

# Simcoe County Forest 2021 Annual Report



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# Simcoe County Forest - 2021

Established in 1922, the Simcoe County Forest (SCF) is the oldest and largest municipal forest in Ontario. Although many of the objectives have remained consistent since its inception, the current management plan for the period 2011-2030 renewed the goals, objectives, and strategies designed to balance the substantial environmental, social, and economic benefits the Forest provides. This report documents annual activities and provides a basis to track progress toward long-term objectives within the plan.

With the arrival of COVID-19 in March 2020, forest management operations continued as forestry was declared an essential service. Supply chain issues and wide fluctuations in demand resulted in high values punctuated with temporary shutdowns of two major softwood purchasers leading to delayed completion of harvesting contracts. The significant increase in recreational uses continued through 2021. Existing infrastructure (primarily parking) continues to be strained, and demand for expanded trail networks from all existing agreement holders continued. Public outreach normally conducted by Forestry staff was still reduced, however several virtual presentations were conducted.

## 1. Property

The total area under management remained constant in 2021 at 13,464 ha (33,276 acres). Some fluctuation in reported area from previous years is a result of data inaccuracies.

An updated 'County Forest Growth, Investment & Protection Policy' was adopted in 2020 which superseded the former 'Acquisition Principles' established in 1996. This established as policy some key practices which have, and will continue to be, critical to future success. This includes that the continued growth of the SCF is the desired state, and that all forestry revenue and assets be reinvested back into the management and continued growth of the SCF. The Policy does not diverge significantly from the general approach which has resulted in continued expansion, however it identifies that increased investment and focus will be required if underrepresented areas of the County are to be addressed. Adopted in parallel, a new 'County Forest Reserve Fund' superseded the former 'Reforestation Reserve Account' which had also been in place since 1996.

### 1.1 Acquisitions

One of the unanticipated and unfortunate side effects of the pandemic has been a significant drop in opportunities to acquire vacant lands. Among other issues, available land has declined, and prices have become significantly elevated. As a result, no additions to the Simcoe County Forest were made in 2021.

## 2. Silvicultural Operations

Simcoe County has long recognized that forests and their many benefits and resources are essential to the continuing well-being of our environment, communities, and economy. The sustainable management of our forests is therefore critical, not only to balance competing uses in the short term, but to ensure that the many benefits of our forests are available for generations to come. Good long-term planning is key to ensuring continued growth and

success, which is anchored by the 20-year forest management plan (Simcoe County Forests 2011 – 2030). Monitoring is conducted at the individual forest stand level, collated into annual reporting, and a further assessment is conducted at five-year intervals. Commercial timber harvesting is just one of the treatments utilized to achieve the environmental, social, and economic objectives identified in the management plan. Other treatments may include tree planting, invasive species management, controlled burning, pre-commercial thinning, etc. All treatments are designed with ecological principles and the long-term sustainability of the SCF as critical elements of the decision-making process.

Approximately 1,000 hectares of the SCF are inventoried annually. Each forest compartment identified in the operating plan is assessed by Forestry staff and, if warranted, a prescription is prepared detailing the manner in which it is to be treated. If harvesting is prescribed, trees are marked and tallied according to the prescription, and volume is estimated in order to provide detailed information to prospective buyers. The standing timber is then sold to the highest bidder as per County policy.

Timber sales encompass approximately 700 to 800 hectares annually, which is generally divided into 25 to 40 individual sales. Primarily conducted through an open tendering process, in some circumstances additional sales are conducted by quotation, and negotiated sales may also occur where no bids are received or opportunities arise to salvage low value, declining or storm damaged timber. Staff attempts to distribute the volume of timber as evenly as possible throughout the year and include a variety of sizes and types in each lot to ensure that local operators have an opportunity to purchase a relatively constant supply. All operations are conducted in accordance with the management plan.



Compliance monitoring of each harvesting operation is conducted regularly to ensure health and safety guidelines are followed, site impacts are minimized, and to ensure sensitive natural or cultural heritage features are identified and protected. This information is reviewed annually to provide feedback on current processes and to ensure that long range objectives remain on target.

