

PETERBOROUGH COUNTY FOREST

ANNUAL WORK REPORT

FOREST MANAGEMENT ACTIVITIES

Year 3 of the 2020 - 2029 Forest Management Plan

January 1, 2022 to December 31, 2022



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Table of Contents

1.0 Introduction.....	2
2.0 Planning	2
3.0 Forest Certification	2
4.0 Silviculture.....	2
5.0 Forest Inventory Updates.....	3
6.0 Monitoring and Assessment.....	3
7.0 Forest Health.....	3
8.0 Other Management Activities	4

1.0 Introduction

This Annual Work Report has been prepared to track the progress of the Forest Management Plan for the Peterborough County Forest (PCF) 2020-2029.

The County Forest has been managed employing the principles of sustainable forestry and has sought the assistance and expertise of forest professionals. As a result, the County Forest remains healthy, provides habitats for a variety of wildlife, supports non-resource-based activities and generates revenues through the sale of forest products derived from the County's well-managed forests. Silv-Econ Ltd. has assisted in implementing management activities in the County Forest since 2012. Management activities are guided by forest management plans. The 2020-2029 Forest Management Plan 2020-2029 was approved by County Council on June 3, 2020. The management activities during 2022 are described below. Table 1 provides details of the work program in the PCF during 2022.

2.0 Planning

The 2020-2029 Forest Management Plan established a set of resource management principles and several objectives to guide resource management activities on the County Forest. Management activities have been scheduled for individual stands (compartments) for the 2020-2029 operating period.

3.0 Forest Certification

Since 2001, the Peterborough County Forest has been Forest Stewardship Council® (FSC®) certified by NEPcon (previously Smartwood) under Silv-Econ Ltd.'s group certificate (NC-FM/CoC-001769). Forest certification involves adherence to FSC Principles and Criteria for sustainable forest management. Timber produced from certified forests can be marketed as such and sold to mills that have FSC chain-of-custody arrangements.

Certification requires annual compliance reviews and five-year certificate renewal audits of Silv-Econ's certificate. The PCF is classified as a Small Low Intensity Managed Forest (SLIMF) under the FSC and NEPcon criteria and accordingly it does not need to be audited annually. The County Forest was not audited in 2022.

4.0 Silviculture

Forest management embodies a suite of activities designed to maintain and enhance the health of the forest. These include silvicultural management such as stand improvement thinning, tree planting in areas where natural regeneration is absent, tending to remove undesirable competing vegetation, and activities to protect the forest from natural and human-induced disturbances where possible. In 2021, hardwood stands in the Cavan and Havelock Depot blocks were marked for a selection thinning by certified tree markers from Silv-Econ. Silvicultural prescriptions were prepared to guide the tree marking and harvest by David Puttock, R.P.F., Silv-Econ Ltd. The timber sale was tendered in 2021 and awarded to Fairview Trucking Ltd., Cavan. Fairview Trucking has until October 31, 2023 to complete the harvest.

5.0 Forest Inventory Updates

A forest inventory is a fundamental tool for assessing the current state of a forest. In 2018 a new forest inventory was completed for the Cavan block. Work on the new forest inventory for the Dummer-Belmont and Havelock Depot blocks began in 2020 and was 95% completed in 2021. There are inventory plots in two the northern lots in the Dummer-Belmont block remaining to be assessed in 2023.

6.0 Monitoring and Assessment

Regular monitoring of the health of the forest is an important component of sustainable forest management. Silv-Econ staff inspected access roads in the Cavan block following a severe wind event in late May 2022 which passed through the area. The roads were not impacted by the wind event.

7.0 Forest Health

The County Forest is a thriving, healthy forest ecosystem with diverse forest communities. Pathogens, insects, and weather-related disturbances contribute to small-scale changes in forest structure that are part of successional change. However invasive plants and insects can have a serious detrimental effect on the native vegetation communities represented in the PCF.

Silv-Econ staff have been conducting annual inspections of a number of forest stands in the County Forest for the presence of Emerald **Ash Borer** (EAB) (www.invasiveinsects.ca) and **Dog Strangling Vine** (DSV) since 2012. EAB has now affected ash trees across southern and central Ontario including the County Forest. Annual inspections have revealed a few small colonies of the DSV in the Dummer-Belmont block. DSV was observed in compartments 538 & 540 in the Cavan block during the 2018 forest inventory. These colonies have not expanded in area since that time.

Lymantria dispar (LDD), commonly known as the gypsy moth, populations have surged across southern Ontario in 2020, 2021, and 2022. The inspection revealed a high number of egg masses in the Havelock Depot block and defoliation in this block was heavy in 2021. However, in fall 2021 populations of LDD appear to have declined rapidly as the larvae appear to have been affected by three biological agents: a parasitic wasp, a fungal disease, and a virus. Visual observations in 2022 indicate minor defoliation far fewer egg masses than in fall 2020. Defoliation from LDD is expected to be very light in 2023.

Hemlock woolly adelgid (HWA) (www.invasiveinsects.ca) is a serious non-native pest of our Eastern hemlock (*Tsuga canadensis*). Originally from Asia, the insect was first detected in Virginia in the 1950's and has since spread throughout the Eastern U.S. It has recently been detected in Ontario and Nova Scotia. Eastern hemlock appears to have little resistance to the feeding activity of the insect and infected trees succumb quickly. Foresters from Silv-Econ are checking hemlock trees as they are encountered during our work in the county Forest. However, HWA is difficult to detect because the feeding activity occurs high in the tree crowns. Silv-Econ is also coordinating

an HWA forest manager’s working group to be proactive in responding to the threat posed by HWA. One of the working group initiatives is to assemble a database on the distribution of Eastern hemlock across the Ontario landscape. The County Forest is participating in the database. The new forest inventory will help foresters identify those stands in the county Forest that are most at risk from HWA.

8.0 Other Management Activities

There were no other management activities in 2022.

TABLE 1

**REPORT OF FOREST MANAGEMENT ACTIVITIES
PETERBOROUGH COUNTY FOREST
YEAR 2 - 2021**

Activity	Block	Area (Ha)	Expenses (\$)	Revenues (\$)	Notes
Planning & Administrative Support Prepare annual report of forest management	All	2130	850		
Forest Certification Annual certification fee	All	2130	10,420		
Silviculture 1. Timber harvest pending in the Cavan and Havelock Depot Blocks	Cavan Havelock Depot	14.6 30.4		2,500 deposit	1
Monitoring & Assessment 1. Inspect PCF blocks for storm damage following May 2022 wind event			1,004		
Infrastructure Improvements Two sections of the main road in the Dummer-Belmont block were repaired by County staff.					
Other Activities					
Total			12,274	2,500	

Notes:

1. Timber sale awarded to Fairview Trucking, Cavan. Harvesting pending.