Our purpose is to provide forest management services which meet the economic, environmental, and social objectives of private woodlot owners throughout the seven western counties in Nova Scotia





No.11

# Fall/Winter 2023 Newsletter

December 22nd

I 'Tis the season to be jolly Fa-la-la-la la-la-la I

Ah winter, isn't it truly the most wonderful time of the year? As it gets colder, and the days get shorter there are more opportunities for rest, reflection, and planning for the warmer seasons ahead. There is nothing more comforting than the smell of balsam fir inside your home, warm holiday beverages, and heat coming off the wood stove.

As we settle into the winter season, we'd like to take some time to reflect on the eventful summer and fall we've had. We encourage you to continue reading to learn about what we've been up to.

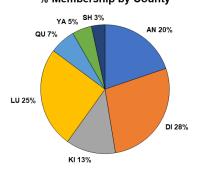


## **Membership Update**

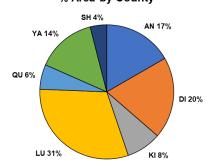
Since our last newsletter on July 31<sup>st</sup>, 2023, our membership has increased from 367 to 384 as of December 14<sup>th</sup>, 2023, representing ~94,000 acres in Western Nova Scotia! As seen in the graphs to the right, Digby County has the highest number of members while Lunenburg County has the highest amount of area. The table below breaks down the membership data in more detail. Woodlot size varies greatly, giving the average WWSC woodlot size of 244 acres (99 hectares).

Membership as of December 14th, 2023					
County	# of Members	Area (ac)	Area (ha)	% by Area	% by Membership
Annapolis	76	15,618	6,321	17%	20%
Digby	106	18,410	7,450	20%	28%
Kings	48	7,907	3,200	8%	13%
Lunenburg	97	28,845	11,673	31%	25%
Queens	25	5,594	2,264	6%	7%
Yarmouth	19	13,475	5,453	14%	5%
Shelburne	13	3,738	1,513	4%	3%
Total	384	93,587	37,873		
Avg. lot size	/Member	244	99		

### % Membership by County



#### % Area by County



Welcome to all our new members!



## 2023 Membership Survey

The co-op is growing, and we are due for another membership survey. We kindly ask that you take some time to fill it out so that we can aim to serve you (our members) better as well as improve our services to meet your objectives, needs and preferences. As a token of our appreciation, we are offering members a chance to win a \$150 fuel gift card by being entered into a draw that is separate from the survey. All survey responses will remain anonymous. Click <a href="here">here</a> to be directed to the survey. The survey will close on January 26<sup>th</sup> 2024, and a winner will be contacted on February 2<sup>nd</sup> 2024 after 12pm.

Link: https://forms.gle/RDB7MA8aytyPmhiP9

#### **Wood Sales and Markets**

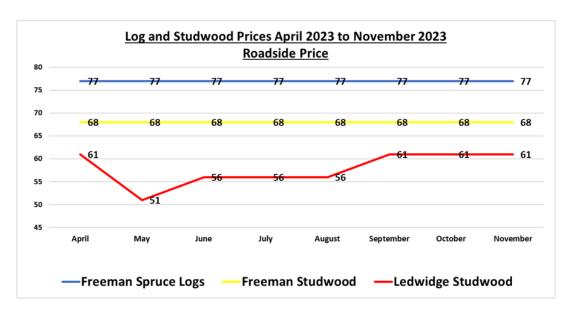
As many of you are aware this year's weather has created some unprecedented challenges for forestry operations. At first in the spring, it was too much of a fire risk to be in the woods and later in the summer the rain made it too wet to work in the woods for a short period of time. However, WWSC staff worked with many landowners this season to complete various harvesting activities across the Western region. A variety of both traditional silvicultural treatments and ecological forestry prescriptions were implemented including commercial thinnings, partial overstory removal harvests, shelterwood harvests, and selection management harvests. These activities produced just over 11,300 tonnes of forest products, generating revenues for the landowners and the WWSC while promoting forest growth, health, and diversity.



Scaled hardwood on a woodlot in Queens county

This work is made possible by several dedicated harvesting and trucking contractors throughout the Western region that are willing and capable of doing the intricate work needed to undertake ecological forestry operations on private woodlands. We look forward to continuing to work with these contractors and WWSC members on more of their forest management projects in the new year.

