



**Operating Plan
for the five-year period
January 1, 2010 - December 31, 2014**

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1.0 INTRODUCTION

The Dufferin County Forest is a 1,048 hectare (2,590 acre) forested area owned and managed by the County of Dufferin. The Forest serves important functions in terms of erosion and water control, natural heritage protection, biodiversity, wildlife habitat, recreational opportunities, and support of the rural economy through timber production.

From the first purchase of property in 1930 until 1991, the Forest was managed on behalf of the County by the Ministry of Natural Resources (MNR). This relationship was governed by twenty-year agreements made under the *Forestry Act*. In 1991, the most recent of these agreements expired. This fact, combined with changes to the MNR's private land forestry policy, resulted in the development of a new management plan for the Forest in which the County took the lead role, assisted by MNR. Dufferin was the first County in Ontario to take the lead in developing a management plan for its forest properties. On June 8, 1995, Dufferin County Council approved *Our Forest, Our Future: Dufferin County Forest Management Plan 1995-2015*. Throughout the process, there was participation from the MNR, a Forest Advisory Team, and the general public, all of whom provided valuable input and comments.

In 1995, the County took over the control and co-ordination of all activities having to do with the Dufferin County Forest. In order to fulfill this new role, Dufferin hired a County Forest Manager, the first County in Ontario to do so.

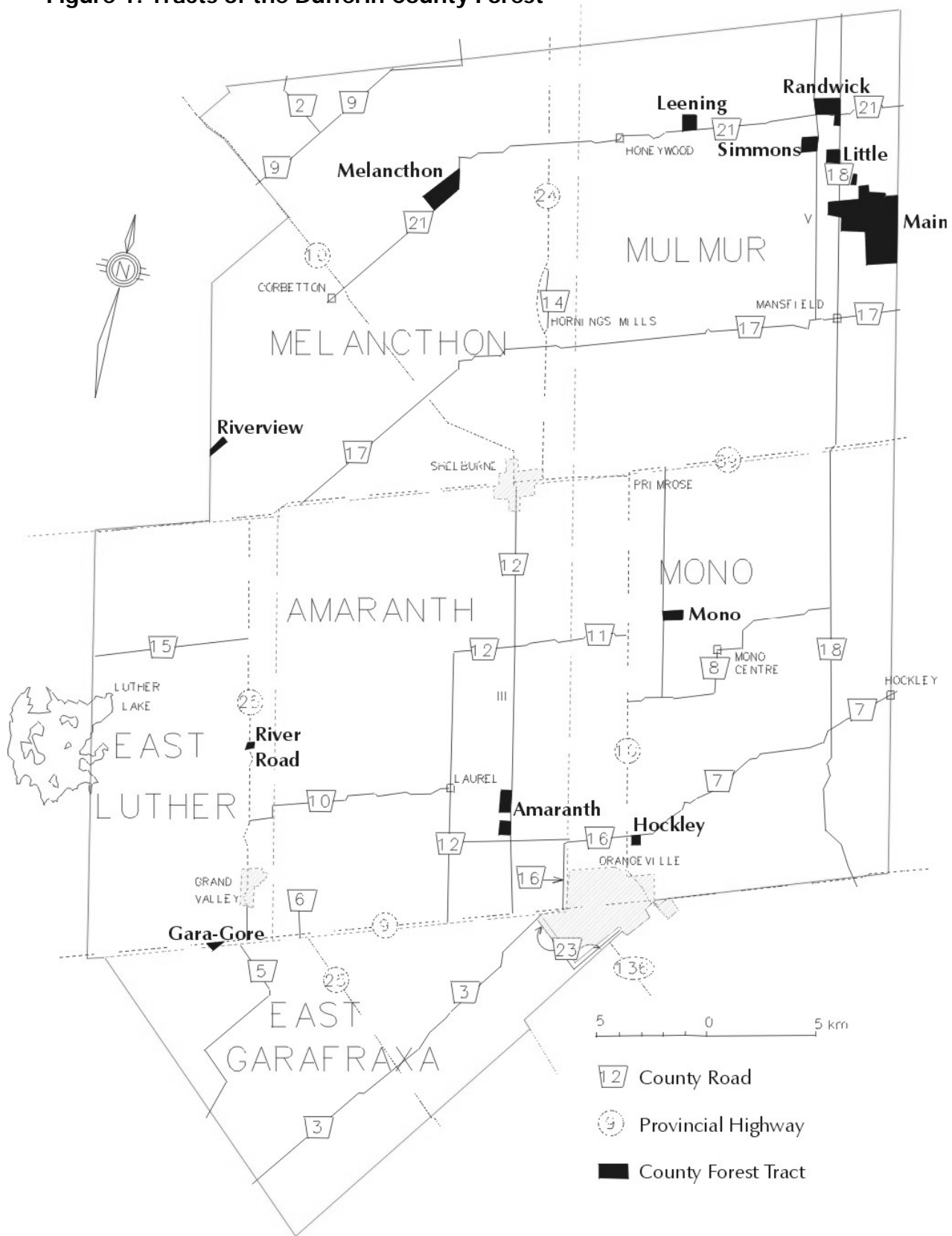
On March 13, 1997, the County signed a Memorandum of Understanding with the Ministry of Natural Resources (MNR). This Memorandum, which expired in 2002, outlined the County's and the Ministry's responsibilities in the management of the Dufferin County Forest. Since the expiration of that agreement, the County has been responsible for all aspects of the management of the Dufferin County Forest.

The document *Our Forest, Our Future Dufferin County Forest Management Plan 1995-2015* outlines the goal, objectives, strategies, and management activities and projects that have guided the management of the Dufferin County Forest over the last five years. The twenty-year management plan continues to be the guiding document for the operating plan for the period 2010-2015. While the overall goal and objectives for managing the Dufferin County Forest remain the same, it is necessary at this stage to assess the activities and projects that have happened over the last five years and to develop a detailed operating plan for the next five years.

2.0 CURRENT RESOURCES

The Dufferin County Forest totals 1,048 hectares (2,590 acres) divided into twelve tracts located in the Town of Mono and the Townships of Mulmur, Melancthon, Amaranth, East Garafraxa and East Luther Grand Valley. The largest single area is the Main Tract (604 hectares, 1,492 acres) in Mulmur Township. For a full description of the resources and history of the Dufferin County Forest, refer to the *Dufferin County Forest Management Plan Background Report* (1995). Figure 1 shows the location of the twelve tracts of the Dufferin County Forest within the County. Table 1 describes the significant

Figure 1: Tracts of the Dufferin County Forest



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Table 1: Tracts of the Dufferin County Forest

Tract	Amaranth North	Amaranth South	Gara Gore	Hockley	Leening	Little
Municipality	Amaranth	Amaranth	East Garafraxa	Mono	Mulmur	Mulmur
Current Zoning	open space conservation	general agricultural	open space conservation	environmental protection, major institutional	Niagara Escarpment	open space conservation
Parent Material	---	loess or alluvium over loam till	loam and silt loam till	loess or alluvium over loam till	glacial till	outwash sand
Topography	smooth basin	smooth very gently sloping	smooth gently sloping	smooth moderately sloping	irregular steeply sloping	smooth very gently sloping
Soil Type	---	fine sandy loam	loam	silt loam	loamy	loam sand
Drainage	---	imperfect	good	good	good	good
Primary Overstorey Covertypes	Laurel Wetland Complex	tolerant harewoods	white spruce	Orangeville Wetland Complex	white spruce and white pine	mixedwood
Secondary Overstorey Covertypes	---	white spruce	---	---	---	---
Known Wildlife Species	snapping turtle, muskrat, raccoon, beaver, mink, fox, coyote, white-tailed deer, colonial waterbirds, pied-billed grebe, northern harrier, mink frog	---	---	---	---	white-tailed deer, wild turkey, small mammals
Cistern(s)/ Fire Pond(s)	0/0	0/0	0/0	0/0	0/0	0/0
Aggregate	none	tertiary significance	none	secondary significance	none	tertiary significance
Recreation	no trails	no trails	few trails	one trail	few trails	one interpretive trail
Special Features	wetland	---	---	wetland	activities restricted as stipulated by donor	significant woodlot, creek

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Table 1: Tracts of the Dufferin County Forest (continued)

Tract	Main	Melancthon	Mono	Randwick	River Road	Riverview	Simmons
Municipality	Mulmur	Melancthon	Mono	Mulmur	East Luther Grand Valley	Melancthon	Mulmur
Current Zoning	open space conservation	open space conservation/ general agricultural	open space	open space conservation	open space conservation	open space conservation/ general agricultural	open space conservation
Parent Material	outwash sand-sandy loam till	esker and kame gravel	outwash fine sand	outwash sand	fine sandy loam material over outwash gravel	loam till	outwash sand
Topography	irregular very steeply sloping	smooth basin/ irregular steeply sloping	irregular moderately sloping	smooth very gently sloping	smooth very gently sloping	smooth level/smooth gently sloping	smooth very gently sloping
Soil Type	loam sand-sandy loam	sandy loam	sandy loam	loam sand	fine sandy loam	loam	loam sand
Drainage	good	good	good	good	good	poor/good	good
Primary Overstorey Coverture	red pine	Melancthon 32 34 37 wetland	red pine	red pine	red pine	Melancthon 2 wetland	red pine
Secondary Overstorey Coverture	red oak	white spruce	tolerant hardwoods	tolerant hardwoods	---	white pine	white pine
Known Wildlife Species	white-tailed deer, ruffed grouse, wild turkey, fox, porcupine, racoon, small mammals	bullfrogs, muskrat, racoon, beaver, white-tailed deer, colonial waterbirds	white-tailed deer, wild turkey, small mammals	white-tailed deer, wild turkey, small mammals	---	bullfrogs, muskrat, racoon, ruffed grouse, waterfowl, small game	white-tailed deer, wild turkey, small mammals
Cistern(s)/ Fire Pond(s)	0/0	0/1	0/0	0/2	0/0	0/1	0/0
Aggregate	tertiary significance	primary significance	tertiary significance	tertiary significance	none	tertiary significance	tertiary significance
Recreation	extensive trail system	two trails	extensive trail system	extensive trail system	no trails	two trails	extensive trail system
Special Features	significant woodlot, ANSI, Pine River floodplain, deer yard, Species at Risk, linkage and buffering	significant woodlot, wetland, buffering	significant woodlot, linkage	significant woodlot, wetland, shoreline	---	significant woodlot, wetland, buffering	significant woodlot

characteristics of the Dufferin County Forest on a tract-by-tract basis. Table 2 is an area summary for the Dufferin County Forest.

Table 2: Dufferin County Forest Area Summary

	Area (hectares)
I. Water	0
II. Non-Forested Land	
i. Designated Agricultural Land	0
ii. Grass and Meadow	5
iii. Unclassified Land	0
III. Forested Land	
i. Treed Wetland	21
ii. Non-treed Wetland	23
iii. Barren and Scattered	26
iv. Timber Management Area	805
v. Protection Forest	175
TOTAL	1,050

An inventory of the Dufferin County Forest was conducted in the late winter and spring of 2003. In addition to this information, every stand that is scheduled for selection harvesting is inventoried in detail as part of the process to develop a pre-harvest silvicultural prescription. Characteristics of the Forest that are measured during an inventory include: overstorey tree vegetation, regeneration, and understorey non-tree vegetation. Notes regarding topography, special features, water resources, wildlife, and aesthetics are also made. A summary of the estimated timber management area and volume for the Dufferin County Forest is shown in Table 3.