## 2.1 Timber Sales Summary

Forest Type	Sales	Area (ha)	Volume (m <sup>3</sup> )	Revenue
Conifer	25	613.9	29,205.4	\$1,675,810.00
Hardwood	11	246.1*	11,884.2**	\$627,284.50
Total	36	860	41,089.6	\$2,303,094.50

\* This includes area that was retendered from 2020 (130.92 ha)

\*\* This includes volume that was retendered from 2020 (6075.7 m<sup>3</sup>)

As described earlier, the pandemic resulted in significant swings of demand for County timber. Prices received for hardwood sales were very high however, and the significant demand for

mature, high quality red pine has continued throughout with exceptional values attained. As detailed in the management plan, an increasing percentage of these highly valuable stands of timber are nearing the end of their rotation age. As the final harvests are occurring and conversion to mixed natural forest increases, a reduction in timber volume and associated revenue will occur within the next 10 to 20 years. Work is ongoing to more accurately predict future timber volumes which will be reported in subsequent annual reports.

With 2021 at the midpoint of the management plan cycle, work commenced on a ten-year Plan update. The following table projecting harvest rates through the next ten years has been revised accordingly.

### Projected Average Annual Harvest 2022 – 2031

Working Group	Total Productive Area (ha) 2022	Available Harvest Area (ha) 2022	Cutting Cycle (Year)	Average Growth Rate (m3/ha/year)	Projected Average Annual Harvest Area (ha) 2022-2031	Projected Average Annual Harvest Volume (m3/year) 2022-2031	Estimated Annual Volume Growth (m3/year) 2022-2031
Red Pine	3,769	3,586	9	7.7	398	17,928	29,023
White Pine	1,262	1,200	9	7.5	133	6,001	9,463
Spruce & Larch	350	350	9	7.5	39	1,749	2,623
Jack & Scots Pine	132	75	9	7.5	8	375	990
Other Conifer	205	182	9	7.5	20	911	1,540
<b>Total Conifer</b>	<b>5,718</b>	<b>5,393</b>	<b>-</b>	<b>-</b>	<b>599</b>	<b>26,965</b>	<b>43,640</b>
Tolerant Hardwood	2,315	2,205	15	3.9	147	6,028	9,030
Intolerant Hardwood	577	530	20	3.9	27	1,087	2,249
Upland Oak	1,148	1,011	20	4.4	51	2,072	5,050
Lowland Hardwood	288	234	20	3.9	12	480	1,124
Other Hardwood	273	146	20	3.9	7	299	1,064
<b>Total Hardwood</b>	<b>4,601</b>	<b>4,126</b>	<b>-</b>	<b>-</b>	<b>243</b>	<b>9,965</b>	<b>18,518</b>

## 2.2 High Conservation Value Forests

High Conservation Value (HCV) forests are those that possess one or more environmental or cultural attributes which is generally of higher significance than timber values. Adjustments are

made to HCV mapping on an ongoing basis as new information becomes available such as the discovery of a species at risk. Harvesting prescriptions must employ a precautionary approach, and if harvesting operations are conducted, monitoring takes place to ensure that the feature or value is not adversely impacted. Recreational uses, including the development of additional trails, may be directed away from these locations. The criteria and designation of all HCV's are reviewed at each five-year renewal of the management plan.

### Operations within High Conservation Value Forests Completed in 2021:

Tract	Comp	HCV Type	HCV Notes	Contract
Wyebridge	14AB 15B	Significant Habitat	Important Bird and Biodiversity Areas of Canada	20-10-028
Marrin	55E	Species at Risk / Regionally Rare Species	Butternut	20-07-024
Coughlin	365A	Species at Risk / Regionally Rare Species	Butternut	19-08-024
Stoney	480B	ANSI	Fergusonvale Provincial Life Sciences	19-11-033

### 2.3 Reforestation

30,750 seedlings were planted primarily at the Packard Tract as part of a restoration project to establish early pine/oak successional forest habitat. This type of habitat type is uncommon in Ontario but is important for many wildlife species including the endangered Kirtland's Warbler. Tree species planted include Red Pine, White Pine, Red Oak, White Oak, Black Cherry, and Red Cedar. Other smaller plantings took place at Baxter, Tosorontio, and Hardwood Hills Tracts to bolster areas with inadequate natural regeneration.

