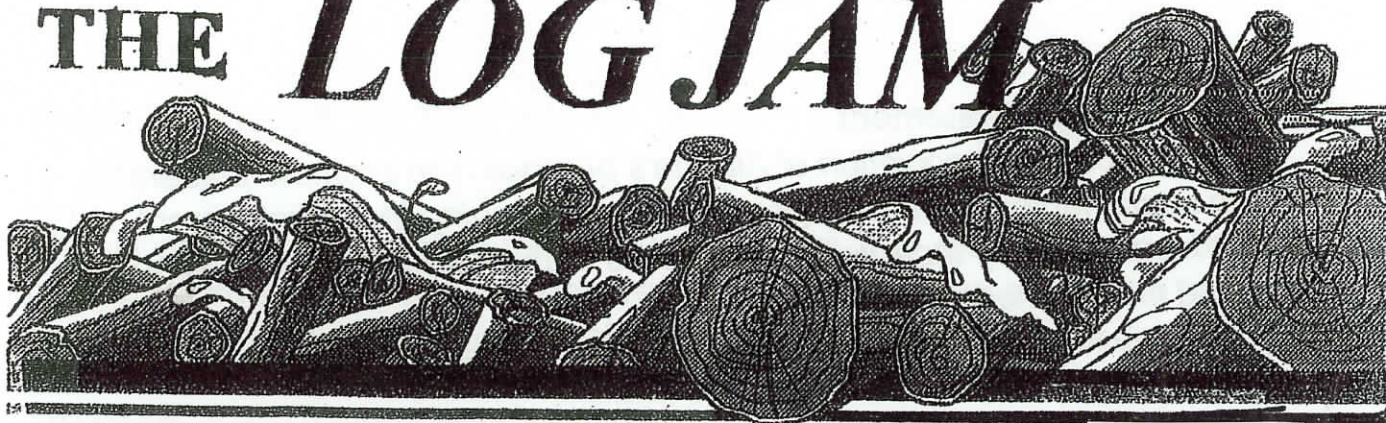


THE LOGJAM



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June, 2018



The Climax Forest

Our Mission Statement

"The Woodlot Association of Alberta's purpose is to promote leadership in sustainable forest management by encouraging the development of Private forest by increasing awareness of their inherent social, economic and environmental values."

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IMPORTANT NOTICE

Jurgen Moll

This is an important notice for all our members that plan on preparing a management plan, in that the new regulation that makes a woodlot into a farming operation, that come into effect for the 2019 taxation year.

Therefore if you want to take advantage of this you may want to prepare a management plan shortly that is because there are only about five months in which to register you plan. The reason being that the assessment that is used for the 2019 tax levee is calculated using the 2018 assessment. Therefore your management plan must be approved by December 31 2018.

Now if you plan on getting the WAA to approve your plan, the Registration Committee would require a copy of your plan within the first week of December 2018. They requirer this time to review the plan and notify your County that the plan is approved before December 31, 2018.

There is one more reason that you may want to consider if you want to change your woodlot into a forest farmland, because the assessor uses the following when calculating the value of farm land as follows.

- a) irrigated farmland \$ 450.00/acre
- b) dry-land farmland \$ 350.00/acre
- c) forest farmland \$ 135.00/acre.

Something to consider before you miss the 2019 taxation years dead line.

(Should you plan on doing a management plan we can supply you with a copy of a Template for a Farm Woodlots Management Plan, that should aid you in preparing your plan.) *contact me if you want one*

Re minder — If you have a Completed Management Plan and want the Registration Board's approval mail a copy of the plan to me at Box 84, Whitecourt, AB. T7S-1A3

Wife “ Why didn't you tell your friend that the girl he is getting married to is not good for him?” **Husband** “ Leave it I am not going to say anything.” **Wife** “ Why not? After all, he is your friend!! “ **Husband** “ He didn't tell me anything when I was getting married,”

President's Report

Laval Bergeron

Hello everyone,

Another spring gone by and a very special one at that, also meaning the AGM has gone by and was a very special also.

First of all, the setting was perfect. A B&B meaning a place to stay and breakfast, beautiful yard all nicely taken care of, ample room..

Then members and non members started to show up for the 10:00 o'clock meeting, even if we consider flat tires, one road sign not in existence.. add a full Board of Directors to that, made the AGM an « AGM ».

There was much discussion and everybody eager to share their knowledge made time go very quickly.

Two long standing Board of Directors have stepped down, Harry White and Pete Mills, both of them being very unique and bringing special aspect to the board. Thank you gentlemen. (you can still participate you know:)).

And to Brian Mullen for stepping up and leaving his name stand and with that I welcome you to the Board and anxious to meet you.

Gordon and Brenda Doherty, our host, were awesome at sharing their dining room which stretched out to the living room and had the opportunity to be treated like Kings. Great food, everything, I could go on. What is spectacular in this case is that, everything was donated by them. Did not cost a penny to the Ass. And so for the ones present at the meeting, if you wonder where your 25.00\$ went, in the bank, greatly needed.

After dinner a tour of their woodlot had been organized and with all these Woodlot Managers at his side. there was much to be heard. At this point I want to apologize for leaving the tour half way, sometimes you got to do what you got to do.!

Thank you to « For Evergreen B&B » for being excellent host. Turns an AGM in a truly formidable reunion.

If you receive the Logjam please make sure your membership is up to date, the life of the journal, other items and the association are crucial to your participation.

If you want a tax break on your woodlot, have your WMP (Woodlot Management Plan) in order before too long, at least for the 2019 yr. of taxation.

Keep reading, all kind of good stuff. Talk to you in September.

Have a great summer

2017-18 MPB Control Summary

The beginning of April marked the end of Agriculture and Forestry's 2017-18 mountain pine beetle control program. In total approximately 92,230 trees were cut and burned at 7,643 sites across Alberta. The following table lists tree control numbers by Forest Area.