For our current fiscal year from April 1 to November 30, roadside prices for spruce and fir logs and studwood held steady at \$77/tonne for logs and \$68/tonne for studwood at Freeman's. The price at Ledwidge dropped significantly early this year but has since rebounded and remains the same. Ledwidge pays a delivered price for studwood so the roadside price varies depending on trucking distance; it tends to range from \$61 – 71/tonne. Prices for pine, hemlock, hardwood logs and firewood remain mostly stable but the market for hemlock logs is still limited. Low grade wood markets continue to be challenging, and the demand has decreased over the last couple of months and will likely continue to be reduced for the next few months due to an excess of supply and low consumption. Note that in the graph below, prices for Ledwidge studwood are from Digby County.



Of the wood marketed since April 1st, 66% was produced from Digby County with a significant increase in Queens and Lunenburg Counties and some harvesting in most other counties, except Shelburne. These forest products were sold mainly to Freeman Lumber, JA Turner, Spec Resources, and the rest went to many other smaller buyers throughout western Nova Scotia.

County	Tonnes	% of total
Digby	7488.72	66%
Yarmouth	536.56	5%
Queens	1817.38	16%
Lunenburg	1358.12	12%
Kings	13.8	0%
Annapolis	149.64	1%
Shelburne	0	0%
Total	11364.22	100%

Wood produced through WWSC by county



Feller buncher on a woodlot in Queens Co.



Forwarder on a woodlot in Kings Co.



## **Silviculture Summary**

For the period April 1 to December 7, 2023, WWSC has assisted woodlot owners in completing a total of 130.5 hectares (322.4 acres) of various silviculture activities. This relates to a total of \$78,817.20 of funding claimed from 2 sources: the Association for Sustainable Forestry and J.A Turner and Sons Ltd. 70.4% of silviculture treatments were funded through the ASF and 29.6% through J.A Turner and Sons Ltd. Wood Acquisition Program (WAP).

WWSC silviculture completed by category, April 1st to December 7th, 2023:

Silviculture Category	Area (ha)	Area (ac)	\$ Amount	Counties
Full Plant SW	6.6	16.3	\$5,610.00	Ki, Lu
Fill Plant	1.5	3.6	\$441.00	Lu
Early Competition Control (Man. weeding)	1.7	4.2	\$672.00	Lu
Pre-commercial thinning HW NAT	0.5	1.3	\$449.80	An
Pre-commercial thinning SW NAT	13.6	33.7	\$12,328.50	Lu, Di
Commercial thinning HW	3.0	7.4	\$1,758.20	Di
Commercial thinning SW	64.4	159.1	\$36,822.20	Di, Lu, Qu, Ya, An
Selection management HW	5.2	12.8	\$2,565.20	Ki, Di, Lu
Selection management SW	34.0	84.0	\$18,170.30	Di, An, Qu
Total area claimed	130.5	322.4	\$78,817.20	

As of December 7th, 2023, 53 silviculture jobs have been completed in 6 different counties within the WWSC service area. The average job size/claim across all treatment categories is 2.46 hectares and approximately 82% of all work completed has been merchantable treatments such as commercial thinning and selection management with non-merchantable treatments such as pre-commercial thinning, manual weeding, and planting accounting for 18% of work completed. No crop tree pruning, or crop tree release treatments have been claimed thus far.

Of total area treated, 58% occurred within Digby County, with softwood commercial thinning being the dominant treatment category. This was followed by Lunenburg County at 21%, with merchantable treatments, such as selection management and commercial thinning, and non-merchantable treatments such as precommercial thinning, manual weeding and planting being completed. 13% of the treated area was in Queens County, followed by 4% in Annapolis, 3% in Kings and ~1% in Yarmouth. No funded silviculture treatments were completed in Shelburne County in the current fiscal year thus far.

WWSC silviculture completed by county, April 1st to December 7th, 2023:

Total Silviculture by County	Area (ha)	Area (ac)	% of total
Digby	75.4	186.2	57.8%
Lunenburg	27.0	66.6	20.7%
Queens	17.4	42.9	13.3%
Annapolis	5.6	13.9	4.3%
Kings	4.1	10.0	3.1%
Yarmouth	1.1	2.7	0.9%
Overall total	130.5	322.4	100.0%



\$6523.50 in revenue was generated in silviculture commissions from the 130.5 hectares of work completed and claimed as of December 7<sup>th</sup>, 2023. A small fee of \$50/ha is retained by the WWSC from the total \$/ha funding amount for each treatment completed (for example, for a commercial thinning job that is funded at \$550/ha, WWSC will retain \$50/ha and the remaining \$500/ha will be paid to the contractor/landowner/party completing the work). The revenue generated from silviculture activities helps to cover some of the costs related to field work and administration of WWSC's silviculture program and is entirely invested back into the WWSC.