### 2.4 Site Preparation

Successful reforestation efforts depend upon the proper planning and orchestration of several key steps beyond just tree planting. Assessing and preparing the site in advance of planting or other silvicultural practices designed to facilitate natural regeneration is key.

A controlled burn was completed in the spring within 40 hectares (100 acres) at the Tosorontio Tract in the Township of Adjala-Tosorontio. This burn is part of a long-term plan to retain Red Oak as a dominant species within the oak forest ecosystem. The objective of the burn was to reduce other more shade tolerant species which were dominating the forest understory.

In Rathburn Tract a lease agreement with an area farmer was utilized to prepare fallow, former agricultural lands for future tree planting. The underutilized fields are part of a property that was acquired in 2020. The site was plowed and disked and soybeans were planted which will act as a cover crop to control weeds and reduce soil erosion. The remaining bean stocks after harvest help add organic material to the soil and are an excellent medium to plant trees into. Tree seedlings will be planted in the spring of 2022 to transform this former marginal agricultural area into a young forest.

## 2.5 Tending / Pre-commercial Thinning

Young forests which would benefit from thinning before it is commercially viable, or other kinds of tending may be prescribed to enhance long-term stand quality, productivity, diversity or to mitigate damage or disease. This could include thinning a very young, dense hardwood stand to favour particular species, or reducing competitive trees from overtaking a young plantation. No significant work of this kind was undertaken in 2021.

## 3. Invasive Species Management

### 3.1 Invasive Plants

Management of invasive plants continues to focus on prevention, detection, control, and adaptation. Prevention includes educating the public with appropriate signage and other methods to communicate the importance of not spreading plant matter from an ornamental flower garden into a natural forest ecosystem. Yard waste dumping is a large contributor to new invasive species introductions within the SCF. Invasive plant detection is completed throughout the year by Forestry staff and by leveraging partnerships and information sharing with the public, user groups and other forestry workers. Current processes enable staff to efficiently detect and map new outbreaks and problem areas and to quickly initiate control. Control responses are determined by Forestry staff who are also licenced forestry exterminators trained to consider plant biology, impacts and resources. While eradication is always the goal, this is not always initially feasible. Adaptive management is employed to prioritize, reduce populations and contain spread. Annual herbicide applications are conducted within known outbreak areas mostly for species such as Buckthorn, Dog Strangling Vine and Garlic Mustard.

Significant work has been done over the last decade to locate, track, and maintain control within a significant area. Typically, the area managed annually is approximately 100-150 hectares. Below is a summary table of what species were managed in how many forest tracts in 2021.

Species Managed	Tracts
Autumn Olive	2
Buckthorn	6
Dog Strangling Vine	18
Giant Hogweed	1
Garlic Mustard	14
Goutweed	1
Himalayan Balsam	1
Honeysuckle	1
Japanese Knotweed	4
Manitoba Maple	3
Norway Maple	3
Periwinkle	3
Phragmites	1
Yellow Archangel	1

## 3.2 Invasive Insects

### LDD

LDD moth, (formerly known as Gypsy Moth) is a non-native insect that caused its first widespread defoliation event in Ontario in 1981. Cyclical outbreaks have occurred every 5-10 years since, with the most recent event from 2019 to 2021 the largest Ontario, and Simcoe County, has ever experienced. Staff conducted egg mass sampling in 2019, 2020 and 2021, both to monitor and predict defoliation levels and also to provide information to local municipalities and other partners. County Council Report CCW 2021-255 provides background and details on 2021 egg mass survey results, which indicates that the peak of the outbreak has passed through much of Simcoe County. No aerial spraying is planned for the SCF in 2022.