Unfortunately, due to a number of circumstances we fell short on meeting our control goal, and 2220 infested trees were left uncontrolled. These trees are located at 285 sites within the Grande Prairie and Slave Lake Forest Areas, and will be a priority for survey and control work next season.

Forest Area	Trees Controlled
Edson	58,476
Grande Prairie	14,876
Slave Lake	14,427
Whitecourt	3,692
Lac La Biche	488
Rocky Mountain House	40
Calgary	271
Total	92,270

On the flip side, we were very fortunate that the immigration of MPB into the Hinton area from a large source population in Jasper National Park last summer was not as widespread as predicted. This allowed us to expand the Leading Edge Zone (where aggressive single tree treatment occurs) westward to approximately the town of Hinton with existing program funds. To help achieve this, West Fraser (Hinton) bolstered the Department's efforts by controlling approximately 14,500 trees in the area south east of Hinton through a grant from the Forest Resource Improvement Association of Alberta (FRIAA).

Although there is some uncertainty on how the current epidemic in Jasper will impact adjacent Crown forests, we do expect that things will get worse before they get better. We anticipate continued immigration into the Hinton area for at least another few years as the pine host in the park is depleted. Fortunately, declining populations over much of the Grande Prairie and Whitecourt Forest Areas will allow us to focus resources on this priority area.

Mike Undershultz — Edmonton

Tree nuts can reduce prostate cancer patient mortality risk: study

Eating lots of tree nuts, such as almonds, pine nuts, cashews, walnuts and pistachios, can significantly reduce non metastatic prostate cancer patients risk dying from the disease, a new study suggested. A team of researchers from the Brigham and Women's Hospital in Boston has found in the study that prostate cancer patients who eat tree nuts 4 - 5 times per week reduce their risk of death because of the disease by 34 % as compared with patients who eat nuts just once per month.

This isn't the first time a study has suggested the consumption of nuts could help fight certain cancers. In 2009, researchers claimed eating large quantities of Brazil nuts could help fight against prostate cancer.

Editorial

Jurgen

The climax forest is a forest that is losing more volume than it is increasing in growth, this happens to every forest. This is not necessarily a result of old age but is mostly driven by the site it is growing on, therefore the trees may be well under one hundred years old or they can be over two hundred years old, to reach the climax of their life span.

When I look at a forest the first thing that I pay attention to is the site, such as is it high well drained or very wet low land edging on muskeg, Secondly I look at the trees condition are they leaning in different directions, is there crown die-back, the amount of windfall both old and more recent, sign of diseases, insect attacks, wind damage, and human disturbances such as past harvesting, plus the size of the trees.

The last thing I look at is the age of the trees as this can be a very poor guide as when to harvest a stand of timber, for if we govern our harvest by age only we may be harvesting them when they are growing their best.

Therefore to govern when to harvest your forest or a part of it, walking through your woodlot and surveying the site and the condition of your timber is the best way to do it. At the same time you will decide when to harvest some in the present or in the distant future and whether to clearcut some of it or perhaps do a partial removal of it.

Every species has a different time of climaxing for example aspen mixed with the long living spruce the aspen will meet their climax long before the spruce do. Some of this is brought about when the spruce over take the aspen and the aspen can not tolerate shade as they are an intolerant species. In this case a partial cut would be best which would remove the aspen and a few spruce.

We know what we are, but know not what we may be - Hamlet

How will Canada's national public alert system work? An explainer

Canadians seeking updates on public emergencies will soon have to look no further than their mobile phones.

Later this week, telecom providers will become part of the National Public Alerting System and will push emergency notifications out to users on their networks. Here's a look at how the system is expected to work:

What is it?

The National Public Alerting System, often dubbed Alert Ready, is a service designed to deliver emergency notifications to Canadians. In the past the system has shared those messages over radio and television networks, but wireless networks will be included as of Friday. Customers with Canada's major telecom providers have likely received text messages about the service in the past week or two, as the Canadian Radio-television and Telecommunications Commission (CRTC) has mandated that providers send at least one explanatory text a year for the next two years.

How does it work?

When an emergency situation develops, a government issuer (for example, a provincial or territorial emergency management agency, or Environment and Climate Change Canada) will deliver an alert to the National Alert Aggregation and Dissemination (NAAD) System, which is run by Weather Network parent company Pelmerex Corp. The system will then push the alert to broadcasters and wireless companies. According to the Alert Ready website, found at alertready.ca, wireless service providers will only relay messages issued for threat-to-life situations. The Alert Ready website says no data will be gathered about individuals, their wireless devices or their locations when emergency alerts are sent out.

What does this mean?

In case of emergencies, officials will be able to send a localized alert that will compel compatible phones on an LTE network to emit an alarm and display a bilingual text warning of exactly what is unfolding. The shrill, siren-like alarm tone is the same one that currently accompanies alerts broadcast via radio and television. The Alert Ready website says individuals will not be billed for messages they receive.

What situations could prompt an alert, and are there any geographical boundaries in play?

The Alert Ready website says alerts sent to wireless devices will be "geo-targeted," meaning alerts will only be sent out to people likely to be impacted by the emergency event. The website offers a comprehensive list of the types of scenarios that could trigger an emergency notification. The broad categories are: fire (such as widespread industrial blazes or forest fires), natural (including earthquakes and severe weather), biological (such as major air or water contamination), terrorist threat, or civil emergency (such as a danger posed by an animal or an Amber Alert for a missing child). Alerts may also be issued if there's a disruption or outage for 911 services.

Can I opt out?

No. The CRTC has previously stated that the alerts are too important to be optional, overriding preferences from telecom providers that pushed for an opt-out clause. However people dreading the sound of the alarm at odd hours have some choices. If a smartphone is turned off it cannot be forced on by an alert. Similarly, if a smartphone is muted an alert cannot force the device to play the alarm.

So does this mean I'll start getting alerts on my phone as of Friday?

While a broad range of popular phones are compatible with the program, wireless providers have released different lists of phones that will receive the alerts on their networks. Consumers can look up their phone type and more information on the program at alertready.ca.