### WWSC Silviculture Commissions, April 1st to December 7th, 2023:

<b>Total Area Claimed (ha)</b>	Total Silviculture Commissions (\$)
130.5	\$6,523.50

As always, please get in touch with us if you have any silviculture related questions or if you have areas on your woodlot that may benefit from some silviculture work. We are always looking for opportunities to identify suitable forest improvement work that will enhance the long-term health, diversity and value of your woodlot!

For a full description of the various silviculture treatments that are eligible for funding and associated criteria, please visit the Association for Sustainable Forestry's website at: <a href="https://www.asforestry.com/silviculture/">https://www.asforestry.com/silviculture/</a>

For further explanations of harvesting and silviculture terminology, please check of the following section of the WWSC website: https://www.westernwoodlotcoop.com/harvesting-silviculture.



Pre-commercial thinning in Lunenburg county

# The Benefits and Challenges of PCT, and a Possible Path Forward

Pre-commercial thinning [PCT], as outlined in our July newsletter, is a silviculture treatment that is done when trees are young and unmerchantable to free them from competition of surrounding overtopping trees. PCT is also known as a "tending" treatment, which is another way of saying "taking care of", to influence the future trajectory of a stand. The goal of this treatment is to promote selected crop trees of a favorable species while removing their competition.



The benefits of PCT are two-fold. Firstly, the treatment influences the species composition of the stand at a critical stage of development, allowing a landowner to select desirable species based on their own management objectives, whether it be for timber, biodiversity, wildlife, or simply aesthetics. Secondly, by removing competing vegetation from the selected crop trees it gives the crop trees more light, nutrients, and physical space to achieve a larger size in a shorter amount of time, in comparison to what would occur in an untreated stand. From a timber management perspective this treatment may be the difference between a landowner being able to harvest trees in the same stand twice within their lifetime, or not. From a financial investment point of view, PCT provides the most return on investment of any silviculture treatment.

For all its benefits, PCT is plagued by several challenges. The workforce that is able and willing to complete PCT is dwindling. In 2019 WWSC completed 83 hectares of PCT on member woodlots, while in 2022 that number had fallen to 24 hectares. This drop in completed PCT's can be directly attributed to labour challenges. PCT is a labour-intensive job that requires training and significant experience to be efficient. With rising inflation, the current rate structure makes it challenging for PCT operators to attain a living wage, without being extremely efficient. PCT operators are often paid a piece work rate; that is, they are paid a per hectare rate based on the area completed. Rates range from \$400-\$800/hectare, with operators commonly facing stem densities of greater than 25,000 per hectare, with a requirement to bring the density down to 1500-3500 stems per hectare to qualify for funding. Initial costs for thinning equipment are often greater than \$2000, not including a vehicle that can access PCT work areas. Therefore, the barrier to entry into this profession is high, and when one PCT operator is ready to retire there is often no one willing or available to replace them.



Mechanized silviculture operator getting underway on a PCT block in Kings County

With these challenges in mind, and being well aware of the benefits of PCT, WWSC applied for, and received grant funding from the Nova Scotia Community College Forest Innovation Voucher Program [FIVP] to support the development of mechanized PCT contractor within our service area. Mechanized PCT [MPCT] involves the use of a mini-excavator with a mulching and/or shear head to conduct PCT as opposed to the traditional, motor-manual method involving a silviculture worker and a spacing saw.

The initial stage of our project involves training, supporting, and working with one new MPCT operator to develop an efficient system for conducting PCT, while also exploring some of the potential challenges and best practices for conducting MPCT in different stand types and terrain conditions. Following the initial stage, we hope to continue to work with the FIVP to expand the scope of the project to more MPCT operators throughout our service area. The overarching goal of the project is to develop the capacity to complete PCT's in a more efficient manner, while making the work more accessible to people with varying backgrounds, skill levels, and abilities. If you or someone you know might like to get involved with MPCT as a contractor or machine operator, please reach out to one of our staff.



## **Outreach**

This summer and fall, staff at WWSC have hosted a handful of workshops to educate, build relationships, and have some fun. In September, Michele and Dawson hosted a tree-planting workshop on one of our members woodlots in Farmington, Lunenburg County. This was a great opportunity to get folks together to talk about reforestation, pre-merchantable silviculture treatments, and planting techniques. We even got members to try it out for themselves and plant a few trees!

November was a busy month for us. In early November, we partnered up with NSWOOA to hold a workshop on planning an ecological based harvest with climate resilience in mind. This workshop was led by Patricia and Bronson and hosted by one of our members on their woodlot in Centrelea, Annapolis County. This workshop fostered some incredible discussions about the importance of species and structural diversity, considering the disturbance history and the makeup of your woodlot (soils, veg type, age classes), and different harvesting techniques that could be used to build resilience against a changing climate and help transition a stand to a climax Wabanaki-Acadian Forest type.