Table 3: Summary of Estimated Timber Management Area^{*} and Volume for the Dufferin County Forest

Working Group	Area (ha)	% Total Area	Volume (m ³)	% Total Volume
Red pine	319	40%	178,157	61%
White pine	130	16%	30,300	10%
White spruce	15	2%	4,005	1%
Other Conifers	10	1%	3,530	1%
Red oak	266	33%	55,648	19%
Hard maple	31	4%	5,997	2%
Poplar	26	3%	11,310	4%

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Working Group	Area (ha)	% Total Area	Volume (m ³)	% Total Volume
Other Hardwoods	8	1%	1,746	1%
Total	805 ha	100%	290,693 m ³	99%**

* Area of Dufferin County Forest that is actively managed primarily for sustainable timber production.

** Totals are not equal to 100 due to rounding.

2.1 Wildlife

Animal species which are present in the Dufferin County Forest include: white-tailed deer, ruffed grouse, wild turkey, woodcock, Canada goose, mallard, wood duck, pheasant, snapping turtle, muskrat, raccoon, beaver, mink, coyote, fox, porcupine, cottontail rabbits and other small mammals. Not all of these species exist on all of the tracts, as some are associated with wetland habitat types (e.g. snapping turtle), while others are associated with upland types. The main wildlife species known to be associated with each tract can be found in Table 1.

Many species of trees, shrubs, and plants that are important to wildlife as sources of food are present in the Dufferin County Forest. Some of these are: red oak, butternut, ironwood, pin cherry, choke cherry, wild strawberry, raspberry, blackberry, various species of *Viburnum*, red-osier dogwood, alternate-leaved dogwood, elderberry, sumac, and wild apple. Eastern hemlock is a key winter cover species, particularly for white-tailed deer.

Neither the Ministry of Natural Resources (MNR) nor the County collect census data for the wildlife species in the Dufferin County Forest. Wildlife management is based on a habitat management approach; the forest is managed for a variety of habitat types rather than being directly managed for different wildlife species. The Dufferin County Forest currently includes the following habitat types: non-treed wetlands, treed wetlands/lowland conifers (mostly cedar and larch), creeks, upland tolerant hardwoods (mostly hard maple, white ash, American beech, and ironwood), upland oak, and conifer plantations (mostly red and/or white pine).

Habitat types which are adjacent or in close proximity to the Dufferin County Forest include cultivated and uncultivated fields, meadows, river valleys, stream corridors, and small woodlands.

2.2 Natural Heritage Features

Currently, there are several significant wetlands that form part of the Dufferin County Forest:

- i. Laurel Wetland Complex (provincially significant) located on Cons. I-IV, Amaranth Township (Amaranth Tract);
- ii. Walker's Creek Swamp (locally significant) located on Cons. VI-VIII, Mulmur Township (Randwick Tract) and Tosorontio Township (Simcoe County);
- iii. Melancthon 2 (locally significant) located on Cons. IX and X in Melancthon Township (Riverview Tract);
- iv. Melancthon 34 (locally significant) located on Cons. III-VIII in Melancthon Township (Melancthon Tract) and;
- v. Terra Nova Complex (provincially significant) located adjacent to the Main Tract of the Dufferin County Forest, Mulmur Township.

In the Dufferin County Forest, there is one provincially significant Life Science Area of Natural and

Scientific Interest (ANSI), the Oak Ridges South Slope Forest. It is located at the south end of the Main Tract. This ANSI is associated with the Oak Ridges Moraine and represents warmer-than-normal forest associations on sand in Site Region 6. The cover is currently a sugar maple-red oak forest with some red and white pine. In the Pine River floodplain area the species include white ash, yellow and white birch, basswood, cedar, hemlock, balsam fir, and elm.

There is an area near the Little Tract that is identified as supporting a vulnerable species. The exact location and identification of this species is held in confidence by the Ministry of Natural Resources (MNR) in order to minimize the pressure on it from human activities. Since the Little Tract was designated as Dufferin County Forest Natural Area in 1995, there is no resource extraction (i.e. logging, hunting, fishing) and only limited recreational activity (no vehicles of any kind, motorized or non-motorized) allowed in the area. This designation meets the requirements of Ontario's *Endangered Species Act* in terms of non-interference with designated wildlife and/or their habitat.

There are no significant areas of critical fish habitat in the Dufferin County Forest.

2.3 Protection (Fire, Insects, and Disease)

Following the recommendations of a 1992 Ministry of Natural Resources study, and consultation with local fire departments, all of the cisterns in the Dufferin County Forest have been closed.

There are fire ponds at the Melancthon, Riverview, and Randwick Tracts.

Fire boundaries are maintained as necessary in conjunction with road maintenance.

Entrances to the County Forest tracts are equipped with signs that state their six digit civic address and the number to dial in case of emergency (911).

Insects and diseases are monitored on an ongoing basis by the County of Dufferin with assistance from the Canadian Forest Service, the Ministry of Natural Resources, and the Canadian Food Inspection Agency. Specifically, emerald ash borer, Asian long-horned beetle, Sirex woodwasp, gypsy moth, beech bark disease, butternut canker, and red pine decline are of primary concern.

2.4 Recreation

Most of the County Forest tracts have a trail system that is used for a variety of recreational activities including hiking, nature appreciation, cross-country skiing, snowmobiling, mountain biking, hunting, and horseback riding. The County has marked and mapped many of the trails in the Main Tract.

The County has established an interpretive trail at the Little Tract, consisting of numbered posts, a new trailhead sign, and an explanatory brochure. The brochure is available at the Little Tract and at the Dufferin County Museum and Archives.

The Mansfield Outdoor Centre leases trails in the Main Tract for cross-country skiing.

Ontario Federation of Snowmobile Clubs (OFSC) trails run through or beside the Main Tract, Randwick Tract, Riverview Tract, Simmons Tract, and Mono Tract. The OFSC trails are the only areas in the County Forest where snowmobiling is permitted.

Hunting in the Dufferin County Forest focuses on white-tailed deer and wild turkey. The shotgun portion of the white-tailed deer hunt takes place annually for five days at the beginning of November and five days at the beginning of December. The bow hunt for white-tailed deer runs from the beginning of October to December 31, except during the shotgun hunt. The spring wild turkey hunt takes place from the end of April to May 31 of each year. In 2008, a new fall wild turkey hunt was introduced, taking place for almost two weeks following Thanksgiving. The seasons for small game vary, but usually take place over the fall and winter. The hunting seasons and number of tags available are determined by the Ministry of Natural Resources on a Wildlife Management Unit basis so that wildlife populations in any given area are not exposed to undue hunting pressure.

There is no hunting allowed on any of the County Forest properties from June 1 to September 30. There are no significant hunting opportunities during this time, and the restriction minimizes potential conflicts with other recreational users during a high-use time of year.

2.5 Aggregates

The only significant aggregate resource on any of the County Forest properties is in the Melancthon Tract. The *Aggregate Resources Inventory Papers for Dufferin County* describe it as a selected sand and gravel resource area of primary significance with greater than 35% gravel over six metres thick in some areas.

2.6 Research Plots

The area in the Main Tract (Compartment 27, 25 ha) that was established as a red oak research project in 1994 will not be continued as a formal research project. However, management activities will continue in such a way as to promote the establishment and growth of red oak on the site. (For more detail, see section 4.2.1.)

The Forest contains two biodiversity plots established using the internationally-recognized Smithsonian protocol, in the Main Tract and the Mono Tract.

3.0 REPORT OF PAST OPERATIONS HIGHLIGHTS 2004-2008

Further details of past operations can be found in the relevant annual reports.

3.1 Public Use & Relations

An important element in the County's taking over the management of the Dufferin County Forest was the creation of partnerships that would enable the County to achieve the goal and objectives of the long-term forest management plan (1995-2015), which were reiterated in the operating plan for 2005-2010. The potential relationships were outlined in section 8.0 (pgs. 34-36) of the management plan. In accordance with the general intent of that section, the County Forest has developed two very important partnerships; with the Dufferin County Museum and Archives (DCMA) and with the Dufferin South Simcoe Land Stewardship Network (LSN). These partnerships have enabled the County to achieve some of the objectives of the management plan that do not necessarily involve work "on the ground" in the Forest.

In the long-term forest management plan and in the previous operating plan (2005-2010), the County

made a significant commitment to inform and educate the public about the Dufferin County Forest and forests and forestry in general. The specific objectives can be found on pgs. 40-44 of the management plan and pgs. 15-18 of the operating plan. They include all ages and sectors of the population. The activities that the County partners on with the Museum and the Stewardship Network are chosen to achieve these public use and relations objectives. Generally speaking, they include regular contributions to the Museum's *Museletter* and *Calendar of Events*, landowner workshops, forest walks, and participation in the provincial *Envirothon* programme for high school students.

Signs throughout the County Forest properties have been replaced as necessary on an ongoing basis. In addition, temporary signs informing users of major recreational events and the wild turkey and deer shotgun hunting seasons have been posted annually. During the past four years no new permanent signs have been posted.

The County Forest website at www.dufferinmuseum.com/forest is updated regularly, especially the news and events section. Information about the County Forest can also be found on the County's website at www.dufferincounty.on.ca.

Over the years, there have been one or two identification walks held every year in the County Forest. These continue to draw small groups interested not only in tree identification, but also forest management and ecology. In general, one of the walks focuses on plant identification and one focuses on tree identification.

Information requests continued to be dealt with in a timely and appropriate manner.

The Dufferin County Forest was featured as part of the County of Dufferin's display at both the spring and fall Home Shows at the Orangeville Fairgrounds.

The County Forest Manager has participated in the new High Skills Major Horticulture and Landscaping Program at Banting Memorial High School in Alliston. Students from the program have done work in the County Forest measuring trees and clearing trails, and the County Forest Manager has provided advice to students on pursuing a career in forestry/arboriculture.

The marking of the roads in the Main Tract was completed; work continues on the development of a new map.

The Ontario Competitive Trail Riders Association (OCTRA) continued to hold two or three horseback riding events annually. There were also several non-motorized mountain biking events and orienteering events held in the Main Tract. The Mansfield Outdoor Centre annually leased cross-country ski trails and, until 2005, non-motorized mountain biking trails.

Starting in 2003, the County has hired off-duty OPP officers to patrol the Main Tract (and, in one year, the Mono Tract) to enforce the provisions of the County Forest by-law 2003-50. The prohibition on motorized vehicles has been the focus of the enforcement.

In 2008, the trail through the Hockley Tract built in co-operation with the Town of Mono was officially opened. This trail links to the dam at Island Lake, and will eventually link to the Island Lake perimeter trail.

In 2004, two of the red pine stands in the Randwick Tract were part of a larger study into the causes of

red pine decline.