Up Coming Events

Board of Directors - Teleconference

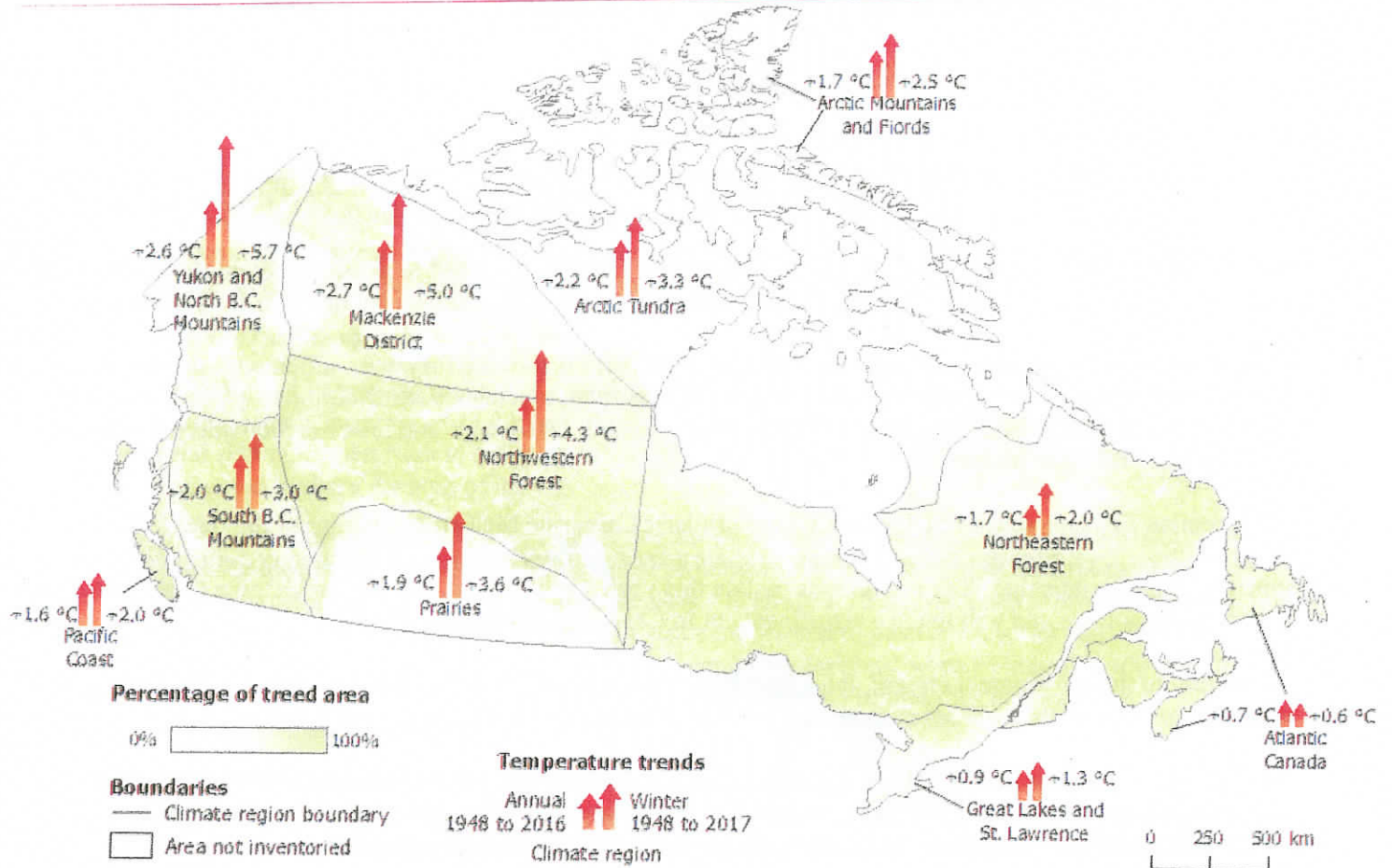
July 30, 2018

August 27, 2018

September 24, 2018

All calls at 7pm

Treed area and long-term temperature trends by climate region



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Are we entering the bio-age?

It was a powerful statement from Kim Rudd, parliamentary secretary to the minister of natural resources, at an [industry event in Ottawa \(/sustainability/working-toward-a-low-carbon-future-6616\)](#) late November.

And if it at all reflects the sentiment at Natural Resources Canada, it's a call to action for biomass producers to make noise in the marketplace. There is a strong reason to think 2018 will be a banner year for biomass.

Making good on its election promises, the Liberal government is moving forward – albeit with the usual bureaucratic glacial pace – with two policies that will help reduce Canada's contribution to greenhouse gases (GHGs). These policies will help bridge the price gap between fossil fuels and lower carbon alternatives like wood pellets and other biofuels.

In December Environment and Climate Change Minister Catherine McKenna announced the release of the [federal Clean Fuel Standard \(/news/clean-fuel-standard-requires-fuel-producers-to-cut-emissions-6648\)](#) with the aim of publishing draft regulations by late this year. The standard, she said, will “give Canadians better access to clean fuels and will make a significant cut in Canada's carbon pollution.”

According to the government release, the Clean Fuel Standard will be a “flexible regulation” with a range of compliance options, and will set carbon intensity according to the entire lifecycle of a fuel.

Scott Lewis, vice-chair of Renewable Industries Canada, said the Clean Fuel Standard will “bring to Canada a credit trading market for biofuels that is essential in our ability to continue to bring low carbon fuels to consumers at competitive prices, while allowing for some flexibility in compliance.”

Also in December McKenna gave an update on national carbon pricing, giving provinces and territories until the end of 2018 to submit their own plans. To be approved these plans must meet the equivalent of \$10 per tonne of carbon a year rising to \$50 a tonne by 2022. While Alberta and B.C. already have plans in place that will meet the standard, other provinces and territories will need to take action next year.