### Emerald Ash Borer

Emerald Ash Borer (EAB) is a primary killer of Ash trees which was first identified in Canada in 2002 and Simcoe County in 2013. A management strategy was completed in 2014 following which Forestry staff initiated a program to monitor the spread of the insect and provide information to local municipalities and residents. Monitoring continued until 2017 when EAB was found to be widespread throughout the County. Management of the SCF has been modified since that time to reduce the economic losses and also reduce hazards along active trails resulting from Ash mortality.

## 3.3 Invasive Pathogens

### Heterobasidion Irregulare

*Heterobasidion irregulare* is a non-native fungus that infects coniferous trees (pine) and causes Annosus Root Rot. The fungus spreads by releasing basidiospores in summer/fall and can travel long distances by wind. Once the spore lands on a wound or freshly cut pine stump it begins to colonize and spread down to the roots. The fungus then spreads to other nearby pines by growing along roots that have been grafted together, which is particularly problematic in plantation-grown pine and can cause significant decline and mortality. Efforts to mitigate the effects of this pathogen have been made for decades. The current management technique is to apply another fungus known as *Phlebiopsis gigantea* onto freshly cut stumps, which is a native fungus and works by quickly colonizing the stump and roots leaving little room for *Heterobasidion* to establish. *Phlebiopsis gigantea* comes as the active ingredient in Rot Stop C, a fungicide which is applied to stumps when the tree is cut either mechanically with a forest harvester, or manually by forestry staff with a backpack sprayer. Simcoe County Forest has required that Rot Stop C be applied seasonally to cut stumps within a conifer plantation setting since 2016. Approximately 150-250 hectares of plantations are treated annually to reduce the long-term impacts.

## 3.4 Other Invasive Species Concerns

There are many other invasive plants, insects and pathogens that already exist, or are potential future threats to the SCF and area woodlands. Some of these have been endemic for decades, such as Dutch Elm Disease, White Pine Blister Rust, Chestnut Blight and others

which have impacted forest health and in some cases reduced biodiversity by essentially eliminating some formerly common native species.

Beech Bark Disease (BBD) was officially confirmed in Ontario in the 1990's. It occurs as a result of an insect-fungus complex where an invasive beech scale insect feeds on the bark of the tree which produces cracks that allow a native canker fungus to enter. With the mortality of 85% of infected trees within 10 years, healthy Beech trees have become an uncommon presence in local forests. Stressed and dying trees also result in excessive sprouting of young beech trees, changing the structure and diversity of future forests. Staff have utilized techniques to identify and retain mature Beech that appear resistant to the disease, while managing to reduce the impacts of excessive re-sprouting.

Emerging threats that staff are currently paying close attention to include Oak Wilt, and Hemlock Woolly Adelgid. Oak Wilt is a fungus that grows on the outer sapwood and restricts the flow of water and nutrients through the tree, leading to eventual mortality. Oak Wilt is not currently found in Canada, although it is documented within 24 US States and within 2km of the Ontario border. Hemlock Woolly

Adelgid is a small aphid-like insect that damages and kills Hemlock trees. This insect is widespread south of the border from Georgia to Maine. It has been found in Ontario several times in the last few years but efforts to date have been able to eradicate or contain the insect.

Staff continue to remain informed and engage with experts on other invasive plant, insect and pathogens which could have potential impacts on area forests.

## 4. Recreation

One of the primary roles of the County Forests is to provide for a full range of recreational activities. Distributed throughout the County, the many forest tracts provide an opportunity for residents to enjoy these benefits close to home. With over 720km of walking, off road motorcycle, ATV, and snowmobile trails there is something for everyone.

The number of residents and tourists that are enjoying the County Forest have increased over the years and will continue to grow. A Recreation Policy was established in 2006 and later revised in 2018 to ensure that all responsible users can continue to enjoy their recreational pursuits.



In 2020 and 2021, Covid-19 led to a significant increase in use of all kinds. With travel restrictions in place and many indoor and organized activities cancelled, the SCF became an important refuge for many individuals to relax, exercise, recreate and socialize.

