands conservation by-laws impede on their ability to operate a viable farm operation. Farmers may purchase a property containing a woodlot with the thought that they one day may be able to remove the woodlot and expand their farmable land. However, municipalities that enforce a woodlands conservation by-law generally do not allow this extent of cutting, and those that do typically require an exemption permit. Many farmers then view a woodlot as land that does not produce an income, but is still taxed. Factors, such as the Emerald Ash Borer have reduced the value of trees considerably over the last decade. Dave Ferguson, the President of the Lambton Federation of Agriculture, believes
that demographics have had a large impact on forest cover in Lambton County (Hnatyshyn, 2015).

In an interview Ferguson stated, “The younger generation is not picking up the slack. Younger farmers are turning a blind eye to potential benefits of proper woodland management, in part because of their recent run of good cash crop prices” (Hnatyshyn, 2015). Ferguson believes that many farmers would be willing to practice sustainable forestry practices on their property if they were reimbursed for their efforts (Hnatyshyn, 2015). He feels that many urban residents do understand that farming is a business and that farmers should receive assurance that they will be reimbursed for their work (Hnatyshyn, 2015).

Larry Barrette, a Municipal By-law Enforcement Officer in the County of Simcoe, described similar circumstances in areas north of Toronto. In an interview, Officer Barrette stated that areas still forested are often low-lying lands that were once prone to flooding, but can now be tile drained and turned into reasonable farmland. Officer Barrette has also noticed an increase in residential development pressure on forested lands. As housing prices in Toronto increase, developers continue to purchase available land in municipalities surrounding the Greater Toronto Area. Officer Barrette stated that in recent years they have been dealing with more applications to remove woodlands to build residences.

Several of individuals interviewed believed that woodlands conservation by-laws should be used in collaboration with other planning tools such as Official Plans and Zoning By-laws. Official Plan, such as those discussed above, are effective in preventing development in environmentally sensitive areas, and areas containing natural heritage features. Zoning by-laws can also be useful in protecting individual features or properties through zoning and permitted uses. For example, St Clair County’s Zoning By-law includes an Environmental Protection-Woodlot Zone (EP-WD). The permitted uses in this zone include: active recreation, conservation, existing
agriculture, and passive recreation (St. Clair County, 2013). All of these permitted uses are exclusive of buildings and structures. The zoning by-law clearly states, “that no trees may be removed or cleared within the EP-WD being in accordance with accepted woodlot management practices and tree savings plan and the County of Lambton Tree Cutting By-Law” (pg. 159, 2013). According to Nancy Bourgeois, a Planner with the City of Sarnia, St Clair Township has designated woodlots four hectares in size or greater with no cost to the land owner. This zoning by-law helps to further protect woodlands and helps create greater awareness of the by-law. If a parcel containing a woodland feature is for sale, the zoning may also help deter potential buyers who believe that the trees can be cleared and the land can be used for other purposes.

