



## **Good Forestry Practices**

### **Guidelines for the Haldimand County Forest Conservation By-law 2204/20**

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## 1. Introduction

The purpose of Haldimand County's Forest Conservation By-law is to regulate the injury or destruction of trees in Woodlands and promote the sustainable use of forest resources. It is Council's objective to enact a Forest Conservation By-law for the purposes of:

- Achieving the objectives of the Haldimand County Official Plan to preserve and improve Woodlands through the application of Good Forestry Practices;
- The production of wood, wood products and sustaining the local forest economy;
- Minimizing the injury and destruction of trees in Woodlands; and
- Contributing to ecosystem health, human health, recreation, enjoyment and improving quality of life through the conservation of Woodlands.

The Forest Conservation By-law does not prohibit all tree harvesting and is not intended to deny landowners the enjoyment and reasonable use of forest resources on their property. The by-law provides a number of exemptions for the removal of dead or hazardous trees, cutting trees for the construction of buildings, Normal Farm Practices and personal use. Clear cutting is not permitted under the provisions of the by-law unless authorized by a Minor Exception Permit.

By requiring the application of Good Forestry Practices to harvest trees, the Forest Conservation By-law promotes healthy Woodlands and ensures they will continue to provide important social, economic and environmental benefits for all landowners and residents.

## 2. Guideline Application

These guidelines are not law and do not constitute an official part of the Forest Conservation By-law, but have been developed to complement the definition of Good Forestry Practices in the by-law. They are indented to provide a reference for Municipal Law Enforcement Officers when considering Good Forestry Practices Applications, forestry professionals working pursuant to the by-law and for landowners who are contemplating harvesting trees in their Woodlands.

These guidelines are not intended to be all encompassing or represent an exhaustive list of Good Forestry Practices. These guidelines may be amended from time to time to accommodate the changing threats to forests, unique forest management circumstances and to keep current with updated practices.

For the purpose of administering and enforcing the by-law, the determination of Good Forestry Practices is solely at the discretion of the Municipal Law Enforcement Officer.

These guidelines have been adapted from [A Silvicultural Guide to Managing Southern Ontario Forests](#), prepared by the Ontario Ministry of Natural Resources and Forestry.

### **3. Good Forestry Practices**

The Forest Conservation 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 detriment to forest values including significant ecosystems, important fish and wildlife habitat, soil and water quality and quantity, forest productivity, health, esthetics and recreational opportunities of the landscape.”

Good Forestry Practices are conducted in a way that enables Woodlands to maintain their health, ecological processes, wildlife habitats and provide a continuous supply of forest products that provide both short-term and long-term economic benefits to landowners. These practices represent what the forestry profession, forestry workers and society have come to expect from forest management operations.

Under no circumstances is Diameter Limit (also known as Circumference Limit) cutting permitted pursuant to the Forest Conservation By-law. This method of regulation has been used in the past for its ease of application and enforcement. The cutting of only the largest trees in a forest has significant negative impacts the long-term health, structure, genetic diversity and sustainability of wood products produced in a Woodlands and is no longer considered an acceptable practice in Haldimand County.

### **4. Key Components of Good Forestry Practices**

The successful implementation of Good Forestry Practices depends on careful planning at all stages of forest management. This requires adherence to some fundamental rules that are necessary to help landowners meet their management objectives while minimizing environmental damage, maintaining species diversity, retaining significant wildlife habitats and other important features. Listed below are some of the more widely accepted rules to encourage good forestry practices.

#### Landowner Objectives

- Identification of long-term objectives for the future stand condition as well as short-term management objectives.
- Common objectives include producing high-value wood products, fuelwood for personal use, establishing regeneration, controlling species composition, encouraging old-growth characteristics, controlling stand density, reducing losses to insects, diseases and fire, enhancing non-timber values such as wildlife habitat, rare species protection, recreation and nature appreciation.
- Objectives must be realistic and take into consideration all other forest values.

#### Analysis of Site History, Suitability and Quality

- Information based on soil productivity, suitability of tree species for certain soils, site conditions, history of site, stand history and property manager’s experience.

- Includes natural events such as storms, fire or human land use activities that influenced the development of current site characteristics.
- Used to help predict the potential ability of the site to support desired species which may affect management objectives, choice of silvicultural prescription and productivity of the site.

#### Site and Stand Inventory

- Collection of information on land characteristics, trees and other resource values such as local climate, site conditions, current successional stage of forest, current tree density, species composition, general health, presence of other important values like wildlife habitat and water bodies.
- Used to set realistic management objectives, develop a silvicultural prescription, schedule forestry operations and provide a foundation for monitoring activities.
- Used to select the most suitable silvicultural system for the forest stand.

#### Wildlife Habitat Management and Protection

- Use of silvicultural systems that emulate natural disturbance patterns and provide for a diversity of tree species, size composition and structure of forest stands.
- Retain recommended levels of canopy closure and buffer protection for wildlife habitats (Deeryards, raptor nesting areas, riparian habitats).
- Retain nest, cavity, and den trees as well as future snags and mast trees.
- Do not implement silvicultural prescriptions and activities unless they can be conducted without destroying other important forest values such as wildlife habitat and cover.
- Do not cut in areas with locally or regionally significant habitat features such as: lakes, streams, springs, seepage areas, fish spawning habitat, clusters of super canopy trees, abundant downed woody debris, habitats of species of conservation concern such as warblers, raptors, grouse and areas of dense conifer cover.
- Where possible, retain a 30-meter buffer of uncut densely growing trees beside open fields or other hard edges to reduce wind throw and other damage to the forest interior and minimize invasion by non-native species. Maintain buffers of natural vegetation between cut areas and waterbodies, rare vegetation communities and significant wildlife habitats.