### 4.1 Property Use Agreements

As the County has not historically developed or maintained trails, trail construction has been enabled through partnerships with organizations as per the Recreation Policy. Property Use Agreements are renewed annually to ensure roles and responsibilities are clearly defined and

County liability is minimized. Primarily driven by volunteerism through not-for-profit groups, recreational opportunities are enhanced for many different types of users. Organized events also require similar agreements.

### Non-Profit Agreements

Organization	Activity
Central Ontario ATV Club	ATV Trails
Ganaraska Hiking Trail Association	Hiking Trails
Simcoe County Mountain Bike Club	Mountain Biking Trails
TeamVanGo	Mountain Biking Trails
Halton Off-Road Rider Association	Off-Road Motorcycle Event
Ontario Federation of Trail Riders	Off-Road Motorcycle Trails
Ontario Federation of Snowmobile Clubs	Snowmobile Trails
Dufferin Simcoe Land Stewardship Network	Guided Walk

### Commercial Agreements

Organization	Activity
Leo St. Croix	Horse Drawn Sleigh Rides
RDC Stables	Horse Drawn Sleigh Rides
Hardwood Ski and Bike	Mountain Biking Trails
Smart Adventure Program	Motorized Off-Road Vehicle Training

### Municipal Trail Agreements

Township	County Tract
Clearview	Lawden
Essa	Rippon

## 5. Property Monitoring / Enforcement

### Property Monitoring

The control of unauthorized and illegal activity on SCF property is accomplished through a range of measures, which begins with establishing permitted uses through the approved Recreation Policy and enabling enforcement with the associated by-law. Information is provided to the public through the website, direct notifications, and through signs installed at standard locations on all properties. Ensuring the visibility of property boundaries is also key to reduce both incidences of trespass onto neighbouring private land and to limit encroachment.

Due to the scale and distribution of properties, staff utilize all available opportunities to monitor activity in the SCF including help from neighbours, contractors, and recreation partners. In addition to ongoing staff visits when completing a range of forestry activities, formal property

checks are also completed at regular intervals which includes an assessment of the condition of all infrastructure.

## **Enforcement**

Property damage continues to most commonly occur to gates during attempts of forced entry. In some instances, gates are destroyed and must be replaced entirely. Dumping of garbage and yard waste occurs throughout the County, from very minor amounts to significant illegal dumping events requiring substantial resources to remove. There were fewer significant dumping occurrences in 2021, which may be due to increased public use.

To ensure police support, all major illegal occurrences of property damage and dumping are reported. In 2021, two incidence reports were submitted. Two vehicles were removed in 2021 that were abandoned in the Lawden Tract and another was removed from the Vasey Tract that had been set on fire and required a response from the local Fire Service.

Required repairs and removal of debris are completed as quickly as possible to reduce reoccurrence. In problem areas, surveillance cameras may be utilized, and photos are provided to police if evidence is obtained which may support laying charges.

## **Unauthorized Use (as per Recreation By-law)**

An educational approach has primarily been taken to improve compliance since the approval of the first Recreation Policy in 2006, however enforcement is required and has been increased in recent years.

The most common infraction is related to unauthorized motorized use; ATV's, off-road motorcycles, and snowmobiles are all permitted provided they are operating on club operated trails and have permits in place. A highly effective partnership has been in place for several years between the County, Simcoe County Off-Road Riders Association and Central Ontario ATV club to improve compliance with respect to off-road motorized vehicles. Off-duty OPP Officers are hired to conduct patrols in the attendance of one or more club members. Due to staffing issues from the OPP in 2021 very few patrols were carried out during the year. To continue having a presence and enforcement of the Recreation By-law additional efforts were made by the OPP S.A.V.E unit to increase patrols. A private security firm was also contracted to help enforce the Recreation By-law. Several Forestry staff are also authorized to issue Part 1 tickets under the By-law.

## **6. Infrastructure Improvements / Maintenance**

### **Entrances**

Limiting vehicular access continued in 2021 to reduce illegal dumping and other unauthorized activities. A total of 14 additional gates were installed and 8 repaired.

## Signage

Ongoing replacement and repairs occurred throughout the year due to vandalism, deterioration, and theft. 78 main 'Tract' signs were replaced with updated signs due to wear and fading.