In 2005, researchers from the Canadian Forest Service established a plot in the Main Tract to study the effects of alternatives to borax in the treatment of red pine stumps against colonization by the root rot disease *Heterobasidium annosum*.

3.2 Environmental & Resource Management

Annually, approximately thirty hectares of County Forest were marked and thinned. This thinning improved the growth of the remaining trees, and generated the bulk of the County Forest revenues. Since stands in the County Forest are thinned using selection harvesting (removal of individual trees), natural regeneration is developing in the majority of areas and there is limited need for planting. Table 4 summarizes the environmental and resource management activities that took place from 2004 to 2008.

Table 4: Environmental and Resource Mgmt Activities for the Dufferin County Forest 2004-2008

Activity	2008	2007	2006	2005	2004
Site preparation (hectares)	0	0	0	0	0
Reforestation (hectares)	0	0	0	0	0
Marking (hectares)	60.0	44.0	35.0	28.0	31.0
Non-commercial tending (hectares)	0	0	0	0	0
Commercial harvesting (hectares)	60.0	47.0	35.0	28.0	31.0
Commercial harvesting (m ³)	2,235	1,911	972	1,409	1,744
Borax application (hectares)	0	0	0	0	0

3.3 Administration

In order to diversify its revenue stream, the County instituted fees for large recreational events in 1995, and required hunters to purchase forest use permits starting in 1997. The Mansfield Outdoor Centre continues to pay for its lease of the cross-country ski trails in the Main Tract.

Table 5 shows the number of forest use permits (hunting) that have been issued over the period 2004-2008.

Table 5: Forest Use Permits (Hunting) Issued for the Dufferin County Forest 2004-2008

Year	2008	2007	2006	2005	2004
Number of Permits	164	161	170	153	141

4.0 PROPOSED ACTIVITIES 2010-2015

The goal and objectives of the long-term management plan, *Our Forest, Our Future: Dufferin County Forest Management Plan 1995-2015* continue to be valid in conducting the management of the Dufferin County Forest. Therefore, the proposed activities for the period of the five year operating plan (2010-2015) will continue to be guided by this goal and objectives.

The goal of the twenty-year management plan is:

To protect the quality and integrity of ecosystems in the Dufferin County Forest, including air, water, land and biota; and, where quality and integrity have been diminished, to encourage restoration or remediation to healthy conditions; while providing a variety of social and economic benefits to the public.

The objectives of the management plan fall into three streams: public use and relations, environmental and resource management, and administration.

Forest Certification

Within the period of this operating plan (2010-2015) the County will begin the process of gaining certification of its forest management operations. Forest certification is defined as: *a procedure whereby an independent third party inspects forest management and utilisation practices to assess compliance with a set of ecological, economic and social standards for sustainable forestry.* There are two primary reasons for pursuing forest certification. First, since it is an independent assessment of forest management work it serves to increase the confidence of the public in the way the goal and objectives for the management of the County Forest are being met. Second, the demand for wood products from certified forests is increasing, giving such products increased market access and, in some cases, premium prices. The following generally accepted forest certification standards will be assessed prior to a decision being made to follow a particular standard: Forest Stewardship Council, Sustainable Forestry Initiative, and Canadian Standards Association. The accepted standard will address all aspects of the County's forest management operations: public use and relations, environmental and resource management, and administration.

4.1 Public Use & Relations

4.1.1 To encourage responsible use of the Dufferin County Forest through increased public involvement in planning and management for the forest.

Forest Watch/Friends of the Dufferin County Forest

The County will formalize a Forest Watch program, modelled on the Road Watch program currently in place in many areas of Ontario. The County will continue to work informally with interested parties in the planning and management for the forest and will establish a formal "Friends" organization if it is deemed to be necessary.

4.1.2 To increase public awareness within Dufferin County of the Dufferin County Forest and the opportunities it provides for people and wildlife including recreation, tourism, hunting, outdoor education, cultural heritage, and critical habitat.

Signs

Signs that currently exist in the Forest will be maintained and replaced as necessary throughout the period of the operating plan.

Consideration will be given to placing signs at additional locations informing users of the dates of the wild turkey hunts (spring and fall) and the two weeks of the fall deer shotgun hunt.

The only new signs planned for the period 2010-2015 are yellow dots placed around the perimeter of all Forest tracts, as described in the *Trespass to Property Act*. Yellow dots indicate that access to the property is allowed with some restrictions on permitted activities. This will be done to mark the boundaries of the forest tracts and to make it more difficult for those conducting activities that are not permitted to claim that they "didn't know". The placement of the signs will be accompanied by ads in the local press and press releases to inform users of the meaning of the yellow dots.

Procedure for Large, Organized Events

The procedure for large, organized events will remain the same. Groups will continue to apply to the County to hold their event, provide evidence of insurance, and pay an application fee and a fee per event participant.

Maps

As the County continues to develop its Geographic Information System (GIS) updated road and trail maps of the County Forest properties will be produced for internal use as well as distribution to the public. As part of this process, attempts will be made to map as many of the trails as possible, in particular in the Main Tract, which has extensive trail systems.

Printed Material

The Dufferin County Forest pamphlet was updated and reprinted in 2004, and will be updated again and reprinted in 2010. This pamphlet will continue to be distributed to anyone who requests information about the Dufferin County Forest, as well as through local municipal offices, local libraries, at a variety of public events, through the Dufferin County Museum and Archives, and through the office of the Hills of Headwaters Tourism Association. Other avenues of distribution will be considered as they become known.

The executive summary of the operating plan will be updated and distributed to anyone requesting information about the Dufferin County Forest.

At least one interpretive brochure will be developed for the new Hockley Tract trail, in co-operation with the Town of Mono.

Other printed material about the Forest, including maps, the County Forest by-law (2003-50), the hunting fact sheet, and the interpretive trail brochures will be updated as necessary and distributed as requested. The hunting fact sheet will be distributed to all hunters purchasing a forest use permit.

There is currently no need to produce other forestry-related material, as there are many such items available through other sources. The County Forest Manager will continue to distribute such material as requested, as well as through the Dufferin County Museum and Archives and at public events. In particular, information regarding invasive exotic pests such as Asian long-horned beetle and emerald ash borer will be distributed.

Interpretive Trails and Centre

The interpretive trail in the Little Tract describes general information about forests and forestry. A second interpretive trail in the Main Tract will be established to show different forest management systems in practice. The newly-established trail in the Hockley Tract will have interpretive elements added to it.

In the long-term management plan, the establishment of an interpretive centre was presented as a future option in the management of the Dufferin County Forest. While this option remains open and

opportunities will be reviewed and evaluated as they arise, there are no immediate plans to establish an interpretive centre.

Schools

The County will continue its involvement in the *Envirothon* programme for high school students through the Dufferin South Simcoe Land Stewardship Network (LSN).

School visits will be promoted through the Dufferin County Museum and Archives and conducted as requested.

The County Forest Manager will continue involvement with the new High Skills Major Horticulture and Landscaping Program at Banting Memorial High School in Alliston. Students from the program will do work in the County Forest, and the County Forest Manager will provide advice to students on pursuing a career in forestry/arboriculture. Other related activities may be pursued as the program develops.

Cultural Heritage Resources

Cultural heritage resources (e.g. buried artifacts, cemeteries, house foundations) will be assessed as necessary, in consultation with staff of the Dufferin County Museum and Archives. If appropriate, guidelines in the MNR's *Forest Management Guide for Cultural Heritage Values* (2007) will be applied.

Public Education

Requests for information, comments, and concerns about the Dufferin County Forest will be handled in a timely and appropriate fashion.

The County will take a more proactive role in promoting news stories related to the County Forest through the Dufferin County Museum and Archives and its *Museletter*, press releases, articles, the County Forest website, local municipal offices and websites, and local libraries.

As the County of Dufferin develops its new website, consideration will be given to including a clickable Calendar of Events for the Dufferin County Forest.

Printed materials related to the forestry and the Dufferin County Forest will continue to be part of the information available to the public at the Dufferin County Museum and Archives.

Presentations, tours, forest walks, requests for general forestry information, and celebrations of theme weeks (eg. National Forest Week) will continue. Wherever possible, these activities will be conducted in co-operation with partners such as the Dufferin South Simcoe Land Stewardship Network (LSN) and the Dufferin County Museum and Archives (DCMA).

Co-operation with related local, provincial, and national organizations will continue, including the Dufferin Hi-Land Club of the Bruce Trail Association, Huronia Woodland Owners' Association, Ontario Forestry Association, Ontario Professional Foresters Association, Huronia Loggers Association, and the Upper Credit Field Naturalists.

To assist in public education, a conifer plantation thinning demonstration area was established adjacent to the Main Tract parking lot in 1997. The area (2.5 hectares) was planted with red pine and some spruce in 1967. It has been divided into four sections that were thinned in 1998 as follows: 50% removal, 25% removal, 33% removal, and 0% removal. This will enable landowners and others to observe the impact of various thinning regimes on the growth of the trees and on the development of

regeneration and understorey plants. In 2009, a second thinning took place in half of each of the original four sections. This will further demonstrate the effect of one or two thinnings. Signs have been placed at the demonstration area explaining the project. Disks were collected from the trees at the time of both thinnings so that comparisons in annual ring growth can be made. This area is an important tool in the education of landowners and the general public on the effects of conifer plantation thinning.

4.1.3 To cooperate with agencies that wish to conduct research in the Dufferin County Forest.

The County will continue to cooperate with, and provide support where possible, to researchers and research agencies that wish to work in the Dufferin County Forest.

4.1.4 To take reasonable measures to make the Dufferin County Forest safe and accessible for a range of users.

Cisterns

Following the recommendations of a 1992 Ministry of Natural Resources study and consultation with local fire departments, all of the cisterns in the County Forest have been closed. They are no longer required for firefighting, and pose a potential hazard if not maintained.

Accessible Trails

The new trail established in the Hockley Tract (linking Hockley Road to the Island Lake dam) is fully accessible to individuals with mobility restrictions. The trail will have interpretive elements added to it.

Road Maintenance

Road maintenance in the County Forest will be conducted as necessary.

Sign System for Roads

The signing of the roads in the Main Tract will be maintained. Once the trails in the Main Tract have been mapped, consideration will be given to a signing system for the trails.

Gates

The gates at the entrances to the forest properties will be maintained and replaced as necessary.

Hunting Seasons

The posting and advertising of the wild turkey hunting seasons (spring and fall) and the two weeks of white-tailed deer shotgun hunting will continue. Consideration will be given to posting the signs at additional locations. The prohibition on hunting between June 1 and September 30 will continue.

Human Health

The County Forest plays an important role in the health and well-being of the community. It is a low cost outdoor venue for physical activity for those living in or visiting the region. Many people find the forest environment enjoyable simply because of its peace and tranquillity compared with the rest of their daily lives. As well, trees absorb carbon dioxide and pollutants from the air and release oxygen, providing very real air quality (and consequently, health) benefits.

However, the Forest also has the potential to have a negative impact on human health. The County will post information on www.dufferincounty.on.ca and www.dufferinmuseum.com/forest regarding forest-related human health issues such as west nile virus, lyme disease, giant hogweed, and poison ivy.