Now is the time for wood pellet and biofuel companies to share their low carbon solutions with consumers who will soon have new incentives to choose greener options.

Lack of awareness is still the No. 1 hurdle to growing the local wood pellet heating market. Consumers need to hear the good news story of how wood pellets provide efficient home heating at a comparable price long term.

With that goal in mind, the Wood Pellet Association of Canada launched www.woodpelletheat.ca, a website dedicated to sharing information on wood pellets as a renewable heat and power source.

For years the bio industry in Canada has been calling for favourable government policy to spur the growth of the bioeconomy. The Clean Fuel Standard and national carbon pricing are a response from government. These policies, if implemented as promised, will help usher in the “bio-age” in Canada. Canadian biomass companies should react by ramping up their marketing efforts in 2018 and getting in front of the movement.

Undiscovered Country

A year in the life of a newly off the grid woodlot owner

By David McGregor

Country life is still new to me, my solar power system is still a bit of a mystery, and my woodshed is mostly empty, but the woods make me feel at home. Over the next 12 months this column will follow all of the ups and downs in my boreal adventures. I'll share my experiences as I take on traditional building techniques, bushcraft, and woodland beekeeping.

Part I – The Set-up

My wife and I are in the process of completing a new home on a quarter section that is predominantly made up of 12-15 year old regrowth. Though we have some experience living in a rural setting, our decision to set up an off the grid solar home that is primarily heated by wood is uncharted territory for both of us.

As we developed our site plan our biggest question was how to get electricity. While we both liked the idea of solar power, the cost seemed prohibitive – at least until I got an estimate from the utility company. They made the decision easy – even seem like a cost saver when compared to a full kilometer of new power line. At first I was a bit hesitant to push our inverter and 2kw array too hard. There were certainly some beads of sweat on my forehead when I plugged in a work light for the first time. After checking the battery status every 5 minutes for the first couple weeks, I learned to chill out a bit (sort of).

Our next decision was whether we wanted to use wood for cooking as well as heating. I frequently hear stories from friends about their upbringing with the old cook-stove and sawdust filled walls. People politely cautioned us about the amount of work involved and the poor quality of life. A lot of people had to get up once or twice through the night to feed the fire (every night) and it was still ice cold in the morning.

Many of these cautions have helped us in our planning – propane for a back up heater and a cooktop seemed like good ideas. After extensive research we decided to take the plunge on a cookstove that also had the ability to heat our 700 square foot home. The Esse Ironheart eventually won out. I had the 800 lb. stove shipped from Toronto, in the process causing the company selling them to reconsider their “free shipping in Canada” guarantee. Northern Alberta is a long way for almost a tonne of cast iron to travel. So far the stove has been great and the house is running efficiently. Good insulation, triple-glazed windows and a very efficient stove buoy this cautious optimism.

It is an empowering (no pun intended) experience to step out of the loop of the utility company in this way. Most people I speak to have some off-the-grid fantasy but I find that when I ask about it they are most commonly drawn to the idea of freedom from the system. It is not so much an escape from the system that appeals to me, but rather a sense of ownership and participation in fulfilling our needs.

Next time: To cruck or not to cruck... Planning the timber-framed workshop

Using forests to manage carbon: a heated debate

The best way of managing trees and forests for climate change and accounting for contributions of forests and forestry activities in carbon budgets remains hotly contested. Forests can either take up carbon dioxide (CO₂) or release more CO₂ into the atmosphere. Wood can substitute fossil fuels or energy-intensive materials, but forests are also large carbon reservoirs that add emission peaks if disturbed.

The atmospheric concentration of CO₂ has increased from a pre-industrial 280ppm (volume parts per million) to just above 407ppm – and will reach 550ppm by 2050. As the main greenhouse gas, CO₂ drives human-induced climate change. Most global CO₂ emissions come from burning fossil fuels, but net deforestation still adds about five billion metric tons of CO₂ per year.

