



Guidelines for **Good Forestry Practices**

**A Compendium to the
Halton Region Tree By-law (121-05)**

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Introduction

As stated in the Region's Official Plan, it is Regional Council's objective to promote the conservation and wise economic use of forestry resources in a manner that is complementary to the Region's ecological and environmental goals and objectives. On October 5, 2005, Halton Regional Council adopted a new Tree By-law (By-law 121-05) under the authority of Section 135 of the *Municipal Act*, 2001.

The Tree By-law does not prohibit tree harvesting and is not intended to deny individual landowners personal enjoyment and reasonable use of forestry resources on their property or properties. However, the Tree By-law does prohibit forestry activities that are ecologically damaging in southern Ontario's forest landscapes. In particular, clear cutting is **not** permitted under the provisions of the By-law unless authorized by a Special Council Permit.

By requiring good forestry practices during tree harvesting activities, the Tree By-law promotes healthy forests and seeks to ensure they continue to provide the social, economic and environmental benefits for all landowners and Halton residents alike.

As the Tree-By-law outlines a number of exemptions for the removal of dead or hazard trees, normal farm practice and activities or applications made under other legislation (i.e. *Planning Act*), these guidelines should be read in conjunction with the provisions of By-law 121-05.

Good Forestry Practices

Section 1(h) of the Region's Tree By-law defines *Good Forestry Practices* as follows:

"Good Forestry Practices" means:

The proper implementation of harvest, renewal and maintenance activities known to be appropriate for the forest and environmental conditions under which they are being applied and that minimize detriments to forest values including significant ecosystems, important fish and wildlife habitat, soil and water quality and quantity, forest productivity and health, and the aesthetics and recreational opportunities of the landscape.

In other words, good forestry practices will ensure that no forest values are diminished by protecting key stand components and by minimizing environmental damage during tree harvesting. Properly managed tree harvest activities assure the maintenance of all forest values and a continuous flow of forest products that provide for both short and long-term economic benefits to landowners.

Application of these Guidelines

These guidelines do not constitute an official part of the Tree By-law but are intended to complement the definition of "Good Forestry Practices". They identify a series of specific practices during harvesting, maintenance or renewal of forest resources that are conventionally accepted as "good forestry practice". The guidelines are designed as a reference for landowners who are contemplating forestry and serve as a reference for specific activities that constitute good forestry practices. Finally, these guidelines will serve as a reference for the Region's Tree By-law Officer when considering permit applications as described further under the section *The Role of The Region*. In administering the Tree By-law, the determination of good forestry practice is solely at the discretion of the Tree By-law Officer.

The guidelines are largely adapted from *A silvicultural guide to managing southern Ontario forests*, a comprehensive reference document prepared by the Ontario Ministry of Natural Resources (MNR and

from discussions with Ministry staff during consultations during on development of the By-law. These guidelines may be amended from time to time as circumstances warrant.

Key Components of Good Forestry Practices

Careful planning for all stages of forest management is perhaps the most important component of good forestry practices. Establishing both short and long-term management objectives of the forest based on a current forest inventory that assesses biological features such as trees and wildlife as well as physical factors such as site characteristics, land capability and important environmental features is the first and most critical step towards success, and will help identify the degree to which each or all of the following practices should be adopted. Please note that these guidelines generally apply only to tree-removal activity in *Rural* areas of Halton. Please see the following section for special considerations and requirements for harvesting activities in urban areas of Halton.