Printed information regarding these issues will be available through the Dufferin County Museum and Archives and at various public events featuring materials about the County Forest. The primary information source regarding these topics will be the local health unit. Other human health issues will be added as appropriate.

Liability

The County Forest continues to be covered under the County of Dufferin's municipal liability insurance. In addition, the County requires that organizations holding larger-scale events, the Mansfield Outdoor Centre, the Ontario Federation of Snowmobile Clubs, and logging operators have their own liability insurance, with the County as a named insured. The amount of liability insurance that the County will require third parties to carry will be determined by the County.

Enforcement Strategy

The County will retain contract enforcement on an annual basis as necessary to ensure compliance with the County Forest by-law (2003-50).

4.2 Environmental & Resource Management

In general, management of the forest stands in the Dufferin County Forest will continue in accordance with the outline for pre-harvest silvicultural prescriptions and silvicultural practices that begins on pg. 48 of *Our Forest, Our Future: Dufferin County Forest Management Plan 2000-2015* (1995). However, since the development of the long-term management plan, there have been updates to a number of relevant publications. Where appropriate, the following references will be used: *A Silvicultural Guide to Managing Southern Ontario Forests* (MNR, 2000), *A Silvicultural Guide for the Tolerant Hardwood Forest in Ontario* (MNR, 1998), *Ontario Tree Marking Guide* (MNR, 2004), and *Forest Management Guidelines for the Provision of White-Tailed Deer Habitat* (MNR, 1997).

Climate Change

While there is increased consensus that climate change is occurring, it is still not clear what forest managers can and should be doing to be prepared for its effects. Since trees are unable to move and have long life spans, their ability to adapt to a rapidly changing climate on an individual basis is limited. However, there are some things that can be done to make the forest as a whole more resilient to the potential impacts of climate change.

A key strategy is to maintain, and where possible, increase, the diversity of the tree species in the County Forest. In this way, if some species are affected by climate change more than others, the forest as a whole will be more able to absorb the effects. Therefore, the County will continue its management strategy of maintaining mixed tolerant hardwoods and converting single species conifer plantations to mixed tolerant hardwoods with a relatively small proportion of remaining conifers (usually red pine and/or white pine).

Through the ongoing active management of the majority of the County Forest properties, stands will be maintained in a vigorously growing, healthy state, and thereby better to resist the impacts of future climate change.

There is a possibility of establishing tree species that have traditionally grown in warmer regions of Ontario in the Dufferin County Forest. It is unclear how effective this would be, however, as current climate change predictions include not just warming, but also changes in precipitation patterns and

increasing frequency and severity of storm events. This means that just because the trees are adapted to warmer conditions, they will not necessarily be able to deal with other possible changes. Therefore, there are no current plans to establish tree species in the Dufferin County Forest that are adapted to warmer regions.

Another potential issue is that virtually all of the regeneration in the Dufferin County Forest currently happens naturally. This means that the young trees are adapted to the current growing conditions in the area, but not necessarily to future growing conditions. At the same time, it is illogical to destroy naturally-established trees to replace them with trees (at significant expense) that may not be adapted to future growing conditions either. Therefore, there will no change to the County's overall strategy of encouraging natural regeneration as the primary way of establishing the future forest.

4.2.1 To promote healthy wildlife populations through the maintenance of a diversity of habitat types (including non-treed wetlands, treed swamps, creeks, deciduous and coniferous uplands, bottomlands, oak forests, and forest interior and forest edge habitat) in the Dufferin County Forest.

The Little Tract will continue to be designated as "Natural Area" and allowed to develop into an old growth forest. Some of the old growth characteristics that are developing include a diversity of tree ages and sizes (including very large old trees), snags (dead standing trees), cavity trees (standing trees with feeding and/or roosting holes), large logs on the forest floor, and gaps in the forest canopy.

White-tailed deer yards will continue to be managed so that core feeding and core shelter areas are maintained.

For areas where natural regeneration is deemed to be insufficient as a result of a regular forest cruise or other forest inventory activity, a plan will be developed and implemented to augment the natural regeneration through planting and/or seeding.

Red Oak Management

The area in the Main Tract (Compartment 27, 25 ha) that was established as a red oak research project in 1994 will not be continued as a formal research project. However, management activities will continue in such a way as to promote the establishment and growth of red oak on the site. To this end, there was a prescribed burn conducted in the spring of 2009 in order to suppress understorey vegetation that is competing with the established red oak. If necessary, a second prescribed burn will be conducted in the spring of 2010 to further reduce competing vegetation. The overstorey will be harvested to a basal area of 14-16 m²/ha in order to provide the appropriate light levels for the rapid growth of the red oak regeneration established on the site. The results of the management of this area will serve to inform the management strategies for other red oak stands in the Dufferin County Forest.

Species at Risk

Habitats of species at risk (formerly referred to as vulnerable, threatened, and endangered species) will continue to be managed in such a way as to maintain their features.

Exotic Invasive Plants

Exotic invasive plants have great potential to alter the ecology of the terrestrial habitats of the Dufferin County Forest. Since the Dufferin County Forest does not contain a significant number of watercourses, aquatic invasive species are of lesser concern. Four key species to consider in this regard are garlic mustard (*Allaria petiolata*), dog-strangling vine (*Vincetoxicum rossicum* and *V. nigrum*), Scots pine (*Pinus*

sylvestris) and Norway maple (*Acer platanoides*).

While garlic mustard and dog-strangling vine are still not common in the Dufferin County Forest, it is anticipated that their presence will increase over time, due to their invasive nature and their spread being magnified by increased recreational use. (Seeds of these species can be transported from one area to another on bicycle tires, horses' hooves, and peoples' footwear.) Areas of garlic mustard and dog strangling vine will be managed as they are identified, using appropriate control measures for the particular species. This will be done in order to minimize the spread and invasion of these species into the County Forest.

Other than at the Little Tract parking area, there are no significant areas of Scots pine in the County Forest. The mature trees at the Little Tract are being progressively removed by the staff of the County Operations Centre, while the regeneration is removed on an ongoing basis. Scots pine invading the roadsides at the County Forest tracts are also being removed as time permits. The County has supported the Town of Mono's Scots pine eradication program by actively removing Scots pine from its own properties in the Town of Mono.

There are mature ornamental Norway maple at the former site of Camp Dufferin at the Main Tract. These are being monitored to ensure that their seedlings are not invading the surrounding open area. If seedlings of Norway maple become a problem, the mature Norway maple will be removed to allow native species to colonize the site. There are no other known areas in the County Forest where Norway maple have been planted.

Where feasible, signs and websites will be used to inform forest users about invasive species and give tips on how to reduce and prevent their spread.

The County will keep abreast of developments with regard to the spread and control of invasive species through the Ontario Invasive Plant Council.

4.2.2 To ensure that all wetlands in the Dufferin County Forest are identified and adequately protected and to achieve no loss of wetlands in the Dufferin County Forest.

Provincially recognized (classes 1-7) wetlands in the Dufferin County Forest will continue to be designated as "Natural Area". The County will continue to manage wetlands in the County Forest in such a way as to maintain their features, and to not dispose of properties that contain wetlands.

4.2.3 To minimize soil loss from the Dufferin County Forest.

The County will continue to conduct cut inspections as part of its monitoring of forest operations. The new County Forest by-law (2003-50) reiterates that motorized vehicles are not permitted in the County Forest. Inspection and stabilization of problem soil erosion areas will continue as necessary.

4.2.4 To maintain or enhance the characteristics of all ANSIs within the Dufferin County Forest using an ecosystem management approach, that is, to allow natural forest processes to operate as freely as possible.

The County will continue to monitor the Oak Ridges South Slope Forest Area of Natural and Scientific Interest (ANSI). Since a key feature of the ANSI is the overstorey red oak component, it is likely that active management will be required in the future in order to maintain the ANSI characteristics.

The County will co-operate with the Ministry of Natural Resources in the designation and evaluation of any additional ANSIs in the Dufferin County Forest.

4.2.5 To maintain the quality and quantity of surface and ground water resources. To minimize siltation, compaction, de-vegetation, ditching, and ponding of water in areas where forest management activities occur.

As part of the cut inspection process, the County will ensure that all forest operations are being conducted in such a way as to minimize impact on the soil and water resources of the Dufferin County Forest.

4.2.6 To manage disturbances (wildfire, insects, and disease) for the overall health of the Dufferin County Forest, while ensuring that human life and private property are protected from such disturbances.

Wildfires in the County Forest will continue to be fought in accordance with the procedures outlined in the emergency plans of local municipalities. Firebreaks will be maintained as necessary, in conjunction with road maintenance. Campfires will continue to be prohibited in the Dufferin County Forest. If climate conditions in the future are on average warmer and drier, than the potential for wildfires will be increased as well. If the potential for wildfires is increased significantly, the County will increase education for users and the general public regarding the potential for wildfires and how to limit their occurrence.

It is important to note that while wildfires have the potential to do great damage to the Forest, prescribed burning (the knowledgeable application of fire to a specific land area to accomplish predetermined forest management or other land-use objectives) is an important forest management tool. This is especially true for the maintenance of mid-successional communities such as the red oak stands in the Dufferin County Forest. Therefore, although every effort will be made to control and suppress wildfires, prescribed burning will remain a part of the management strategy for the Dufferin County Forest. The application of prescribed burning will be determined on a stand-by-stand basis taking into consideration silvicultural, wildlife habitat, and economic objectives.

The County, in co-operation with partners such as the Canadian Forest Service, the Ministry of Natural Resources, and the Canadian Food Inspection Agency will continue to monitor pests and diseases in the Forest. Pest and disease outbreaks will be managed using an Integrated Pest Management approach.

It seems likely that one of the impacts of climate change will be an increase in pest and disease outbreaks, as well as possible increased survival of exotic pests and diseases. Maintaining a diverse, vigorously growing forest will mitigate the impacts of these outbreaks, but it is possible that more activity to control outbreaks will be necessary. Particular pest and disease issues that will be carefully monitored over the period of this operating plan include emerald ash borer, Asian long-horned beetle, Sirex woodwasp, gypsy moth, beech bark disease, and butternut canker, all of which are considered to be exotic.

A recent forest health issue that has developed is red pine decline. This phenomenon is manifesting itself as the relatively rapid (sometimes in a matter of months) decline and death of red pine trees older than about sixty years. The County of Dufferin has participated in a southern Ontario-wide research project to attempt to determine the cause of this decline. The results of the research suggest that a combination of

factors is involved, including two types of root rot (*Armillaria ostoyae* and *Heterobasidium annosum*), several years of drought, and alkaline soil. When the trees are growing in soil that has an alkaline base their rooting depth can be significantly reduced. In long periods of dry weather, this reduced rooting depth puts the trees under moisture stress and makes them more susceptible to root rots and other insect and disease attacks. In general, older red pine stands that are declining will be managed in such a way as to speed succession toward tolerant hardwoods while maximizing timber values.

4.2.7 To provide an even flow of timber revenue from the Dufferin County Forest for the County of Dufferin and the rural economy, while maintaining the quality and sustainability of the forest resource.