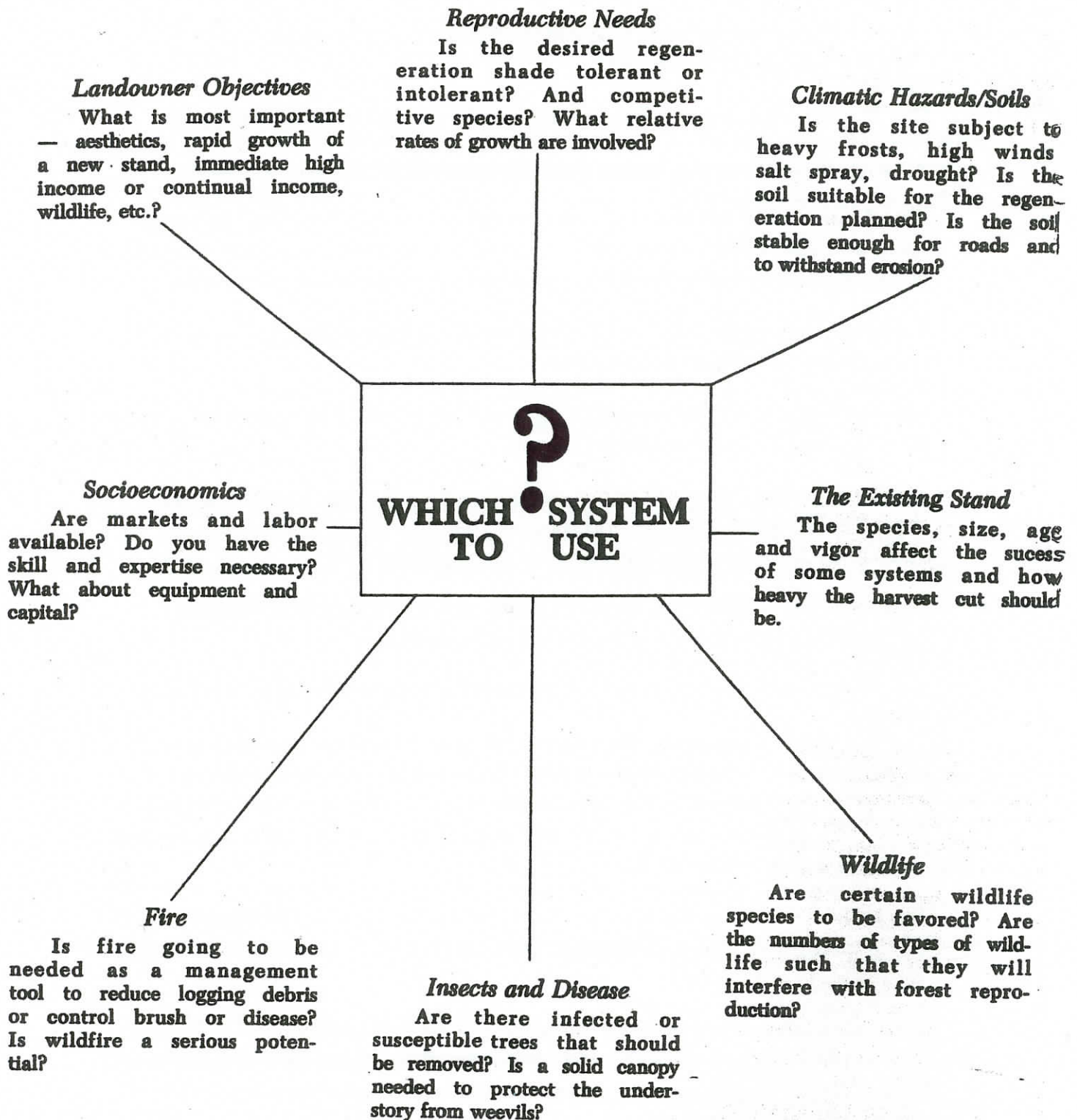
Theoretically, older forests reach an equilibrium, when carbon taken up into new growth is balanced by carbon released through decomposition processes. But this has been proved wrong. Even 800-year-old forests still continue to take up carbon, and, perhaps more surprisingly, individual large, old trees maintain high growth rates, too. Old forests are not only large carbon reservoirs worth maintaining, but actively continue to capture atmospheric carbon. Young, rapidly growing forests remove atmospheric carbon quickly, but have relatively small carbon reservoirs. Ageing forests capture carbon at decreasing rates, but build up large carbon reservoirs in biomass and soils. When an older forest is logged, not only the wood is removed, but carbon from unused biomass and soil is also released back into the atmosphere, creating a “carbon debt”. Especially large, old trees store most carbon, but are often over 100 years old. Repayment of the carbon debt may, therefore, take a long time.

British Columbia, Canada, have turned from a carbon sink to a net carbon source following large-scale outbreaks of a native pine beetle. Very little is known about how environmental changes and rising CO₂ affect the vulnerability of trees and the resilience of forest ecosystems.

On the upside, in a country with low forest cover such as the UK, any sensible reforestation (avoiding bogs) is beneficial for carbon balance. Yet managing forests solely for their carbon benefit would miss the point. Especially older trees and forests provide a host of services, including biodiversity, flood mitigation, clean water and human well-being benefits.

Any policy incentives must aim at balanced outcomes for all forest goods and services. Incentives that commodify one service but not others, too often create unintended consequences. Where forests are concerned, such mistakes are expensive, because it takes a long time to reverse adverse effects on old trees and forests.

CONSIDERATIONS IN SELECTING A HARVEST (REGENERATION) CUTTING METHOD



Construction Corner: 'Superdense' wood could revolutionize materials

A homebuilder once told me Canadians are “the greatest stick-builders in the world.”

It's a good line, and understandable coming from a homebuilder.

After all, most Canadian homes are built primarily of wood.

Wood is probably the oldest building material in the world unless you count rocks and sod. What's most amazing to me, is that after thousands of years of history, we are still looking for — and finding — new ways to use wood.

In recent years we've heard a lot about cross-laminated timber, CLT, and its growing use in highrise construction.

Now comes word of something called superdense wood that could be used to build everything from bridges to cars.

Engineers at the University of Maryland have found a way to make wood more than 10 times stronger and tougher than untreated wood. It is, apparently, stronger even than steel or many titanium alloys.

Liangbing Hu, who led the research team, says this superdense wood is comparable to carbon fiber, “but much less expensive.”

The team's research results were published recently in the journal *Nature*.

The researchers developed their superdense wood using a two-step process. First, the wood is chemically treated by boiling it in a solution of sodium hydroxide and sodium sulfite. This breaks down the lignin in the wood. Lignin is a natural polymer, present in the cell walls of many rigid plants. It's the stuff that keeps the plants stiff.

The second step is to squeeze the wood between metal plates heated to 100 C at a pressure of five megapascals, which is roughly 50 times more than atmospheric pressure.

The chemicals used to process the wood are already widely used in the pulp and paper industry and a great deal is known about them. So the researchers already know they don't pose any significant pollution concerns says Teng Li, the paper's co-author.

He says that means this superdense wood could provide an eco-friendly alternative to steels or alloys for constructing buildings or bridges. He says it could also be used to manufacture more lightweight, fuel-efficient cars or trains.

Not only is this new wood as strong as or stronger than steel, it weighs only about a sixth as much and takes 10 times more energy to fracture than natural wood. It can even be bent and moulded at the beginning of the manufacturing process.

There is another advantage, say the researchers. The process works well with just about any wood. That means, says Hu, that "softwoods like pine or balsa, which grow fast...could replace slower growing but denser woods like teak in furniture or buildings."

Treating wood to improve its mechanical performance is not new. Some attempts date as far back as the 1700s. Wood has been treated with steam, heat or ammonia. It has been cold-rolled to make it stronger.

Many of these efforts enjoyed a degree of success, but none capitalized on wood's full potential. Very often, the wood would re-expand and lose strength over time.