## Parking

Increasing use throughout the County continues to necessitate expanded parking to ensure user safety. Parking areas were enhanced and expanded in the Silver Creek Tract, Slessor Tract, and Hickling Tract.

Winter maintenance was first initiated in 2019 to provide safe parking in high use areas. In 2021 the number of plowed lots continue to increase thanks to the assistance from both County Roads and local municipalities.

Tract	Municipality	Snow Removal by Contractor	Snow Removal by County	Snow Removal by Local Municipality
Amos	Oro-Medonte			x
Oro	Oro-Medonte	x		
Strachan (2)	Oro-Medonte	x	-	x
Orr Lake	Springwater	x		
Williams	Springwater	x		
//Hendrie (2)	Springwater		x	
Hickling	Springwater		x	
Smith	Springwater		x	
Martin's Valley	Midland			x
Sinclair	Bradford West Gwillimbury			x
Hodgson	Bradford West Gwillimbury			x
Webb	Innisfil	x		

Ongoing assessments will be made and discussions with other partners will follow to enable safe winter access to other locations as needed.

## Internal Access Roads

Significant access road improvements were completed with assistance from the roads department within the Rathburn, Archer, and the North Barr Tracts to facilitate access for planned harvesting operations. Additional contracted assistance was utilized to improve numerous access roads in Coughlin, Orr Lake, Stoney, Caston, and the Train Tract.

## Garbage

In addition to typical garbage collection conducted by Forestry staff and a contractor. The roads department assisted in the removal of refuse in the Rathburn Tract. The total volume of garbage removed was 12,887 kg which is relatively consistent with totals from recent years.

## Hazardous Tree Removal

Through regular forestry activity, hazard trees within a tree length of trails are marked and removed during harvesting operations. Other hazards which may be identified by users or County staff are removed as required. 8 trees were removed by County staff around parking areas and near adjacent properties; another 2 trees were removed by contractors.

## 7. Research

### Permanent Sample Plots (PSP's)

Forestry researchers have utilized 'permanent sample plots' for decades to provide crucial information on the growth and development of our forests over time. This involves the detailed measurement of trees, and in some cases associated soils and other data, in the exact same location over a period of decades. The data gathered and collated from these plots has been used to develop information critical to foresters to predict growth and make informed management decisions.

Although extremely valuable, the very long-term nature of this work has created challenges as staff and priorities have changed over the years. In 2008, County staff began working collaboratively with the Ministry of Northern Development, Mines, Natural Resources & Forestry (MNDMNR) to assess research plots, refresh and retain those which remain valuable and integrate the locations into the County database. All retainable plots have now been measured at least once with County staff assistance.



To support the 10-year forest management plan update, significant resources were allocated to permanent sample plot measurements and to growth and yield analysis in 2021. In total, 11 permanent sample plots were re-measured. Staff also contributed significant assistance in data entry and management. The data collected was used to update growth and yield forecasting, which is integral to forest management planning. In total 169 individual forest plots and 860 separate plot measurements were used in the analysis.

### Surveillance for the presence and spread of black-legged ticks (carrier of Lyme disease)

The County has been assisting the Simcoe Muskoka District Health Unit by providing survey locations to update Public Health Ontario's Lyme Disease Map. Estimated risk areas are identified through active surveillance led by the local health unit by conducting 'tick dragging.' These areas are calculated from the location where black-legged ticks are found and include communities within a 20-kilometer radius surrounding that location. Tick dragging was not performed in SCF in 2021 due to constraints from Covid-19.

Additional signage was provided and placed at various high use County Forest Tracts to educate users regarding the potential risks of ticks.

## **Rotstop C Efficacy Study**

The County has been treating coniferous stumps continuously with Rotstop C since 2016. Rotstop C is a stump treatment used to prevent the introduction and spread of Heterobasidion Root Disease (HRD) in conifer plantations. A biological fungicide, Rotstop C contains spores of the naturally occurring wood decay fungus *Phlebiopsis gigantea*, which grows into the stump and prevents HRD from becoming established. In 2021 a study was started to look at the efficacy of how Rotstop C is working within our conifer plantations. Stumps were excavated to check on the level of decay in the root system to determine how well and how fast the Rotstop C was spreading, and decaying.