Tables 6-10 list candidate sub-compartments for harvest over the period of the five year operating plan. This information is based on: a commitment to ensure the sustainability of the forest resource, records of past harvesting activities, and the inventory done in 2003. Harvesting at the levels indicated can be sustained over the long-term, while improving the health and growth of the Forest and providing a relatively even flow of timber revenue. Actual stands selected for harvest in any given year will be further inventoried and assessed to ensure that the long-term sustainability of the forest ecosystem is not compromised.

It is anticipated that any possible impacts of climate change will not be significant enough over the next five years to adversely affect timber production from the Dufferin County Forest.

Table 6: Proposed Selection Harvesting 2010

Tract and Compartment	Working Group	Area (ha)
Main (26b)	red oak, hardwoods	18
Mono (41a)	mixed conifer	10

Table 7: Proposed Selection Harvesting 2011

Tract and Compartment	Working Group	Area (ha)
Randwick (1a)	red pine	20
Randwick (2a)	red pine	11

Table 8: Proposed Selection Harvesting 2012

Tract and Compartment	Working Group	Area (ha)
Main (12a)	red pine	22
Main (16a/17a)	red pine	8
Mono (40a/46a)	tolerant hardwoods	15

Table 9: Proposed Selection Harvesting 2013

Tract and Compartment	Working Group	Area (ha)
Randwick (2b)	tolerant hardwoods	6
Main (10a)	red pine	12

Table 10: Proposed Selection Harvesting 2014

Tract and Compartment	Working Group	Area (ha)
Randwick (5b)	red pine	14
Mono (41b)	mixed conifer	10

4.3 Administration

4.3.1 To maintain the Dufferin County Forest as financially self-sustaining.

An annual budget for the County Forest will be developed as part of the County's budgeting process. The possibility of the County Forest becoming part of a carbon credit program will be considered as such programs continue to develop and become accessible.

4.3.2 To assess the natural heritage and socio-economic significance of the Dufferin County Forest in order to facilitate the acquisition and disposal of properties.

The property assessments for all of the County Forest tracts are shown in Table 11. The criteria used in assessing the properties are shown in Appendix B. These assessments have been reviewed and are still valid. If opportunities for property acquisition should arise, they will be assessed as described in the report *Guidelines for Acquisition of Dufferin County Forest Properties*, as amended and approved by County Council on June 11, 2009.

Table 11: Socio-Economic and Natural Heritage Assessment of Dufferin County Forest Properties

Tract	Natural Heritage	Size	Location	Species Variety	Site	Rec. Potential	Land Value (2008)	Total	Rank
Amaranth	wetland	2	5	2	3	1	3	16	5
Gara-Gore		2	5	1	5	0	3	16	5
Hockley	wetland	2	5	1	3	2	3	16	5
Leening	Niagara Escarpment Rural Area	1	3	2	5	0	2	13	7
Little	significant woodlot, creek	3	2	1	5	2	3	16	5
Main	significant woodlot, ANSI, Pine River floodplain, deer yard, SAR, linkage, buffering	5	3	5	5	2	5	25	1
Melancthon	significant woodlot, wetland, buffering	4	1	2	3	1	3	14	6
Mono	significant woodlot, linkage	4	5	3	5	2	4	23	2
Randwick	significant woodlot, wetland,	5	2	3	5	2	5	22	3

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Tract	Natural Heritage	Size	Location	Species Variety	Site	Rec. Potential	Land Value (2008)	Total	Rank
	shoreline								
River Road		1	4	1	5	0	3	14	6
Riverview	significant woodlot, wetland, buffering	3	1	2	3	1	3	13	7
Simmons	significant woodlot	3	2	3	5	1	3	17	4

4.3.3 To develop a use plan for the Dufferin County Forest to facilitate the achievement of the environmental and public use objectives and minimize conflict.

The division of the County Forest tracts into use classes has been reviewed and is still valid. The "DCF Natural Area" (no vehicles of any kind; management activities only to maintain or enhance notable features) consists of: Little Tract, Hockley Tract, all class 1-7 wetlands, Oak Ridges South Slope Forest ANSI, and Leening Tract. All other areas of the County Forest are designated as "DCF Resource Management Area" (management activities and recreation in accordance with the objectives of the plan).

5.0 MONITORING

In order to ensure that all activities related to the Dufferin County Forest are conducted within the goal, objectives, strategies, and management activities and projects of this operating plan, a number of monitoring activities will be undertaken. These monitoring activities relate to the individual objective streams: public use and relations, environmental and resource management, and administration. In addition, the implementation of a forest certification system (as described in section 4.0) will provide third-party independent monitoring of all activities related to the management of the County Forest.

The public use and relations stream will be monitored through contact and consultation with the users of the Forest and the ratepayers of Dufferin County.

The environmental and resource management stream will be monitored mainly through periodic cut inspections and forest cruises conducted by the County. This is the standard approach for monitoring forest management objectives. Management projects that are conducted by contractors, such as non-commercial thinning, cleaning, or tree marking, will be audited by the County. The procedure for this will depend on the individual contract.

The administration stream will be monitored mainly through administrative and budgetary procedures in place at the County of Dufferin.

Reporting regarding the County Forest is to the Dufferin County Museum and Archives and Heritage Lands Board, and subsequently to County Council.

5.1 Public Use & Relations

In order to ensure that the public use and relations objectives are being met, the County of Dufferin will do the following:

1. Conduct formal surveys with regard to contentious issues.
2. Conduct informal oral (as opportunities arise) surveys of users to determine if:
 - i. they have gained knowledge about the Dufferin County Forest;
 - ii. there still exist knowledge gaps that the County of Dufferin can fill and;
 - iii. they have any safety or access concerns.
3. Assimilate and act on comments/concerns from users on an ongoing basis.
4. Maintain a dialogue with user groups to determine the effectiveness of the permit procedure.
5. Maintain a dialogue with researchers and research agencies working in the Dufferin County Forest to determine the effectiveness of the access procedure.
6. Ensure ongoing maintenance of signs and gates in the Dufferin County Forest.
7. Retain contract enforcement to ensure compliance with County Forest by-law 2003-50.

5.2 Environmental & Resource Management

There are two main methods for assessing if forest operations and silvicultural activities are meeting stated objectives: cut inspections and forest cruises. In addition to these, the County of Dufferin will do the following to ensure that the environmental and resource management objectives are being achieved:

1. Conduct periodic inspections of areas that are prone to erosion or have had erosion problems in the past. Areas where erosion is reported by users will be inspected as they are reported.
2. Assess the potential for insect and disease outbreak on an annual basis and as incidences are reported by users.
3. Comply with fire regulations as determined by the local municipalities.
4. Monitor the value of the timber sold annually from the Dufferin County Forest.
5. Identify and assess aggregate deposits of properties that become part of the Dufferin County Forest.
6. Retain contract enforcement to ensure compliance with County Forest by-law 2003-50.
7. Assess opportunities for supplementing natural regeneration with planting and/or seeding.

5.2.1 Cut Inspections

Cut inspections in the Dufferin County Forest will be conducted according to the following guidelines:

1. Inspections will be conducted at least once every week in areas where forest operations are ongoing.
2. An inspection will be conducted within one week of the end of forest operations.
3. Every inspection will:
 - i. ensure that all marked trees have been removed;
 - ii. ensure that only marked trees have been removed;
 - iii. ensure that excessive site disturbance has not occurred;
 - iv. ensure compliance with the *Timber Management Guidelines for the Protection of Fish Habitat*;
 - v. ensure compliance with the *Code of Practice for Timber Management Operations in Riparian Areas*;
 - vi. ensure compliance with the *Environmental Guidelines for Access Roads and Water*

Crossings and;

vii. ensure compliance with all conditions of the County of Dufferin's *Agreement for the Sale of Timber*.

In cases where the operator does not fulfil the conditions, there may be monetary penalties and/or the *Agreement for the Sale of Timber* may be terminated.

5.2.2 Forest Cruises

Forest cruises in the Dufferin County Forest will be conducted according to the following guidelines:

1. A forest cruise will be conducted every ten years for the entire "DCF Resource Management Area" of the Dufferin County Forest.
2. A forest cruise will be conducted for newly acquired properties within two years of their acquisition.
3. The forest cruise will include (at minimum):
 - i. a quantitative inventory of overstorey tree vegetation (variable-radius plot sampling);
 - ii. a quantitative inventory of regeneration (fixed-radius plot sampling);
 - iii. a quantitative inventory of understorey non-tree vegetation (fixed-radius plot sampling) and;
 - iv. a qualitative inventory of wildlife, water resources, topography, aesthetics, and special features.
4. The forest cruise will be conducted using the stratified random sampling technique. The strata will be formed by the different working groups in the forest. In the absence of time constraints, the cruise will produce an estimate of basal area per hectare for the entire forest that has a 95% probability of being within $\pm 10\%$ of the true mean; and an estimate of basal area per hectare for each stratum that has a 95% probability of being within $\pm 15\%$ of the true mean.

5.3 Administration

In order to ensure that the administration objectives are being met, the County of Dufferin will do the following:

1. A budget for the Dufferin County Forest will be presented annually to Dufferin County Council.
2. The natural heritage and socio-economic value of the forest properties will be re-assessed every five years.
3. The criteria used for assessing the significance of the properties will be revisited every five years to ensure that they are still facilitating the achievement of the County of Dufferin's objectives for the forest properties.
4. The use plan will be revisited every five years to ensure that it is still serving its purposes of facilitating the achievement of the environmental and public use objectives and minimizing conflict between uses of the Dufferin County Forest.
5. As new properties are added to the Dufferin County Forest their natural heritage and socio-economic value will be assessed and they will be assigned to one of the use classes.

6.0 THE FUTURE OF THE PLANNING PROCESS

This document describes a five-year operating plan for the period 2010-2015. This is the last operating

plan to fulfil the requirements of the twenty-year management plan that was passed by County Council in 1995. Toward the end of the twenty year management plan, starting in 2013, a new twenty year plan will be written for the period 2015-2035. This plan will include a five year operating plan for the period 2015-2020.