Practice	Description
Consider professional advice	Obtaining professional assistance to develop a forest management plan or silvicultural prescription is highly recommended and will help landowners maximize their harvest yield while maintaining forest values. For smaller scale harvest operations, obtaining the services of a certified tree marker will help identify the appropriate trees to both cut and preserve in order to achieve good forestry objectives. There are also many self-help resources available to landowners available from the Region and consultation with the Region’s Tree By-law Officer is recommended.
Choose an appropriate silvicultural method	Tree cutting activities such as diameter limit cutting or high-grading are not normally suitable for the forests of Halton. High grading is a type of selective cutting where some or all of the biggest and best trees are cut at the same time, and diameter limit cutting removes all trees over specific diameter limit. These practices may result in reduced genetic quality and diversity of the forest stand, leaving defective individuals of high-grade species and a much higher proportion of low-grade species. Over time, such stands will look impoverished and will offer less food and shelter to wildlife. Significant restoration effort would be necessary to bring a high-graded forest stand back to an economically viable condition. Clear cutting is an ecologically damaging and unsustainable silvicultural technique that is not suitable in Halton. By-law 121-05 prohibits clear-cutting unless authorized by a Special Council Permit.
Retain a diversity of tree species, ages, sizes and stands.	Retaining healthy representatives of all native tree species present in the forest is important and advantageous for maintaining stand biodiversity. It is equally important to maintain the age-range of individual species which is generally measured by size class. Special consideration should be given to the care and protection of species that are rare or at risk and there may be requirements of other legislation such as the Ontario <i>Endangered Species Act</i> that may restrict cutting. The Ministry of Natural Resources Natural Heritage Information Centre website (www.nhic.mnr.gov.on.ca) is an excellent source of information on rare species in Halton and throughout Ontario.
Limit activities to the appropriate season	Plan to harvest during times that are least disruptive to other forest values including soils, wildlife and other vegetation. It is most desirable to harvest in the winter when the ground is frozen and there is snow cover to protect soils and understory vegetation. If winter harvest is not possible, cutting during dry periods in the fall may be the next best option. Avoid harvesting in the early spring or when conditions are wet or during the period between March 20 th and August 31 st which is usually the time when sensitive wildlife species breed or nest. Certain species are protected under provincial and federal legislation such as the <i>Migratory Bird Act</i> .

Practice	Description
Use directional tree felling	Trees should be felled directionally such that they can be removed in a manner that minimizes disturbance to the forest site and limits damage to residual/remaining trees. Improper tree felling techniques can damage branches and bark on all trees including seedlings on the forest floor.
Roads, skid trails and landings	Wherever possible, minimize the number of and width of roads, skid trails and landings. Roads and trails should follow the natural contours of the land and be located as far away as possible from environmentally sensitive features such as watercourses and wetlands. Skid trails and landings should be located on well drained sites and should avoid being located directly up or down a slope to minimize damage to vegetation.
Avoid stream crossings	Stream crossings for roads and skid trails should be avoided where possible, or where not possible, be restricted to one location where the stream is narrow and has a rocky substrate. Trails and roads should approach at right angles to minimize impacts on stream banks and to prevent stream water from flowing down skid trails. Prior to any stream crossings, landowners must ensure that the requirements of legislation such as the <i>Fisheries Act</i> or Regulations under the <i>Conservation Authorities Act</i> for watercourse crossings are met.
Avoid harvesting on steep slopes	To minimize erosion and sediment run-off which can damage forest soils and streams, tree cutting on slopes greater than 35% (or approximately 3:1 slope) should be avoided.
Retain edge density	Where interior forest habitat exists, it is desirable to retain an uncut buffer of forest edge. This helps to reduce windthrow and other damage to the forest interior and provides effective protection from the invasion of exotic species. Where an uncut buffer is not possible, planning for a higher density of trees on the outer edge of the forest is the next best option.
Protect wildlife habitat	In addition to cutting outside sensitive time frames, wildlife habitat can be protected by retaining nest, cavity and den trees and by ensuring that some nut-bearing trees remain. When not posing a safety hazard, standing dead trees provide important habitat for forest wildlife that use them for feeding, nesting, denning and escaping from predators. Fallen deadwood may also provide these benefits in addition to returning nutrients to the soil when they decay.
Use appropriate harvesting equipment	Equipment should reflect the scale of the harvesting operation in order to avoid excessive residual damage that heavy machinery may inflict on the forest stand. Large and heavy equipment might not be suitable for removing only a few small trees nor would they be appropriate for use on steep slopes

Adapted from A silvicultural guide to managing southern Ontario forests (OMNR 2000)

Forestry Activities in Urban Areas

Lands in the urban area means land defined as such in the Regional Official Plan. As these lands are intended to accommodate future urban uses, tree removal requires special consideration to prevent the circumvention of the planning process. Accordingly, tree harvesting activity may require the preparation of a Forest Management Plan prepared by a professional forester. Please review the By-law for full details or contact the Region for additional information.