## **Biocontrol Release to Manage Dog Strangling Vine**

The biocontrol agent, *Hypena opulenta* was released at four sites in the Fitzgerald Tract of the Simcoe County Forest in 2021. This is part of a 3-year project which will see a release of approximately 1000 larvae annually. *Hypena opulenta* is a moth that has been approved for release as a biological control to manage the invasive plant Dog Strangling Vine. The larva of *Hypena opulenta* was approved for release in Canada in 2013 and has since been released at many sites in Ontario. The larvae feed only on dog strangling vine. It is anticipated that the population of the Larvae will eventually become self-sustaining and over time will spread to control the plant in other areas. As success will not be achieved for many years however, other management practices to control Dog Strangling Vine will continue.

## **8. Special Projects**

### **Kirtland's Warbler Habitat and Forest Restoration Projects**

#### **Packard Tract**

2021 was the 3<sup>rd</sup> year of a multi-year forest restoration and habitat creation project at the Packard Tract. This project is funded for 4 years through the Eastern Georgian Bay Initiative and Ganawenim Meshkiki/Henvey Inlet First Nations.

With site preparation completed in prior years, 237 kg of seed (native herbaceous plants, grasses, shrubs, trees) was broadcast on the restoration area along with 265 kg of millet seed as a cover crop. There were 28,500 tree seedlings planted.

Bird callback devices were also installed to attract migrating birds to the area. These devices are set up on a timer to emit the calls of several bird species that will use this habitat type.

#### **Coughlin Stream Crossing and Rehabilitation**

Significant work was conducted in the Coughlin tract to enhance a small stream and to ensure that future trail use has negligible impact to the waterway. A stream crossing was decommissioned, and another crossing was enhanced with a hard bottom to ensure future access to this section of Coughlin Tract. This work was conducted in accordance with Section 28 (1) of the Conservation Authorities Act, R.S.O. 1990, and Ontario Regulation 172/06 standards. A forestry access road that also serves as a COATV trail as well as an OFSC trail was rerouted away from the stream. Approximately 810 native trees and shrubs will be planted

in the spring of 2022 as well as broadcasting of native wildflower seed mix to naturalize the decommissioned access road and the stream banks.

## 9. Fire Protection

In 1996, the former agreement between the County and the Ministry of Natural Resources (MNR) to manage the Simcoe County Forest ended. Also, at this time, the MNR terminated agreements with municipalities to provide forest firefighting services in Southern Ontario. Until this time, municipal fire departments had provided initial response to fires within County Forests, however MNR was primarily responsible for fire suppression including all associated costs.

As a result, a 'Wildland Firefighting Agreement' was drafted in 1999 and agreements were formalized with local municipalities. Under this agreement, the Simcoe County Forestry Dept. purchased five 'Wildland Equipment Caches' which are a collection of specialized firefighting



equipment used to extinguish wildland fires. These caches have been stored and maintained at municipal fire departments with equipment replacement funded on an as-needed basis through the Forestry Dept.

In 2017, County staff and area Fire Chiefs initiated a collective effort to review and update the agreements to improve clarity regarding the terms and conditions under which firefighting services are provided. This culminated with the signing of updated agreements with all local municipalities in 2019, which included provisions for the addition of one additional equipment cache plus annual funding for wildland firefighting knowledge and skills training.

Fire prevention measures were much more important and prevalent in the early years in the development of the SCF. The extensive young, primarily coniferous plantations originally established were highly susceptible to fire; as a result, the installation of fire breaks was standard, and maintenance occurred annually. As these plantations mature, however, the influx of primarily deciduous species means that over time, fire risk declines.