7.0 ACRONYMS USED IN THE PLAN

ANSI	Area of Natural and Scientific Interest	LSN	Dufferin South Simcoe Land Stewardship Network
CFS	Canadian Forest Service	MNR	Ministry of Natural Resources
CO	Conservation Officer	OFSC	Ontario Federation of Snowmobile Clubs
DCMA	Dufferin County Museum and Archives	SAR	Species at Risk
DCF	Dufferin County Forest		
GIS	Geographic Information System		

7.2 Species Abbreviations

Ab	black ash	I	ironwood
Aw	white ash	Mh	hard (sugar) maple
Bd	basswood	Mr	red maple
Be	American beech	Or	red oak
Bw	white birch	Pj	jack pine
Ch	cherry	Po	poplar (aspen)
C	other conifers	Pw	white pine
Ce	eastern white cedar	Sb	black spruce
Elm	American elm	Sw	white spruce
H	other hardwoods	La	tamarack (larch)
He	eastern hemlock		

7.3 Conversion Factors

1 hectare (ha) = 2.47 acres
 1 metre (m) = 3.26 feet = 1.09 yards
 1 cubic metre (m³) = 35.315 cubic feet = 0.415 cords = 195 f.b.m.
 1 hectare (ha) = 10,000 m²

8.0 GLOSSARY

ANSI: Area of Natural and Scientific Interest. ANSIs are areas of land and water containing natural landscapes or features which have been identified by the *Ministry of Natural Resources (MNR)* as having values related to protection, natural heritage appreciation, scientific study or education.

barren and scattered: productive forest land which, because of natural or artificial disturbance, contains only scattered trees (*stocking* below 0.25) or no trees at all with either shrub cover or bare soil, but no significant regeneration.

basal area: the cross sectional area of a stem at breast height (1.3m), most commonly accumulated as square metres per hectare. Also see *normal basal area*.

biodiversity: the variety and variability (in time and space) among living organisms and the ecological complexes in which they occur. Biodiversity can be measured at the genetic, species and landscape levels.

bog: see *wetland*

breast height: 1.3m above the ground.

carr: see *wetland*

conifer (softwood): needle-bearing tree that produces seeds in cones.

Department of Lands and Forests: see *Ministry of Natural Resources (MNR)*

diameter at breast height (DBH): the diameter of a tree taken at a height of 1.3m above the ground

endangered: any species of flora or fauna that is threatened with imminent *extinction* or *extirpation* throughout all or a significant portion of its Canadian range

even-aged: condition of a *stand* in which relatively small age differences exist between individual trees. The maximum difference in age is usually twenty years. Also see *uneven-aged*.

extinct: a species formerly indigenous to Canada that no longer exists anywhere

extirpated: any species of flora or fauna that no longer exists in the wild in Canada but occurs elsewhere

fen: see *wetland*

forest cruise: sample survey of a forest area to provide an estimate of timber by volume, species, products, size, and other characteristics. Also assesses understorey and ground vegetation, wildlife, water resources, aesthetics and special characteristics of the forest. Also see *timber cruise*.

hardwood: leaf-bearing trees whose seeds are not produced in cones.

high-grading (selective harvesting): a partial harvest removing only the most valuable species, or trees of desirable size and quality, without regard for the condition of the residual stand

intolerant: used to describe trees which do not tolerate shade (e.g. red pine, poplar). Also see *tolerant*.

marsh: see *wetland*

Ministry of Natural Resources (MNR): the provincial ministry responsible for natural resources, including forests, wetlands, waters, and fish and wildlife. The MNR was formerly known as the Department of Lands and Forests.

natural area (DCF): within these areas only low-impact recreational activities (such as hiking/walking, bird/wildlife viewing, and cross-country skiing) will be permitted. There will be no vehicles (including bicycles) allowed in these areas unless prior permission is given by the County of Dufferin. The only forest management activities that will be conducted in these areas will be maintenance and

enhancement of notable features.

normal basal area: the basal area for a given *working group* on a particular *site class* at a particular age, as given by Plonski's Normal Yield tables.

prescribed burning: the knowledgeable application of fire to a specific land area to accomplish predetermined forest management or other land-use objectives

private land: land not vested in Her Majesty in right of Ontario, but includes unpatented land that is located or sold under the *Public Lands Act*. Also see *public lands*.

productive forest land: all forest areas capable of growing commercial trees and not withdrawn from such use

production forest: all productive forest land managed primarily for human benefit, unless otherwise reassigned

protection forest: all productive forest land managed primarily to exert beneficial influence on soil, water, landscape, or for any other purpose when production of merchantable timber, if any, is incidental

public lands: the lands vested in Her Majesty in right of Ontario and under the management of the Minister [of Natural Resources], and includes the lands in respect of which a lease, licence of occupation or permit has been granted or issued under the *Mining Act*, the *Provincial Parks Act* or the *Public Lands Act*. Also see *private land*.

regeneration: the renewal of a tree crop whether by natural (self-sown seed or by vegetative means) or artificial means (sowing and planting). This term may also be used to describe the young crop itself.

resource management area (DCF): within these areas recreational activities, except those disallowed by by-laws, will be permitted and management activities that conform to the current management plan and operating plan will be permitted

restoration: a process of returning ecosystems or habitats to their original structure and species composition. Restoration requires a detailed knowledge of the (original) species, ecosystem functions, and interacting processes involved.

selective harvesting: see *high-grading*

selection harvesting: an annual or periodic cutting of trees chosen individually or by groups, in an uneven-aged stand, in order to recover the yield and develop a balanced uneven-aged stand structure, while providing the cultural measures required for tree growth and seedling establishment

shelterwood system: an *even-aged silvicultural system* where in order to provide a source of seed and/or protection for regeneration, the old crop is removed in two or more successive cuttings

silviculture: the science and art of cultivating forest crops. More particularly, the theory and practice of controlling the establishment, composition, constitution and growth of forests. Silviculture is a combination of three forestry activities: 1) timber harvest; 2) forest renewal; 3) subsequent maintenance of the new forest.

silvicultural system: a process, following accepted silvicultural principles, in which crops constituting forests are tended, harvested, and regenerated, resulting in the production of crops of distinctive form. Systems are conveniently classified according to the method of harvesting the mature stands with a view to regeneration and according to the type of crop produced.

site class: a measure of the relative productivity of a site. Site classes 1a and X are the most productive; site class 3 is the least productive. Site class is determined using Plonski's Normal Yield Tables.

stand: a community of trees possessing sufficient uniformity in composition, constitution, age, arrangement or condition to be distinguishable from adjacent communities

stocking: the actual *basal area* as a fraction of the *normal basal area*. Stocking can be more than 1.

swamp: see *wetland*

threatened: any species of flora or fauna that is likely to become *endangered* in Canada if the factors affecting its vulnerability are not reversed

timber cruise: sample survey of a forest area to provide an estimate of timber by volume, species, products, size and other characteristics. Also see *forest cruise*.

tolerant: used to describe trees that can regenerate under a canopy (e.g. maple, hemlock). Also see *intolerant*.

uneven-aged: the condition of a stand in which trees markedly differ in age. Also see *even-aged*.

United States Department of Agriculture (USDA): a branch of the USDA, the Forest Service, is the government agency responsible for forestry in the United States

vulnerable: any species of flora or fauna particularly at risk because of low or declining numbers, small range or for some other reason, but not a *threatened* species

wetland: land that is seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils (characterized by an abundance of moisture) and has favoured the dominance of water-tolerant plants. The four major types of wetlands are **swamps, marshes, bogs** and **fens**. **Carr** is an English name for a wet-ground shrub community. Dogwoods and willows are the dominant types of vegetation in the carr.

	Vegetation	Water	Soil	Location
Marsh	∞ cattails, sedges, rushes	∞ very efficient at supplying water and nutrients to vegetation ∞ occasional flooding ∞ maintain some open water, less than 2m depth	∞ mineral ∞ high organic matter content near surface	∞ southern Ontario

Dufferin County Forest Operating Plan 2010-2015

	Vegetation	Water	Soil	Location
		∞ will dry out during extended droughts		
Bog	∞ sphagnum moss	∞ water from runoff and precipitation only	∞ thick layer of peat (decomposed sphagnum moss), which is highly acidic, extends beneath bog	∞ common to northern Ontario, but some in south
Swamp	∞ shrubs and trees e.g. soft maple and cedar	∞ occasional flooding	∞ organically rich mineral soils	∞ most common wetland in southern Ontario
Fen	∞ grasses, sedges	∞ some flow-through	∞ neutral and alkaline	∞ rare in Ontario

Wetlands in Ontario are evaluated based on their biological, hydrological, socio-economic and special features. The wetland is given a number of points in each of these categories. Based on the number of points the wetland is assigned to one of seven classes. Wetlands in classes 1-3 are provincially significant; classes 4-7 are locally significant.

working group: an inventory aggregation for management purposes. An aggregate of *stands*, including potential forest areas assigned to this category, having the same predominant species, and management under the same rotation and broad silvicultural system.

Appendix A

THE CORPORATION OF THE COUNTY OF DUFFERIN BY-LAW NUMBER 2003-50

BEING A BY-LAW TO GOVERN THE LANDS KNOWN AS THE DUFFERIN COUNTY FOREST AND TO REPEAL BY-LAWS 96-36 AND 96-39

(Authorization: Dufferin County Museum and Archives & Heritage Lands Board, May 12, 2003)

Authority

WHEREAS by section 8 of the Municipal Act, 2001, S.O. 2001, c.25, the Council of the Corporation of the County of Dufferin has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS by the *Trespass to Property Act*, R.S.O. 1990, c. T.21, as amended, the Council of the Corporation of the County of Dufferin is authorized to pass a by-law for prohibiting entry to land occupied by the Corporation of the County of Dufferin and the carrying on of certain activities on such land and for these purposes give notice thereof;

AND WHEREAS the Council of the Corporation of the County of Dufferin on June 8, 1995 by motion 95-129 approved the document entitled "*Our Forest, Our Future: Dufferin County Forest Management Plan 1995-2015*" which outlines the County's policies with regard to the resource management of the lands occupied by the Corporation and generally known as the Dufferin County Forest;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE COUNTY OF DUFFERIN ENACTS AS FOLLOWS:

Definitions

1. For the purposes of this by-law:

- (a) "Chief Administrative Officer" and "CAO" mean the Chief Administrative Officer of the Corporation of the County of Dufferin;
- (b) "Council" means the Council of the Corporation of the County of Dufferin;
- (c) "County" means the Corporation of the County of Dufferin;
- (d) "Dufferin County Forest" and "Forest" mean the forest lands occupied by the Corporation of the County of Dufferin consisting of about 1,050 hectares in twelve tracts generally known as: Amaranth Tract, Gara-Gore Tract, Hockley Tract, Leening Tract, Little Tract, Main Tract, Melancthon Tract, Mono Tract, Randwick Tract, Riverview Tract, River Road Tract, and Simmons Tract and further described in Schedule A;
- (e) "Dufferin County Forest Natural Area" includes the parts of the Dufferin County Forest generally known as the Hockley Tract, Leening Tract, Little Tract, the part of the Amaranth Tract located in Lot 8, Concession III of the Township of Amaranth, Walker's Creek Swamp, Melancthon 2 wetland, Melancthon 32 34 37 wetland, and the Oak Ridges South Slope Forest;
- (f) "hunting" includes,
 - (a) lying in wait for, searching for, being on the trail of, pursuing, chasing or shooting at wildlife, whether or not the wildlife is killed, injured, captured or harassed, or
 - (b) capturing or harassing wildlife,except that "hunting" does not include,
 - (a) trapping, or
 - (b) lying in wait for, searching for, being on the trail of or pursuing wildlife for a purpose other than attempting to kill, injure, capture or harass it, unless the wildlife is killed, injured, captured or harassed as a result, and "hunt" and "hunter" have corresponding meanings;
- (g) "motorized snow vehicle" means a self-propelled vehicle designed to be driven primarily on snow;
- (h) "motor vehicle" means a motor vehicle within the meaning of the Highway Traffic Act, R.S.O. 1990, c. H.8, as may be amended from time to time and;
- (i) "management" includes all activities deemed, now or in the future, by the Corporation of the County of Dufferin to be consistent with the goal and objectives set out in the document approved by Council motion 95-129 on June 8, 1995 entitled "*Our Forest, Our Future: Dufferin County Forest Management Plan 1995-2015*" and any updates and revisions to said document.