Other Good Forestry Practices

The above practices apply primarily to the actual harvesting of trees, however, longer-term forest management objectives require consideration of many other good forestry practices that deal with on-going maintenance and regeneration of forest stands. These may include practices to promote, plant and maintain native species and to control invasive species, to treat infestations or disease or to undertake pruning or selection thinning. A professionally prepared forest management plan will detail the best approaches for maintenance and renewal tailored to the characteristics of the forest and the specific objectives of the landowner.

Additional Information:

There is a wealth of information on a variety of forest management topics available from a number of sources. The Ontario Ministry of Natural Resources publishes the extensive “Extension Notes” series of informative factsheets on a diverse number of topics including agroforestry, forest stewardship, insects and pests, water and wetlands and wildlife and the financial aspects of forest management. The full series of over 50 factsheets is available from the Ontario Landowner Resource Centre at www.lrconline.com.

Landowners considering using the services of a contractor are highly encouraged to carefully research and select reputable companies to conduct harvesting operations. The Ontario Woodlot Association publishes an excellent reference guide entitled *A Landowner’s Guide to Selling Standing Timber* which is available to download at www.ont-woodlot-assoc.org. A number of additional information sources covering a wide range of topics are also available from the Ontario Woodlot Association (OWA). The comprehensive book *A silvicultural guide to managing southern Ontario forests* (OMNR 2000) is also available from the OWA.

The Role of the Region:

It is the position of the Region that tree harvesting activities and good forestry practice can co-exist. Each individual landowner will have specific forest management objectives and each forest stand will exhibit unique physical characteristics. Because of this diversity, these guidelines are not intended to be all-encompassing in that they are applicable to all forest stands and tree-harvesting activity, nor do they represent an exhaustive list of practices. All tree harvesting permit applications will be evaluated by the Tree By-law Officer on an individual basis that will account for site specific conditions and circumstances when determining whether a proposal represents good forestry practices.

Where an Officer is of the opinion that a harvesting proposal does not represent good forestry practices, the Officer will first consult with the landowner to provide guidance and advice on how to proceed in an acceptable manner while still achieving their objectives. Figure 1 on the following page illustrates the general process for the administration of the Tree By-law as it relates to good forestry practices, and places emphasis on consultation to achieve common objectives. It is expected that the vast majority of forestry operations will fall under the practices described in these guidelines.

While landowners are obliged to ensure that tree harvesting activities adhere to good forestry practice, the Region’s primary role in administering the Tree By-law is to assist landowners by providing education and guidance. It is also the obligation of the Region to ensure fairness and a level playing field for landowners practicing good forestry. For these reasons, the Region is focusing effort towards promoting forest stewardship and by providing landowners with consultation services, information resources and financial incentives to promote good forestry practice.

Summary

These guidelines detail practices that are most applicable at the “forest stand” scale of woodland management. The provisions of the Tree By-law do not apply where an approval for a development application has been granted under the *Planning Act*, or where approval has been granted for an

application made under the *Aggregate Resources Act*. In these circumstances, the protection of woodlands is addressed and evaluated under the comprehensive planning policies detailed in the Regional Official Plan, the Official Plans of the Local Municipalities, and the policies and regulations of other agencies including Conservation Authorities. These policies apply broader environmental protection and natural heritage system planning goals and objectives across site, landscape and regional scales. The practice of “good forestry” in individual forest stands is an important component towards achieving these goals and objectives.

Reference Cited: OMNR, 2000. A silvicultural guide to managing southern Ontario forests, Version 1.1. Ontario Ministry of Natural Resources. Queen’s Printer for Ontario. Toronto. 648 p.

For More Information:

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Figure 1. Stages in the Permit Application