Huajian Gao, a professor at Brown University who was not involved in the study, says the paper "provides a highly promising route to the design of lightweight, high-performance structural materials, with tremendous potential for a broad range of applications where high-strength and toughness...are desired."

But none of this means you can expect this superdense wood to be commercially available anytime soon. Many engineering studies remain to be done. As well, removing lignin from a natural plant material often makes that material susceptible to bacterial or fungal infections. No one knows yet whether superdense wood structures would be susceptible.

This new material, if it can be brought to market successfully, plus the growing success of CLT would mean that "stick-building" would go far beyond building homes.

An old couple are out rocking on the porch one evening and the old lady slaps the old man on the shoulder. He asks, "what on earth is that for?" She says "it's for being awful in bed all these years" A little while later he smacks her back. She asks "Whats that for?" He says "That's for knowing the difference."

What is a " Woodlot "

Jurgen

Webster's Dictionary defines a woodlot as : "**Woodlot - a piece of land on which trees are cultivated and cut**"

The term Woodlot is in common use in eastern Canada, whereas in western Canada it is used by few people. Why this is primarily because in the eastern Provinces there is privately owned forest land; ie.- PEI - 95% , NS - 68%, NB - 50%, of total forested land as compared to AB - 4%, B.C. - 3%.

Therefore it is quite evident that most Albertans have never heard or used the term woodlot. For when the media or others refer to Forests, they are speaking only about the 96% of forested land which is owned by the crown that is land leased out to large multi national corporations for the sole production of lumber, pulp, etc. Thus the 4% of private forested land as a woodlot are very seldom referred to.

Let us look at what a woodlot on private land really is. Webster is not wrong in stating it is "land on which trees are cultivated and cut" for all woodlots do indeed grow trees and at times harvest some.

But woodlots are much more than only the growing of trees.

They are a habitat for all forms of wildlife ranging from the very small animals such as squirrels and voles to the large moose, deer, elk, coyotes, plus a wide range of birds of all kinds.

They are a source of clean water as they retain and filter the water, plus reduce flooding by slowly releasing it, and aid in recharging the ground water aquifer.

They are a particularly valuable source of carbon sequestering.

They serve many as place for recreation and mental and physical health.

They are a source of a wide range of native berries from strawberries to saskatoons, and many different mushrooms.

They are a source of firewood for those who supplement their heating with a wood burning stove.

The list could go on and on but this is a taste of what private woodlots really are. If they are managed they can become an asset to any farm in particular in a largely predominantly agricultural area that has been cleared of its native forests.

Therefore when asked "What a Woodlot Is ?" use this to explain that woodlots are more than just a patch of bush, and that they also benefit the communities bio-diversity.

Which is More Green - SFI or FSC LUMBER

The two main sustainable forestry certification programs (**Sustainable Forestry Initiative**, SFI, and **Forest Stewardship Council**, FSC) have been fighting for years to determine which is better. **SFI has struggled to gain a foothold** in the industry, and has been working to be approved by the US Green Building Council's **LEED green building rating system**. In an attempt to fully understand the potential greenwashing, let's take a look at the two **wood certification** systems compare, green-wise.

Harvest Requirements

The FSC standard requires that growth meet or outpace harvesting at a planning unit level (area of forest land) over a ten-year period, except for certain situations, such as a large fire or invasive species. SFI allows harvest to exceed growth, and looks at areas of land by owner, allowing over-harvesting on large tracts with growth occurring on small tracts far

Old Growth

FSC requires protection of old growth areas, including the restoration of **old growth** when it is not prevalent in an area. SFI does not require protection, just that there be a program to promote conservation of old growth. No level of outcome or any other details are provided.

Protecting Endangered Species

FSC requires protection of rare, threatened, or endangered species, broadening the definition of these species beyond state and federal requirements, identifying those species that will soon be rare, threatened, or endangered. SFI requires a program to protect globally imperiled species, which are usually identified by state and federal programs.

Protecting Water Quality

FSC requires protection of water quality, going beyond state-level and voluntary requirements when necessary, from direct impacts of harvesting, erosion, and chemical runoff. SFI requires conformance with state, federal, and voluntary requirements only.

Protecting Habitat

FSC requires protection of natural habitat for underrepresented ecosystems, including those recognized by federal and state programs. SFI requires protection of ecological areas identified under state and federal programs as having high conservation value.

Clearcutting

Regional limits are placed on the size of clearcut areas by FSC. These limits range from 2 acres in the Ozarks to 20 acres in the Mississippi Alluvial Valley and the Ouachitas. In other forests, clearcutting is not allowed, and no large clearcutting is allowed when it threatens ecological integrity. SFI does not have a size restriction on clearcutting, and has no specific requirement to maintain ecological integrity after harvest. Clearcutting is not allowed to be over 120 acres averaged across the land owned by one owner, which may span multiple states and may not be contiguous.

Use of Pesticides

FSC prohibits the use of some pesticides that are known to be dangerous, even if they are commonly used in the forestry industry. There are exceptions, based on site specific justification and having no other viable options. Workers that apply pesticides must be trained in their use. SFI requires the minimization of the use of pesticides, using the least toxic and in the narrowest spectrum possible. Requires supervisors of workers who apply pesticides to be trained.

Genetically Modified Organisms

FSC bans the use of GMOs. SFI has no specific requirement addressing this issue.

Aesthetics

FSC does not specifically address the visual appeal of a forest area. It is listed as one of the many social impacts that forest managers must address. SFI requires a program to maintain visual appeal. In addition, visual appeal is to be considered in road placement, harvesting, landing design, and other management activities. Recreational opportunities are to be promoted, where consistent with forest management objectives.

Outreach to Public and Indigenous Peoples

FSC requires outreach to the local communities and tribal representatives and protection of their rights and resources. SFI has no requirements on private lands, and on public lands outreach is required for planning and management activities, with an additional requirement to meet with affected indigenous peoples.