## 10. Partnerships / Extension Services

### Planting Partnership

One of the objectives of the County Forest has always been to 'encourage private landowners in their reforestation efforts'. The Simcoe County Tree Planting Program was initiated in 2007, with funds provided annually through the Forestry Dept. budget to increase reforestation on private lands by offsetting the cost of tree seedlings and/or tree planting services. The 'Delivery Partners' include the Nottawasaga Valley and Lake Simcoe Region Conservation Authorities, Severn Sound Environmental Association, and the Dufferin South Simcoe Land Stewardship Network.

63,783 trees were planted or distributed resulting in 32.5 hectares reforested in 2021. Program funding provided since 2007 totals \$367,432 which has been leveraged with contributions from many other organizations and landowners resulting in a full project value of \$1,904,464. This has culminated in 853,057 trees planted on 530 hectares over the previous 15 years.



Private landowners will continue to contact the appropriate agency directly to determine eligibility. The subsidy level varies depending upon the type of planting and the environmental benefit provided as per the guidelines within the MOU.

### **Forestry Services provided to member municipalities**

Staff have traditionally provided woodlot management expertise and assistance to local municipalities upon request. This generally includes initial site assessments, detailed inventories and completion of silvicultural prescriptions, tree marking, tendering, and forest operations supervision. Contract monitoring was completed on a site initiated in 2020 on behalf of Essa Township.

### **Invasive Species Monitoring and Information Transfer**

Forestry staff continue to update and manage a webpage for information on the LDD moth and its impacts to the area. This website provides an updated and consistent information source for residents. Staff also provide updates to local municipalities on the status of the infestation and management options. Forestry staff have also continued a monitoring program that began in 2019 to assess current and potential future impacts from the insect. Collaboration with other partners including Conservation Authorities and Severn Sound Environmental Association ensures a consistent approach and reduces duplication.

### **Forestry Assistance provided to other County Departments**

Forestry staff assisted the Solid Waste Management Dept. (SWM) with the continued monitoring of two planting sites as per the Compensation Planting Plan for required ecological offsetting for the planned Environmental Resource Recovery Centre. Assistance was also provided to SWM with invasive species management, primarily for Phragmites control on closed sites.

### **Extension Services**

Staff respond to public enquiries on an ongoing basis pertaining to the Forest Conservation By-law, good forestry practices, and forest insect and disease issues. Information or advice is provided but no site visits are conducted.

The County continues to support the involvement of Forestry staff in extension and outreach in the community, resulting in productive working relationships with a wide range of organizations

and an increased understanding of the many benefits realized through the sustainable management of our forests. Efforts also continue to work collaboratively with the full range of recreational interests utilizing the SCF, and to improve the understanding and respect between groups.

In 2021, the usual variety of outreach through presentations, tours, workshops, and school visits was reduced due to COVID.

**The following presentations were conducted by SCF staff**

<b>Organization</b>	<b>Date</b>	<b>Title</b>
SCDSB – Virtual	April 8	Forestry in the Classroom (Forests Ontario partnership)
University of Toronto	Nov 5	Sustainable Forestry Tour
Simcoe County Historical Society	Nov 16	Presentation on SCF history and current objectives
Innisfil Rotary Club	Nov 17	Presentation on SCF history and current objectives

**The following organizations were supported or sponsored**

<b>Organization</b>	<b>Date</b>	<b>Purpose</b>
Forests Ontario	Feb 3-4	Sponsorship of AGM and Conference

**The following meetings were organized and hosted**

<b>Organization</b>	<b>Date</b>	<b>Purpose</b>
SCF Property Use Agreement Holders	Feb 16	Annual meeting of recreation representatives
Ontario Professional Foresters Assoc.	April 6-8	OPFA AGM and Conference

**Staff provided input and/or support**

<b>Organization</b>	<b>Date</b>	<b>Purpose</b>
Ontario Professional Foresters Assoc.	-	Awards Committee (G. Davis)
Ontario Professional Foresters Assoc.	-	2020 / 2021 AGM and Conference Planning Committee (G. Davis, B. Dixon)
Tree Marking Certification Program	-	Steering Committee (B. Dixon)
Community Forest Managers group	-	Annual Meeting Steering Committee (B. Dixon)
Forests Ontario	-	Simcoe County District School Board Envirothon Forestry Section Expert (B. Dixon)