Planning a harvest with climate resilience in mind, Annapolis Co.



Lunenburg County wreath making workshop.

We also had a field day with first year students in mind, Annapolis Co. from the NRET (Natural Resources Environmental Technology) program at NSCC Lunenburg Campus with ACFOR Energy to demonstrate the value and benefits of wood chip heating using low grade wood products from our members woodlots. Students got to visit the boiler room on campus that is currently heating both the campus and the courthouse in Bridgewater and visit one of our members woodlots where there had been a partial harvest this year. Shawn from ACFOR Energy, Dawson, and Patricia did an excellent job at providing a holistic overview of the contributions that are needed from their respective organizations to make wood heating successful and effective, as well as how to properly implement an ecologically based harvest.

In late November, WWSC hosted two wreath making workshops. One in the valley, and one on the south shore. These workshops involved collecting brush from our members woodlots and assembling festive wreaths for the holiday season.

Finally, in December, WWSC held 2 field tours of an active harvesting operation on lands owned by the Municipality of the County of Annapolis in Graywood, Annapolis Co. On December 5<sup>th</sup>, there was a tour for members of the municipality's Forestry Advisory Committee, councilors, and WWSC board members and on December 6<sup>th</sup>, the tour was open to all WWSC members. Attendees were guided through an active softwood commercial thinning operation being completed by North Range Forest Products of Digby County where they were able to meet with the harvesting contractors and have discussions surrounding ecological forestry.



Field tour in Graywood, Annapolis County.



#### MTRI – Woodlands for Wildlife

Since 2020, staff at the Mersey Tobeatic Research Institute (MTRI) have offered **woodland biodiversity assessments** to forest stewards including WWSC members. This type of assessment aims to take stock of the **overall forest condition and habitats available to wildlife** by identifying the composition of stand vertical structure, snags and cavity trees, and coarse woody material, among other components. Special interest is taken around special habitats such as wet forest areas which are particularly important to wildlife, and old forest stands, as well as uncommon features such as large diameter standing and downed dead wood, and animal dens



or nests. Landowners are welcome to join MTRI staff in the survey of their woodlands and follow up includes **sharing the locations of key features and advice on beneficial management practices** which might enhance the woodland for biodiversity. Additional follow up with MTRI biologists is made available should the woodland present potential habitats for species at risk (SAR). **Landowners that wish to have a biodiversity assessment conducted on their property, can contact Abby Lewis:** Abby,Lewis@merseytobeatic.ca

For landowners that are interested in taking a more active role in SAR conservation on their woodlands, MTRI has newly launched

the **Woodlands for Wildlife** pilot program that utilizes primarily landowner recognition and small **financial incentives to encourage the protection of significant habitat for SAR** on private woodlands in southwest Nova Scotia. The program targets a group of at-risk birds, turtles, lichens, and tree species and works with woodland owners to **establish effective buffers around significant species at risk habitat** on their property in addition to a series of **species-specific beneficial management practices**. Woodland owners are rewarded for their conservation efforts through an annual incentive payment tied directly to the total operable forested area included within the established buffers.

There are currently over 10 woodland owners in southwest Nova Scotia that are taking part in the Woodlands for Wildlife pilot program, and in doing so are assisting MTRI in its efforts to protect significant SAR habitat, all while enjoying annual financial incentives for their involvement. Woodlands must be found to support at least one species at risk to qualify for the program. MTRI staff conduct preliminary surveys of potential new woodlands to confirm the presence of a SAR and identify significant habitat. Woodland owners are then provided with a customized implementation plan outlining significant habitat on the property as well as specific beneficial management practices for the SAR, such as limiting silviculture and construction/maintenance during critical breeding seasons. Annual incentives are calculated at a rate of \$20/acre for significant SAR habitat. MTRI will periodically request access to the property to conduct SAR monitoring and woodland owners are welcome and encouraged to accompany staff on surveys.



MTRI is now actively seeking new participants as the Woodlands for Wildlife program enters its second active year! Interested woodland owners are encouraged to reach out to the Woodlands for Wildlife Program Coordinator, Laura Carter: wfw@merseytobeatic.ca for more details.



# **Closing Remarks**

On behalf of WWSC staff and directors, we would like to extend our gratitude for your support in 2023. This holiday season, we hope that you are surrounded by family and friends and that you get the opportunity to relax and enjoy some time off.

As always, we are here to help you with your management goals and objectives. If you have any questions, do not hesitate to get in touch with any of us. Our contact information is listed below.

Merry Christmas and Happy Holidays to you all.

- WWSC Staff



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