Management and Decision Making

FSC is an open membership-based organization, open to all organizations and individuals, except for government agencies and trade organizations. The Board of Directors is elected by the members, with equal participation from the three chambers: economic (industry members, manufacturers), social (educational, research), and environmental (protection). Each chamber has equal voting rights, and a majority vote from each chamber is necessary for approval of any action. SFI is not an open organization. The Board is self-appointed, and the three chambers are equally represented. An 80% vote, regardless of chamber representation, is needed for decision-making.

Third-Party Testing

FSC requires all claims to be third-party verified. SFI plan participants do not have to undergo a third-party verification. However, to put a label on a product or call a product certified, it must be audited by a third-party certification authority who has been approved by ANSI or the Standards Council of Canada.

Dal scientist's - new tree extends needle retention

The new SMART Balsam Fir tree, which was developed by Dr. Rajasekaran Lada and his research team at Dalhousie's Christmas Tree Research Centre, will last 55 days longer than the average Christmas tree before it begins to lose its needles.

"The extra time length they stay healthy allows us to ship them earlier and further," said Bill Casey, MP for Cumberland-Colchester.

"We ship these trees all over, to Venezuela, Brazil, and all over the United States. These new trees will help us take advantage of that two-million-tree open market that we haven't been able to meet yet."

Alongside the new tree, Lada and his team are also working on a delaying agent or spray, as well as a protocol for post-harvest storage and transport.

Lada began looking into Christmas trees and needle retention after a farmer walked into his office nine years ago with two photos of his trees that were refused during shipment due to needle loss.

"It became clear to me that if we did not fix the needle loss problem, the industry would lose its reputation," said Lada.

"We may have lost the Christmas tree and greenery industry here, which is a significant contributor for the bio-economy for the region."

The successful development and commercial licensing of a new Christmas tree that will last longer and ship earlier was announced Thursday morning at Dalhousie's Agricultural Campus in Bible Hill, and is set to completely change the province's Christmas tree industry.

"These new trees will stay fresh longer, which will increase marketability and the potential for exporting," said Navdeep Bains, minister of innovation, science and economic development.

"We export more than three million trees annually, so imagine the potential that exists with an additional two million trees in demand right now."

With years of research and scientific advancements, Lada's new tree will last long enough to be shipped around the world twice before needle loss becomes a problem, he said.

The increased lifespan and export potentials of the new Smart Christmas tree will not only help the Christmas tree sector be more efficient and innovative, but will also have an economic effect.

"This is a really important sector of the economy for not only Nova Scotia, but for Atlantic Canada and Canada as well," said Bains.

"What we are seeing in the Christmas tree sector is so much growth and export potential. This creates more opportunities for the local economy and more jobs locally and regionally.

"The product quality name recognition is high for Canadian Christmas trees, especially for Nova Scotia and Atlantic Canada, so we want to utilize that brand and take advantage of it."

Oldest trees have survived centuries of climate change

Very old, giant trees are storehouses of genetic excellence. A new initiative is underway to protect these 'elephants of the forest', many of which grow on private residential property.

Ontario's oldest and largest native trees are vital to ecosystems because their superior genes have allowed them to survive hundreds, even thousands, of years.

"They've withstood (centuries) of climate variation," said Eric Davies of the forestry department at the University of Toronto.

However, Davies says that most trees for sale in Ontario nurseries are derived from stocks native to the United States and elsewhere. They lack the specific genetic material that is appropriate to deal with Ontario climate. Their ancestors did not grow in Ontario, and their DNA is consequently wrong for Ontario conditions.

Davies contends they will not be able to deal with future climate turmoil in Ontario. Natural biodiversity is being wrecked and ruined by an infusion of non-native trees, such as Norway maples, that can choke out native vegetation.

That is why efforts are taking shape to collect and plant seeds from some of Ontario's giant trees, the behemoths of the forest. The idea is to genetically invigorate our forests, especially urban forests.

Some of North America's oldest trees have reached almost unbelievable ages. A pine tree in the White Mountains of California has been aged at 5,067 years. A white juniper living in the Sierra Nevadas of California is almost 2,700 years old. Some Ontario trees are centuries old. A white cedar on the Niagara escarpment has been aged at 1,316 years. Two Ontario sugar maples are 500 and 460 years old. A birch in Rainbow Falls Provincial Park is more than 240 years old.

Several white pines in the Algoma district are almost 500 years old, and 400-year-old red pines occur in the Timmins region. Forestry specialists claim very old trees are reservoirs of genetic excellence and merit protection. Nonetheless, Canada's oldest tree, a yellow cedar aged at 1,835 years, was recently felled by loggers in British Columbia as part of a clear-cut operation. Only its stump remains to testify to its former magnificence.

An overview of the forest sector

Canada's 3.47 million km² of forests, which account for about 9% of forest land worldwide, are diverse ecosystems that offer many benefits to Canadians.

The forest sector was a major economic driver for 105 communities across Canada in 2016, down from 463 in 2001, according to the latest release of the publication *Human Activity and the Environment*. These communities derived at least 20% of income from forest sector employment.

Overall, the share of forest sector employment income generated by forest sector-based communities fell from 30% in 2000 to 11% in 2015. Increasingly, communities that receive a significant proportion of their income from the forest sector are smaller.

COMMUNITIES FOR WHICH THE FOREST SECTOR WAS A MAJOR SOURCE OF INCOME

The forest sector continues to be an important provider of jobs and income in communities across the country, particularly in smaller and Indigenous communities. It was a major economic driver for 105 communities in 2016 compared to 463 in 2001.