**Conclusion**

The purpose of this paper is to: provide a better understanding of the different Woodlands Conservation By-laws in municipalities located within the Carolinian Region of southern Ontario; examine Official Plan Policies and how they contribute to the protection of woodlands; analyze municipal promotion of the by-laws and public awareness; and to examine various applications at both the provincial and municipal level to understand if the protection of trees was upheld. As stated in the abstract of this paper, the by-laws examined vary considerably in aspects such as allowable harvest, fees required, and fines imposed for violations. Some of the most effective approaches were suggested above, after comparing by-laws, researching public opinion, reading annual statistical reports, conducting interviews, as well as from experience gained while working for municipal governments. It is hoped that this paper could be used as a stepping-stone for updating and revising woodlands conservation by-laws in the future.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>First By-law</th>
<th>Most Recent Revision</th>
<th>Woodlands Protected</th>
<th>Permitted Harvesting Methods</th>
<th>Notice of Intent</th>
<th>Fee Required</th>
<th>Enforcement</th>
<th>Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Year Start</td>
<td>Year End</td>
<td>Area Requirement</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>Notice Requirement</td>
<td>Fee or Penalty</td>
<td>Reporting Officer</td>
<td>Penalty Amount</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------</td>
<td>---------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Lambton</td>
<td>1979</td>
<td>2012</td>
<td>1 Ha or greater</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>10 days before cutting</td>
<td>$50</td>
<td>County Woodlands Conservation Officer</td>
<td>$100,000 or $10,000 per tree</td>
</tr>
<tr>
<td>Huron</td>
<td>1979</td>
<td>2013</td>
<td>1 Ha or Greater &amp; Woodlots 0.2 Ha or greater</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>GFP: 20 days before cutting &amp; CLH 10 days before cutting.</td>
<td>None</td>
<td>County Forest Conservation Officer</td>
<td>Individual: $10,000 or $1,000 per tree for a first offence Corporation: $50,000 or $5,000 per tree for a first offence.</td>
</tr>
<tr>
<td>Norfolk</td>
<td>1947</td>
<td>2006</td>
<td>1 Ha or Greater &amp; Woodlots 0.2 Ha and no greater than 1.0 Ha</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>Notice is required.</td>
<td>Fee is dependent on the number of days a notice is provided before cutting. 7 days or greater the permit is free.</td>
<td>County Forest Conservation Services</td>
<td>Individual: $10,000 or $1,000 per tree for a first offence Corporation: $50,000 or $5,000 per tree for a first offence.</td>
</tr>
<tr>
<td>Elgin</td>
<td>1987</td>
<td>2005</td>
<td>1 Ha or Greater &amp; Woodlots 0.2 Ha and no greater than 1.0 Ha</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>5 days before cutting.</td>
<td>None</td>
<td>County Tree Commissioner- Kettle Creek Conservation Authority</td>
<td>$10,000 or $1,000 per tree for a first offence</td>
</tr>
<tr>
<td>Middlesex</td>
<td>1986</td>
<td>2004</td>
<td>1 Ha or greater</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>14 Days before cutting</td>
<td>None</td>
<td>County Woodlands Conservation Officer</td>
<td>$10,000 or $1,000 per tree for a first offence</td>
</tr>
<tr>
<td>Oxford</td>
<td>1946</td>
<td>2004</td>
<td>1 Ha or greater</td>
<td>Good Forestry Practices or Circumference Limited</td>
<td>10 days before cutting.</td>
<td>$25</td>
<td>Public Works Department</td>
<td>Individual: $10,000 or $1,000 per tree for a first offence Corporation: $50,000 or $5,000 per tree for a first offence. Ticketable Offences are also outlined in the By-law set fine of $400</td>
</tr>
<tr>
<td>Region</td>
<td>Start Year</td>
<td>End Year</td>
<td>Minimum Size</td>
<td>Good Forestry Practices</td>
<td>Fines/Offences</td>
<td>Administration</td>
<td>Enforcement Authority</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>--------------</td>
<td>-------------------------</td>
<td>----------------</td>
<td>---------------------</td>
<td>----------------------</td>
<td></td>
</tr>
<tr>
<td>Halton</td>
<td>1983</td>
<td>2006</td>
<td>0.5 hectares and greater, as well as properties entirely or partially within the Regional Greenlands System</td>
<td>Not Identified</td>
<td>None</td>
<td>By-law Officer</td>
<td>Individual: $10,000 or $1,000 per tree for a first offence Corporation: $50,000 or $5,000 per tree for a first offence.</td>
<td></td>
</tr>
<tr>
<td>Niagara</td>
<td>1971</td>
<td>2008</td>
<td>1 Ha or greater than size. Less than 1.0 Ha has been delegated to lower tiers.</td>
<td>Good Forestry Practices</td>
<td>3 Business Days</td>
<td>None</td>
<td>Niagara Peninsula Conservation Authority</td>
<td>Individual: $10,000 or $1,000 per tree for a first offence Corporation: $50,000 or $5,000 per tree for a first offence.</td>
</tr>
<tr>
<td>Brant</td>
<td>1948</td>
<td>2001</td>
<td>1.2 Ha or greater</td>
<td>Circumference Limited Harvesting Depending on Species</td>
<td>7 days before cutting</td>
<td>$100</td>
<td>Municipal By-Law Enforcement Officer</td>
<td>No set fine defined in by-law</td>
</tr>
</tbody>
</table>

References


Development For Consideration by Committee of the Whole. RE: Haldimand County Tree Management.


Halton Region (2006). By-law No. 121-05. A By-law to Repeal and Replace By-law No. 79-83, Being a By-Law to Prohibit or Regulate the Destruction or Injuring of Trees in the Regional Municipality of Halton.


**Interviewees**

Tim Payne, Woodlands Conservation Officer - Lambton County

Larry Barrette, Municipal Law Enforcement Officer - Forest Conservation – County of Simcoe

Brett Dixon, Forest Technician - County of Simcoe

Nancy Bourgeois, Planner - City of Sarnia

Adam Biddle - Superintendent of Forestry - Norfolk County