#### Silvicultural Prescription

- Good Forestry Practices Applications must include a silvicultural prescription prepared by a Registered Professional Forester or Associate Member of the Ontario Professional Foresters Association (OPFA) under the *Professional Foresters Act* 2000. Hiring a Qualified OPFA Member ensures that individuals preparing silvicultural prescriptions have the proper education, training and experience to make forest resource management decisions.

#### Tree Marking

- A Certified Tree Marker who is currently certified through the Ontario Ministry of Natural Resources and Forestry must complete all tree marking for a Good Forestry Practices Application based on the prescription written and certified by a Qualified OPFA Member.

This requirement will ensure that individuals marking trees to be harvest are experienced, well trained, can apply resource management standards, use discretion in adapting tree marking to circumstances such as variability in terrain, forest stand type, habitat conditions, ecological features, ecological and social values; and apply tree marking prescriptions in a consistent manner.

### Harvesting Considerations

- To reduce the impact on forest soils and vegetation harvest only during winter months when the ground is still frozen and preferably snow-covered or during late summer and fall when the ground is dry.
- Do not harvest in early spring when the ground is thawing or soft, the bark is easily torn from trees and avoid harvesting from March 20th to June 30th while sensitive wildlife species are nesting and/or breeding.
- Wherever possible, skid trails and roads should avoid steep slopes (Greater than 12% for roads and greater than 20% for skid trails), wet spots, seepage and poorly-drained areas, and intermittent streams. Minimize the number, width of skid trails and follow the land contours.
- Skid trails and roads should approach and cross streams at right angles to minimize impacts on stream banks and to prevent water from flowing down skid trails. Minimize the number of stream crossings, cross at only one location and where the stream is narrow and preferably has a rocky bottom. Remember that it is illegal to destroy any fish habitat.
- Where possible, without lowering product value, skid shorter log lengths and never skid directly up or down a slope.
- Locate landings on well-drained sites away from waterbodies and watercourses.
- To prevent erosion, cut only on dry slopes less than 35%.
- Use careful directional felling to minimize damage to the residual stand, regeneration, and to the tree that is being felled and to reduce skidding damage.
- Equipment should reflect the scale of the harvesting operation in order to avoid excessive residual damage that heavy machinery may inflict on the forest.

### Invasive and Exotic Species

- Hose down forestry equipment between work sites to prevent the introduction of non-native species.
- Remove non-native species to help ensure long-term health of the forest stand.

## **5. Silvicultural Prescription**

A silvicultural prescription is a document which has a planned series of treatments designed to change the current structure and composition of a forest to one that meets specific management goals while considering ecological, economic and social objectives. The following are essential components that must be included in a silvicultural prescription:

### General Information

- Landowner name, mailing address and contact information.

- Woodland address, township, roll number, lot number, concession and how to access the Woodland.

Map or Sketch

A hand drawn sketch or map with aerial photography is a requirement of the application and must include the following:

- North Arrow
- Roads and crossroads, access to harvest area and skid trail locations
- Streams, rivers, ponds and wetlands
- Dwellings, structures and other distinguishing features
- Property boundaries, outline of Woodland and harvest area
- Proposed posting location of permit
- Maps can be created using the Digital Mapping feature found on the Haldimand County website

Woodland Description

- Species composition, forest type, topography, drainage, soil texture, woodland size, average height of trees in stand, estimated age of trees in stand, regeneration observations, description of stand history, site suitability, and quality.

Management Objectives

- Description of the landowner’s long-term and short-term management objectives for the Woodland.

Stand Analysis

- Number of basal area plots, species, size classes (Polewood, Small, Medium, Large and Extra-Large Sawlogs), acceptable growing stock, unacceptable growing stock, pre-harvest basal area, target basal area and ideal basal area.
- Unacceptable growing stock should be removed before acceptable growing stock.
- Ideal Residual Basal Areas for Haldimand County

Tree Size Class	Polewood (10 – 24cm)	Small Sawlogs (26 – 36cm)	Medium Sawlogs (38 – 48cm)	Large Sawlogs (50 – 60cm)	X-Large Sawlogs (62cm +)	Total
Ideal BA (m2/ha)	4	5	5	4	2	20

Note: Total Residual Basal Area should not be less than 18m2/ha.

Tree Marking Prescription

- Silvicultural system to be used and treatment instructions.
- Description of marking for sawlogs, firewood, wildlife, fence lines and the colour of paint used to mark trees.

- Identification of Integrated Resource Management (IRM) and Areas of Concern (AOC) considerations.
- Identification of wildlife values and considerations such as stick nests, Species at Risk, mast trees and cavity trees.

#### Summary

- Prescribed methods for conducting the harvest
- Quantity, species, size of trees to be harvested and estimated volume to be cut
- Follow up recommendations and timeframe for next harvest
- Any additional information

#### Authorization

- Date, signature and seal of Qualified OPFA Member.
- Date and signature of Certified Tree Marker.
- Date and signature of property owner confirming their review and approval of the prescription.

## 6. Good Forestry Practices Application Process