Uses declared

2. The Council of the Corporation of the County of Dufferin hereby declares the use of the lands known as the Dufferin County Forest to be for “forestry purposes”, that is to include the production of wood and wood products, provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation, and protection and production of water supplies.

Exceptions

3. This by-law shall not apply to an employee of the Corporation of the County of Dufferin while acting in the course of his or her employment in managing the Dufferin County Forest or any part thereof, or any person authorized by an employee of the Corporation of the County of Dufferin to carry out any duty relating to the management of the Dufferin County Forest or any part thereof.

Motor vehicles

4. No person shall enter the Dufferin County Forest or any part thereof for the purpose of bringing into the Forest any motor vehicle for the purpose of operating said motor vehicle in the Dufferin County Forest with the following exceptions:

Parking

(a) any person who enters the Dufferin County Forest or any part thereof for the purpose of bringing into the Forest any vehicle which is drawn or propelled by a motor or any means of power other than by muscular power, to park such vehicle in any area marked or designated for parking or;

Motorized snow vehicles

(b) any person who enters the Dufferin County Forest on a motorized snow vehicle on a designated Ontario Federation of Snowmobile Clubs (O.F.S.C.) trail, remains on such designated trails while in the Forest, and is in possession of a valid O.F.S.C. trail permit.

Campfires

5. No person shall have an open campfire at any time in the Dufferin County Forest or any part thereof.

Curfew

6. No person shall remain in the Dufferin County Forest or any part thereof between the hours of 12:00 a.m. (24:00 hours) and 5:00 a.m. (5:00 hours) local time for any purpose, including camping without written permission from the Corporation of the County of Dufferin.

Garbage disposal

7. No person shall discard refuse in the Dufferin County Forest or any part thereof.

Vandalism

8. No person shall wilfully damage structures in the Dufferin County Forest, including any and all signs and gates.

9. No person shall construct obstacles such as ramps and bridges on any roads or trails in the Dufferin County Forest without prior written permission from the Chief Administrative Officer or his designate.

Hunting

10. There shall be no hunting in the Dufferin County Forest except as permitted under the Fish and Wildlife Conservation Act, 1997, S.O. 1997, c. 41, and the associated regulations.

Permits Required

(a) All persons wishing to hunt in the Dufferin County Forest must obtain a Forest Use Permit from the County that shall be in the form described in Schedule B and will be valid from the date indicated on its face until December 31 of the same year, excepting the period between June 1 and September 30. Forest Use Permits must be authorized by the signature of the County Forest Manager or a staff member of the Dufferin County Museum & Archives.

Treestands and Blinds

11. Treestands and blinds must be of a freestanding, portable design and must be removed within one week of the end of the hunting season during which they were erected.

12. No person shall hunt at any time for any reason in the part of the Dufferin County Forest generally known as the Mono Tract.

13. No person shall hunt in any part of the Dufferin County Forest for any reason between June 1 and September 30.

Dufferin County Forest Natural Area

14. Notwithstanding sections 4 and 10, in the Dufferin County Forest Natural Area:

- (a) No person shall have any type of vehicle, whether powered by motor power or muscular power and;
- (b) No person shall hunt at any time for any reason.

Offences

15. Every person who contravenes any provision of this by-law is guilty of an offence and upon conviction is liable to a fine or penalty as provided for in the Provincial Offences Act, R.S.O. 1990, c. P.33, as may be amended from time to time.

Enforcement

16. (a) Any police officer, provincial offences officer, or employee of the County designated by the Chief Administrative Officer is authorized to inform any person of the provisions of this by-law and to request compliance therewith.

- (b) In addition to any other authority they may have, any police officer, provincial offences officer or municipal law enforcement officer, is authorized to order any persons believed by such officer or employee to be contravening or who has contravened any of this by-law,
 - i. to desist from the activity constituting or contributing to such contravention;
 - ii. to remove from the Dufferin County Forest any thing owned by or in the control of such person which the officer believes is or was involved in such contravention, or
 - iii. to leave the Dufferin County Forest.

(c) Any police officer, provincial offences officer or municipal law enforcement officer may enforce the provisions of this by-law.

(d) Where any person contravenes any of the provisions of this by-law, or fails to comply with the order referred to in subsection (b) hereof, the permission and licence of such person to remain in the Dufferin County Forest is revoked.

Severability

17. If a court of competent jurisdiction should declare any section or part of a section of this by-law to be invalid, such section or part of section shall not be construed as having persuaded or influenced Council to pass the remainder of the by-law and it is hereby declared that the remainder of the by-law shall be valid and shall remain in full force and effect.

18. That by-laws 96-36 and 96-39 as passed by the Council of the Corporation of the County of Dufferin be and the same are hereby repealed effective on the coming into force of this by-law.

19. Schedules A & B shall form part of this by-law.

20. This by-law shall come into full force and effect on the date of passing.

Schedule A

1. All those parcels or tracts of land in the Township of Mulmur in the County of Dufferin and Province of Ontario described as

READ a first, second and third time and finally passed this 13 day of November, 2003.


Gordon Gallaugher, Warden


Linda J. Dean, CAO/Clerk

follows and together forming what is generally known as the Randwick Tract of the Dufferin County Forest:

- FIRSTLY:** That part of the east half of Lot 26 in Concession VI east of Hurontario Street in the said township, containing 99 acres, more or less, and being all of the east half of Lot 26 SAVING AND EXCEPTING thereout and therefrom that portion conveyed to the Board of Public School Trustees for School Section No. 11 of the Township of Mulmur by conveyance bearing date the 29th of June, A.D. 1907, and registered in the Registry Office for the Registry Division of Dufferin as No. 6433 in Book 170 for Mulmur.
- SECONDLY:** The west half of Lot 26 in Concession VI east of Hurontario Street in the said township containing 100 acres, more or less.
- THIRDLY:** That part of the east half of Lot 25 in Concession VI east of Hurontario Street in the said township, containing 90 acres, be the same more or less, and being all of the said east half SAVING AND EXCEPTING thereout and therefrom that portion described as follows:
COMMENCING at a point on the westerly limit of the road allowance between concessions VI and VII east of Hurontario Street in the said township the said point being a distance of 604 feet measured southerly thereon from the north easterly corner of the east half of Lot 25;
THENCE south 9 degrees east (assumed bearing) along the westerly limit of the road allowance between concessions VI and VII, a distance of 881 feet;
THENCE north 76 degrees 41 minutes west 272 feet 5 inches;
THENCE north 65 degrees 26 minutes west 456 feet 11 inches;
THENCE north 11 degrees 32 minutes west 455 feet;
THENCE north 74 degrees 48 minutes east 682 feet 2 inches, more or less, to the point of commencement.
- FOURTHLY:** Part of the east half of Lot 25 in Concession VI east of Hurontario Street in the said township containing 10 acres more or less, and more particularly described as follows:
COMMENCING at a point on the westerly limit of the road allowance between concessions VI and VII east of Hurontario Street in the said township the said point being a distance of 604 feet measured southerly thereon from the north easterly corner of the east half of Lot 25;
THENCE south 9 degrees east (assumed bearing) along the westerly limit of the road allowance between concessions VI and VII, a distance of 881 feet;
THENCE north 76 degrees 41 minutes west 272 feet 5 inches;
THENCE north 65 degrees 26 minutes west 456 feet 11 inches;
THENCE north 11 degrees 32 minutes west 455 feet;
THENCE north 74 degrees 48 minutes east 682 feet 2 inches, more or less, to the point of commencement.

2. All those parcels or tracts of land in the Township of Mulmur in the County of Dufferin and Province of Ontario described as follows and together forming what is generally known as the Main Tract of the Dufferin County Forest:

- FIRSTLY:** All of the south half of the east half of Lot 20, Concession VIII of the said township, containing 50 acres, more or less.
- SECONDLY:** All of the south west quarter of Lot 20, Concession VIII east of Hurontario Street containing 50 acres, more or less. All of the east half of the east half of Lot 20, Concession VII east of Hurontario Street in the said township, containing 50 acres, more or less.
- THIRDLY:** All of the east half of the west half of Lot 21 in Concession VII east of Hurontario Street in the said township, containing 50 acres, more or less.
- FOURTHLY:** All of Lot 19 in Concession VIII in the said township, containing 200 acres, more or less.
- FIFTHLY:** All of Lot 19 in Concession VII east of Hurontario Street in the said township, containing 200 acres, more or less.

- SIXTHLY:** The east half of Lot 19 in Concession VI of the said township containing 100 acres, more or less.
- SEVENTHLY:** All of Lot 18 in Concession VIII east of Hurontario Street in the said township, containing 200 acres, more or less.
- EIGHTHLY:** All of Lot 18 in Concession VII east of Hurontario Street in the said township, containing 200 acres, more or less.
- NINETHLY:** All of lots 16 and 17 in Concession VIII east of Hurontario Street in the said township, containing 400 acres, more or less.

3. All that parcel or tract of land in the Township of Mulmur in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Simmons Tract of the Dufferin County Forest: All of the east half of Lot 24 in Concession V east of Hurontario Street in the said township, containing 100 acres, more or less.

4. All that parcel or tract of land in the Township of Mulmur in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Little Tract of the Dufferin County Forest: All of the east half of lot 23 in Concession VI east of Hurontario Street in the said township, containing 100 acres more or less.

5. All that parcel or tract of land in the Township of Mulmur in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Leening Tract of the Dufferin County Forest: Part of the west half of Lot 26 in Concession II east of Hurontario Street in the said township containing 19.586 acres, and being shown as Part 2 on Plan 7R-1177 by Peter J. Williams, O.L.S., registered in the Registry Office for the Registry Division of Dufferin (No. 7) on May 11, 1976 as No. MF76462.

6. All that parcel or tract of land in the Township of Melancthon in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Melancthon Tract of the Dufferin County Forest: All of Lot 17 in Concession VII, north east of the Toronto and Sydenham Road in the said township, containing 147 acres, be the same more or less.

7. All that parcel or tract of land in the Township of Melancthon in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Riverview Tract of the Dufferin County Forest: All of Lot 17 in Concession IX, south west of the Toronto and Sydenham Road in the said township, containing 98 acres, more or less.

8. All those parcels or tracts of land in the Township of Mono in the County of Dufferin and Province of Ontario described as follows and together forming what is generally known as the Mono Tract of the Dufferin County Forest:

FIRSTLY: The west half of Lot 22 in Concession I east of Hurontario Street in the said township containing 100 acres more or less; The north half of the east half of Lot 22 in Concession I east of Hurontario Street in the said township, containing 50 acres, more or less.

SECONDLY: The west half of the south half of the east half of Lot 22 in Concession I, east of Hurontario Street, in the said township, containing 25 acres, more or less.