2001
463 communities



2016
105 communities



In 2014, gross domestic product (GDP) for the forest sector in Canada was **\$22.1 billion.**

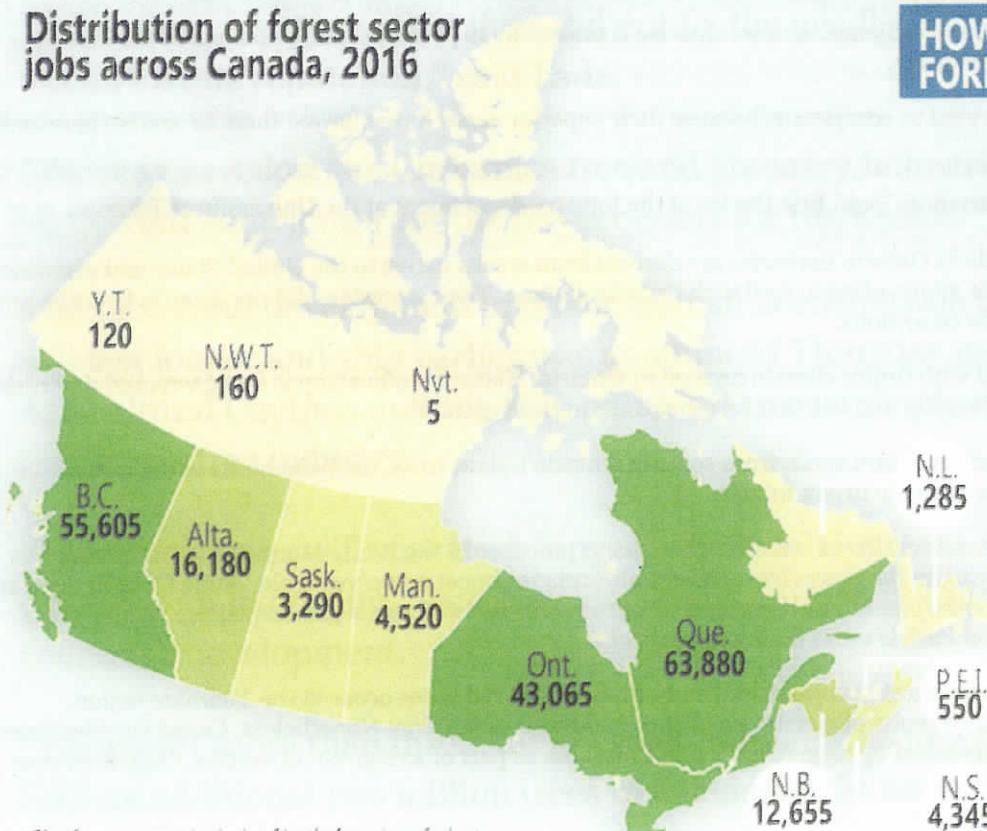


In 2016, forest product exports were valued at **\$29.5 billion.**



In 2016, employment in the forest sector was **205,660.**

Distribution of forest sector jobs across Canada, 2016



HOW VALUABLE ARE CANADA'S FOREST ASSETS?

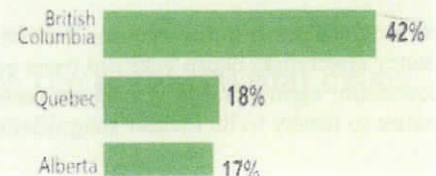


Forests provide many products, but also ecosystem services such as water filtration, air purification, carbon sequestration, and recreational and spiritual services.



In 2016, the value of Canada's accessible timber stocks—a component of natural resource wealth—was estimated at **\$215.4 billion.**

Volume of roundwood harvested, 2015 as a proportion of Canada's total



My Woodlot *by Elton and Esther Kauffman*

The Deerhill Woodlot

Local 'oldtimers' describe a fire that went all the way across northern Alberta about one hundred years ago. I heard of this when I felled the remnants of a century old pine tree and counted the rings back to some obvious fire damage. I was told that I missed the date by one year! Other fire damage on the same tree dated in the forties but a local farmer said 'there were fires all over during that time'. (Deerhill is equally north of Bluesky and west of Hines Creek.)

These are some of the forces that shape our present woodlot. Some of the rough terrain is covered with small aspen while some south slopes have a few large spruce among the aspen and new spruce coming in the natural succession. Hilltops have stands of large spruce (as shown in the photo) some of which are finding the end of their days and being salvaged for firewood. Other areas are dominated by black poplar. Pine is nowhere to be found.

When we came here in 1990 we assumed the 'bush' would be managed as pasture. It is still useful for some grazing but we are now much more careful about timing and intensity than at first, giving the goodies like peavine a chance to thrive. Through contacts with other woodlot owners ideas of what our landscape could look like began to develop. About twelve years ago we did some deliberate planning and started planting spruce among the aspen and some pine on more open south slopes. Some of those are now putting on over a foot of new growth each year (see photo again). In some of those areas the aspen are dying back, (disease and drought?) giving the pine plenty of sunshine to thrive in. On a different quarter north of some crown land the first 50 ft. didn't grow hay anyway so I began planting pine. The volunteer spruce need to be thinned out of them. After the initial planting it seemed more were needed so doubling the density has given us about six foot spacing. They have reached six to eight foot high; (again see photo).

In my rambles through our adjoining grazing lease I found and followed an 'ancient' set of tracks. Some places they could be followed easily because spruce had grown up only along the track. By questions to neighbors and searching local history books I've concluded this is the remnant of what was called the Chase Trail which comes across one corner of our woodlot quarter and crossed to the west near where our house now sits. The trail got its name from a trapper known as 'Doc' Chase who made enough money on foxes he could hire the work done - twenty miles of trail that became the main access to this area in the memory of folks we knew when we moved here. It only recently came to mind that the fire and the trail might be connected. Perhaps the fire partially cleared the way for the trail as the trail was cut within ten years of the fire. It is hard to imagine making trail by hand through the present stand.

We hope to continue planting a thousand plus trees each year for a while longer while we slow down in some other areas. It is rewarding to see something left for the next century even though we will not see the end of it. Perhaps we can inspire someone else to find the same motivation and attitude.

Photo's of Elton and Esther Kauffman - Woodlot



One of these two is over 100 years old.



Wildlife damage – but they haven't done them all!



Hay field edge pine plantation.



Pine doing well among falling aspen.