9. All that parcel or tract of land in the Township of Mono in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Hockley Tract of the Dufferin County Forest: Part of the west half of Lot 5 in Concession I west of Hurontario Street in the said township, containing 51.063 acres, and more particularly described as follows:

COMMENCING at the northeast angle of the west half of said Lot 5;
THENCE south 10 degrees 06 minutes 40 seconds east along the centre line of Concession I west of Hurontario Street a distance of 331.32 feet more or less to an iron bar planted being the place of beginning;
THENCE continuing south 10 degrees 04 minutes 20 seconds east along the centre line of Concession I west of Hurontario Street a distance of 320.84 feet more or less to an iron bar planted;
THENCE south 9 degrees 19 minutes 40 seconds east along the centre line of Concession I west of Hurontario Street a distance 491.22 feet more or less to an iron bar planted;
THENCE south 9 degrees 38 minutes 05 seconds east along the centre line of Concession I west of Hurontario Street a distance of 434.00 feet to an iron bar planted;
THENCE south 11 degrees 21 minutes 35 seconds east along the centre line of Concession I west of Hurontario Street

a distance of 409.07 feet more or less to an iron bar planted at the southeast angle of the west half of said Lot 5;
THENCE south 72 degrees 32 minutes 35 seconds west along the south limit of said Lot 5 a distance of 508.51 feet more or less to an iron bar planted;
THENCE south 73 degrees 18 minutes 00 seconds west along the south limit of said Lot 5 a distance of 226.48 feet to an iron bar planted;
THENCE south 73 degrees 29 minutes 20 seconds west along the south limit of said Lot 5 a distance of 457.95 feet more or less to an iron bar planted at the southeast angle of Lot 8 according to Registered Plan 72 for the Township of Mono;
THENCE north 10 degrees 17 minutes 15 seconds west along the easterly limits of Lots 8 to 13 inclusive according to said Registered Plan 72 a distance of 768.21 feet more or less to the northeast angle of Lot 13 according to said Registered Plan 72.
THENCE north 30 degrees 15 minutes 30 seconds west along the easterly limits of Lots 14, 15, 16, 17, 18, 19, 20, 21, and 22 according to said REGISTERED Plan 72 a distance of 1252.80 feet more or less to an iron bar planted at the northeast angle of Lot 22 according to said Registered Plan 72;
THENCE north 73 degrees 42 minutes 55 seconds east a distance of 576.74 feet to an iron bar planted on Clinton Road;
THENCE south 12 degrees 41 minutes 35 seconds east along the westerly limit of Clinton Road a distance of 440.98 feet more or less to an iron bar planted;
THENCE north 73 degrees 43 minutes 25 seconds east a distance of 461.78 feet more or less to an iron bar planted at the southeast angle of Lot 27 according to Registered Plan 67 for the Township of Mono;
THENCE north 12 degrees 41 minutes 30 seconds west along the east limit of Lot 27 according to said Registered Plan 67 a distance of 120.00 feet more or less to an iron bar planted at the northeast angle of Lot 27 according to said Registered Plan 67;
THENCE north 73 degrees 27 minutes 35 seconds east along the south limit of Lot 25 according to said REGISTERED Plan 67 a distance of 132.61 feet more or less to an iron bar planted at the southeast angle of Lot 25 according to said Registered Plan 67;
THENCE north 73 degrees 40 minutes 25 seconds east a distance of 443.64 feet more or less to the place of beginning, which parcel of land contains 51.063 acres.

10. All those parcels or tracts of land in the Township of Amaranth in the County of Dufferin and Province of Ontario described as follows and together forming what is generally known as the Amaranth Tract of the Dufferin County Forest:

FIRSTLY: All that part of the east half of Lot 8 in Concession III of the said township lying east of the Canadian Pacific Railway lands, containing 30 acres, more or less, and being more particularly described in Registered Instrument 12285.

SECONDLY: All that part of the east half of Lot 6 in Concession III of the said township lying east of the Canadian Pacific Railway lands, containing 30 acres, more or less, and being more particularly described in Registered Instrument 13216.

11. All that parcel or tract of land in the Township of East Garafraxa in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the Gara-Gore Tract of the Dufferin County Forest: All of Lot 21 in Concession XII of the said township, containing 36 acres, be the same more or less.

12. All that parcel or tract of land in the Township of East Luther Grand Valley in the County of Dufferin and Province of Ontario described as follows and forming what is generally known as the River Road Tract of the Dufferin County Forest: Part of the south half of Lot 31 in Concession VII of the said township, containing 12.2 acres, be the same more or less, and more particularly described as follows:

PREMISING that the bearings of the southern limit of Lot 31 has an astronomic bearing of north 74 degrees 30 minutes east and relating all bearing herein thereto.

COMMENCING at a point in the southerly limit of Lot 31 at a distance of 624.8 feet measured easterly from the south west corner of said Lot 31;

THENCE north 20 degrees 04 minutes 30 seconds west, a distance of 325.6 feet;

THENCE north 75 degrees 54 minutes 30 seconds east, a distance of 264.1 feet;

THENCE north 34 degrees 28 minutes 30 seconds west, a distance of 1,938.5 feet, more or less, to the westerly limit of said Lot 31;

THENCE south 9 degrees 24 minutes 10 seconds east along the last mentioned limit, a distance of 660 feet;

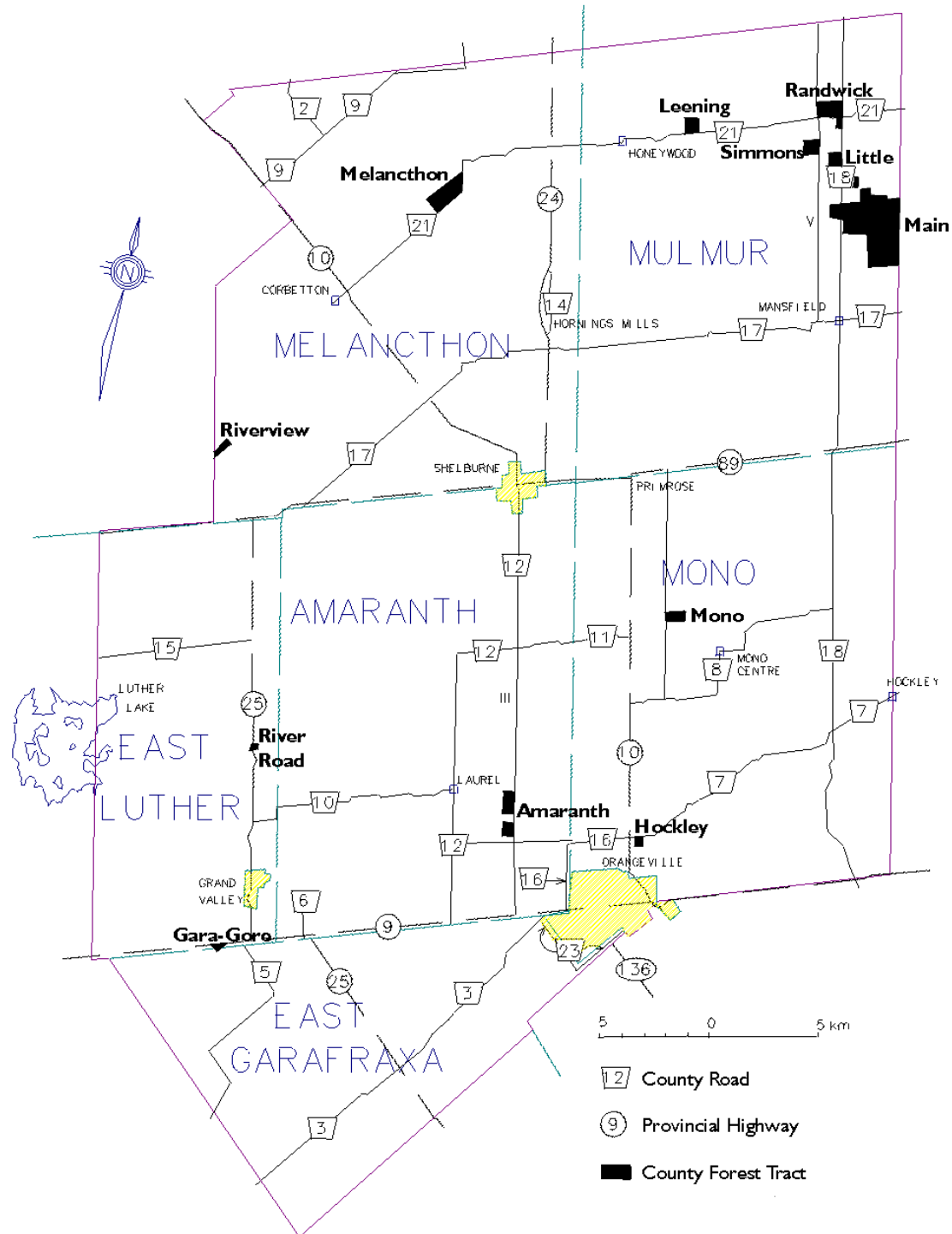
THENCE south 34 degrees 09 minutes east, a distance of 533.1 feet;

*THENCE south 24 degrees 54 minutes east, a distance of 1,003.2 feet, more or less, to the southerly limit of Lot 31;
THENCE easterly along the last mentioned limit, a distance of 129.8 feet, more or less, to the point of
commencement.*

Schedule A-1

Tracts of the Dufferin County Forest

Total area: 1,050 hectares (2,596 acres)



Schedule B

The use permit will take the form of a laminated card with the following information:

The permittee named on the reverse must be in possession of this use permit at all times while using the Dufferin County Forest and must present the use permit on request to authorized personnel. This use permit is not transferable.



Forest Use Permit (hunting) Dufferin County Forest

This forest use permit entitles

Date of Issue

Authorized Signature

Number: DCF-W

to hunt in the Dufferin County Forest provided that he/she is in compliance with the *Fish and Wildlife Conservation Act* and its associated regulations, and County of Dufferin by-law 00-00. This forest use permit is valid from the date of issue until December 31 of the year of issue, excepting the period between June 1 and September 30.

Appendix B: Criteria Used in Assessing Properties

1. Natural Heritage

as described in the *Comprehensive Set of Policy Statements Implementation Guidelines for Natural Heritage and Environmental Protection*

2. Size

under 10 hectares: 1
10-30 hectares: 2
31-50 hectares: 3
51-75 hectares: 4
over 75 hectares: 5

3. Location (distance from Orangeville)

over 50 kilometres: 1
41-50 kilometres: 2
31-40 kilometres: 3
20-30 kilometres: 4
under 20 kilometres: 5

4. Species Variety (number of overstorey working groups)

one working group: 1
two working groups: 2
three working groups: 3
four working groups: 4
more than four working groups: 5

5. Site (average site class from Plonski's yield tables)

site class three: 3
site class two: 4
site class one or better: 5

6. Recreation Potential

one point for each of :

- i. good trail system
- ii. important or unique natural heritage feature(s)

7. Land Value (2008)

under \$50,000: 1
\$50,001-\$100,000: 2
\$100,001-\$500,000: 3
\$500,001-\$1,000,000: 4
over \$1,000,000: 5